As a comprehensive community college, our mission is to provide quality education and to economically enhance the communities we serve.

The provisions of this publication do not constitute a contract or offer to contract with any person. The right to change any provision or requirement without notice at any time within the student’s term of attendance is reserved to Western Iowa Tech Community College.

Accredited/Approved by:
- The Higher Learning Commission of the North Central Association of Colleges and Schools, 30 N. LaSalle Street, Suite 2400, Chicago, IL 60602-2504; (800) 621-7440
- Iowa Department of Public Health, Bureau of EMS, 321 East 12th Street, Lucas State Office Building, Des Moines, IA 50319-0075; (515) 281-3741
- Commission on Dental Accreditation, 211 East Chicago Avenue, Chicago, IL 60611; (312) 440-2500
- Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 N. Fairfax St., Alexandria, VA 22314; (703) 706-3245
- Iowa Board of Nursing, Riverpoint Business Park, 400 S.W. 8th Street, Ste B, Des Moines, IA 50319-0166; (515) 281-3255
- National Council of State Boards of Nursing, 111 East Wacker Drive, Suite 2900, Chicago, IL 60601-4277; (312) 525-3600
- Medical Assisting Education Review Board, 20 N. Wacker Drive, Ste. 1575, Chicago, IL 60606; (800)-228-2262
- Association of Surgical Technologies, 6 West Dry Creek circle, Ste. 200, Littleton, CO 80120; (303)-694-9130
- Iowa Board of Educational Examiners, 400 East 14th St., Grimes State Office Building, Des Moines, IA 50319-0147; (515)-281-3245
- Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions, 8301 Lakeview Parkway, Ste. 111-312, Rowlett, TX 75088; (214)-703-8445
- Commission on Accreditation of Allied Health Education Programs, (CAHEP) 35 E. Wacker Drive, Suite 1970, Chicago, IL 60601-2208; (312) 553-9355
- Accreditation Commission for Education in Nursing, Inc. (ACEN) 3343 Peachtree Road NE, Suite 500, Atlanta, GA 30326; (800) 669-1656

Curricula approved by:
- Iowa State Board of Education

Approved for:
- Associate of Arts Degree
- Associate of Science Degree
- Associate of Applied Science Degree
- One-year Diploma
- Occupational Proficiency Certificate
- Veterans’ Training

Member of:
- Iowa Association of School Boards
- Iowa Association of Community College Trustees, Presidents
- Western Iowa Tech Community College 2013-2014 Catalog
College Calendar 2013-2014

Fall Semester
August 21, 2013  Classes Begin
September 2  Labor Day Holiday; No Credit Classes; College Closed
October 18  No Credit Classes; Offices Open
October 21 & 22  Staff Development; No Credit Classes; Offices Closed
November 28 & 29  Thanksgiving Break; No Credit Classes; College Closed
December 19  Fall Semester Ends After Last Regularly Scheduled Class; Graduation
December 20  Faculty Workday; No Classes; Offices Open
January 2–15, 2014  Winterim Classes; Offices Open

Spring Semester
January 20, 2014  Classes Begin
March 17 & 18  Staff Development; No Credit Classes; Offices Closed
April 18  Spring Break; No Classes; Offices Closed
May 15  Spring Semester Ends After Last Regularly Scheduled Class; Graduation
May 16  Faculty Workday

Summer Semester
June 2  Classes Begin
July 3  First Half Summer Semester Ends
July 7  Second Half Summer Semester Begins
August 7  Summer Semester Ends After Last Regularly Scheduled Class; No Evening Classes
August 8  Graduation

NOTE: College holidays and break periods begin with the close of regularly scheduled evening classes on the class day immediately preceding the holiday or break period. Classes resume at their regularly scheduled starting time on the first day following a holiday or break.

The College Now (League of Schools) programs may adjust their calendars to meet the individual needs of their respective school districts.

The Iowa Community College Online Consortium (ICCOC) sets the online class schedule. The online semester dates always vary from the face-to-face semester by a few days.

Telephone Listings

Sioux City – Main Campus
4647 Stone Ave., Sioux City, IA
Information ............................................. (712) 274-6400
Admissions .................................................. 274-6403
Financial Aid .............................................. 274-6402
Registration ................................................ 274-6404
Toll Free ...................................................... (800) 352-4649

Sioux City – Beltway Center
3415 Highway 75 North, Sioux City, IA ........ (712) 274-6449

Cherokee Campus & Conference Center .................................. (712) 225-0238 or 200 Victory Drive (800) 352-4649, ext. 1240

Denison Campus ........................................... (712) 263-3419 or Hwy. 30 E./11 N. 35th Street (800) 352-4649, ext. 2621

Mapleton Center ........................................... (712) 882-2401 38491 Hwy. 175 North

Le Mars Center ........................................... (712) 546-7338 940 Lincoln Street SW

www.witcc.edu

Sioux City Campus

Telephone Listings

Sioux City Campus

Telephone Listings

Sioux City – Main Campus
4647 Stone Ave., Sioux City, IA
Information ............................................. (712) 274-6400
Admissions .................................................. 274-6403
Financial Aid .............................................. 274-6402
Registration ................................................ 274-6404
Toll Free ...................................................... (800) 352-4649

Sioux City – Beltway Center
3415 Highway 75 North, Sioux City, IA ........ (712) 274-6449

Cherokee Campus & Conference Center .................................. (712) 225-0238 or 200 Victory Drive (800) 352-4649, ext. 1240

Denison Campus ........................................... (712) 263-3419 or Hwy. 30 E./11 N. 35th Street (800) 352-4649, ext. 2621

Mapleton Center ........................................... (712) 882-2401 38491 Hwy. 175 North

Le Mars Center ........................................... (712) 546-7338 940 Lincoln Street SW

www.witcc.edu
Table of Contents

4 Career Cluster Program Index
5 Mission Statement
6 Academic Vision
7 College History
8 Enrollment Services
11 Student Financial Aid Policy and Program
14 Academic Information
21 Student Services and Activities
30 Students’ Rights and Responsibilities
35 College Policies
39 College Credit Programs
40 Program Descriptions
42 Course Listings
213 College People
224 Index

College Credit
Program Guide

40 Accounting
Accounting Specialist
41 Accounting
Bookkeeping and Office Support
42 Cost Accounting
Payroll Clerk
43 Addictions Counseling
44 Administrative Assistant
Administrative Assistant–Medical
45 Administrative Office
Management
46 Medical Assistant
47 Medical Transcriptionist
48 Medical Coding Specialist
Medical Secretary
49 Administrative Office Support
50 Health Information Technology
51 Office Assistant
52 Agriculture
Agriculture Transfer
53 Agribusiness Technology
54 Agriculture Management
55 Agriculture Diploma
56 Veterinary Assistant
57 Air Conditioning, Heating, and Refrigeration
58 Air Conditioning
Heating
59 Art and Design
60 Audio Engineering
Audio Engineering Technician
61 Audio Production Assistant
62 Automotive
Auto Collision Repair Technology
63 Auto Body Refinishing
64 Auto Body Structural Repair
65 Auto Body Procedures
Automotive Painting
66 Automotive Technology
67 Auto Mechanics
68 Automotive Drive Train
Automotive Electrical
69 Band Instrument Repair
70 Biology
71 Business
Business Administration
72 Business Management
73 Financial Services
74 Human Resource Management
75 Technical Business Management
76 Entrepreneurship
Human Resources
77 Human Resources Technician
Entrepreneurship Concepts
78 Chemistry
79 Computer Technologies
Directory
80 Construction
81 Carpentry
Drywall
82 Interior Finishing
83 Concrete Specialties
Wall Framing and Roofing
84 Cyber Crime Investigations
Cyber Security and Digital Crime
85 Data Recovery
Network Security
86 Early Childhood Education
87 Early Childhood Studies
88 Child Development
89 Education
90 Paraeducator
91 Early Childhood
92 Electrician
93 Electronics
Electronic Systems Technology
94 Biomedical Electronics
Electronic Musical Instrument Repair
95 Smart Home Technology Specialist
96 Emergency & Disaster Mgmt.
97 Technical Emergency & Disaster Management
98 Emergency & Disaster Management Methods & Tactics
99 Technical Emergency & Disaster Management
100 Emergency Medical Services
Emergency Medical Services–Paramedic
101 Advanced Emergency Medical Technician
102 Paramedic
103 Emergency Medical Technician
Emergency Medical Responder
104 English
105 Fire Science
Fire Science Technology
106 Fire Science
Fire Science Principles
107 Foreign Language
108 Graphic/Web Design
Graphic Design
109 Web Design
110 Visual Design
Marketplace Design
111 Health Science
Dental Assisting
112 Pre-Dental Hygiene
113 Medical Assistant
114 Nursing
115 Medication Aide
Nursing Assistant
116 IV Therapy Concepts and Review
Supervision and Management in Health Care
117 Health Occupations Skill Enhancement
118 (Certified) Personal Trainer
119 Pharmacy Technician (Diploma)
Pharmacy Technician (Certificate)
120 Physical Therapist Assistant
121 Sports Medicine - Athletic Training
122 Sports Medicine - General Studies
123 Surgical Technology
124 Surgical Technology (Diploma)
125 History
126 Independent Filmmaking
127 Information Systems
128 Manufacturing
Industrial Plant Technology
129 Computer Numerical Control Operator
Electrical Maintenance Technician
130 Machine Operations
Mechanical Maintenance Technician
131 Mass Media
132 Mathematics
133 Mechanical Engineering
Mechanical Engineering Technology
134 Motorcycle/Powersports
135 Motorcycle Mechanic
Small Engine Mechanic
136 Music
137 Networking
Network Administration and Security
138 LAN Technician
139 A+ Certification
Cisco Certified Network Associate-CCNA
140 Microsoft Certified Technology Specialist (MCITP)
Microsoft Certified IT Professional (MCITP)
141 Paralegal
Legal Office Aide
142 Photography
Professional Photography
143 Professional Photography Technician
144 Physical Education
145 Coaching
146 Police Science
Police Science–Corrections
147 Police Science–Forensics
Investigation
148 Police Science Technology
149 Political Science
150 Psychology
151 Social Media Marketing
152 Social Work
153 Sociology
154 Technical Studies
155 Video Game Design
156 Video Game Audio Production
Video Game Design Digital Character Animation
157 Video Game Design Dynamic & Visual Effects
158 Welding
Advanced Welding
Qualified Welding
159 Industrial Welding
160 Wind Energy Technician
Wind Turbine Maintenance Specialist
Wind Site Assessment Specialist
Wind Energy Technician
161 Corporate College
 Truck Driver Training
162 Course Numbers
163 Course Listings
209 Merged Area XII
Campus Directory
210 Board and President
211 Faculty and Administration
216 Support Staff
217 Advisory Committees
221 Foundation Board
222 Index
# Career Cluster Program Index

The States’ Career Clusters Initiative (SCCI) is a national initiative intended to help states and schools organize their programs and guidance activities around clusters of similar occupations. The 16-cluster format used by the U.S. Department of Education encompasses all 970+ occupations.

“Our 16 broad career clusters will help students enhance the link between the knowledge they acquire in school and the skills they need in the workforce. Without limiting students, career clusters help them focus on an area of interest or a possible career path.”

– Richard W. Riley, Former U.S. Secretary of Education

## Agriculture, Food, & Natural Resources
- Agriculture
- Agriculture Management
- Agribusiness Technology
- Biology
- Chemistry
- Veterinary Assistant

## Architecture & Construction
- Mechanical Engineering Technology
- Mechanical Drafting
- Construction
- Electronic Systems Technology
- Air Conditioning
- Heating
- Refrigeration
- Electrician
- Advanced Welding
- Industrial Welding
- Qualified Welding

## Arts, A/V Technology, & Communications
- Art and Design
- Audio Engineering
- Independent Filmmaking
- Music
- Band Instrument Repair Technology
- Electronic Systems Technology
- Graphic Design
- Interior Design
- Professional Photography
- Video Game Design
- Web Design

## Business, Management, & Administration
- Business Administration
- Business Management
- Accounting Specialist
- Paralegal/Legal Assistant
- Administrative Assistant–Medical
- Administrative Office Management
- Agribusiness Technology
- Financial Services
- Human Resource Management
- Technical Business Management
- Bookkeeping and Office Support
- Accounting
- Entrepreneurship
- Medical Transcription
- Human Resources
- Medical Assistant
- Medical Coding Specialist
- Medical Secretary
- Admin. Office Support

## Education & Training
- Education
- Paraeducator
- Early Childhood Education
- Early Childhood Education
- Child Development
- Physical Education

## Finance
- Financial Services
- Accounting
- Accounting Specialist
- Bookkeeping
- and Office Support
- Mathematics

## Government & Public Administration
- Accounting Specialist
- Cyber Security and Digital Crime
- Emergency & Disaster Management
- Technical Emergency & Disaster Management
- Police Science - Forensics Investigation
- History
- Political Science

## Health Science
- Biology
- Chemistry
- Practical Nursing
- EMS–Paramedic
- Associate Degree Nursing (ADN)
- Medical Lab Technician
- Physical Therapist Assistant
- Medical Assistant
- Pre-Dental Hygiene
- Surgical Technology
- Certified Personal Trainer
- Dental Assisting
- Pharmacy Technician
- Hospital Records Transcription
- Medical Secretary
- Administrative Assistant–Medical
- Medical Coding Specialist
- Sports Medicine - General Studies
- Sports Medicine - Athletic Training

## Hospitality & Tourism
- Business Administration
- Business Management
- Certified Personal Trainer
- Entrepreneurship
- Foreign Language
- Music

## Human Services
- Child Care Supervision and Management
- Certified Personal Trainer
- Addictions Counseling
- Child Care Development
- Financial Services
- Psychology
- Social Work
- Sociology

## Information Technology
- Network Administration & Security
- Cyber Security & Digital Crime
- Information Systems
- Computer Programmer
- Electronic Systems Technology
- Graphic Design
- Web Design
- Electronics Systems Technology
- LAN Technician

## Law, Public Safety, Corrections, & Security
- Political Science
- Police Science - Corrections
- Cyber Security and Digital Crime
- Emergency & Disaster Management
- Technical Emergency & Disaster Management
- EMS - Paramedic
- Fire Science
- Police Science - Forensics Investigation
- Police Science Technology
- Paralegal/Legal Assistant

## Manufacturing
- Pre-Engineering
- Electronic Systems Technology
- Mechanical Engineering Technology
- Air Conditioning
- Heating
- Refrigeration
- Electrician
- Electronic Systems Technology
- Industrial Plant Technology
- Advanced Welding
- Qualified Welding

## Marketing, Sales & Service
- Business Administration
- Business Management
- Mass Media
- Entrepreneurship
- Graphic Design
- Web Design
- Web Programmer
- Professional Photography
- Social Media Marketing*
- Marketplace Design*

## Science Technology, Engineering, & Mathematics
- Construction
- Mathematics
- Engineering
- Biology
- Biotechnology
- Chemistry
- Physics
- Electrician
- Electronic Systems Technology
- Information Systems

## Transportation, Distribution, & Logistics
- Auto Collision Repair Technology
- Automotive Technology
- Auto Body Refinishing
- Auto Body Repair
- Auto Body Structural Repair
- Auto Mechanics
- Information Systems
- Motorcycle/Powersports Technology

* Pending State Approval
Mission, Values and Guiding Principles

Mission

As a comprehensive community college, our mission is to provide quality education and to economically enhance the communities we serve.

To accomplish the mission, the College will:

- Provide post-secondary occupational education leading to diplomas, certificates, and the Associate of Applied Science degree.
- Provide post-secondary general and transfer education leading to the Associate of Arts or Associate of Science degree.
- Provide basic education for the improvement of academic skills and/or leading to a General Educational Development (GED) diploma.
- Provide economic development programs and assistance.
- Provide lifelong community and continuing education.
- Develop partnerships with educational institutions, businesses, governmental agencies, and communities.
- Develop programs for participation in the global economy.
- Provide student development services to improve the academic success of our diverse student population.
- Provide opportunities for our students to participate in leadership development and in community, social, and recreational activities.
- Maintain a learning and working environment that is safe, clean, and comfortable.
- Provide student and employee support services to operate the College.

Values and Guiding Principles

- **Student Learning.** We value the personal, intellectual, and occupational growth of our students.
- **Quality.** We are committed to quality instruction and services to maximize student success and employer satisfaction.
- **Access.** We provide access to the College by addressing student needs related to time, location, and cost.
- **Diversity.** We respect individual differences and strive to meet the needs in our diverse communities.
- **Lifelong Learning.** We promote lifelong learning for personal and professional development.
- **Academic Freedom.** We are dedicated to the free exchange of ideas and information which promotes our growth as an educational institution.
- **Shared Governance.** We believe in shared governance and encourage our employees and students to contribute to the development of the College.
- **Efficiency and Effectiveness.** We are committed to continuous improvement and fiscal responsibility within our educational programs and College services.
- **Dedication.** We value a workplace which promotes mutual respect and cooperation between the College and the employees.
- **Professional Integrity.** We are committed to high standards of ethics and integrity in our relationships, our professional activities, and the performance of our duties.
Western Iowa Tech Community College’s scholar-practitioner model of learning is embedded in a culture of innovation, carried out with integrity and evidenced through the success of our learners and our communities.

**The best place to start and succeed**
- creating opportunities in an environment of hope for all learners
- providing meaningful education and training so that learners may successfully pursue careers and/or further their education
- promoting and transcripting credentialed, lifelong learning
- engaging communities regionally, nationally, and globally

**Learner-centered**
- examining the implications of ethical, historical, economic, and social trends
- developing, deploying, and assessing curriculum to meet learners’ needs
- cultivating technical and professional skills for tomorrow’s workforce
- encouraging excellence in employees
- providing comprehensive support systems

**Innovative**
- encouraging creativity as a means for generating positive change
- fostering openness and diversity of thought, experience, and culture
- forging relevant interdisciplinary learning opportunities
- collaborating globally in regional economic development
- expanding workforce and industry capability
- embracing an evolving curriculum architecture process

**A model of integrity**
- demanding academic rigor and relevance
- fostering WITCC’s values and guiding principles
- accomplishing initiatives through genuine empowerment
- operating resourcefully, effectively, and efficiently
- establishing a shared vision through effective internal governance

Adopted Fall 2006
Western Iowa Tech Community College is a publicly supported comprehensive community college serving the Iowa counties of Cherokee, Crawford, Ida, Monona, Plymouth, and Woodbury, which have a combined population of about 180,000.

A nine-member Board of Directors provides governance for Western Iowa Tech Community College. The board members are elected from the nine districts in the six-county service area. The College is accredited by the North Central Association of Colleges and Schools and is regulated by the Iowa State Department of Education.

Brief History

The College was organized in August 1966 and created as an area vocational-technical school as provided in Chapter 280A of the Iowa Code. The first board of directors was chosen at a special school election on November 2, 1966. The Board selected Dr. Robert H. Kiser to serve as chief administrator and named the school Western Iowa Tech.

The first classes began on January 27, 1967, when Western Iowa Tech accepted responsibility for one vocational and two technical postsecondary programs then operated by the Sioux City Community Schools. By fall term of 1967, 17 full-time programs were in operation. At that time, Western Iowa Tech also assumed direction of all adult basic, high school completion, high school equivalency certificate and occupationally oriented adult educational programs. At this point enrollment totaled 230.

During the first years of operation, WITCC offered programs at various temporary locations throughout Sioux City. The first administrative home in 1966 was the former Hobson School building located at 222 South Floyd Boulevard. In 1968, the administrative offices were moved to the former Trinity Prep campus at 3075 Floyd Boulevard.

In 1970, enrollment totaled 510 and a permanent campus was established on a 143 acre site at 4647 Stone Avenue. The first building was completed and occupied during the 1970-71 school year. In November 1972, ground was broken for another, adjacent building. In 1973, when Western Iowa Tech received permission to offer a two-year associate of arts degree, the curriculum became fully comprehensive. The facility for radio station KWIT was completed in 1978. The station provided public, non-commercial radio within an 80-mile radius of the city.

In the fall of 1980, credit enrollment totaled 1,323. During the same year, construction was completed on the then Student Center and the Gaylord Smith Vocational Building. On-campus housing, Sun Ridge Court Apartments, was built in 1982. In 1984, the Transportation Center, located at 5001 East Gordon Drive, was added to the Sioux City campus.

In 1990, credit enrollment totaled 1,687. In 1991, Dr. Robert H. Kiser retired from the presidency of the College after 25 years of service. Dr. Robert E. Dunker, a graduate of the College’s first Mechanical Drafting and Design Technology class, was selected by the Board of Directors as the second president to lead Western Iowa Tech Community College. In 1992, remodeling of the College’s original structure added two lecture halls and an interactive television classroom. Distance learning became a reality. Through community partnerships, the College constructed and opened the Denison Campus in 1993. In 1996, through community partnerships, the College constructed and opened the Cherokee Campus and Conference Center. In 1994, extensive construction joined the College’s first two structures into an instructional, student service administrative facility known as the Dr. Robert H. Kiser Building.

In 2000, fall credit enrollment totaled 4,365. Online classes were first offered in 2002 providing a whole new, convenient platform for learning. KWIT added KOJI in 2002 bring Iowa public radio programming to the Great Lakes region for the first time. In 2003, the Denison campus was remodeled and expanded adding classroom, library and new high-tech equipment space. During that same year, the first tree was planted on the Sioux City campus’s Loess Hills Arboretum and Nature Trail. The College constructed and opened the Cherokee Campus and Conference Center. In 1994, extensive construction joined the College’s first two structures into an instructional, student service administrative facility known as the Dr. Robert H. Kiser Building.

In 2010, credit student enrollment reached 6,421. During 2011, Dr. Robert E. Dunker retired as president after 20 years of service. Upon his retirement, he received the title of President Emeritus and was further honored by the dedication of the new student center in his name. This 40,000 square foot center provides fitness and meeting facilities for learners and employees. Dr. Terry A. Murrell, who joined Western Iowa Tech four years earlier, was selected by the Board of Directors after a national search to become the College’s third president. During 2012, renovations of existing facilities upgraded the student learning environments in the Kiser Building and community meeting area in the Corporate College.
Enrollment Services

WITCC is committed to providing an atmosphere that encourages scholarship, the robust exchange of ideas and interaction with others in a safe environment.

WITCC reserves the right to deny admission or place conditions on admission or the enrollment of any applicant, student, or former student if WITCC determines that such person presents an unreasonable risk to the safe and orderly campus environment.

WITCC also reserves the right to deny a student’s application for residence hall housing, or remove a student from a residence hall, if it is determined that the student presents an unreasonable risk of harm to others in the residence hall.

A Checklist for Registration and Your Academic Success

✓ Complete and submit Application for Admission
  • Apply online at www.witcc.edu.
  • Application available in Admissions and Advising (Room A300) on the Sioux City Campus, or the main office on the Denison, Cherokee, and Le Mars campuses.

✓ Apply for Financial Aid if needed
  • Apply online at www.fafsa.gov.
  • Start this process early. It sometimes takes 6-8 weeks for government aid.
  • If you need assistance applying, call Financial Aid at (712) 274-6402.

✓ Take the Computerized Placement Test (CPT)
  • Students with an ACT composite of 22 or higher may be exempt.
  • Schedule CPT by calling the Testing Center at (712) 274-8733, ext. 6443 for Sioux City; or, call Denison at ext. 2621; call the main office in Cherokee at ext. 1240; or call Le Mars at (712) 546-7338.

✓ Visit with an Admissions Advisor
  • Interpret CPT scores, develop an academic plan, select and schedule classes.

✓ Register for your WITCC Classes
  • Online - using my.witcc.edu.
  • By telephone - call (712) 274-6404, or (800) 352-4649, ext. 6404; in Denison at ext. 2621; in Cherokee at ext. 1240; in Le Mars at (712) 546-7338.
  • In person - in Registration (Room A300) on the Sioux City campus; or the main office on the Denison, Cherokee, or Le Mars campuses.

✓ Pay your Tuition
  • In person; by phone at (712) 274-8733, ext. 1210; or online at my.witcc.edu; or the main office on the Sioux City, Denison, Cherokee, and Le Mars campuses.
  • Refer to Methods of Payment and Tuition Charges on the following pages of this booklet.

✓ Purchase Books
  • Online at bookstore.witcc.edu.
  • Bookstore hours are 7:30 a.m. - 6 p.m. Monday - Thursday and 7:30 a.m. - 5 p.m. on Friday on the Sioux City campus.
  • Go to the main office at the Denison, Cherokee, or Le Mars campuses.

✓ Go to Class!

Applying for Admission

Western Iowa Tech Community College is an open enrollment institution. To be admitted to the College as a student, new students must submit a completed Application for Admission. Admission to the College does not guarantee admissions into programs or courses. Students are encouraged to submit an official high school transcript showing receipt of high school diploma, or submit official documentation that a GED has been received. A high school transcript is required for admission to some programs.

College Experience Class

SDV-108, The College Experience, is a one-credit, pass/fail course. This course introduces students to the college’s expectations, environment, and resources so that students may become more competent participants in the learning process. The College Experience allows students opportunities to learn about WITCC policies and procedures that will impact them. They also learn about acclimation to college, financial aid, campus security, self-advocacy, learning styles, study habits, student activities, and much more. Students are required to enroll in The College Experience during their first semester of college. The College Experience, SDV-108, is a required course for all new certificate (12+ credits), diploma, and degree-seeking students, part-time or full-time. Successful completion of SDV-108 is a requirement of graduation. All students will benefit from SDV-108; however, students who fit into the following categories are not required to take the course:

1. Those students who have successfully passed a similar course at another institution.
2. Those students who transfer 12 or more credits with a minimum GPA of 2.0.
3. Those students who previously attended Western Iowa Tech and successfully completed 12 or more credits with a minimum GPA of 2.0. This does not include those students who completed college-level courses while enrolled in high school.

Transfer Students

Admitted students who want credits transferred to WITCC from another postsecondary institution need to submit an official transcript to the Registrar. An evaluation of credit is completed after the student registers for classes. Grades earned with a “C” or higher are eligible for transfer.

Readmitting Students

A student who has a break in enrollment in the College for two or more consecutive semesters, excluding summer sessions, is readmitted to the College under the catalog program requirements in effect at the time of readmission. The student must submit a completed Application for Admission.

International Students

The following conditions apply to students from outside the United States seeking admission to the College:

1. Immigration laws require international students on certain visas to attend college as full-time students.
2. Any individual with a visa and enrolled as a student will be considered to be a non-resident for purposes of tuition payments.
3. An applicant whose native language is not English is required to take the Test of English as a Foreign Language (TOEFL). The applicant must submit an official Score Report of the Test of English as a Foreign Language (TOEFL), if English is not the language of instruction in your country. One of the following TOEFL test options is required:
   a. a TOEFL paper-based test score of 450.
   b. a computer-based test score of 133, or
   c. an Internet-based test score of 45.

Only international students with F-1 student visas transferring from other post-secondary institutions in the United States who cannot produce the required TOEFL score must take the Computerized Placement Test (CPT) when they arrive on campus. Based on the results of this test, the student will be placed in the academic developmental classes as test scores indicate. The classes are held at the Sioux City main campus.

4. The applicant is required to complete the Application for Admission (International Student) form.

5. The applicant must provide an official high school transcript of grades (English translation) with the date of graduation. For students transferring from another college or university, official transcripts are required (certified English transcripts).

6. The applicant must provide evidence of financial independence while attending college. A deposit covering tuition, fees, books, supplies, health insurance, and an estimated cost of living expense allowance for one year must be submitted in advance.

7. Although all of the deposited money may not be needed, it is available to the student and may be used as conditions warrant. The unspent money, with any accrued interest, is returned to the student at the time of departure.

8. Upon completion of the requirements for admission, the I-20 Eligibility Form and a letter of acceptance will be sent to the applicant.

Criteria for Admission to Specific Programs

Programs which have program-specific admission criteria include, but are not limited to:

- Business Occupations
  - Accounting
  - Accounting Specialist
  - Administrative Assistant – Medical
  - Administrative Office Management
  - Bookkeeping and Office Support
  - Human Resources
  - Management Specialist
  - Marketing Management
  - Technology and Office Assistant
- Child Care Supervision and Management
- Emergency & Disaster Management
- Fire Science
- Health Occupations
  - Associate Degree Nursing (RN)
  - Dental Assisting
  - Emergency Medical Services/Paramedic Specialist
  - Physical Therapist Assistant
  - Practical Nursing
  - Surgical Technology
- Police Science/Corrections/Forensics

For information on specific program requirements, contact the Admissions Office for a requirements booklet.

A person who does not meet the requirements for a specific program may become eligible after completing appropriate work in developmental credit classes or prerequisite credit classes and achieving the appropriate Computerized Placement Test (CPT) scores.

Admission to the programs listed above is based on the order in which the requirements for admission are completed and on the availability of space.

Health Occupations Programs Requirements

- All students in the health careers have additional program specific admission criteria. Students entering health career occupations need to be able to perform certain activities in order to be successful in the occupation. The Iowa Core Performance Standards (found in the specific program requirements booklet) was developed so prospective individuals will be aware of the occupation requirements. Before final admission applicants are responsible for providing medical and other documentation related to any disability and the appropriate accommodations needed to meet the Core Performance Standards.
- Students in health careers will need to complete a criminal history and give permission to have individual criminal background checks completed. Results of the criminal background check will be released to many external affiliating agencies so students can be screened for acceptance into agencies for clinical experience.
- Students in health careers may need to consent for drug testing and release of that information to external affiliating agencies for clinical experience. The drug test is a urine specimen that is tested for the presence of drugs, including but not limited to amphetamines, cannabinoids (marijuana), cocaine, opiates, and phencyclidine (PCP).
- A health evaluation, which includes health history, hearing, vision, immunization record and physician physical, must be completed prior to entering the clinical phase of the program.

Registration

Registration is the process of selecting a course of study, officially enrolling for class(es) and the payment of tuition and fees. Dates of registration and instructions are published each semester in the Schedule of Classes. Academic advising and assistance will be provided by faculty, admissions advisors, and other staff members; however, it is the responsibility of the student to be certain that the courses selected will meet the requirements for the degree, diploma or certificate in their program of study.

Registration Requirements

To register for classes, a student:
1. must complete the Admissions requirements;
2. have no outstanding financial or other obligations to the College;
3. must complete assessment testing unless waived (see page 15); and
4. must be in good academic standing and cannot have been dismissed from the College for conduct reasons.

Changes in Registration

Students who wish to add or drop classes after registering for a semester should use the online service at my.witcc.edu or submit a completed Add/Drop/Withdrawal form at the Registration Center, or call (712) 274-6404 or (800) 352-4649, ext. 6404.

Change of Major

Process to update Program of Study Information:
- Go to MyWit
- Go to the student tab
- Go to Self Service - Academic Profile -
- Go to my educational plan - check active academic program and your catalog.

If not correct, contact admissions and registration office at (712) 274-6403, to make a change.
 Withdrawal Policy
Withdrawal is defined as dropping all classes and having no credit hours for a given semester.
A student officially withdraws from school when:
• The student submits a written notice of total withdrawal to a Registration Center. (A signed official withdrawal form or other written notice, such as an e-mail to the registrar, constitutes a written notice.) OR
• The student calls a Registration Center at any of the WITCC campuses and declares his/her intent to withdraw from all courses. The student must supply all information requested by the registration clerk or the withdrawal will not be considered official or completed. OR
• The student withdraws online from all classes using my.witcc.edu.
The date of official withdrawal will be the date the written notice is received in the Registration Center, or the date the student’s phone call is received, or online notice is processed.
A student will be considered to have unofficially withdrawn when:
• The student does not complete the official withdrawal process. AND
• All of the student’s instructors report that the student is no longer attending classes. OR
• The student has received an “F” grade in all classes.
The date of unofficial withdrawal will be the mid-point of the semester.
If the student wishes to document his/her last date of attendance, it is the student’s responsibility to have his/her instructors send an e-mail to the registration center stating the last date the student participated in an academically related activity which was part of the course of instruction.

Institutional Refund Policy
Students who stop attending and who fail to officially withdraw will NOT receive a refund of tuition and fees.
A schedule for refunding of tuition and/or fees is published each semester in the Schedule of Classes. Copies are available in Admissions and Advising, Room A300, or online at my.witcc.edu.

Fees and Expenses
Tuition and fee charges are determined annually by the WITCC Board of Directors and are published in the Credit Class Schedule book.
Course Fees: Material and lab fees may be assessed on a course by course basis. A list of course fees is published in the Schedule of Classes and maintained in the Student Accounts Office.
Books and Supplies: Students may purchase books and supplies through the WITCC Bookstore. Students attending classes in Cherokee, Denison, and Le Mars may purchase their books at those campus centers. Students may also purchase books online; go to bookstore.witcc.edu.
Other: Depending on the program, the student may be required to purchase uniforms, tools, instruments or other equipment (examples of such programs or courses are art, science, health occupations programs, auto tech programs, construction trades, etc.). For an estimate of costs, see the program advisor.

Payment of Accounts
Charges incurred each semester for tuition, fees, and other expenses (books and supplies) are the responsibility of the student. Payment or arrangement for payment is due on the first day of class. Failure to make payment or payment arrangements may result in disenrollment of all classes.
No student shall be permitted to register for a new semester or attend classes until all prior accounts are settled. Students will not be granted a degree, diploma, certificate, final grade report, or official transcript until all outstanding accounts with the College have been paid in full.

1. Payment in Full – you may pay your tuition and fees in person, by phone, or online at my.witcc.edu. Payment may be made with cash, check, debit card, Visa, MasterCard, or Discover.
2. Payment by Financial Aid – approved financial aid will be applied to the student’s charges.
3. Payment by Third Party – if sponsored by an agency (JTP, DVRS, etc.), please sign the invoice and return to Student Accounts.
4. FACTS Tuition Payment Plan – Western Iowa Tech Community College has a tuition payment plan option to accommodate the financial needs of students. Students using the FACTS payment plan may apply online at any computer with online access by using my.witcc.edu. Additional information regarding online application is provided by the Student Accounts Office at (712) 274-8733, ext. 1210.

Returned Checks. A service charge is assessed for returned checks.

Residence Qualifications
For tuition charges, students will be classified as either an Iowa resident or non-resident based on the purpose of being in Iowa. A student is classified as a non-resident if the sole purpose for being in Iowa is to attend school. However, a student’s residency status may change, once the student has resided in the State of Iowa 90 days prior to the start of a semester.
If the student establishes an Iowa residence and wishes to apply for a change of status, it is the responsibility of the student to request a change of residency status by filling out the Request for Iowa Residency Status form. This request must be initiated with the Enrollment Services Office. Supporting documentation will be required. The request to change status must be made prior to the beginning of the semester it will take effect. The decision of the Dean of Students will be final.

Appealing Tuition and Fee Charges
Students who must drop classes within a semester due to extenuating circumstances may request an adjustment of tuition. Extenuating circumstances may include medical hardship, the death of immediate family members, military activation, or other situations which prohibit the student from completing a class. Students appealing charges must provide supporting documentation.
Students wishing to appeal tuition and fee charges for a semester must complete the appropriate appeal form available at the Registration Center. The appeal form must be received by the end of the subsequent semester. Appeals received after this time will NOT be reviewed. The Appeals Committee will review the appeal petition and make a decision. The decision of the Dean of Students is final.
Western Iowa Tech Community College believes that the opportunity for a college education should be within the reach of all interested individuals. The College administers a financial aid program designed to assist the student who qualifies, to complete a diploma or degree program. The purpose of the Financial Aid Office is to assist, within the limits of its resources, students who have a financial need.

All students who are accepted to WITCC and apply for financial aid will be considered for aid regardless of race, creed, color, gender, national origin, religion, age, disability, sexual orientation, or other protected basis as set forth in the College’s affirmative action plan. Students must make satisfactory academic progress to continue their eligibility for financial aid.

**Applying for Financial Aid**

To apply for financial aid a student must:

1. Complete the Free Application for Federal Student Aid (FAFSA). The FAFSA is available online at [www.fafsa.gov](http://www.fafsa.gov) and may be submitted after January 1 for the school year beginning the next fall. If you need assistance accessing the FAFSA online, contact the Student Service Center.

2. To receive financial assistance, the following requirements apply:
   a. Graduation from high school, completion of the GED.
   b. Admission into an eligible program at WITCC leading to a degree or diploma.
   c. U.S. citizenship or eligible non-citizen status.
   d. Possession of a valid Social Security number.
   e. Must not be in default on any federal student loan or in repayment status on a federal grant.
   f. Males who are required to be registered with the Selective Service must be registered.
   g. If you are a returning student at WITCC, you must be making satisfactory academic progress as defined by the institution.

**Financial Aid Refund Policy**

**Important Notice for Financial Aid Recipients**

The American taxpayers have entered into an agreement with you by investing tax dollars in grants and loans for your education at Western Iowa Tech. This investment places a serious responsibility on you to complete your education according to the agreement with the American taxpayers. If you fail to complete your education, the American taxpayers are entitled to receive back, from you, a portion of their investment.

**Consequences of Withdrawal and Financial Aid**

A student receiving federal financial assistance may have his/her financial aid adjusted based on his/her date of official or unofficial withdrawal.

**Procedure for Repaying the U.S. Government**

If you owe a repayment for grants received at WITCC, it may be possible to resolve your repayment at the Student Accounts Office. Contact the Student Accounts Office for details.

If you do not contact the Student Accounts Office within 15 days of receiving notice and schedule your repayment, you will be turned over to the U.S. Department of Education for collection. If you are referred to the Department of Education, you will remain ineligible for federal aid until the college receives notice from the Department of Education that you have re-established your eligibility. Carefully read all correspondence received from WITCC in case there is a change in your financial obligation to the college or your financial aid eligibility.

If you have any question about the effect of the Return of Funds to the federal aid programs, contact the Financial Aid Office.

**Satisfactory Academic Progress Standards for Financial Aid Recipients**

Federal and state regulations require students receiving financial aid to maintain satisfactory academic progress. These standards apply to recipients of federal, state, and institutional programs administered by the WITCC Financial Aid Office. Scholarships awarded by WITCC from institutional or foundation resources are governed by criteria specific to those awards.

Satisfactory academic progress is evaluated at the end of each semester during the regular academic year. Students attending summer sessions are evaluated at the end of the second session. Satisfactory Academic Progress Standards apply to all work attempted even though a student may not have been receiving financial aid.

A student must complete his/her program within 150 percent of the amount of credits normally required to complete a degree or diploma.

A minimum 2.0 cumulative grade point average for all course work at WITCC is required. In addition, a student must complete 67% of all hours attempted at WITCC.

1. Credit hours completed are:
   a. “A” through “D-” grades
   b. “P” passing with credits

2. Incomplete credit hours are:
   a. “F” grade
   b. “W” grade
   c. “X” replaced grade
   d. “O” academic renewal
   e. “I” incomplete

3. A student who withdraws from WITCC and re-enrolls at a later date will return with a financial aid status determined at the end of the semester for which he/she withdrew from WITCC.
4. Transfer students may be assumed to be making satisfactory progress for the first disbursement of financial aid funds. Cumulative GPA for transfer students is based on WITCCC academic work only. However, credits transferred from other institutions will be used to evaluate program completion within the 150 percent time frame. Transcripts from all previously attended post-secondary institutions may be required.

**Financial Aid Warning**

A student who has received financial aid is placed on financial aid WARNING the first time he/she fails to maintain a 2.0 cumulative grade point average or fails to complete 67% of all hours attempted. A student on financial aid WARNING continues to receive financial aid. If a student does not meet the minimum levels by the end of the WARNING semester, the student is considered to be making unsatisfactory academic progress and is NOT ELIGIBLE for Financial Aid.

However, a student whose cumulative credits earned is 0 or whose cumulative grade point average is 0.0 will become ineligible. (See Appeal of Financial Aid Eligibility)

**Notification**

The Financial Aid Office notifies any student receiving financial aid who does not meet the minimum satisfactory academic progress standards by e-mail at their my.witcc.edu e-mail account.

**Appeal of Financial Aid “Not Eligible” Status**

Any student who loses eligibility for financial aid based on academic performance or extenuating circumstances such as death of an immediate family member, serious illness or other significant circumstances which adversely affected their academic performance to the Academic Progress Appeal Committee.

An appeal must be made in writing in a format provided by the Financial Aid Office. When documentation of extenuating circumstances is available, it must be submitted with the appeal. An Academic Plan, signed by the student’s advisor, must also be submitted with the appeal.

The decision of the committee will be final.

**Types of Financial Aid**

**Federal Programs**

**Federal Pell Grants.** All students should apply for this grant by completing the Free Application for Federal Financial Aid (FAFSA). The grant does not need to be repaid. Grants are variable in amount depending on student eligibility, enrollment status, and federal appropriations.

Federal Supplemental Educational Opportunity Grants (FSEOG). These grants are awarded to students demonstrating exceptional financial need. The Free Application for Federal Student Aid (FAFSA) is used to apply for these grants. Students are notified of their eligibility for this grant by the Financial Aid Office. Grants are variable in amount depending on student eligibility, enrollment status, and federal appropriations.

**Federal Stafford Direct Student Loans.** A student’s eligibility for the Federal Pell Grant must be determined before a Direct Loan may be processed. Submit the Loan Request Form to the Financial Aid Office online through my.witcc.edu and complete all loan eligibility requirements if you wish to borrow.

**Federal Work-Study Programs.** In addition to grants, students may be awarded part-time jobs funded through the Federal Work-Study Programs. Eligibility is based on financial need. Students employed under the Federal Work-Study Programs are paid monthly by check. Contact the Student Service Center for details.

**State Programs**

(Click [www.iowacolleageaid.gov](http://www.iowacolleageaid.gov) for complete details.) Deadline for submitting the FAFSA for state programs is July 1.

**Iowa Vocational-Technical Tuition Grants.** The Legislature of the State of Iowa sets aside funds each year to assist students who choose vocational programs at the Iowa area schools. Students must be residents of Iowa as defined in the state of Iowa Code and Policy.

**Iowa Grant.** These grants are awarded to students who have filed a FAFSA and demonstrate exceptional financial need. Students are notified of their eligibility by the Financial Aid Office. Grants are variable in amount and based on student eligibility, enrollment status, and state appropriations.

**All Iowa Opportunity Scholarship Program.** This is a statewide need-based program to assist high-need Iowa residents. Recipients must demonstrate financial need and make satisfactory academic progress to receive the award. Students must complete the All Iowa Opportunity Scholarship online application each year by the deadline set by the College Aid Commission, usually May 1, at [www.ihaveaplan.iowa.gov](http://www.ihaveaplan.iowa.gov). Students must also file the Free Application for Federal Student Aid (FAFSA) by July 1.

**All Iowa Foster Care Grant.** This grant program is a statewide need-based program to assist high-need Iowa residents who were in the Iowa Foster Care system. Recipients must demonstrate financial need and make satisfactory academic progress to receive this award. Students must file the All Iowa Foster Care Grant online by the deadline set by the College Aid Commission, usually May 1, at [www.ihaveaplan.iowa.gov](http://www.ihaveaplan.iowa.gov) to be considered for an award. Students must also file the Free Application for Federal Student Aid (FAFSA) by July 1. Students may apply for an award at age 17, but cannot be a recipient until age 18. Students must be under age 24 to be a recipient.

**Iowa National Guard Education Assistance Program.** Grant assistance for members of the Iowa National Guard. Annual application is required. Contact your Guard unit for application procedures and deadlines or go to [www.ihaveaplan.iowa.gov](http://www.ihaveaplan.iowa.gov).

**Aid from Other States.** Non-Iowa residents may be eligible for assistance from their home state. Contact the WITCCC Financial Aid Office if you need to know how to contact your state agency.

**Scholarships**

**Foundation Scholarships.** The Western Iowa Tech Community College Foundation is a non-profit organization operated for charitable, scientific, and educational purposes. Currently, the Foundation has the following Scholarships available:

- AAUW Scholarship
- AGP Scholarship
- Alorica Scholarship
- Alumni Scholarship
- Annual Campaign Scholarship
- Argosy Scholarship
- Bacon Creek Construction and Design, Inc. Scholarship
- Band Instrument Repair Scholarship
- Mary Biles Nursing Scholarship
- Shawn Blair Memorial Scholarship
- BoDean’s Scholarship
- Bomgaars Scholarship
- Larry and Jeannene Book Scholarship
- Broadway Dental Scholarship
- Cargill Scholarship
- Crouch Education Foundation Scholarship
- Crouch Education Foundation Scholarship - GED
- Day’s Door Scholarship
- Denison Campus Scholarship
- Dental Assisting Scholarship
- Ann Doeden Memorial Nursing Scholarship
- Raleigh and Kathy Downey Memorial Auto Collision Scholarship

Western Iowa Tech Community College 2013-2014 Catalog 12 800.352.4649 or www.witcc.edu
• Ernest and Ann Dunker Memorial Scholarship
• Educational Talent Search Scholarship
• Electrician Scholarship
• Foulk Bros. Plumbing and Heating Scholarship
• Jeff Feldick Memorial Scholarship
• Fred Fowler Memorial
• Geletta, USA, Inc. Scholarship
• Goosmann Law Firm Scholarship
• HACAS
• Bill and Eunice Hanson Scholarship
• Dwight C. Hauff Foundation Scholarship
• Bill Hattig Memorial Scholarship
• Henjes Conner & Williams PC Scholarship
• Marsha Hofer Memorial Scholarship
• History Scholarship
• Homebuilders Association of Siouxland Scholarship
• Robert C. Hopper Memorial Welding Scholarship
• Huculak-Mercer PTA Scholarship
• Humanities, Social, and Behavioral Sciences Scholarship
• Hy-Vee, Inc. Scholarship
• IMKO/Diversified Workforce Solutions Scholarship
• Roland and Carol Junck Scholarship
• Klinger Companies, Inc. Scholarship
• Dons Koeppe Memorial Nursing Scholarship
• Art Ludwigs Memorial Scholarship
• Mahoney-Hill Scholarship
• Steve and Brenda Martens Scholarship
• Media Concepts Scholarship
• Mid-American Energy Company Scholarship
• Lyle Miller Memorial Scholarship
• Missouri River Historical Development Scholarship
• Curt Neill Memorial Scholarship
• Nor-Am Cold Storage Scholarship
• Chuck Norby Memorial Scholarship
• Office Systems Co. Scholarship
• PLaN Architecture Scholarship
• Ginny Peterson Scholarship
• Pinnacle Bank Scholarship
• Pioneer Bank Scholarship
• Kristin Polley Memorial (TRiO) Scholarship
• Primebank Scholarship
• Prince Manufacturing Corp. Scholarship
• Dr. Carolyn Rants Scholarship
• Ruby Rasmus Memorial Nursing Scholarship
• Grace & Leo Rasmussen Memorial Scholarship
• Ray’s Mid-Bell Music Scholarship
• River Valley Legacy Scholarship
• Rogers Electric Scholarship
• Tom Rozmiarek Welding Scholarship
• Sabre Towers and Poles Scholarship
• Robert Schmeckpeper Memorial Accounting Scholarship
• Luke Schneider Memorial Fire Science Scholarship
• Eldon Schroder Scholarship
• Patrick Scollard Memorial Scholarship
• Scott Family Scholarship
• John Scott Memorial Police Science Scholarship
• Security National Bank Scholarship
• SHIP Scholarship
• Sioux Body Shop Scholarship
• Sioux City Police Officers Association Scholarship
• Siouxland Community Foundation/United Airlines Scholarship
• Siouxland Federal Credit Union Scholarship
• Soo Tractor Sweepstake Scholarship
• Sterk Financial Services Scholarship
• Doc Stewart Memorial Scholarship
• Study Abroad Scholarship
• United Way Scholarship (Women's Power Lunch)
• Deb Peniska Upward Bound Scholarship
• U S Bank Scholarship
• Van Meter Industrial Scholarship
• Wells Fargo Bank Scholarship
• WITCC Student Senate Scholarship
• WITCCSEA Scholarship
• Charlie Zook Motors Scholarship

**Annual Campaign Scholarships.** All students are encouraged to apply for this scholarship as students in all programs of study are awarded scholarships from this fund.

**Program Scholarships.** Many scholarships are available for students in a particular program. Please contact your program instructor or the Financial Aid Office for more information.

**Other Scholarships.** Other scholarships are available through organizations independent of WITCC.

**Endowed Scholarships:**
- Rodney Anderson
- Joan and Keith Ballantyne
- David Leo Carlson
- Fred and Martha Davenport
- Fred Fowler
- Albert R. and Dorothea Hansen
- Dr. Robert H. Kiser
- George W. Lee
- William and Lois Menzel
- Thomas Miller
- Dr. Terry Murrell
- David J. Patterson Jr.
- Dr. Robert and Kaye Rasmus
- Isadore Rocklin
- Dr. Fred Stark
- Stocktonian
- Eugene E. Stoik
- WITCC

**Valedictorian Scholarship.** This scholarship is granted to high school class valedictorians. The student must enroll full time for the fall semester immediately following high school graduation.

**Western Iowa Tech Board Scholarship.** Scholarships are granted to two students in each Merged Area XII and Associated High School upon recommendation from the student’s high school guidance counselor. The student must enroll full time for the fall semester immediately following high school graduation.

**Western Iowa Tech President’s Scholarship.** This scholarship is awarded to any student that has a composite ACT score of 22 or higher and a 2.5 high school GPA. The student must enroll full time for the fall semester immediately following high school graduation.

**College Now Scholarship.** This scholarship is awarded to any student who has successfully completed a Western Iowa Tech or other college course(s) during high school and has a college cumulative grade point average of 2.0 or higher. The student must enroll full time for the fall semester immediately following high school graduation.

**Veterans’ Benefits.** Qualifying veterans carrying a course load of 12 semester hours or more in designated programs are eligible for full benefits from the Veterans’ Administration. A load of six semester hours will qualify for half-time benefits, and nine semester hours for three-fourths-time benefits. Students in diploma and/or certificate programs should review requirements with the Veterans’ Advisor in the Admissions Office. Veterans wishing to receive veterans’ educational benefits must make applications through the Admissions Office and are urged to contact the Veterans’ Advisor for current VA regulations each semester.

Veterans and other students who receive financial assistance from an outside agency may find that the agency has rules which do not permit payment for courses which are taken more than once.
Student Responsibility for Catalog Information

Each student is responsible for being familiar with the information appearing in this catalog. Failure to read the regulations will not be considered an excuse for noncompliance. The College reserves the right to change policies or revise curricula as necessary.

Assessment and Course Placement

In recognition of the varying skill levels of entering students, WITCC uses the Computerized Placement Test. Scores are used to assist advisors and students in choosing appropriate courses.

All new students are required to complete the College Placement Test prior to enrolling for classes unless they meet one of the following conditions:

- Completion of a baccalaureate degree or higher.
- The student has received an ACT composite score of 22 or higher on an ACT test taken within the last three years.
- The student is enrolling as a summer semester student and has attended another college or university during the preceding fall and spring semesters.
- The student has already successfully completed transfer level math and English courses.

Certain programs require minimum CPT scores for acceptance into the program. See page 9.

Credit for Prior Learning

With proper assessment, learning outside the classroom can be recognized as part of the educational experience. WITCC acknowledges credit for prior learning through the following methods:

- Transfer of credits with a grade of “C” or better from other post-secondary institutions. (Courses or credits over seven years old may not apply.)
- College Level Examination Program (CLEP) (see page 24) General Examinations may be used for elective credit. Subject matter tests may be substituted for appropriate equivalent courses.
- Test-out exams (see page 25)
- Departmental challenge exams
- Defense Activity for Non-traditional Education Support (DANTES) (see page 23)
- American Council on Education Credit (ACE)
- Advanced Placement (AP) program of the College Board (see page 25)
- Program for Non-Collegiate Sponsored Instruction (PONSI)
- Work experience learning
- National Certification (current)
- High School Articulation Agreements

Western Iowa Tech Community College maintains formal institutional and program articulation agreements with many area high schools. The purpose of the program articulation agreement is to enable students enrolled in high school courses to transfer to designated career programs at Western Iowa Tech Community College and receive college credit for the core objectives (competencies) achieved at the high school. The High School Articulation Validation Request Form and the Articulation Verification Form(s) must be signed and sent along with a copy of the student’s high school transcript to the Admissions Office as part of the application process. Please refer to the Career Program pages in this catalog to determine specific high school courses that may be eligible for articulation.

Students should check with their high school counselor, instructor, or the Director of Admissions and Advising at Western Iowa Tech Community College for more information.

Questions regarding Credit for Prior Learning should be directed to Enrollment Services (A300).

Academic Advising

New students are assisted by an Admissions advisor who will work with them during the admission and registration process. Students will be assigned a faculty advisor during the first semester. All full time faculty are available for advising.

Policy for Prerequisite Courses

Students are responsible for meeting prerequisites before enrolling in a course. A Division Chair can waive course prerequisites for demonstrated course equivalency and/or achievement of the course competencies. Contact the Division Chair or Registrar for the appropriate form. A grade of C (2.0) or better is required for prerequisites in some professional courses (such as health occupations programs); a passing grade is required for prerequisites in general education courses. Some state and national accrediting agencies may require certain departments to have higher minimum standards.
Independent Study Courses

Independent study courses are defined as WITCC college credit courses that may be taken by a student on an independent study basis due to special circumstances. A course that is taken on an independent study basis must be a WITCC college credit course that is listed in the college catalog and is required for a student’s program of study. A student enrolled in an independent study course must complete the same course requirements as when it is offered in a traditional class format.

An independent study course will have the same course prefix and number as other similar courses; however, a special section number will be assigned. To register for an independent study, a student must complete a Request for Independent Study form which is available from Division Chairs. All academic and registration policies and procedures for college credit courses are applicable to independent study courses.

Transcript Request Information

WITCC needs to receive transcript requests in writing. You may either come in and fill out a request form or send a fax or letter requesting your transcripts to be sent to you or a specific college.

The letter or fax should contain your full name, Social Security number or WITCC student I.D., the years you attended WITCC, your signature, and $4.00 for the first copy and $1.00 for each additional copy ordered at the same time. Requests will be accepted via e-mail only if the transcript is going to another college or university.

Please send transcript requests to:
Western Iowa Tech Community College
Transcript Center
PO. Box 5199
Sioux City, IA 51102-5199

For additional information, call (712) 274-6404, ext. 1333 or (800) 352-4649. The fax number is (712) 274-6441. The e-mail address is transcripts@witcc.edu. Do not send Social Security numbers or credit card information in an e-mail.

Developmental Education Courses

Developmental education courses are designed to help students improve academic skills. The College Placement Test (CPT), which is taken prior to registration for a course, recommends appropriate course placement. Students may also elect to take a developmental education course to improve skills.

Specific developmental courses include:
- BIO 070 Basic Biological Concepts
- ENG 010 Fundamentals of English
- ENG 020 Fundamentals of Writing
- BCA 051 Fundamentals of Computer Operations
- MAT 021 Math Foundations I
- MAT 022 Math Foundations II
- MAT 041 Basic Math
- MAT 063 Elementary Algebra
- RDG 038 College Prep Reading I
- RDG 039 College Prep Reading II

Descriptions of these courses are found in the Course Listing section of this catalog. Credit for these classes does not apply to any certificate, diploma, or degree program.

Student Classification

Students taking 12 credit hours or more are classified as full-time students during each semester, fall, spring, and summer. Students who take less than 12 credit hours per semester are classified as part-time students.

Grades

Unit of Credit

Each course carries academic credit based on the total contact hours and the method of instruction. Units of credit are used in determining student grade point averages.

Grading System

Students enrolled in credit courses will be graded by the following letter-grade and point system. These represent various levels of accomplishment and grade points earned.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
<th>Grade Points per cr. value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent achievement.</td>
<td>4</td>
</tr>
<tr>
<td>A-</td>
<td></td>
<td>3.67</td>
</tr>
<tr>
<td>B+</td>
<td></td>
<td>3.33</td>
</tr>
<tr>
<td>B</td>
<td>Above average achievement.</td>
<td>3</td>
</tr>
<tr>
<td>B-</td>
<td></td>
<td>2.67</td>
</tr>
<tr>
<td>C+</td>
<td>Average achievement.</td>
<td>2.33</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>C-</td>
<td></td>
<td>1.67</td>
</tr>
<tr>
<td>D+</td>
<td></td>
<td>1.33</td>
</tr>
<tr>
<td>D</td>
<td>Below average achievement.</td>
<td>1</td>
</tr>
<tr>
<td>D-</td>
<td></td>
<td>0.67</td>
</tr>
<tr>
<td>F</td>
<td>Failing. Course requirements have not been met.</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete. Work acceptable but incomplete.</td>
<td>Not computed</td>
</tr>
<tr>
<td>P</td>
<td>Pass. Acceptable quality work.</td>
<td>Not computed</td>
</tr>
<tr>
<td>NP</td>
<td>Not Passing. No grade point given.</td>
<td>Not computed</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal.</td>
<td>Not computed</td>
</tr>
<tr>
<td>N</td>
<td>Audit.</td>
<td>Not computed</td>
</tr>
<tr>
<td>AW</td>
<td>Administrative Withdrawal.</td>
<td>Not computed</td>
</tr>
<tr>
<td>O</td>
<td>Academic Renewal.</td>
<td>Not computed</td>
</tr>
<tr>
<td>T</td>
<td>Credit granted by testing.</td>
<td>Not computed</td>
</tr>
<tr>
<td>L</td>
<td>Credit granted for prior learning.</td>
<td>Not computed</td>
</tr>
<tr>
<td>X</td>
<td>Course repeated.</td>
<td>Not computed</td>
</tr>
<tr>
<td>T</td>
<td>Credit granted by testing.</td>
<td>Not computed</td>
</tr>
<tr>
<td>L</td>
<td>Credit granted for prior learning.</td>
<td>Not computed</td>
</tr>
<tr>
<td>X</td>
<td>Course repeated.</td>
<td>Not computed</td>
</tr>
</tbody>
</table>

800.352.4649 or www.witcc.edu
**Grade Point Average**

The cumulative grade point average (GPA) is determined by dividing the total number of grade points earned by the total number of credits in those courses taken at Western Iowa Tech Community College. Grades that do not carry points are not included in the grade point average.

The semester cumulative grade point average is determined by dividing the total number of grade points earned in a semester by the total number of credits in those courses.

Students with a cumulative GPA of 3.5 or higher will be given special recognition during graduation ceremonies for their outstanding achievements. Honors are also noted on the student’s official transcript.

**Grade Reports**

No grade reports will be mailed to the student’s home address. The student may access grades via my.witcc.edu.

**Resolving Failing Grades**

The options for resolving a failing grade in a course are the following:

1. Repeat the course at WITCC.
2. Transfer an equivalent course offered by another institution.
3. Completing an equivalent approval test-out.

**Repeating a Course**

Students may wish to repeat a previously taken course. Both courses will be shown on the permanent transcript. Only the latest grade will be computed in the cumulative grade point average. The student must notify Enrollment Services upon completion of the repeated course.

Veterans should consult with the Veteran’s Advisor in the Admissions and Advising Department before repeating any course.

**Academic Renewal**

Academic renewal permits the removal of credit hours and grades for one or two semesters from a student’s grade point average to allow for improvement of the student’s cumulative GPA.

A student may be granted academic renewal only one time. A student must have completed 12 semester credit hours with a minimum grade point average of 3.00, or 24 semester credit hours with a minimum grade point average of 2.50 following the term(s) for which renewal is sought.

Courses and grades, which are granted academic renewal, will remain on the student’s official transcript, but will be marked with an “O.” These hours and grades will not count toward graduation or be included in calculating the student’s cumulative GPA. Courses which have been considered in granting a previous graduation award are not eligible for Academic Renewal.

Students who are granted academic renewal may be required to pay back some or all benefits received for those courses and terms for which veteran’s benefits or financial aid was received.

**Auditing a Course**

A student who audits a class is required to pay tuition and other required fees. To audit a class, a student must complete the Audit Permit form within ten (10) days after the class starts. Students who audit a class will receive a grade of “N” but will receive no credit.

**Incomplete Grades**

To receive an Incomplete (“I”) grade, students must contact their instructor prior to the end of the semester requesting a grade of incomplete. The instructor must complete an Incomplete Grade Contract form. Instructors may assign incomplete grade (“I”) only when a student who is doing ACCEPTABLE course work and is unable to complete the course because of an illness or other extenuating circumstances, i.e., military service, hardship, or death in the immediate family.

A student shall have until the end of the next regular semester following receipt of the “I” to meet the conditions of the Contract. If the student fails to do so, the “I” will be changed to an “F” grade.

**Attendance**

Students are expected to attend all sessions of classes for which they are enrolled. Absences do not excuse the student from meeting the course requirements. The student must take the initiative in making up any missed work. Each instructor will provide policies concerning course attendance.

**Academic Progress Standards**

Students who fail to achieve a 2.0 cumulative grade point average (GPA) for 12 or more graded credit hours will be placed on academic probation.

The Registrar and the Dean of Instruction will review students’ academic records each semester and will notify students of their probationary status. All students placed on academic probation will remain on academic probation until their cumulative GPA is raised to 2.0. Probationary students who fail to raise their GPA may be suspended. If a student is suspended, he/she has the right to appeal and should contact the Enrollment Services Office to initiate the appeal process. A written appeal will be taken to the Academic Appeal Committee. The Academic Appeal Committee will review the appeal and make a recommendation to the Chief Academic Officer. The decision of the Chief Academic Officer will be final.

If a student receives financial aid, there are additional criteria to meet for satisfactory academic progress as noted on page 11 of this catalog. Contact the Financial Aid Office for additional details.
Scholastic Recognition

Scholastic recognition is available to students who have completed 12 or more graded semester credits during the fall, spring, or summer semesters. Students are eligible for the following academic honors.

1. President’s List GPA = 4.0000
2. WITCC Scholar List GPA = 3.5000-3.9999

This scholastic recognition is announced early by the Dean of Students in the following semester.

Students with a cumulative GPA of 3.5 or higher will be given special recognition during graduation ceremonies for their outstanding achievements. Honors are also noted on the student’s official transcript.

Honors Program

The WITCC Honors Program consists of intensified course instruction. Faculty and students select a project within the scope of the course for further research or performance. The student completes the project under the tutorial leadership of the course instructor. The student must also achieve a grade of "A" in the class to receive Honors (H) recognition on the transcript and at graduation. For further information concerning the Honors Program, contact the Associate Dean of Instruction.

Phi Theta Kappa Honor Society

WITCC students can earn scholastic recognition through membership in Phi Theta Kappa (PTK), the honor society for two-year colleges. The College chapter, Beta Zeta Mu, provides opportunities for campus and community service, leadership development, and scholarships. Students who qualify for membership, join, and maintain eligibility may wear the PTK gold stole at graduation and have the PTK seal affixed to their diplomas.

The PTK member becomes part of the international organization that offers national scholarships, a study abroad program, and opportunities for honors study.

To be eligible for membership, WITCC students must be in an associate degree program and have earned 12 credit hours or more with a GPA of 3.5 or higher. For further information about Phi Theta Kappa, phone (712) 274-8733, ext. 2884.

Academic Awards

Western Iowa Tech Community College grants
• Degrees
• Diplomas
• Certificates

to those individuals who successfully complete programs of study in Liberal Arts, Science, Business, Vocational, Technical and Health Sciences.

General Education

Philosophy

Western Iowa Tech Community College’s general education provides breadth of learning to the community college experience. General Education imparts common knowledge, promotes intellectual inquiry, and stimulates the examination of different perspectives, thus enabling people to function effectively in a global and changing world.

General Education is not directly related to an individual student’s technical, vocational, or professional field, but prepares a student to meet personal, social, and lifelong learning needs.

Goals

Upon successful completion of any degree program, the student should be able to:

1. Communicate effectively
   a. Utilize current information technology specific to the discipline
   b. Write and/or speak using organized, clear and grammatically correct language, appropriate to purpose and audience

2. Reason scientifically and quantitatively, or qualitatively by applying mathematical and/or scientific concepts and skills to analyze, manipulate, and interpret data

3. Think critically and demonstrate information literacy
   a. Identify and locate information through application of relevant research
   b. Evaluate information for credibility and relevancy
   c. Analyze, integrate and synthesize knowledge and draw conclusions from complex materials and facts

4. Demonstrate social responsibility
   a. Identify the relationships between current and historical events
   b. Collaborate with others in a team environment
   c. Examine the impact of diversity within local and global communities
   d. Examine, analyze and discuss ethical issues
**Associate of Arts Degree**

**General Studies**

The Associate of Arts degree provides students with a learning foundation in communications, social and behavioral sciences, and the humanities. While the A.A. degree program offers opportunities for personal enrichment and career enhancement, it is primarily designed to enable students to transfer to a four-year college or university for the purpose of earning a baccalaureate degree. Courses leading to the A.A. degree are also designed for students interested in preprofessional studies for such fields as law, political science, education, and social science.

Students who intend to transfer credits to another college or university are responsible for identifying the specific program requirements at the transfer institution. In order to meet specific program requirements, the student should coordinate his/her sequence of courses with a WITCC academic advisor and transfer staff from the destination institution. Current catalogs for most U.S. colleges and universities are available online.

**Associate of Arts Requirements**

The Associate of Arts degree will be awarded to students who meet the following requirements:

1. Satisfactorily complete a minimum of 64 semester hours from an approved A.A. degree program as outlined in the College catalog.
2. Earn a minimum cumulative grade point average of 2.0 ("C" average).
3. Earn a minimum of fifteen (15) college transfer credit hours at WITCC.
4. File an application for graduation at the Enrollment Services Office or online by the filing deadline.
5. Resolve all financial obligations to the College and return all library and College materials.
6. Complete the College’s outcomes assessment requirement

**NOTE:** Developmental education courses (courses numbered below 100) do not fulfill degree requirements.

---

**Associate of Science Degree**

The Associate of Science (A.S.) degree provides students with a foundation in the general studies as well as the sciences. Students will gain knowledge and skills which can be generalized to the world outside the classroom. Courses leading to the A.S. degree are designed for students interested in the sciences or mathematics. As a result, a minimum of 20 credits are necessary from the math and sciences. While the A.S. degree program offers opportunities for personal and career enhancement, such degree is designed for students who wish to transfer to four-year institutions which offer full Bachelor of Science degrees.

Students who intend to transfer credits to another college or university are responsible for identifying the specific program requirements at the transfer institution. In order to meet specific program requirements, the student should coordinate his/her sequence of courses with a WITCC academic advisor and transfer staff from the destination institution. Current catalogs for most U.S. colleges and universities are available in the WITCC Learning Achievement Center and in the Career Development Center.

**Associate of Science Requirements**

The Associate of Science degree will be awarded to students who meet the following requirements:

1. Satisfactorily complete a minimum of 64 semester hours from an approved A.S. degree program as outlined in the College catalog.
2. Earn a minimum cumulative grade point average of 2.0 ("C" average).
3. Earn a minimum of fifteen (15) college transfer credit hours at WITCC.
4. File an application for graduation at the Enrollment Services Office or online by the filing deadline.
5. Resolve all financial obligations to the College and return all library and College materials.
6. Complete the College’s outcomes assessment requirement

**NOTE:** Developmental education courses (courses numbered below 100) do not fulfill degree requirements.
# Associate of Arts Degree Requirements

## College Success

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience (required)</td>
<td>1</td>
</tr>
<tr>
<td>(Take in 1st semester of enrollment)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## English and Speech (9 credits required)

Take one of these courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 105</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 106</td>
<td>English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

## Mathematics/Laboratory Science (8 credits required)

Must include one math course and one laboratory science course from the following:

### *Mathematics*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 111</td>
<td>Math for Liberal Arts</td>
<td>4</td>
</tr>
<tr>
<td>MAT 117</td>
<td>Math for Elementary Teachers</td>
<td>3</td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra</td>
<td>4</td>
</tr>
</tbody>
</table>

Or approved higher level course. See advisor for course selection.

### *Laboratory Science*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 105</td>
<td>Introductory Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 125</td>
<td>Plant Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 163</td>
<td>Essentials of Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<tr>
<td>CHM 122</td>
<td>Intro to General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>ENV 111</td>
<td>Environmental Science</td>
<td>4</td>
</tr>
<tr>
<td>PHS 120</td>
<td>Exploring Physical Science</td>
<td>4</td>
</tr>
<tr>
<td>PHS 151</td>
<td>Introduction to Astronomy</td>
<td>4</td>
</tr>
</tbody>
</table>

Or approved higher level course in these subjects. See advisor for course selection.

## Diversity (3 credits required)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLS 212 or SOC 212</td>
<td>Diversity</td>
<td>3</td>
</tr>
</tbody>
</table>

## Social and Behavioral Sciences (6 credits required)

Take one course from Social and Political Sciences:

### *Social and Political Sciences*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECN 120</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECN 130</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>POL 111</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>POL 112</td>
<td>State and Local Government</td>
<td>3</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 121</td>
<td>Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 110</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 120</td>
<td>Marriage and Family</td>
<td>3</td>
</tr>
</tbody>
</table>

*Other accepted courses include: POL 121, 125, 151, 201 See advisor for course selection.

Take one additional course from Social and Political Sciences above or from History and Diverse Cultures:

### *History and Diverse Cultures*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 105</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>GEO 121</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>HIS 110</td>
<td>Western Civ: Ancient to Early Modern</td>
<td>3</td>
</tr>
<tr>
<td>HIS 111</td>
<td>Western Civ: Early Modern to Present</td>
<td>3</td>
</tr>
<tr>
<td>HIS 151</td>
<td>US History to 1877</td>
<td>3</td>
</tr>
<tr>
<td>HIS 152</td>
<td>US History since 1877</td>
<td>3</td>
</tr>
</tbody>
</table>

*Other accepted courses include: HIS 211, LIT 150, SOC 200,210 See advisor for course selection.

## Humanities (9 credits required)

Take three courses from at least two subject areas:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>ART 203</td>
<td>Art History</td>
<td>3</td>
</tr>
<tr>
<td>DRA 101</td>
<td>Introduction to Theatre</td>
<td>3</td>
</tr>
<tr>
<td>DRA 112</td>
<td>American Film</td>
<td>3</td>
</tr>
<tr>
<td>ENG 221</td>
<td>Creative Writing</td>
<td>3</td>
</tr>
<tr>
<td>FLF 141</td>
<td>Foreign Language - French</td>
<td>4</td>
</tr>
<tr>
<td>FLG 141</td>
<td>Foreign Language - German</td>
<td>4</td>
</tr>
<tr>
<td>FLS 141</td>
<td>Foreign Language - Spanish</td>
<td>4</td>
</tr>
<tr>
<td>HUM 101</td>
<td>Introduction to Humanities</td>
<td>3</td>
</tr>
<tr>
<td>LIT 101</td>
<td>Introduction to Literature</td>
<td>3</td>
</tr>
<tr>
<td>MMS 101</td>
<td>Mass Media</td>
<td>3</td>
</tr>
<tr>
<td>MUS 100</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>PHI 101</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHI 105</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>REL 101</td>
<td>Survey of World Religions</td>
<td>3</td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communications</td>
<td>3</td>
</tr>
</tbody>
</table>

*Other accepted courses include: ART 204, FL(F,G,S) 142,231,232, HUM 220, LIT 124, 133, 185,189, MUS 202, PHI 111, REL 150. See advisor for course selection.

## Distributed Requirement (6 credits required)

Take two additional courses from any of these areas: Mathematics, Laboratory Science, Social and Behavioral Sciences, and Humanities

## Electives

See your advisor to select appropriate elective courses to complete 64 total credit hours to complete the degree. Developmental courses (courses numbered less than 100) do not apply toward the degree. Up to 16 Career and Technical Credit hours may be used toward the degree. See your advisor for further information.

**Total Credit Hours Required**: 64

Required Transfer Level Credits Earned at WITCC: 15

Minimum Cumulative WITCC GPA Required: 2.00

## Computer Literacy/Technology – Suggested Elective

Computer literacy is critical to your success as a college student. It is strongly recommended that you consider your competency in computer applications. Some major programs at transfer institutions may require a computer applications course. Consult with your advisor regarding this suggested course.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
</tbody>
</table>

This is a general transfer degree. Students should consult with their intended transfer institution to make appropriate course selections in each of the required areas as well as in elective credits to complete the degree. Some transfer institutions may require specific courses in each of the requirement areas based on the student’s intended major. Always consult with academic advisors prior to registration as they will have suggested program of studies consistent with the student’s intended major.
Associate of Science Degree Requirements

College Success
SDV 108  The College Experience (required)  1
(Take in 1st semester of enrollment)

English and Speech (9 credits required)
Take each of these courses:
ENG 105  English Composition I  3
ENG 106  English Composition II  3
SPC 112  Public Speaking  3

Mathematics/Laboratory Science (20 Credits required)
Must include one math course and one laboratory science course from the following:
*Mathematics
MAT 111  Math for Liberal Arts  4
MAT 121  College Algebra  4
MAT 129  Precalculus  5
MAT 130  Trigonometry  3
MAT 141  Finite Math  4
MAT 157  Statistics  4
MAT 201  Applied Calculus  5
MAT 211,217,219 Calculus I, II and III  5/5/4

*Laboratory Science
BIO 116/117  Biology IB and IIB  4/4
BIO 169/174  Anatomy & Physiology I and II  4/4
BIO 186  Microbiology  4
CHM 166/176  General Chemistry I and II  5/5
CHM 261/271  Organic Chemistry I and II  4/4
PHY 162/172  College Physics I and II  4/4
PHY 212/222  Classical Physics I and II  5/5

Students should complete both of any sequenced Laboratory Science courses to apply to the degree and ensure transferability of coursework. See advisor for course selection.

Diversity (3 credits required)
CLS 212 or SOC 212 Diversity  3

Social and Behavioral Sciences (3 credits required)
Take one course from the following:
*Social and Political Sciences
ECN 120  Principles of Macroeconomics  3
ECN 130  Principles of Microeconomics  3
POL 111  American Government  3
POL 112  State and Local Government  3
PSY 111  Introduction to Psychology  3
PSY 121  Developmental Psychology  3
SOC 110  Introduction to Sociology  3
SOC 120  Marriage and Family  3

*Other accepted courses include: POL 121, 125, 151, 201
See advisor for course selection.

Humanities (6 credits required)
Take two courses from two different subject areas:
ART 101  Art Appreciation  3
ART 203  Art History  3
DRA 101  Introduction to Theatre  3
DRA 112  American Film  3
ENG 221  Creative Writing  3
FLF 141  Foreign Language - French  4
FLG 141  Foreign Language - German  4
FLS 141  Foreign Language -Spanish  4
HUM 101  Introduction to Humanities  3
LIT 101  Introduction to Literature  3
MMS 101  Mass Media  3
MUS 100  Music Appreciation  3
PHI 101  Introduction to Philosophy  3
PHI 105  Introduction to Ethics  3
REL 101  Survey of World Religions  3
SPC-122  Interpersonal Communications  3

*Other accepted courses include: ART 204, FL(F,G,S) 142,231,232
HUM 220, LIT 124, 133, 185,189, MUS 202, PHI 111, REL 150.
See advisor for course selection.

Electives
See your advisor to select appropriate elective courses to complete 64 total credit hours to complete the degree. Developmental courses (courses numbered less than 100) do not apply toward the degree. Up to 16 Career and Technical Credit hours may be used toward the degree. See your advisor for further information.

Total Credit Hours Required  64
Required Transfer Level Credits Earned at WITCC  15
Minimum Cumulative WITCC G.P.A. Required  2.00

Computer Literacy/Technology – Suggested Elective
Computer literacy is critical to your success as a college student. It is strongly recommended that you consider your competency in computer applications. Some major programs at transfer institutions may require a computer applications course. Consult with your advisor regarding this suggested course.
CSC 110  Introduction to Computers  3

This is a general transfer degree. Students should consult with their intended transfer institution to make appropriate course selections in each of the required areas as well as in elective credits to complete the degree. Some transfer institutions may require specific courses in each of the requirement areas based on the student’s intended major. Always consult with academic advisors prior to registration as they will have suggested program of studies consistent with the student’s intended major.
**Associate of Applied Science Degree**

The Associate of Applied Science (A.A.S.) degree is awarded to graduates who complete the technical or paraprofessional degree programs in a specific occupational field. The curriculum normally requires two years (minimum of four semesters) to complete when taken on a full-time basis and includes technical courses that emphasize applied sciences and general education courses. (A.A.S. programs contain a minimum of 64 credit hours.)

Although the Associate of Applied Science degree is not designed to be a transfer program, some of the courses may be accepted toward a baccalaureate degree at some institutions. Please consult a WITCC academic advisor or the Career Development Center for further information.

**Associate of Applied Science Requirements**

The Associate of Applied Science degree is awarded to students who satisfy the following requirements:

1. Satisfactorily complete a prescribed program of study as outlined in the College catalog. Each A.A.S. program is designed for a specific occupational field; semester hour requirements will vary with the particular program. A.A.S. programs contain a minimum of 64 semester credit hours.

2. A minimum of fifteen (15) semester credit hours must be in the A.A.S. General Education. (See the General Education Core.)

3. Earn a minimum cumulative grade point average of 2.0 ("C" average).

4. Earn a minimum of fifteen (15) credit hours in an A.A.S. degree program at WITCC.

5. File an application for graduation at the Enrollment Services Office or online by the filing deadline.

6. Resolve all financial obligations to the College and return all library and College materials.

7. Complete the College's outcomes assessment requirement.

NOTE: Developmental education courses (courses numbered below 100) do not fulfill AAS requirements.

---

**Associate of Applied Science General Education Core**

All students earning the Associate of Applied Science degree must complete a minimum of 15 hours of general education distributed over at least five of the six content areas listed below.

Successful completion of SDV 108 is a requirement of graduation.

I. **General Education Core**
   A. **English and Speech (minimum one course)**
      - COM 723, 753
      - ENG 105, 106
      - SPC 112, 122
   B. **Mathematics and Science (minimum one course)**
      - MAT 102, 121, 141, 157, 772, 775, 777
      - PHS 120, 151, 166
      - BIO 105, 116, 125, 151 (no lab), 163, 169, 197
      - CHM 122, 166
      - PHY 106, 162, 212
      - ENV 111
   C. **Social and Behavioral Sciences (minimum of two courses from C, D, or F)**
      - History and Diverse Cultures
        - ANT 105
        - CLS 157, 212
        - GEO 121
        - HIS 110, 111, 151, 152, 211
        - SOC 200, 210, 212
      - Social and Political Sciences
        - ECN 120, 130
        - POL 111, 112, 121, 151, 152, 211
        - PSY 102, 111, 121, 251
        - SOC 110, 115, 120
   D. **Humanities (minimum one course from C or D)**
      - ART 101, 121, 184, 186, 203, 204, 370
      - DRA 101, 112
      - FLG 141, 142
      - FLF 141, 142, 231, 232
      - FLS 100, 101, 102, 103, 141, 142, 231, 232
      - HUM 101, 220
      - LIT 101, 124, 133, 185, 189
      - MMS 101
      - MUS 100, 202
      - PHI 101, 105, 111
      - REL 101, 150
      - SPC 122, 140
   E. **Computer Literacy/Computer Technology (minimum one course)**
      - CSC 110 or BCA 206 (Consult program pages in the catalog and your advisor)
      - BCA 109, 115, 129, 130, 147, 165
      - GRA 100
      - Computer literacy may be demonstrated through completion of a course or assessment.
   F. **Healthful Living/Leisure**
      - BIO 151
      - EMS 114
      - PEH any course
      - PEA any course
      - PEC any course
      - **General Education Core Credits (Minimum 15)**
Diploma

A diploma is awarded to graduates who complete the technical or paraprofessional degree programs in a specific occupational field. The curriculum normally requires one year (minimum of two semesters) to complete when taken on a full-time basis. Technical courses that emphasize applied science and general education courses are included. Diploma programs contain a minimum of 30 semester credit hours. Diploma programs may fulfill a major portion of Associate of Applied Science degree requirements. Students should consult with their academic advisor regarding course options before enrolling.

**Diploma Requirements**

1. Satisfactorily complete a minimum of 30 semester hours from an approved program of study.
2. Earn a minimum of six (6) semester credits in general education. (See General Education Core Requirements for A.A.S. degree.)
3. Earn a minimum cumulative grade point average of 2.0 ("C" average).
4. Earn a minimum of ten (10) credit hours in a diploma program at WITCC.
5. Successful completion of SDV 108 is a requirement of graduation.
6. File an application for graduation at the Enrollment Services Office by the filing deadline.
7. Resolve all financial obligations to the College and return all library and College materials.

NOTE: Developmental education courses (courses numbered below 100) do not fulfill diploma requirements.

Certificates

Certificates are designed to enable students to gain entry-level employment in specialized areas or to qualify for occupational advancement. A Certificate may consist of selected occupational and general education college credit courses.

**Certificate Requirements**

1. Successfully complete a prescribed certificate program of study.
2. Each is designed for a specific occupational field; semester hour requirements will vary with the particular program.
3. Earn a minimum cumulative grade point average of 2.0 ("C" average).
4. Successful completion of SDV 108 is a requirement of graduation.
5. Resolve all financial obligations to the College and return all library and College materials.
6. File an application for graduation at the Enrollment Services Office by the filing deadline.

NOTE: Developmental education courses (courses numbered below 100) do not fulfill certificate requirements.

Graduation

**Application for Graduation**

Students who plan to receive a degree, diploma, or certificate must file an Application for Graduation with Enrollment Services by the filing deadline set for that semester.

**Requirements for Graduation**

All degrees, diplomas, and certificates earned at WITCC are based upon the successful completion of a specific prescribed program of study. Refer to the appropriate section in the College catalog for the requirements of each program. It is the student’s responsibility to check the transcript prior to the last semester of study and finalize any transfer of credit to ensure that all the requirements for graduation are met. Students may request a degree audit at any time. Students graduating with an associate’s degree will be required to complete an outcomes assessment.

**Effective Catalog**

The catalog in use during a student’s first enrollment in the College normally is used in determining completion of graduation requirements. The effective catalog may not be more than six years old at the time of graduation. A student may elect to meet the requirements of any subsequent catalog published during the six-year period, including the current year. This election must be made when the student files a graduation application.

A student who has a break in enrollment in the College for two or more consecutive semesters, excluding summer sessions, is readmitted to the College under the catalog program requirements in effect at the time of readmission. The College reserves the right to make necessary course and program changes in order to meet current educational standards.

When a decision is made to inactivate a program, students that currently have that program declared as their major will be notified. Those students will be given an opportunity to complete that program within the next year. Course’s will not continue to be offered beyond one year to complete inactivated programs.

**Graduation Ceremony**

Students are encouraged to participate in the formal commencement ceremony upon completion of their requirements for degree or diploma. Dates of the graduation ceremony are included in the College Calendar.

**Transfer Agreements/Colleges and Universities**

Western Iowa Tech Community College maintains formal transfer agreements that help ensure that associate degree graduates may transfer a maximum number of credits into a baccalaureate program. Final decisions regarding acceptance at the transfer institution rest solely with that institution. For example, a grade of "D" will rarely transfer if it is earned in a student’s major, and in certain cases, a "D" grade will not transfer under any circumstance. It is very important that students who plan to transfer after completing their studies...
at WITCC, consult the college of their choice as early as possible in their academic program.

In addition to the formal articulation agreements, many four-year institutions articulate courses with WITCC students upon evaluation of the student’s transcript.

At the time of publication, the following colleges have articulation agreements with WITCC:

**General Transfer Agreements**

WITCC and the following transfer institutions regularly update their formal articulation agreements. The format is a course to course articulation.

- AIB – College of Business
- Bellevue University
- Bio Chi Institute
- Briar Cliff University
- Buena Vista University
- Capella University
- Community College of the Air Force
- Concordia University (St. Paul, MN)
- Concordia University (Seward, NE)
- Iowa State University
- Morningside College
- Palmer College of Chiropractic
- University of Iowa
- University of Northern Iowa
- University of Phoenix
- Upper Iowa University
- Waldorf College
- Wayne State College
- Western Illinois University

**Program Transfer Agreements**

WITCC and the following transfer institutions articulate A.A.S., A.A., and A.S. programs into specific majors with the intent of the student achieving a four-year degree.

- Bellevue University admits all A.A.S., A.A., and A.S. graduates with junior standing to pursue a Bachelor of Science or Bachelor of Arts degree through the College of Professional Studies.
- University of Northern Iowa admits selected A.A.S. degrees to pursue a Bachelor of Arts degree in Technology Management and Technology Education.
- The University of Iowa has an ADN to BSN nursing completion program for students who have earned their A.A.S. in Associate Degree Nursing.
- The University of Iowa, Iowa State University, and the University of Northern Iowa have a Bachelor of Liberal Studies degree available to A.A. and A.S. graduates.
- Upper Iowa – Emergency Disaster Management.
- Palmer College of Chiropractic accepts A.S. graduates to pursue chiropractic degrees.
- Western Illinois University has a Bachelor of Arts degree in Fire Science available to A.A.S. graduates in Fire Science.

**Program Cooperative 2+2 Agreements**

WITCC and the following transfer institutions have designed a specific program of study for the first two years at WITCC and the last two years at the transfer institution for a specific four-year degree.

**Social Work**

- A.A. at WITCC + Bachelor of Social Work at Briar Cliff University
- A.A. at WITCC + Bachelor of Social Work at Buena Vista University
- A.A. at WITCC + Bachelor of Social Work at the University of South Dakota

**Elementary Education**

- A.A. at WITCC + Bachelor of Elementary Education at Buena Vista University
- A.A. at WITCC + Bachelor of Arts in Elementary Education/Instructional Strategist through the University of Northern Iowa

**Fire Science**

- A.A.S. in Fire Science at Western Illinois University

**Police Science – Forensic Investigation**

- A.A.S. in Police Science – Forensic Investigation at WITCC + Bachelor of Science at Briar Cliff University

**Transfer Plan**

Several transfer institutions have established a transfer plan that outlines the general education courses needed at WITCC to coordinate with the four-year degree requirements at the transfer institution. The following four-year institutions have formal transfer plans for selected majors.

- Briar Cliff University
- Iowa State University
- Morningside College
- University of Iowa
- University of Northern Iowa
- University of South Dakota
- Wayne State College

**Guaranteed Quality of Education**

Western Iowa Tech Community College believes in the quality of its faculty and staff, and in the quality of instruction and technical skill competencies the College provides to students. As an expression of confidence in this belief, WITCC has established guidelines to guarantee its graduates the technical skill competencies expected by employers and the transferability of baccalaureate oriented course credits to receiving four-year colleges and universities.

A copy of the complete guarantee statement is available on request from the Enrollment Services Offices at the College.
## Defense Activity for Non-Traditional and Education Support (DANTES) Subject Standardized Tests* and WITCC Equivalent Courses

<table>
<thead>
<tr>
<th>Test Form No.</th>
<th>Title</th>
<th>Min. Score</th>
<th>Credit Awarded</th>
<th>WITCC Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF, SG 424</td>
<td>Fundamentals of College Algebra</td>
<td>47</td>
<td>4</td>
<td>MAT 121 College Algebra</td>
</tr>
<tr>
<td>SE 450</td>
<td>Principles of Statistics</td>
<td>48</td>
<td>4</td>
<td>MAT 157 Statistics</td>
</tr>
<tr>
<td><strong>SOCIAL SCIENCE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SE 489</td>
<td>Foundations of Education</td>
<td>46</td>
<td>3</td>
<td>EDU 210 Foundations of Education</td>
</tr>
<tr>
<td>SE 461</td>
<td>Art of the Western World</td>
<td>48</td>
<td>3</td>
<td>ART 101 Art Appreciation</td>
</tr>
<tr>
<td>SE 470</td>
<td>Human/Cultural Geography</td>
<td>48</td>
<td>3</td>
<td>GEO 121 World Regional Geography</td>
</tr>
<tr>
<td>SF 490</td>
<td>Lifespan Developmental Psychology</td>
<td>46</td>
<td>3</td>
<td>PSY 121 Developmental Psychology</td>
</tr>
<tr>
<td>SF 494</td>
<td>General Anthropology</td>
<td>47</td>
<td>3</td>
<td>ANT 105 Cultural Anthropology</td>
</tr>
<tr>
<td>SF 497</td>
<td>Introduction to Law Enforcement</td>
<td>48</td>
<td>3</td>
<td>CRJ 100 Introduction to Criminal Justice</td>
</tr>
<tr>
<td>SF 498</td>
<td>Criminal Justice</td>
<td>49</td>
<td>3</td>
<td>CRJ 133 Constitutional Criminal Procedure</td>
</tr>
<tr>
<td><strong>PHYSICAL SCIENCE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SF 500</td>
<td>Astronomy</td>
<td>48</td>
<td>3</td>
<td>PHS 151 Introduction to Astronomy</td>
</tr>
<tr>
<td>SE 508</td>
<td>Here’s to Your Health</td>
<td>48</td>
<td>3</td>
<td>PEH 102 Health</td>
</tr>
<tr>
<td>SF, SC 511</td>
<td>Environment &amp; Humanity:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Race to Save the Planet</td>
<td>46</td>
<td>4</td>
<td>ENV 111 Environmental Science</td>
</tr>
<tr>
<td>SF 519</td>
<td>Physical Geology</td>
<td>46</td>
<td>3</td>
<td>PHS 170 Physical Geology</td>
</tr>
<tr>
<td><strong>BUSINESS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SF 524</td>
<td>Principles of Finance</td>
<td>47</td>
<td>3</td>
<td>FIN 130 Principles of Finance</td>
</tr>
<tr>
<td>SF 530</td>
<td>Personnel/Human Resource Management</td>
<td>48</td>
<td>3</td>
<td>MGT 170 Human Resource Management</td>
</tr>
<tr>
<td>SF, SE 532</td>
<td>Principles of Supervision</td>
<td>46</td>
<td>3</td>
<td>MGT 130 Principles of Supervision</td>
</tr>
<tr>
<td>SE 534</td>
<td>Business Law II</td>
<td>52</td>
<td>3</td>
<td>BUS 186 Business Law II</td>
</tr>
<tr>
<td>SE 543</td>
<td>Introduction to Business</td>
<td>46</td>
<td>3</td>
<td>BUS 102 Introduction to Business</td>
</tr>
<tr>
<td>SE 550</td>
<td>Personal Finance</td>
<td>59</td>
<td>3</td>
<td>FIN 121 Personal Finance</td>
</tr>
<tr>
<td><strong>APPLIED TECHNOLOGY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SE 820</td>
<td>Technical Writing</td>
<td>47</td>
<td>3</td>
<td>COM 723 Workplace Communications</td>
</tr>
<tr>
<td><strong>HUMANITIES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SE 474</td>
<td>Ethics in America (Essay Required)</td>
<td>67</td>
<td>3</td>
<td>PHI 105 Introduction to Ethics</td>
</tr>
<tr>
<td>SE 496</td>
<td>Introduction to World Religion</td>
<td>49</td>
<td>3</td>
<td>REL 101 Survey of World Religions</td>
</tr>
<tr>
<td>SE 815-826*</td>
<td>Principles of Public Speaking (Speech Required)</td>
<td>47</td>
<td>3</td>
<td>SPC 112 Public Speaking</td>
</tr>
</tbody>
</table>

*In addition to a minimum score of 47 on the multiple-choice test, an examinee must also receive a passing grade on the speech.
## College-Level Placement Tests (CLEP) Subject Examinations and WITCC Equivalent Courses

<table>
<thead>
<tr>
<th>Department and CLEP Test</th>
<th>Min. Scaled Score*</th>
<th>Credit Awarded</th>
<th>WITCC</th>
<th>Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMPOSITION AND LITERATURE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Literature</td>
<td>50</td>
<td>6</td>
<td>LIT 110</td>
<td>American Literature to Mid-1800’s –AND-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LIT 111</td>
<td>American Literature Since Mid-1800’s</td>
</tr>
<tr>
<td>Analyzing and Interpreting Literature</td>
<td>51</td>
<td>3</td>
<td>LIT 101</td>
<td>Introduction to Literature</td>
</tr>
<tr>
<td>English Literature</td>
<td>50</td>
<td>6</td>
<td>LIT 140</td>
<td>British Literature I –AND-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LIT 141</td>
<td>British Literature II</td>
</tr>
<tr>
<td>Freshman College Composition</td>
<td>51</td>
<td>3</td>
<td>ENG 105</td>
<td>Composition I</td>
</tr>
<tr>
<td><strong>FOREIGN LANGUAGES</strong>**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Level French Language</td>
<td>50</td>
<td>8</td>
<td>FLF 141</td>
<td>Elementary French I –AND-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FLF 142</td>
<td>Elementary French II</td>
</tr>
<tr>
<td>College Level German Language</td>
<td>50</td>
<td>8</td>
<td>FLG 141</td>
<td>Elementary German I –AND-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FLG 142</td>
<td>Elementary German II</td>
</tr>
<tr>
<td>College Level German Language</td>
<td>63</td>
<td>6</td>
<td>FLG 231</td>
<td>Intermediate German I –AND-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FLG 232</td>
<td>Intermediate German II</td>
</tr>
<tr>
<td>College Level Spanish Language</td>
<td>50</td>
<td>8</td>
<td>FLS 141</td>
<td>Elementary Spanish I –AND-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FLS 142</td>
<td>Elementary Spanish II</td>
</tr>
<tr>
<td>College Level Spanish Language</td>
<td>66</td>
<td>6</td>
<td>FLS 231</td>
<td>Intermediate Spanish I –AND-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FLS 232</td>
<td>Intermediate Spanish II</td>
</tr>
<tr>
<td><strong>HISTORY AND SOCIAL SCIENCES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Government</td>
<td>50</td>
<td>3</td>
<td>POL 111</td>
<td>American National Government</td>
</tr>
<tr>
<td>History of the U.S. I: Early Colonization to 1877</td>
<td>50</td>
<td>3</td>
<td>HIS 151</td>
<td>U.S. History to 1877</td>
</tr>
<tr>
<td>American History II – 1865 to the Present</td>
<td>50</td>
<td>3</td>
<td>HIS 152</td>
<td>U.S. History Since 1877</td>
</tr>
<tr>
<td>Introduction to Educational Psychology</td>
<td>50</td>
<td>3</td>
<td>PSY 281</td>
<td>Educational Psychology</td>
</tr>
<tr>
<td>Introductory Psychology</td>
<td>50</td>
<td>3</td>
<td>PSY 111</td>
<td>Introduction to Psychology</td>
</tr>
<tr>
<td>Human Growth and Development</td>
<td>51</td>
<td>3</td>
<td>PSY 121</td>
<td>Developmental Psychology</td>
</tr>
<tr>
<td>Principles of Macroeconomics</td>
<td>50</td>
<td>3</td>
<td>ECN 120</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>Principles of Microeconomics</td>
<td>50</td>
<td>3</td>
<td>ECN 130</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>Introductory Sociology</td>
<td>50</td>
<td>3</td>
<td>SOC 110</td>
<td>Introduction to Sociology</td>
</tr>
<tr>
<td>Western Civilization I: Ancient Near East to 1648</td>
<td>50</td>
<td>3</td>
<td>HIS 110</td>
<td>Western Civilization: Ancient to Early Modern</td>
</tr>
<tr>
<td>Western Civilization II: 1648 to Present</td>
<td>50</td>
<td>3</td>
<td>HIS 111</td>
<td>Western Civilization: Early Modern to Present</td>
</tr>
<tr>
<td><strong>SCIENCE AND MATHEMATICS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculus with Elementary Functions</td>
<td>60</td>
<td>5</td>
<td>MAT 211</td>
<td>Calculus I</td>
</tr>
<tr>
<td>College Algebra</td>
<td>60</td>
<td>4</td>
<td>MAT 121</td>
<td>College Algebra</td>
</tr>
<tr>
<td>Precalculus</td>
<td>60</td>
<td>5</td>
<td>MAT 129</td>
<td>Precalculus</td>
</tr>
<tr>
<td><strong>BUSINESS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Systems and Computer Applications</td>
<td>52</td>
<td>3</td>
<td>BUS 179</td>
<td>Information Systems</td>
</tr>
<tr>
<td>Principles of Management</td>
<td>50</td>
<td>3</td>
<td>MGT 101</td>
<td>Principles of Management</td>
</tr>
<tr>
<td>Principles of Accounting</td>
<td>50</td>
<td>8</td>
<td>ACC 131</td>
<td>Principles of Accounting I –AND-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ACC 132</td>
<td>Principles of Accounting II</td>
</tr>
<tr>
<td>Introductory Business Law</td>
<td>51</td>
<td>3</td>
<td>BUS 185</td>
<td>Business Law I</td>
</tr>
<tr>
<td>Principles of Marketing</td>
<td>50</td>
<td>3</td>
<td>MKT 110</td>
<td>Principles of Marketing</td>
</tr>
</tbody>
</table>

* Scaled scores are equivalent to the 50th percentile (national norms).

** A single Spanish or German test covers material normally learned during the first four semesters of college level study. The amount of credit received depends upon test scores as indicated.
Advanced Placement (AP) Examinations by the College Board and WITCC Equivalent Courses

<table>
<thead>
<tr>
<th>AP Examination</th>
<th>Min. Score</th>
<th>Equivalent WITCC Course</th>
<th>Credit Hours Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art History</td>
<td>3</td>
<td>ART 203</td>
<td>3</td>
</tr>
<tr>
<td>Studio Art – Drawing</td>
<td>5</td>
<td>ART 203 and 204</td>
<td>6</td>
</tr>
<tr>
<td>Studio Art – Drawing</td>
<td>3</td>
<td>ART 133</td>
<td>3</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>4-5</td>
<td>BIO 116 and BIO 117</td>
<td>8</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>4-5</td>
<td>CHM 166 and CHM 176</td>
<td>10</td>
</tr>
<tr>
<td>ECONOMICS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>3</td>
<td>ECN 120</td>
<td>3</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>3</td>
<td>ECN 130</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Language</td>
<td>3</td>
<td>ENG 105</td>
<td>3</td>
</tr>
<tr>
<td>English Literature</td>
<td>3</td>
<td>LIT 101</td>
<td>3</td>
</tr>
<tr>
<td>FOREIGN LANGUAGE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>French Language</td>
<td>3</td>
<td>FLF 141 and 142</td>
<td>8</td>
</tr>
<tr>
<td>German Language</td>
<td>3</td>
<td>FLG 141 and 142</td>
<td>8</td>
</tr>
<tr>
<td>German Literature</td>
<td>4</td>
<td>FLG 141, 142, 231, 232</td>
<td>14</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>3</td>
<td>FLS 141 and 142</td>
<td>8</td>
</tr>
<tr>
<td>Spanish Literature</td>
<td>4</td>
<td>FLS 141, 142, 231, 232</td>
<td>14</td>
</tr>
<tr>
<td>GOVERNMENT &amp; POLITICS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Government</td>
<td>3</td>
<td>POL 111</td>
<td>3</td>
</tr>
<tr>
<td>Comparative Government</td>
<td></td>
<td>POL 125</td>
<td>3</td>
</tr>
<tr>
<td>HISTORY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European History</td>
<td>4</td>
<td>HIS 110 and 111</td>
<td>6</td>
</tr>
<tr>
<td>American History</td>
<td>4</td>
<td>HIS 151 and 152</td>
<td>6</td>
</tr>
<tr>
<td>MATHEMATICS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculus AB</td>
<td>4</td>
<td>MAT 211</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>MAT 211 and 217</td>
<td>10</td>
</tr>
<tr>
<td>PHYSICS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physics B</td>
<td>3</td>
<td>PHY 162</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>PHY 162 and 172</td>
<td>8</td>
</tr>
<tr>
<td>PSYCHOLOGY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>4</td>
<td>PSY 111</td>
<td>3</td>
</tr>
</tbody>
</table>

Test-Out Opportunities

Business Department Test-Outs:
- ACC 261 Income Tax Accounting
- ADM 105 Introduction to Keyboarding
- ADM 131 Office Calculators
- CSC 110 Introduction to Computers
- BCA 109 Windows Operating Systems
- BCA 115 Internet Basics
- BCA 147 Basic Spreadsheets
- BCA 165 Basic Databases
- BCA 129 Basic Word Processing
- BCA 175 Basic Presentation Software

These tests for the above courses may be taken once each semester in the Testing Center, however, three weeks prior to the course ends. Contact the Testing Center for an appointment. Check with branch campuses for test-out options.

Contact the Business Occupations Department in room A146 for test-out information on the following test:

General Test-Out:
- SDV 153 Pre-employment Strategies

The test-out is given only once each semester. Contact the Math Department for test-out information on the following test:

Math Department Test-Out:
- MAT 772 Applied Math

These test-outs are offered during the first week of scheduled classes each semester. The student may take the test only once. See department chairs for exact date and times.

Procedure:
- Obtain Petition to Test Out from Enrollment/Student Services.
- Pay $20 per credit hour at Student Accounts.

Page Updated 5/31/13
Student Services and Activities

Western Iowa Tech Community College offers a variety of student services. Professionally trained staff and counselors are accessible to all students.

**Career Services**

**Counseling/Career Planning**

Group and individual counseling sessions for students who are questioning their career options or coping with personal issues are available with the college counselor located in Enrollment Services. An extended orientation course, “Strategies for Academic Success,” is recommended for first-year students who seek additional support and career exploration during their first semester on campus.

**Transfer Information**

College catalogs and applications for four-year colleges and universities are located at the entrance area near the information desk. Transfer representatives from regional colleges visit WITCC regularly to provide information to students pursuing a baccalaureate degree.

**Student Services at Branch Campuses**

Arrangements for career counseling, tutoring, and other student services are available at the branch campuses upon request. Contact the Director at each branch campus as to how to access the requested services.

**Student Housing & Residence Life**

WITCC’s student housing is located within walking distance of the Sioux City campus buildings. The Bur Oak Suites offer private bedrooms in suite-style living quarters. The Sun Ridge Court offers apartment-style living. Students who live on campus are required to purchase a meal plan each semester. Please contact the student housing office at (712) 274-6417.

**Campus Bookstore**

The WITCC Bookstore is located across from the Overlook Cafeteria. Students may purchase textbooks, supplies, clothing and novelty items at the bookstore or order them online for delivery or pick-up at bookstore.witcc.edu. Bookstore hours and return policies can also be found on the Web site.

Payment for bookstore merchandise is due at the time of the purchase. Accepted methods of payment are cash, check, VISA, MasterCard, and Discover. Students sponsored by an agency (JTP, DVRS, Promise Jobs, etc.) must have a written authorization from the agency before charges can be processed. Students receiving federal grants can charge against the balance remaining after tuition and fees. Sponsored students and students with federal grants can begin charging one week before the semester begins.

Students attending classes in Le Mars, Cherokee and Denison may purchase their books at those locations or order them online.

**Book Return Policy**

1. You MUST have your receipt for any returns.
2. Fall and Spring Semesters: Textbooks must be returned within two weeks from the start of class for a full refund. Summer Semester: Textbooks must be returned within one week from the start of class for a full refund. Textbooks must be in the same condition as when purchased for full refund. Books CANNOT be returned if written or highlighted in. Books with shrink wrap CANNOT be returned if removed from wrap.
3. Clothing must be returned within two weeks of the dated receipt and in new condition. Supplies cannot be returned.
4. Defective products should be returned immediately for refund or exchange.
5. A “Used Book Buyback” is usually held during the last week of each semester. Dates and times will be posted at all locations. Books are purchased for a “used book” wholesaler. Prices are based on national demands and resale value.

**Student Activities and Special Services**

**Student Senate**

Student Senate is a campus-wide student-run organization composed of students working together to promote cooperation and communication among the administration, the faculty, and student body. Student Senate is responsible for all recreation, social, and entertainment events that occur. They plan and coordinate activities on- and off-campus such as movie nights, treat days, WITStock, pool tournaments, and much more. All students are welcome to join.

**Student Organizations and Clubs**

Students are encouraged to participate in one of the several student organizations. Many are associated with particular academic programs of study. Hobby interest clubs are also available depending on student interest. Each group must have a faculty advisor and must be chartered by the Student Senate.

**Student Activities**

The Student Activities Office plans and coordinates a variety of special activities that involve community service activities, music groups, comedians, picnics, dances, and trips.

**Student Center**

A 40,000 square foot gymnasium and well-equipped fitness center are available for students and staff to use as well as rooms for classes and meetings.

**Student Insurance**

Western Iowa Tech Community College does not have a compulsory insurance plan, but the college recommends that students enroll in a voluntary group accident and/or health insurance plan, available through commercial insurance companies. If students are enrolled as a member of a family health or hospital related plan, students should check to see at what age that coverage ends.
Disability Services
Persons with documented disabilities may request reasonable accommodations. The student should indicate the nature of the disability and identify specific needs and/or requested accommodations. The student is responsible for providing documentation of the disability.

Approved accommodations include modified adaptations; alternative testing, specialized study aids, color-coded materials, large print copies, and assistive technology may be made available as needed.

The Disability Services Coordinator is located in the Admissions and Advising Center, Room A300, and can be reached by calling (712) 274-8733, ext. 3216.

The Kurzweil Reader is available to all WITCC students and is located in the WITCC Computer Lab.

Learning Achievement Center

The Learning Achievement Center represents the heart of the campus. It contains Library Services, the Student Success Center, and the Open Computer Lab.

Library Services
- A collection consisting of more than 46,000 print and media items providing information in diverse formats;
- Subscriptions to hundreds of periodical titles and to local and regional newspapers;
- Reference assistance and bibliographic instruction;
- Worldwide interlibrary loan service;
- Patron privileges at all the Sioux City Library cooperative libraries with verification that you are a current WITCC student;
- Check out privileges at most libraries in Iowa with verification that you are a current WITCC student;
- Visit our Web site at www.witcc.edu/library for access to:
  - > 36 online databases under the umbrella of 11 companies, with full text components;
  - > Online and interactive encyclopedias;
  - > More than 12,000 electronic books;
  - > Quick access to electronic newspapers and Web sites verified to have accurate information available from our Web site.

Student Success Center

Tutoring
The Student Success Center, located in the Learning Achievement Center, provides drop-in tutoring services in various subject areas for registered WITCC students. No appointment is necessary. Individual tutor schedules are posted each semester. The Student Success Center employs both peer and professional tutors. Tutoring services are offered free of charge to enrolled WITCC students.

Supplemental Instruction
The Student Success Center coordinates Supplemental Instruction sessions for select courses each semester. These sessions take place outside of class time and offer students an opportunity to review important material in a group setting with a qualified Supplemental Instruction Leader (student who has previously mastered the course material). Students who participate in the free Supplemental Instruction sessions have historically outperformed other students in the class.

WITCC Computer Lab
- 97 computers and related technology to support the college curriculum and provide access to the Internet.
- A computer login account will be created for each student that enables them to use the college’s academic and system software for the duration of their classroom experience.
- Accounts for my.witcc.edu, the WITCC student portal, will also be created for each student upon registration. Students will be able to access all classroom related information, register for courses, send e-mail, find campus club information, College and community news, and much, much more!
Adult Basic Education (ABE)/
General Educational Development
(GED) Preparation

The ABE/GED program is designed to improve literacy skill
levels in reading, writing, math, problem solving, and other
literacy skills. The GED diploma is a goal of many of the adult
learners. The program is open entry and learners progress
at their own pace using a variety of resources including print
materials and computer-aided instruction. ABE classes are
located in the Corporate College.

English as a Second Language (ESL)

The ESL program is designed to improve the skill levels of
English language learners in speaking, listening, writing, and
reading. Classes are leveled from beginning through advanced
English literacy. Classroom instruction, supplemented by
computer-aided instruction, is competency-based with
emphasis on life and employability skills.

ESL classes are located in the Corporate College.

Adult Literacy

The adult literacy program pairs volunteer literacy mentors
with adults who want to improve their basic reading,
writing, math, and English skills. Orientation and training
are provided for volunteers who wish to serve as volunteer
literacy mentors. The program uses print materials as well
as computer technology and software to help adult learners
improve their literacy skills.

Special Programs

TRiO Student Support
Services Program - Sioux City Campus

TRiO Student Support Services is an equal opportunity,
federally funded program designed to provide opportunities
that will increase a student’s chances for success in college.
Services offered through TRiO-SSS are available to all eligible
participants free of charge. Students will receive the guidance
and encouragement needed to successfully complete their
studies at WITCC and transfer to the four-year college of
their choice.

Services unique to TRiO Student Support Services students include:
- Summer Bridge Program for incoming freshmen
- Free tutoring, including computer-aided instruction
- Exposure to cultural events and experiences
- Campus visits to four-year institutions
- Transfer assistance
- Personal, academic, and financial aid advising
- Peer Mentoring Program

To find out if you are eligible, contact the TRiO Student
Support Services program at WITCC at (712) 274-8733, ext.
3247, and make an appointment to meet with one of the staff;
or stop by the office, located in the Student Success Center.
WITCC also administers the TRiO Educational Talent Search
and the Upward Bound TRiO programs. These programs
help prepare middle school and high school youth for college.

Vocational Rehabilitation Services

The Division of Vocational Rehabilitation Services of the
Iowa Department of Education assists individuals who have a
physical or mental impairment which constitutes or results in
a substantial impediment to employment for that individual.
Specific eligibility requirements are available from the
Rehabilitation Counselor located in the Enrollment Services
Office. For more information, contact the Vocational
Rehabilitation Counselor at (712) 274-8733, ext. 1254.

Job Training Partners

Job Training Partners staff delivers services through two major
programs: The Workforce Investment Act and Promise Jobs.

Workforce Investment Act Services

Job Training Partners administers the WIA services in the
Region 12 area in Iowa. The Workforce Investment Act (WIA)
programs serve low-income adults, dislocated workers, and
disadvantaged, low-income youth. Participants can obtain
assistance to earn a GED; receive assistance in creating a
quality resume, cover letter, and thank-you notes; receive
personalized career development and job search assistance;
and in some cases receive funding assistance to complete an
educational program.

Educational programs must be completed within two years
and the individual must be job ready at the completion of
their education. Assistance is also available to help with
support services such as child care and transportation during
an educational program. Job Training Partners’ staff provides
individualized career development, case management, and
employment services to participants who are enrolled in WIA
services. Low income adults and youth must reside in Region
12 in order to be eligible for services. Dislocated workers
may be eligible for WIA services if the employer from which
they were dislocated is based in one of the five counties in
Region 12. Under certain circumstances, WIA services may
be provided to a resident of Region 12 who was dislocated
from an employer in a neighboring state.

The Career Resource Center is located in Room A209. Job
Training Partners’ main office, which houses WIA low income
adult, dislocated worker, and youth services, is located in
Room A212. The phone number for the Career Resource
Center is (712) 274-8733, ext. 1259. You can reach Job
Training Partners’ main office at (712) 274-6401.
Western Iowa Tech Community College students are both citizens and members of the academic community. As citizens, students enjoy the same freedom of speech, peaceful assembly, and the right to petition that other citizens enjoy. As members of the academic community, they are subject to the obligations which are theirs by virtue of this membership.

The College expects its students to conduct themselves in such a way as to reflect credit upon the institution they represent. There are two basic standards of behavior required by all students: a) They shall not violate any board policy, municipal, state, or federal law; b) nor interfere with or disrupt the orderly educational processes of the College. Students are not entitled to greater immunities or privileges before the law than those enjoyed by other citizens generally.

Western Iowa Tech Community College is an institution dedicated to helping students identify and achieve realistic goals through excellent educational opportunities. The administration and staff of the College promote responsible participation and high achievement as the goal for our students. In working toward this goal, the College acknowledges the rights of students. As a WITCC student you should be aware of and accept responsibility as an active, contributing member of the College.

This catalog is a document that explains policies and procedures identifying students’ rights and responsibilities. WITCC believes that all students have responsibilities in the areas of governance, curriculum, services, and conduct.

**Student Senate**

The Student Senate represents the student body in contact with faculty and administration. Representatives to the Student Senate are selected through an interview process. These representatives are the voting members of the Senate, providing the student body with a voice in college affairs. The Senate organizes and underwrites many of the special events planned for students.

**Student Governance**

Students are expected to know the lines of authority and communication in the college, division, and program or course in which they are enrolled.

Students can participate in Student Senate and selected College committees by attending meetings, sharing views, reporting back to constituents, gathering data and developing rationales for positions taken and requests presented. When representing a constituency, the student is responsible to the total student constituency rather than only themselves or a small interest group.

Students shall maintain confidentiality when appropriate and indicated.

The student should assume responsibility for his/her own thoughts, verbal and nonverbal communications, writings, and behavior.

---

**Student Academic Responsibilities**

Students are responsible for their own learning and development. They have a responsibility to be an active learner by attending class, completing class and laboratory assignments, and preparing in advance of the scheduled class session.

Students should participate through sharing learning experiences with peers, broadening their general education base, and transferring previous learning. Students should assume responsibility for fostering effective relationships with instructors and peers.

Students are expected to understand and maintain high standards of academic honesty. Before any formal action is taken against a student who is suspected of committing academic dishonesty, the instructor is encouraged to meet with the student to discuss the situation. If the instructor concludes that the student has committed academic dishonesty and can resolve the matter with the student through punitive grading, the case may be considered closed.

Examples of punitive grading include giving a lowered or failing grade for the assignment, having the student repeat the assignment or complete an additional assignment, or assessing a lower or failing grade for the course. The Academic Review Procedure offers recourse to a student who feels his/her grade has been reduced unfairly. Examples of academic dishonesty include, but are not limited to, the following:

1. **Cheating.** A student must not use or attempt to use unauthorized assistance, materials, information, or study aids in any academic exercise including, but not limited to, the following:
   a. Substituting on an exam or course for another student.
   b. Submitting a paper written by another person.
   c. Copying with or without the other person’s knowledge during an exam.
   d. Turning in a paper that has been obtained from a commercial research firm or internet site.
   e. Using unauthorized notes during an exam.
   f. Padding items on a bibliography.
   g. Accessing and/or altering exams or grade records.

2. **Plagiarism.** A student must not use the words and/or ideas of another, representing them as his/her own, without proper credit to the author or source.

3. **Fabrication.** A student must not falsify or invent any information or data in an academic exercise including, but not limited to, records or reports, laboratory results, and citations to the sources of information.

4. **Dual Submission.** A student is expected to submit work solely for a single course unless prior written permission of the instructor is obtained that addresses the nature of the changes required in that work before submission to a second course.

5. **Facilitating Academic Dishonesty.** A student must not intentionally or knowingly help or attempt to help another student to commit an act of academic misconduct.
Any person who commits, attempts to commit, or incites/aid others to conduct themselves as good citizens in the College community by respecting the rights and property of others.

All rules and regulations are in effect 24 hours a day at all WITCC facilities, including WITCC Student Housing. Regulations also apply for college-sponsored activities which are held off-campus.

The College reserves the right to change the rules regulating student conduct with appropriate notice to the student body through the Student Senate and the College newsletter. Any person who commits, attempts to commit, or incites/aid others in committing any of the following acts of misconduct shall be subject to disciplinary procedures by the College:

1. Obstruction/disruption of teaching, administrative processes, disciplinary procedures, or any college authorized function/activity.
2. Unauthorized occupation/use of (or unauthorized entry into) any college facility.
3. Conduct which threatens or endangers the health/safety of any person on the campus or at any college authorized function/activity including, but not limited to, physical abuse, the threat of physical abuse, sexual abuse, and assault.
4. Theft, defacement, or damage to property belonging to the College or to any agency/person on the campus.
5. Interference with any lawful right of any person on the campus including the right of access to college facilities.
6. Setting a fire on campus without proper authorization.
7. Unlawful use or possession of alcohol or alcoholic beverages, non-prescription drugs; use or possession of firearms, ammunition; dangerous weapons, substances, or materials (except as expressly authorized by the College); or bombs, explosives, or explosive, incendiary devices prohibited by law.
8. Off-campus conduct which directly, seriously, and/or adversely disrupts or interferes with the educational or other function of the College.
9. Verbal abuse, humiliating treatment, or harassment of any person on the campus. (Also see Sexual and Gender Harassment Policy.)
10. Dishonesty in any form. This includes cheating, plagiarism, forgery, falsification of records, misrepresentation, and lying.
11. Unauthorized use of property belonging to the college or any agency/person on campus.
12. Smoking, the use of tobacco and the use of e-cigarettes are not allowed anywhere on campus. This includes buildings, parking lots, common areas, outdoor arenas, and any vehicle located on the school grounds, and including the perimeter area of fifty feet beyond such school grounds to which the public is invited or in which the public is permitted. Anyone caught smoking on campus will be fined. See the Student Handbook for a complete list of fines.
13. Violation of any local, state, or federal law as evidenced by conviction.
14. Gambling without specific authorization by the administration.
15. Failure to comply with directions of college personnel acting in the performance of their duties. This rule includes failure to identify oneself at the request of a college employee.
16. Disorderly, lewd, indecent, or obscene conduct.
17. Violation of college policies or regulations such as parking and guidelines for student events.
18. Failure to appear at a disciplinary hearing.

Computer Conduct

College computer systems are provided by WITCC for use by students, faculty, and staff for the purpose of furthering the educational mission of the College. This includes course work, college-related educational endeavors, and business operations. Each user is expected to follow established computer conduct policies and not to interfere with or disrupt the orderly processes of WITCC resources. Users accept the responsibility for utilizing services in ways that are ethical, that demonstrate academic integrity and respect for others who share this resource. Users must follow all existing federal, state, and local laws as they relate to computer conduct.

Acts of misconduct which will be the cause for disciplinary action up to and including discharge, as well as possible legal and/or civil action:

1. Unauthorized copying of anything that is licensed or protected by a copyright. This includes, but is not limited to, any software (including operating systems, programs, applications, databases, or code), multimedia files (including music, movies, or audio), or text files.
2. “Computer hacking” (i.e. unwanted or unsolicited entry into a computer system). This includes, but is not limited to, successful acts of hacking, unsuccessful attempts, possession of the tools used for computer hacking, or running programs that attempt to identify passwords or codes.
3. Knowingly introducing a “computer virus” to a computer or network (i.e. a program – either harmless or damaging – which attaches itself to another program and/or has the capability to reproduce in order to infect other computers).
4. Gaining unauthorized access to information that is private or protected or attempting to do so. Willful damage or misuse of systems, applications, databases, code, or data. Attempting to gain network privileges to which you are not entitled.
5. Unauthorized alteration of system configuration. This includes, but is not limited to, interrupting programs that protect data or secure systems, or attempting to do so. Downloading and/or installing software, or attempting to do so.
6. Introducing or using profanity/offensities on the network, including, but not limited to, the campus network, Internet, or any other communications configuration which is accessible by or connected to College computers or computer systems.
7. Using the network to conduct business or solicit services, and/or develop, introduce, or circulate inflammatory comments or subjects.
8. Sharing of assigned logins with anyone else for any reason. Unauthorized use of another person’s login or attempting to and including discharge, as well as possible legal and/or civil action:
to do so. Unauthorized use of a generic login outside of the context for which that login was created. Each student/employee will be responsible for all activities under his/her assigned login.

9. Inappropriate or misuse of e-mail. This involves sending unsolicited e-mail (including junk mail, jokes, or chain letters) to users of the College’s e-mail system that is of a non-business nature.

10. Installing unauthorized personal hardware or software to any computer or network.

Respectful Exchange of Ideas and Information

Computer systems and networks allow for a free exchange of ideas and information. This exchange serves to enhance learning, teaching, critical thinking, and research. While the constitutional right of free speech applies to communication in all forms, we encourage civil and respectful discourse. College policy and local, state, and federal law do prohibit some forms of communication, to include:

- obscenity, lewd, or sexually harassing images or text
- defamation
- advocacy directed to incite or produce lawless action
- threats of violence
- harassment based on sex, race, disability, or other protected status
- anonymous or repeated messages designed to annoy, abuse, or torment

Personal Responsibility

Each individual who is given a computer and/or e-mail account, or uses the computers and network resources made available by Western Iowa Tech Community College, must understand that you are accountable for the policies set forth in this document. In addition, users assume responsibility for:

- protection of your password
- reporting any breach of system security
- reporting unauthorized use of your account
- changing your password on a regular basis
- frequently making backup copies of your work to ensure against loss
- clearly label works and opinions as your own before they are widely distributed

Authority

The Information Technology department may access other’s files for the maintenance of networks, computers, and storage systems. Data, information, and files stored in electronic form on college-owned equipment and/or transmitted across college-owned networks is the property of Western Iowa Tech, and no right to privacy can be assumed. Office staff may also routinely monitor and log usage data, such as network connection times, CPU and disk utilization for each user, security audit trails, and network loading. Data collected may be reviewed and further investigated should evidence of violation of policy or law occur. If necessary, staff may monitor the activities and files of specific users on the college computers and networks. Any staff member who believes such monitoring is necessary should discuss the problem and strategy for investigation with the executive director, Information Technology.

Any student who violates the policies set forth in this document is subject to disciplinary action as defined in the Students’ Rights and Responsibilities section of the Student Handbook. Faculty and staff who violate these policies are subject to disciplinary action as defined in the Employee Handbook. All violators may be subject to arrest according to local, state, and federal law.

Academic Review Procedure

A student who questions a final grade for a particular course is encouraged to meet with the faculty member involved to discuss the issue. Every effort should be made to resolve the concern. If the issue is not resolved, an academic review procedure is provided for students to resolve concerns. A student may exercise the following procedures in sequence. Written requests and written responses shall be provided at all review steps. The academic review procedure needs to be initiated by the student no later than one semester following the original concern.

Step 1: Student will present concern in writing to the faculty member involved. The faculty member shall have five class days to respond.

Step 2: If the concern is not resolved at Step 1, the student may appeal in writing to the appropriate division chair. The division chair shall respond within five class days.

Step 3: If the concern is not resolved at Step 2, the student may request for the Dean of Instruction to convene the Academic Appeal Committee. The Academic Appeal Committee will review the appeal and make a recommendation to the Chief Academic Officer. The committee has no authority to impose sanctions but rather makes recommendations to the Chief Academic Officer for the appropriate resolution of this appeal. The decision of the Chief Academic Officer will be final. The Chief Academic Officer shall have ten (10) class days to respond.

Due Process Procedure

I. Statement of General Expectations and Definitions

A. Expectations: All students are expected and required to obey college policies, rules and regulations and not violate municipal, county, state or federal law. All students are expected to conduct themselves in such a manner as to show respect for properly constituted authority, exhibit and maintain integrity and honor in all matters related to the College and not interfere with or disrupt the orderly educational processes of the College.

B. Definition: In these procedures, unless the context otherwise requires:

1. “Authorized College Official” means an officer of the college who, by assigned responsibility, has authority to act in a particular situation. Frequently, but not exclusively, it will be the President, Vice President, Division Chair, or a person designated by them.

2. “Board” means the WITCC Board of Directors.

3. “Class day” means one day on which classes are in session (M-F). Registration, test, and orientation days are included. If a complaint is filed within three (3) days of the last day of the semester, then the procedure that will be followed is Formal Hearing (II-C).

4. “College property” or “college facilities” means property, real or personal, owned, leased, controlled, or managed by the College.

5. “Complaint” is a written statement which identifies an alleged violation and which sets forth the facts which constitute the violation.

6. “Dean of Students” means the Dean of Students, his/her designee, representative, or agent.

7. “Student” means any person enrolled at the college, whether on a part-time or full-time basis, and includes a person accepted for admission to the College.

8. “President” means the Chief Executive Officer of the
9. “Violation” means any conduct, act, or omission to act, which violates a regulation, policy or administrative rule of the College or of the Board.

10. “Administrative disposition” refers to disciplinary action taken by the Dean of Students or his/her designee, representative, or agent.

11. “Administrative Complainant” refers to the WITCC official who investigates the complaint and presents evidence of the violation at the hearing.

C. Immediate Suspension: The authorized college official may take immediate interim disciplinary action by suspending the student from classes or from the campus, or otherwise alter the status of a student. Causes for immediate suspension include, but are not limited to, the following:

1. Ignoring a summons for a hearing.
2. An attempt of bodily harm to anyone on campus.
3. Possession, use, sale, or purchase of illegal drugs on campus.
4. Destruction or theft of college property or another person’s personal property.
5. Possession of intoxicating beverages on campus.
6. Any activities causing a major disruption or disturbance.
7. A violation of the student code of conduct which the administrator considers a major violation.

Prior to deciding whether to suspend a student, the authorized college official will give the student oral notice of the alleged violation and an opportunity to provide an immediate response to the allegation. Within two (2) class days of the action of temporary suspension, the student will be summoned by the Dean of Students. The Dean of Students will give the student written notice of the alleged violation and an opportunity to provide an immediate response to the allegation. And the Dean of Students will:

1. Dismiss the allegation; or
2. Make an administrative disposition; or
3. Proceed with a formal hearing.

If the suspended student received a favorable administrative disposition or favorable hearing, the student shall be permitted to make up class work required for satisfactory completion of a course or courses begun prior to the beginning of the disciplinary process.

D. Disciplinary Removal From Class: An instructor may remove a student from class for disciplinary reasons. Prior to deciding whether to remove a student from class, the instructor will give the student oral notice of the alleged violation and an opportunity to provide an immediate response to the allegation. The alleged violation must be reported in writing to the Dean of Students within 24 hours to review the allegation and to initiate disciplinary actions.

II. Disciplinary Proceeding

A. Initial Response: Upon notification of an alleged violation, the Dean of Students will review the complaint within three class days and will:

1. Dismiss the allegation as being unfounded or irrelevant.
2. Summon the student for a conference and, after giving the student written notice of the alleged violation and an opportunity to provide an immediate response, then a) dismiss the allegation; b) make an administrative disposition; or c) proceed with a formal hearing.

B. Administrative Disposition: After reviewing the complaint, the Dean of Students may administratively decide that the alleged violation did occur and impose a penalty as described in Section III. The student may accept the administrative disposition or may request a formal hearing. The request for a formal hearing must be made to the Dean of Students within three days of the disposition.

C. Formal Hearing

1. The Dean of Students shall have written notice served upon the student and the complainant, which notice shall set forth the date, time, and place for the hearing, as well as the nature of the alleged violation. The hearing date shall be not less than five (5) nor more than ten (10) class days after service of the notice unless the student makes written acknowledgment of the notice and written consent to the scheduling of a hearing at a different time.

Notice may be hand delivered to the student. In the student’s absence from the campus, notice mailed to the student’s last known address by ordinary mail shall be deemed adequate. Notice by mail will be deemed given on the date of mailing.

2. For good cause, the Dean of Students may postpone the hearing for as much as three (3) class days.

3. The notice shall direct the student to appear before the Dean of Students on the date and at the time specified, and shall advise the student that she/he has a right to each of the following:

   a. To have a private hearing.
   b. To have, at the student’s expense, the presence and assistance of legal counsel.
   c. To confront and cross-examine witnesses against him/her who appear at the hearing.
   d. To cause the Dean of Students to order witnesses to appear on his/her behalf. Only college students and employees are subject to being ordered to appear to testify. The college is not responsible for witnesses who fail to appear or who refuse to testify, and the failure of a witness to appear or to testify will not affect the hearing.
   e. To allow the student to examine documents presented in evidence against the student.
   f. To have, at the student’s expense, a privately-paid stenographer present at the hearing and/or to record the hearing by electronic means.
   g. To remain silent during the hearing.

D. Preliminary Matters

1. Alleged violations arising out of the same occurrence, or out of the same series of occurrences against more than one student, may be heard together. Either at the option of the Dean of Students or upon request by one of the students or the complainant, separate hearings shall be held.

2. Alleged violations by one student arising out of the same transaction or occurrence or out of the same series of transactions or occurrences shall be heard together. Alleged violations by one student arising out of unrelated transactions or occurrences may be heard together with the written consent of the student.

3. At least three (3) class days before the hearing date, the student shall in writing furnish the Dean of Students with:

   a. The name of each witness she/he wants ordered to appear.
   b. Any objection that, if sustained, would postpone the hearing.
   c. The name of legal counsel, if any, who is to appear with him or her.
   d. A request for a private or separate hearing and the ground for such request.
   e. A request to exercise any of the student’s other
E. Procedure
1. The hearing shall be closed to the public unless otherwise requested by the student.
2. The hearing shall proceed generally as follows:
   a. The Dean of Students shall read the complaint.
   b. The Dean of Students shall inform the student of his/her rights, as stated in the notice of hearing.
   c. The administrative complainant shall present evidence in support of the alleged violation.
   d. The student may present his/her defense.
   e. At the request of the student or the administrative complainant, witnesses shall not be present before they are called to testify.
   f. The administrative complainant and the student may present rebuttal evidence, and shall have the right to make argument. The administrative complainant shall have the right to make the first opening and the final closing arguments.
   g. The Dean of Students shall state in writing each finding of a violation and the penalty determined. The Dean of Students shall include in the statement reasons for the finding and the penalty.
   h. These findings shall be forwarded to the President and appropriate academic department chair no more than three (3) class days after conclusion of the hearing.
   i. The Dean of Students shall inform the student of the findings and impose the penalty, if any. This action shall occur no more than five (5) class days after conclusion of the hearing.

F. Evidence
1. Rules of evidence shall not apply to administrative hearings, and the Dean of Students may admit and give effect to evidence that possesses probative value and is commonly accepted in the conduct of a reasonable person. Privileged communications between a student and a member of the professional staff where such communications were made in the course of performances of official duties and when the matters discussed were understood by the staff member and the student to be confidential, as well as those communications which are privileged by law shall not be introduced as evidence before the Dean of Students without the written permission of the student.
2. A student is presumed innocent until the administrative complainant has proved a violation by a preponderance of the evidence.
3. All evidence offered during the hearing shall be made a part of the hearing record. Documentary evidence may be included in the form of copies, extracts or abstracts, or by specific reference. Real evidence may be photographed or described.

G. Record
1. Right To Appeal
   a. The student may appeal the decision of the Dean of Students to the President. Appeals must be made by giving written notice to the Dean of Students on or before the third (3) class day after the day the decision or action is served on the student or mailed to the student’s last known address by ordinary mail. The notice of appeal shall contain the student’s name, the date of the decision or action, the name of his/her legal counsel, if any, and a simple request for appeal.

b. Notice of appeal timely given suspends the imposition of penalty until the appeal is finally decided. However, a notice of appeal does not affect an immediate suspension imposed under Section I (C) of these procedures. An immediate suspension will continue in effect until an appeal is finally decided.

c. After reviewing the evidence and the appeal, the President may take any action consistent with the Board policy.

d. The action of the President is final.

III. Penalties: The Dean of Students may impose one or more of the following penalties for a violation:
A. Warning – a written reprimand to the student to whom it is addressed.
B. Disciplinary Probation – a warning indicating that further violations may result in suspension. Disciplinary probation may be imposed for a period of up to sixteen (16) weeks and the student shall be automatically removed from probation when the imposed period expires. This action has no effect on attendance or academic probationary status.
C. Restitution – reimbursement for damage to or misappropriation of property. Reimbursement may take the form of appropriate service to repair or otherwise compensate for damages.
D. Suspension of Rights and Privileges – a penalty which may impose limitations or restrictions to fit the particular case.
E. Suspension of Eligibility for Official Extra-Curricular Activities: prohibits, during the period of suspension, the student on whom it is imposed from joining a registered student organization, taking part in a registered student organization’s activities, or attending its meetings or functions, and from participating in an official extra-curricular activity.
F. Community Service: A student may be required to perform service to the College or the community in lieu of another penalty.
G. Suspension from the College for less than the remainder of the term prohibits, during the period of suspension, the student on whom it is imposed from entering College property except in response to a request of the College and from registering, either for credit or non-credit work, at the College.
H. Dismissal from the College for a period to be determined by the Dean of Students which shall not be less than the remainder of the term and shall not exceed one (1) calendar year. Such dismissal may be appealed to the President of WITCC within three (3) days of an adverse ruling.
I. Permanent dismissal from the College. This includes credit classes, non-credit classes, seminars, workshops, and other such activities. Such dismissal may be appealed to the President of WITCC within three (3) days of an adverse ruling.
WITCC is committed to providing an atmosphere that encourages scholarship, the robust exchange of ideas and interactions with others in a safe environment.

WITCC reserves the right to deny admission or place conditions on admission or the enrollment of any applicant, student, or former student if WITCC determines that such person presents an unreasonable risk to the safe and orderly campus environment. WITCC also reserves the right to deny a student’s application for residence hall housing, or remove a student from a residence hall, if WITCC determines that the student presents an unreasonable risk of harm to others in the residence hall.

Policy of Nondiscrimination

It is Western Iowa Tech Community College’s policy not to discriminate against individuals with disabilities and to provide reasonable accommodation(s) to qualified applicants and students. Although this policy primarily describes accommodations that allow persons with disabilities to apply for admission and participate in education programs, courses, services and activities, the policy also applies to accommodations that would allow applicants or students with disabilities to enjoy equal benefits and privileges of education as enjoyed by other applicants or students.

Scope of Potential Reasonable Accommodations

A. Upon request, and with appropriate documentation, Western Iowa Tech Community College is prepared to modify or adjust the admissions process or the educational environment to make “reasonable accommodation” to qualified applicants and students with disabilities.

B. Reasonable accommodations may include but are not limited to: a) making existing academic facilities used by students and the public readily accessible to and usable by individuals with disabilities; b) altering when and how academic or technical requirements are met or performed; c) adjusting or modifying admission and performance tests, educational materials, or policies; d) allowing readmission upon review and evaluation; e) providing or arranging counseling services; f) providing readers, interpreters, tutors, written materials in alternative formats, and other auxiliary aids and services; g) adapting or modifying the manner and method of instruction and testing; h) allowing applicants or students to make use of equipment or devices that the College is not required to provide; and i) other similar accommodations. The College does not assume coordination or financial responsibilities for attendant care services.

C. Each request will be evaluated on a case-by-case basis. An accommodation is not considered “reasonable” when: a) the accommodation would fundamentally alter the nature of the program, course, service, and/or activity; b) the individual is not otherwise qualified to meet the academic and technical standards required for admission or participation in an education program, course, service and/or activity; c) the accommodation would cause an undue financial or administrative burden on the College; or d) the individual would still pose a direct threat to the health or safety of himself, herself, or others.

D. Reasonable accommodation does not negate requirements for successful completion of a program, course, service, and/or activity, adherence to generally acceptable standards of behavior and the College’s code of conduct, not adherence to administrative and faculty directions and instructions.

Request for Reasonable Accommodation

A. If an accommodation would result in any expense to the College, the applicant or student must submit a formal request to the Disability Services Coordinator or his/her designee requesting reasonable accommodation and describing the nature of the requested accommodation (Reasonable Accommodation Request Form). The applicant or student should indicate the nature of the disability and identify specific needs or limitations. The applicant or student may be responsible for providing documentation of the disability to the Disability Services Coordinator or his/her designee.

B. The applicant or student shall identify any specific accommodations that have been successful in the past and any equipment, aids, or services that the applicant or student is willing to provide and utilize.

C. If an accommodation is not significant and would not result in any expense to the College, the student or applicant may choose to make informal arrangements for the provision of the accommodation directly with the appropriate faculty. The faculty may either provide the accommodation or direct the individual to the Disability Services Coordinator to make a formal request. If a student or applicant is not satisfied with the response of the faculty, he or she may make a formal request for accommodation with the Disability Services Coordinator for an official determination. An individual may not file a grievance for failure to provide reasonable accommodation unless a formal request for accommodation has been made with the Disability Services Coordinator.

Applicants or Students Who Refuse Reasonable Accommodation

Applicants and/or students with disabilities have the right to refuse an offer of an accommodation. If the refusal of an offer of an accommodation results in the individual’s inability to perform or meet the admission or participation standards for a program, course, service, or other activity, then that individual will not be considered a qualified individual with a disability and may be denied admission or participation accordingly, as deemed appropriate by the College.

Appeals

A student who disagrees with the College’s decision to refuse a requested accommodation may appeal the decision to the Chief Academic Officer of Western Iowa Tech Community College. An Appeals Review Committee (consisting of a student representative, faculty representative, and others as appointed by the Executive Vice President) will review the appeal and make a recommendation to the Chief Academic Officer. The decision of the Chief Academic Officer will be final.

A complete copy of the Policy of Nondiscrimination can be obtained from the Dean of Students.
Discrimination, Sexual Harassment, Americans With Disabilities Act Compliance

WITCC complies with Title IX of the Education Amendments of 1972, Title VI of the Civil Rights Act of 1964, section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, as well as other applicable federal, state, and local laws.

The person charged with monitoring and coordinating Equal Opportunity and Affirmative Action matters, as well as compliance with the aforementioned laws is the Equal Employment Opportunity Administrator/ADA Coordinator. She is located in Room A242 or may be contacted by phone at (712) 274-8733, ext. 1220.

Sexual and Gender Harassment

WITCC is pledged to maintain an environment conducive to work and study for staff and students. That environment must be free of sexual and gender harassment and all forms of sexual intimidation and exploitation. Such behavior, including (1) suggestions that academic reprisals or rewards will follow refusal or granting of sexual favors or (2) behavior which creates an intimidating or hostile academic environment constitutes gross misconduct and will not be tolerated.

Complaints regarding sexual and gender harassment can be directed to the Sexual Harassment Conciliator. She is located in Room A242 or may be contacted by phone at (712) 274-8733, ext. 1220.

Discrimination

Western Iowa Tech Community College does not discriminate on the basis of race, creed, color, gender, national origin, religion, age, disability, sexual orientation, gender identity, or other protected basis in its educational programs, activities, admission procedures, or employment practices.

In matters of discrimination, the EEO Administrator has primary responsibility for advising the complainant of the process and steps to follow. She is located in Room A242 or may be contacted by phone at (712) 274-8733, ext. 1220.

Discipline

Students are to maintain orderly conduct that is consistent with an educational environment. An instructor may remove a student from class for disciplinary reasons. The violation is then reported to the Dean of Students for review and action. Discipline is the responsibility of the Dean of Students, who has the authority to act on any violation and take whatever action is deemed appropriate.

The Dean of Students will review all complaints and may dismiss the allegations, make an administrative disposition, or conduct a formal hearing. Possible disciplinary actions, as well as procedures for disciplinary due process, can be found in the Student Handbook and on pages 30-32 of this catalog.

Disability

Students with verified disabilities requesting accommodations should go directly to the classroom instructor to request the accommodation. It is the student’s responsibility to inform the instructor of the disability and the type of accommodation needed. If the classroom instructor is unable to provide reasonable accommodation or if the student’s request is refused by the instructor, the student may request advocacy services from the ADA Coordinator located in Room A242 or contacted by phone at (712) 274-8733, ext. 1220, or the Coordinator for Disability Services located in Room A326 or may be contacted by phone at (712) 274-8733, Ext. 3216.

In matters relating to accommodations under the Americans With Disabilities Act, the ADA Coordinator has primary responsibility for advising the complainant of grievance procedures and the steps to follow.

Release of Student Information

In general, the policy of Western Iowa Tech Community College is to keep the student’s record confidential. It is the intention of the college to fully comply with the provisions of the “Family Education Rights and Privacy Act of 1974” Section 513 of Public Law 93-380 as amended by Senate Joint Resolution 40. The College has established policies and procedures to implement compliance. These may be reviewed during normal business hours in the Enrollment Services Office.

The College considers the following information as public information and will release it without the student’s consent unless the student directs otherwise: name, address, telephone number, date and place of birth, program of study, participation in recognized activities and sports, dates of attendance, awards and previous institutions attended.

Any students objecting to the public release of this information must file a written objection with the Enrollment Services Office. Forms are available in the Enrollment Services Office. (Directory information will be furnished to law enforcement officials at their request.)

Drug-Free College Community

The College shall endeavor to provide a healthy, safe, and secure educational environment. It is the policy of the Board that within the powers of the college, reasonable measures shall be taken to establish and maintain a drug-free college community as required by the Drug-Free Workplace Act of 1988, the Drug-Free Schools & Communities Act/Amendment of 1988 (PL101-226), and applicable Iowa statutes.

Smoke-Free and Tobacco-Free Campus

Smoking, the use of tobacco and the use of e-cigarettes are not allowed anywhere on campus. This includes buildings, parking lots, common areas, outdoor arenas, and any vehicle located on the school grounds, and including the perimeter area of fifty feet beyond such school grounds to which the public is invited or in which the public is permitted. Anyone caught smoking on campus will be fined. See the Student Handbook for a complete list of fines.
College Credit Programs

Transfer Courses Listing

Associate of Arts Degrees
- Addictions Counseling
- Agriculture
- Art and Design
- Business Administration
- Education – Early Childhood
- Education
- English
- Foreign Language
- General Studies
- History
- Information Systems
- Mass Media
- Mathematics
- Music
- Physical Education
- Political Science
- Psychology
- Social Work
- Sociology
- Sports Medicine - Athletic Training
- Sports Medicine - General Studies

Associate of Science Degrees
- Biology
- Chemistry
- Mathematics

Associate of Applied Science Degrees
- Accounting Specialist
- Administrative Assistant – Medical
- Administrative Office Management
- Agribusiness Technology
- Agriculture Management
- Associate Degree Nursing (ADN)
- Audio Engineering Technician
- Auto Collision Repair Technology
- Automotive Technology
- Band Instrument Repair Technology
- Business Management
- Cyber Security and Digital Crime
- Early Childhood Education
- Electronic Systems Technology
- Emergency & Disaster Management
- Emergency Medical Services – Paramedic
- Financial Services
- Fire Science Technology
- Graphic Design
- Human Resources Management
- Independent Filmmaking
- Mechanical Engineering Technology
- Motorcycle/Powersports Technology
- Networking Administration and Security
- Paralegal/Legal Assistant
- Professional Photography
- Physical Therapist Assistant
- Police Science – Corrections
- Police Science – Forensics Investigation
- Police Science Technology
- Pre-Dental Hygiene
- Social Media Marketing
- Surgical Technology
- Technical Business Management
- Technical Emergency & Disaster Management
- Technical Studies
- Video Game Design – Artistic Track
- Video Game Design – Scripting Track
- Web Design
- Wind Energy Technician
Diplomas Listing

• Accounting
• Administrative Office Support
• Agriculture
• Air Conditioning, Heating, and Refrigeration
• Audio Production Assistant
• Auto Body Refinishing
• Auto Body Structural Repair
• Auto Mechanics
• Bookkeeping and Office Support
• Certified Personal Trainer
• Construction
• Dental Assisting
• Early Childhood Studies
• Electrician
• Emergency & Disaster Management Methods & Tactics
• Energy Technician
• Entrepreneurship
• Fire Science
• Human Resources
• Industrial Plant Technology
• LAN Technician
• Marketplace Design
• Medical Assistant
• Medical Coding Specialist
• Medical Secretary
• Medical Transcriptionist
• Motorcycle Mechanic
• Paramedic
• Pharmacy Technician
• Practical Nursing
• Professional Photography Technician
• Surgical Technology
• Veterinary Assistant
• Welding – Advanced
• Welding – Qualified
• Wind Turbine Maintenance Specialist

Certificates Listing

• A+ Certification
• Air Conditioning
• Auto Body Procedures
• Auto Body Repair
• Automotive Drive Train
• Automotive Electrical
• Automotive Painting
• Biomedical Electronics
• Carpentry
• Certified Personal Trainer
• CCNA–Cisco Certified Network Associate
• Child Development – Infant/Toddler
• Child Development – Preschool
• Coaching
• Computer Numerical Control Operator
• Concrete Specialties
• Cost Accounting
• Data Recovery
• Digital Character Animation
• Drywall
• Electrical Maintenance Technician
• Electronic Musical Instrument Repair
• Emergency Disaster
• Emergency Medical Technician
• Emergency Medical Technician–Advanced
• Emergency Manager Basic Skills
• Emergency Medical Responder
• Emergency Planning
• Entrepreneurship Concepts
• Fire Science Principles
• Heating
• Health Information Technology
• Human Resource Technician
• Industrial Welding
• Interior Finishing
• IV Therapy Concepts and Review
• Legal Office Aide
• Machine Operations
• Mechanical Maintenance Technician
• Medication Aide
• Microsoft Certified IT Professional (MCITP)
• Microsoft Certified Technology Specialist (MCTS)
• Network Security
• Nursing Assistant
• Office Assistant
• Paraeducator
• Payroll Clerk
• Pharmacy Technician
• Skill Enhancement
• Supervision and Management in Health Care
• Small Engine Mechanic
• Smart Home Technology Specialist
• Visual Design
• Video Game Audio Production
• Video Game Design Dynamic & Visual Effects
• Wall Framing and Roofing
• Wind Site Assessment Specialist
Alternative Delivery Systems

Online
WITCC belongs to the Iowa Community College Consortium (ICCOC), seven Iowa community colleges who partner to offer Associates degrees completely online via the cCollege.com system. The seven community colleges that are members of ICCOC are Eastern Iowa Community College, Iowa Lakes Community College, Iowa Western Community College, Northeast Iowa Community College, Southeastern Community College, and Western Iowa Tech Community College. Further information is available at www.iowacconline.org or www.witcc.edu. WITCC has 13 degree programs which may be earned completely online:

Associate of Arts (AA) Degrees:
- Agriculture
- Business Administration
- Education
- English
- General Studies
- History
- Political Science
- Psychology
- Sociology

Associate of Applied Science (AAS) Degrees:
- Agribusiness
- Mathematics

Hybrid
WITCC offers hybrid courses that combine traditional face-to-face instruction and online technology. Many learning activities in the course are delivered online, reducing the number of face-to-face meetings for students and allowing greater flexibility in their educational pursuits.

Iowa Communications Network (ICN)
WITCC offers courses over the state-owned fiber-optic network in six different classrooms located in Sioux City (2), Cherokee (2), Denison (2), and Le Mars. The ICN provides full motion, two-way interactive video and audio for faculty and students. An ICN core of general education courses in English, speech, math, history, and other basic subjects are regularly offered.

Accelerated Degrees
The accelerated degree provides an opportunity for high school students who start taking college-credit courses at WITCC to complete an associate of arts or associate of science degree one year after graduating from high school. Students take college credit courses during their junior and/or senior year from the existing associate degree program offerings. The classes are available in traditional or alternative delivery formats. After graduation, they continue their program in the traditional on-campus program or the online system.

Evening/Weekend/Hybrid Degrees
WITCC schedules a wide variety of general education and specialty classes during evening and weekend hours to accommodate students’ busy schedules. All courses for certification are available in the following areas:
- A+ (computer repair)
- CCNA (Cisco Certified Network Associate)
- Industrial Plant Technology
- Para-educator
- Emergency Medical Technician
- Emergency Responder
- Home Care Aide
- Human Resource Technician
- LPN Supervisory
- Medication Aide
- Nursing Assistant
- Pharmacy Technician
- Smart Home Technician

All courses for the General Studies, A.A. degree, LAN Technician Diploma, and the Health Office Coordinator A.A.S. degree are available during evening hours.
Accounting Specialist

Associate of Applied Science Degree
Sioux City Campus

Program Overview and Opportunities:
The Accounting Specialist Associate of Applied Science degree prepares students for entry-level accounting positions. Students are provided with the skills and knowledge to advance within the accounting field. Students study accounting principles, business law, communication skills, payroll, income tax, computerized accounting, and computerized business applications.

Graduates may be employed by for-profit and not-for-profit entities, manufacturing entities, accounting firms, insurance offices, and agribusiness firms in a variety of positions such as general accounting clerks, accounts payable/receivable specialists, personal income tax clerks, collection clerks, payroll clerks, and bookkeepers. Credit hours earned in this program can be applied toward a baccalaureate degree.

The program also includes an internship or service learning component to allow students to gain practical hands-on experience.

Accounting Specialist Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ACC 131</td>
<td>Principles of Accounting I #</td>
<td>4</td>
</tr>
<tr>
<td>MAT 102</td>
<td>Intermediate Algebra (or higher level math) * #</td>
<td>4</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>BUS 185</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>ACC 132</td>
<td>Principles of Accounting II #</td>
<td>4</td>
</tr>
<tr>
<td>ACC 261</td>
<td>Income Tax Accounting #</td>
<td>3</td>
</tr>
<tr>
<td>BUS 186</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>ACC 161</td>
<td>Payroll Accounting #</td>
<td>3</td>
</tr>
<tr>
<td>ECN 120</td>
<td>Principles of Macroeconomics OR</td>
<td>3</td>
</tr>
<tr>
<td>ECN 130</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations*</td>
<td>3</td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking *</td>
<td>3</td>
</tr>
<tr>
<td>BCA 147</td>
<td>Basic Spreadsheets</td>
<td>2</td>
</tr>
<tr>
<td>ACC 231</td>
<td>Intermediate Accounting I #</td>
<td>4</td>
</tr>
<tr>
<td>ACC 221</td>
<td>Cost Accounting #</td>
<td>3</td>
</tr>
<tr>
<td>ADM 154</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>FIN 130</td>
<td>Principles of Finance</td>
<td>3</td>
</tr>
<tr>
<td>ACC 232</td>
<td>Intermediate Accounting II #</td>
<td>4</td>
</tr>
<tr>
<td>ACC 281</td>
<td>Auditing #</td>
<td>3</td>
</tr>
<tr>
<td>ACC 311</td>
<td>Computer Accounting #</td>
<td>3</td>
</tr>
<tr>
<td>PHI 105</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BUS 934</td>
<td>Capstone</td>
<td>1</td>
</tr>
<tr>
<td>BUS 930</td>
<td>Career Readiness</td>
<td>1</td>
</tr>
<tr>
<td>MGT 938</td>
<td>On-The-Job Training OR</td>
<td>1</td>
</tr>
<tr>
<td>ACC 975</td>
<td>Service Learning</td>
<td>1</td>
</tr>
</tbody>
</table>

Program Total ................................................................. 68

* Denotes courses commonly articulated with area high schools.
# Students must have earned a C (2.0) or better in courses as identified by # before graduation.

If you plan to transfer, meet with a program advisor for other general education options.

Updated 9/17/13

Are You a Part-time Student?

This program could be taken on a part-time basis. Some of the courses are offered online. Please see an advisor to develop an individualized plan of study.

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.
Accounting

Diploma
Sioux City Campus

Program Overview and Opportunities:
The Accounting diploma is similar to the first three semesters of the Accounting Specialist A.A.S. program. Graduates of this program are prepared to be accounting data entry clerks. They perform basic bookkeeping and accounting tasks such as posting cash receipts, expenses, or other transactions to journals or ledgers and verifying accuracy. They may review invoices, bills, vouchers, or other documents for corrections before entry into the permanent records. They may also sort and file documents and perform calculations.

Program Advisors
Jennifer McCune, MBA, CPA
Room A146 Ext. 1401 jennifer.mccune@witcc.edu
Cindy Zortman, MED, Division Chair
Room A146 Ext. 1351 cindy.zortman@witcc.edu

Bookkeeping and Office Support

Diploma
Sioux City Campus

Program Overview and Opportunities:
The Bookkeeping and Office Support program is designed for someone who likes both office and bookkeeping skills. Course work includes bookkeeping and office procedures and machine skills using computers and electronic calculators. Program emphasis is on developing bookkeeping concepts so that graduates can assist an accountant as well as perform necessary office skills. Training includes group and individual instruction, laboratory practice, worksheets and financial statement preparation.

Graduates of the Bookkeeping and Office Support program will find employment as general ledger, inventory and payroll clerks, assistant bookkeepers, and related jobs.

Program Advisors
Mitzi Kirwan, MA
Room A146 Ext. 3214 mitzi.kirwan@witcc.edu
Kari Hadden, MS
Room A146 Ext. 1263 kari.hadden@witcc.edu
Cindy Zortman, MED, Division Chair
Room A146 Ext. 1351 cindy.zortman@witcc.edu

Accounting Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ACC 131</td>
<td>Principles of Accounting I #</td>
<td>4</td>
</tr>
<tr>
<td>MAT 102</td>
<td>Intermediate Algebra* (or higher level math)</td>
<td>4</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>ADM 154</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>ACC 132</td>
<td>Principles of Accounting II#</td>
<td>4</td>
</tr>
<tr>
<td>ACC 261</td>
<td>Income Tax Accounting#</td>
<td>3</td>
</tr>
<tr>
<td>BUS 185</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>ACC 161</td>
<td>Payroll Accounting#</td>
<td>3</td>
</tr>
<tr>
<td>ECN 120</td>
<td>Principles of Macroeconomics OR</td>
<td>3</td>
</tr>
<tr>
<td>ECN 130</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations* OR</td>
<td></td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking *</td>
<td>3</td>
</tr>
<tr>
<td>BCA 147</td>
<td>Basic Spreadsheets*</td>
<td>2</td>
</tr>
<tr>
<td>ACC 311</td>
<td>Computer Accounting#</td>
<td>3</td>
</tr>
<tr>
<td>BUS 930</td>
<td>Career Readiness</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total ............................................................................... 43

* Denotes courses commonly articulated with area high schools.

# Students must have earned a C (2.0) or better in courses as identified by # before graduation.

If you plan to transfer, meet with a program advisor for other general education options.

Bookkeeping and Office Support Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ADM 105</td>
<td>Introduction to Keyboarding</td>
<td>1</td>
</tr>
<tr>
<td>ADM 176</td>
<td>Electronic Records System</td>
<td>3</td>
</tr>
<tr>
<td>ACC 131</td>
<td>Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>BCA 147</td>
<td>Basic Spreadsheets*</td>
<td>2</td>
</tr>
<tr>
<td>MAT</td>
<td>Math General Education Elective</td>
<td>3</td>
</tr>
<tr>
<td>BCA 109</td>
<td>Windows Operating Systems*</td>
<td>2</td>
</tr>
<tr>
<td>ACC 132</td>
<td>Principles of Accounting II</td>
<td>4</td>
</tr>
<tr>
<td>ADM 159</td>
<td>Proofreading and Editing</td>
<td>3</td>
</tr>
<tr>
<td>ADM 123</td>
<td>Document Formatting</td>
<td>3</td>
</tr>
<tr>
<td>ACC 161</td>
<td>Payroll Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ADM 166</td>
<td>Office Procedures I</td>
<td>3</td>
</tr>
<tr>
<td>ACC 311</td>
<td>Computer Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUS 930</td>
<td>Career Readiness</td>
<td>1</td>
</tr>
<tr>
<td>POM 103</td>
<td>Human and Work Relations</td>
<td>2</td>
</tr>
<tr>
<td>SDV 153</td>
<td>Pre-employment Strategies</td>
<td>2</td>
</tr>
</tbody>
</table>

Program Total ............................................................................... 41

* Denotes courses commonly articulated with area high schools.

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.
Cost Accounting

Certificate
Cherokee, Denison, and Sioux City Campuses

Program Overview and Opportunities:
This certificate program is designed to enable the student to prepare cost accounting reports, including cost of production reports and variance analysis, and to use computers to aid in the preparation and analysis of such reports. These courses can be applied toward the fulfillment of the Accounting Specialist associate degree.

Cost Accounting Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ACC 131</td>
<td>Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>MAT 102</td>
<td>Intermediate Algebra (or higher level math)*</td>
<td>4</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>ACC 132</td>
<td>Principles of Accounting II</td>
<td>4</td>
</tr>
<tr>
<td>BCA 147</td>
<td>Basic Spreadsheets</td>
<td>2</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations* OR</td>
<td></td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>ACC 221</td>
<td>Cost Accounting</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total...........................................................24

* Denotes courses commonly articulated with area high schools.

Program Advisors
Jennifer McCune, MBA, CPA
Room A146
Ext. 1401
jennifer.mccune@witcc.edu
Cindy Zortman, MED, Division Chair
Room A146
Ext. 1351
cindy.zortman@witcc.edu

Are You a Part-time Student?
This program could be taken on a part-time basis. Some of the courses are offered online. Please see an advisor to develop an individualized plan of study.

Payroll Clerk

Certificate
Sioux City Campus

Program Overview and Opportunities:
This certificate program is designed to enable the student to compute wages and salaries, maintain payroll records, and prepare reports required by governmental agencies and the employer.

Payroll Clerk Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ACC 131</td>
<td>Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>MAT 102</td>
<td>Intermediate Algebra (or higher level math)*</td>
<td>4</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>ACC 161</td>
<td>Payroll Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACC 311</td>
<td>Computer Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BCA 147</td>
<td>Basic Spreadsheets</td>
<td>2</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations* OR</td>
<td></td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total...........................................................23

* Denotes courses commonly articulated with area high schools.

Program Advisors
Jennifer McCune, MBA, CPA
Room A146
Ext. 1401
jennifer.mccune@witcc.edu
Cindy Zortman, MED, Division Chair
Room A146
Ext. 1351
cindy.zortman@witcc.edu

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.
Addictions Counseling

Chemical Dependency and Co-Occurring Disorder Counseling

Associate of Arts Degree (Transfer)
Sioux City Campus

The Addictions Counseling program is a transfer program that could be continued at a four-year institution as part of a bachelor’s degree. It’s important to consult with your advisor as you take courses to ensure they meet the requirements at the four-year institution to which you intend to transfer.

Program Overview and Opportunities:
Upon successful completion of this two-year program, the student is awarded an Associate of Arts degree (AA). This program follows the prescribed education track to become a Certified Alcohol and Drug Counselor (CADC) in the state of Iowa. In addition to the educational component, the student must complete 1,000 clock hours of supervised experience in substance abuse counseling and pass the certification exam administered through the Iowa Board of Substance Abuse Certification (www.iowabc.org). In order for the experience to count toward certification, the hours must be completed no more than three years after taking the certification exam.

All coursework in this program must be a grade of “C” (70 percent) or better. No more than 50 percent of all coursework may be through distance learning (online, correspondence).

Before students will be allowed to apply for internship, the student must have earned a grade of “C” or better in PSY 248, Counseling Theory and SOC Chemical Dependency and Society.

Addiction counselors may work in licensed facilities that provide drug and alcohol rehabilitation and mental health services. With additional education and experience, individuals may pursue such careers as licensed clinical social worker, mental health counselor, chemical dependency counselor, clinical therapist, certified addiction drug therapist, and/or social worker (MSW).

As many as 65 percent of people with alcohol and other drug dependencies suffer from co-occurring mental health disorders (Hazeldon pub. 2008). The term “co-occurring” disorder has replaced the term “dual diagnosis” when defining individuals with at least one substance dependency disorder in the presence of at least one major mental disorder, including Major Depression, Bipolar Disorder, or a psychotic disorder such as Schizophrenia.

The substance abuse counseling field is a career area that is expected to grow in employment opportunities by 34 percent in the next few years. Students entering the substance abuse treatment field can expect to earn salaries anywhere from $20,000 to $40,000 based on experience and placement.

Addictions Counseling Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td></td>
</tr>
<tr>
<td>PHI 105</td>
<td>Introduction to Ethics</td>
<td></td>
</tr>
<tr>
<td>PSY 111</td>
<td>Introduction to Psychology</td>
<td></td>
</tr>
<tr>
<td>SOC 110</td>
<td>Introduction to Sociology</td>
<td></td>
</tr>
<tr>
<td>BIO 163</td>
<td>Essentials of Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<tr>
<td>ENG 106</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>PSY 241</td>
<td>Abnormal Psychology</td>
<td></td>
</tr>
<tr>
<td>SOC 180</td>
<td>Social Work Interactional Skills</td>
<td></td>
</tr>
<tr>
<td>SOC 247</td>
<td>Chemical Dependency and Society</td>
<td>3</td>
</tr>
<tr>
<td>LIT 101</td>
<td>Introduction to Literature</td>
<td>3</td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>SOC 212</td>
<td>Diversity</td>
<td></td>
</tr>
<tr>
<td>SOC 115</td>
<td>Social Problems OR</td>
<td></td>
</tr>
<tr>
<td>SOC 250</td>
<td>Sociology of Deviance</td>
<td>3</td>
</tr>
<tr>
<td>PSY 248</td>
<td>Counseling Theory</td>
<td></td>
</tr>
<tr>
<td>PSY 121</td>
<td>Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 120</td>
<td>Marriage and Family</td>
<td>3</td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>PSY 295</td>
<td>Co-Occurring and Addictive Mental Disorders</td>
<td>3</td>
</tr>
<tr>
<td>PSY 932</td>
<td>Psychology Internship OR</td>
<td>2</td>
</tr>
<tr>
<td>SOC 932</td>
<td>Sociology Internship</td>
<td></td>
</tr>
<tr>
<td>MUS 100</td>
<td>Music Appreciation OR</td>
<td></td>
</tr>
<tr>
<td>ART 101</td>
<td>Art Appreciation</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total ................................................................. 65

Program Advisors
Deb Gifford, MED ................................................................. Ext. 1354
deb.gifford@witcc.edu
Jill Moravek, PhD ................................................................. Ext. 1443
jill.moravek@witcc.edu
Darin Moeller, MED Division Chair ................................. Ext. 1493
darin.moeller@witcc.edu

Room L314
Room L314
Room L314

800.352.4649 or www.witcc.edu

Western Iowa Tech Community College 2013-2014 Catalog
Program Overview and Opportunities:
Expanding medical services throughout the country have created excellent career opportunities for office workers with specialized medical training. First-year course work gives students entry-level medical office skills. The second year gives the students an opportunity to broaden career options and receive on-the-job experience in a medical office setting.

According to the Bureau of Labor Statistics, this occupation is expected to be among those with the largest number of new jobs. Opportunities should be best for applicants with extensive knowledge of software applications. Secretaries and administrative assistants today perform fewer clerical tasks and are increasingly taking on the roles of information and communication managers. Employment is expected to grow 12 percent from 2010 to 2020. (Bureau of Labor Statistics)
Administrative Office Management

Associate of Applied Science Degree
Sioux City Campus

Program Overview and Opportunities:
The Administrative Office Management program is an associate degree program that prepares students to assume positions as office managers, supervisors, or as assistants to top executives. During the first year of the program, the student will develop skills for entry-level office employment. First-year classes emphasize technology, proofreading and editing, document formatting, filing, machine transcription, human relations, and computerized 10-key. Technology will play a big role in the expected 12 percent increase in administrative support occupations between 2010 and 2020. Therefore, the program also emphasizes word processing, spreadsheet, database, and presentation graphics skills using a Windows operating system. (Bureau of Labor Statistics, 2012-2013)

During the second year, students will develop administrative skills necessary to participate as part of the management team. Office management personnel assist in planning, organizing, and controlling the information-related activities and in leading or directing people to attain the objectives of the organization. They may handle a wide range of daily responsibilities including the supervision of support services.

Administrative Office Management Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ADM 105</td>
<td>Introduction to Keyboarding*</td>
<td>1</td>
</tr>
<tr>
<td>ADM 176</td>
<td>Electronic Records System</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>Math General Education Elective</td>
<td>3</td>
</tr>
<tr>
<td>ADM 166</td>
<td>Office Procedures I*</td>
<td>3</td>
</tr>
<tr>
<td>BCA 147</td>
<td>Basic Spreadsheets</td>
<td>2</td>
</tr>
<tr>
<td>BCA 148</td>
<td>Advanced Spreadsheets*</td>
<td>2</td>
</tr>
<tr>
<td>ADM 159</td>
<td>Proofreading and Editing #</td>
<td>3</td>
</tr>
<tr>
<td>MGT 170</td>
<td>Human Resources Management</td>
<td>3</td>
</tr>
<tr>
<td>BCA 175</td>
<td>Basic Presentation Software*</td>
<td>2</td>
</tr>
<tr>
<td>ADM 167</td>
<td>Office Procedures II</td>
<td>3</td>
</tr>
<tr>
<td>ADM 123</td>
<td>Document Formatting #</td>
<td>3</td>
</tr>
<tr>
<td>General Elective from Category D or F</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ADM 131</td>
<td>Office Calculators*</td>
<td>1</td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>ADM 154</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>BCA 165</td>
<td>Basic Databases*</td>
<td>2</td>
</tr>
<tr>
<td>BCA 221</td>
<td>Integrated Computer Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>ACC 131</td>
<td>Principles of Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ADM 124</td>
<td>Document Formatting II</td>
<td>4</td>
</tr>
<tr>
<td>ADM 180</td>
<td>Administrative Management</td>
<td>3</td>
</tr>
<tr>
<td>BCA 130</td>
<td>Advanced Word Processing</td>
<td>2</td>
</tr>
<tr>
<td>ADM 241</td>
<td>Advanced Office Skills</td>
<td>3</td>
</tr>
<tr>
<td>ADM 932</td>
<td>Internship √</td>
<td>2</td>
</tr>
<tr>
<td>SDV 153</td>
<td>Pre-employment Strategies</td>
<td>2</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations</td>
<td>3</td>
</tr>
<tr>
<td>ACC 161</td>
<td>Payroll Accounting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Program Total .............................................</td>
<td>67</td>
</tr>
</tbody>
</table>

* Denotes courses commonly articulated with area high schools.
√ Students must have earned a C (2.0) or better in courses as identified by # before registering for this course.

Revisions shown in red, updated 5/9/13

Program Advisors
Mitzi Kirwan, MA
Room A146
mitzi.kirwan@witcc.edu
Ext. 3214

Kari Hadden, MS
Room A146
kari.hadden@witcc.edu
Ext. 1263

Cindy Zortman, MED, Division Chair
Room A146
cindy.zortman@witcc.edu
Ext. 1351

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.
Medical Assistant

Diploma
Sioux City Campus

Program Overview and Opportunities:
The Medical Assistant program is a three-semester diploma program that prepares students to be multi-skilled allied health professionals specifically trained to perform in ambulatory settings, such as physicians’ offices, clinics, and group practices, and perform administrative and clinical procedures.

The medical assisting diploma program is accredited by the commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB). National Certification is available to graduates.

According to the Bureau of Labor Statistics, employment of medical assistants is expected to grow much faster than average for all occupations through the year 2014. Employment growth will be driven by the increase in the number of group practices, clinics, and other health care facilities that need a high proportion of support personnel, particularly the flexible medical assistant who can handle both administrative and clinical duties. Medical assistants work primarily in outpatient settings, a rapidly growing sector of the health care industry.

*Students must achieve a grade point average of 2.0 (C) or above in all program requirements.

Medical Assistant Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>HSC 114</td>
<td>Medical Terminology†</td>
<td>3</td>
</tr>
<tr>
<td>BIO 163</td>
<td>Essentials of Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<tr>
<td>ADM 105</td>
<td>Introduction to Keyboarding</td>
<td>1</td>
</tr>
<tr>
<td>MAP 123</td>
<td>Administrative Medical Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>HIT 248</td>
<td>Essentials of Medical Coding</td>
<td>2</td>
</tr>
<tr>
<td>MAP 333</td>
<td>Fundamentals of Medical Assisting I</td>
<td>4</td>
</tr>
<tr>
<td>HSC 143</td>
<td>Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>HSC 218</td>
<td>Clinical Pathology for Allied Health</td>
<td>3</td>
</tr>
<tr>
<td>MAP 141</td>
<td>Medical Insurance</td>
<td>3</td>
</tr>
<tr>
<td>MAP 215</td>
<td>Medical Lab Techniques</td>
<td>4</td>
</tr>
<tr>
<td>MAP 338</td>
<td>Fundamentals of Medical Assisting II</td>
<td>4</td>
</tr>
<tr>
<td>HIT 313</td>
<td>Medical Office Computer Applications</td>
<td>1</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations</td>
<td>3</td>
</tr>
<tr>
<td>ADM 154</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>MAP 402</td>
<td>Medical Law and Ethics</td>
<td>2</td>
</tr>
<tr>
<td>MAP 612</td>
<td>Medical Assistant Externship</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total........................................................................47

Denotes courses commonly articulated with area high schools.

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.

Are You a Part-time Student?
This program could be taken on a part-time basis. Some of the courses are offered online. Please see an advisor to develop an individualized plan of study.

Program Advisors
Carmen Monk, BS, CMA, (AAMA)                           Ext. 1487   carmen.monk@witcc.edu
Room L314                                              
Rexann Smith, RN, MSN, RMA                             Ext. 1209   rexann.smith@witcc.edu
Room L314                                              
Gloria Stewart, RN, EdD, Division Chair              Ext. 1350   gloria.stewart@witcc.edu
Room L313
Medical Transcriptionist

Diploma
Sioux City Campus

Program Overview and Opportunities:
This diploma program prepares the medical transcriptionist to produce reports which become medical, legal, and scientific documents. Graduates will be expected to transcribe reports covering a wide variety of medical situations.

Medical Transcriptionist Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ADM 105</td>
<td>Introduction to Keyboarding*</td>
<td>1</td>
</tr>
<tr>
<td>HSC 114</td>
<td>Medical Terminology* #</td>
<td>3</td>
</tr>
<tr>
<td>ADM 159</td>
<td>Proofreading and Editing #</td>
<td>3</td>
</tr>
<tr>
<td>BIO 163</td>
<td>Essentials of Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>BCA 115</td>
<td>Internet Basics</td>
<td>1</td>
</tr>
<tr>
<td>MAP 134</td>
<td>Medical Transcription I #</td>
<td>3</td>
</tr>
<tr>
<td>HSC 218</td>
<td>Clinical Pathology for Allied Health</td>
<td>3</td>
</tr>
<tr>
<td>MAP 123</td>
<td>Administrative Medical Office Procedures #</td>
<td>3</td>
</tr>
<tr>
<td>ADM 154</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>HSC 143</td>
<td>Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>SDV 153</td>
<td>Pre-employment Strategies</td>
<td>2</td>
</tr>
<tr>
<td>MAP 135</td>
<td>Medical Transcription II</td>
<td>3</td>
</tr>
<tr>
<td>ADM 932</td>
<td>Internship √</td>
<td>2</td>
</tr>
<tr>
<td>BUS 930</td>
<td>Career Readiness</td>
<td>1</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total ........................................................... 42

* Denotes courses commonly articulated with area high schools.
√ Students must have earned a C (2.0) or better in courses as identified by # before registering for this course.

Program Advisors

Carmen Monk, BS, CMA, (AAMA)  Ext. 1487  carmen.monk@witcc.edu
Rexann Smith, RN, MSN  Ext. 1209  rexann.smith@witcc.edu
Gloria Stewart, RN, EdD, Division Chair  Ext. 1350  gloria.stewart@witcc.edu

Are You a Part-time Student?
This program could be taken on a part-time basis. Some of the courses are offered online. Please see an advisor to develop an individualized plan of study.

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.
Medical Coding Specialist

Diploma
Sioux City Campus

Program Overview and Opportunities:
This diploma program is designed to prepare students to assign codes to diagnoses and procedures using nationally recognized coding systems. The graduate will also be knowledgeable of medical insurance, reimbursement systems, and their relationship to coding. The student becomes proficient on the use of coding systems in clinics and hospitals. The curriculum includes an on-the-job experience. Upon completion of the program, students could apply to sit for the certifying examination sponsored through AHIMA and AAPC.

Medical Coding Specialist Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ADM 105</td>
<td>Introduction to Keyboarding*</td>
<td>1</td>
</tr>
<tr>
<td>HSC 114</td>
<td>Medical Terminology #</td>
<td>3</td>
</tr>
<tr>
<td>MAP 402</td>
<td>Medical Law and Ethics</td>
<td>2</td>
</tr>
<tr>
<td>MAP 141</td>
<td>Medical Insurance</td>
<td>3</td>
</tr>
<tr>
<td>BIO 163</td>
<td>Essentials of Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td>ADM 131</td>
<td>Office Calculators*</td>
<td>1</td>
</tr>
<tr>
<td>HIT 248</td>
<td>Essentials of Medical Coding #</td>
<td>2</td>
</tr>
<tr>
<td>HSC 218</td>
<td>Clinical Pathology for Allied Health</td>
<td>3</td>
</tr>
<tr>
<td>HIT 245</td>
<td>Basic ICD-9-CM Coding #</td>
<td>3</td>
</tr>
<tr>
<td>MAP 123</td>
<td>Administrative Medical Office Procedures #</td>
<td>3</td>
</tr>
<tr>
<td>HSC 143</td>
<td>Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>ADM 154</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations</td>
<td>3</td>
</tr>
<tr>
<td>SDV 153</td>
<td>Pre-employment Strategies</td>
<td>2</td>
</tr>
<tr>
<td>ADM 932</td>
<td>Internship V</td>
<td>2</td>
</tr>
<tr>
<td>HIT 244</td>
<td>Basic CPT Coding</td>
<td>3</td>
</tr>
<tr>
<td>HIT 284</td>
<td>Auditing of Evaluation &amp; Management Codes</td>
<td>1</td>
</tr>
<tr>
<td>BUS 930</td>
<td>Career Readiness</td>
<td>1</td>
</tr>
</tbody>
</table>

Program Total ......................................................................47

* Denotes courses commonly articulated with area high schools.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADM 154</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>ADM 123</td>
<td>Document Formatting</td>
<td>3</td>
</tr>
<tr>
<td>ADM 159</td>
<td>Proofreading and Editing</td>
<td>3</td>
</tr>
<tr>
<td>MAP 123</td>
<td>Administrative Medical Office Procedures #</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>Math General Education Elective</td>
<td>3</td>
</tr>
<tr>
<td>MAP 134</td>
<td>Medical Transcription I</td>
<td>1</td>
</tr>
<tr>
<td>SDV 153</td>
<td>Pre-employment Strategies</td>
<td>2</td>
</tr>
<tr>
<td>ADM 131</td>
<td>Office Calculators*</td>
<td>1</td>
</tr>
<tr>
<td>ADM 932</td>
<td>Internship V</td>
<td>2</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations</td>
<td>3</td>
</tr>
<tr>
<td>BUS 930</td>
<td>Career Readiness</td>
<td>1</td>
</tr>
</tbody>
</table>

Program Total ......................................................................43

* Denotes courses commonly articulated with area high schools.

Medical Secretary

Diploma
Sioux City Campus

Program Overview and Opportunities:
Medical secretaries perform a variety of administrative and clerical tasks in a medical setting. They need to be knowledgeable of medical terminology, general medical procedures, and certain business functions.

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.

Program Advisors
Carmen Monk, BS, CMA, (AAMA) Room L314 Ext. 1487 carmen.monk@witcc.edu
Rexann Smith, RN, MSN, RMA Room L314 Ext. 1209 rexann.smith@witcc.edu
Gloria Stewart, RN, EdD, Division Chair Room L313 Ext. 1350 gloria.stewart@witcc.edu

Medical Secretary Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ADM 105</td>
<td>Introduction to Keyboarding*</td>
<td>1</td>
</tr>
<tr>
<td>HSC 114</td>
<td>Medical Terminology #</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>ADM 166</td>
<td>Office Procedures I</td>
<td>3</td>
</tr>
<tr>
<td>MAP 402</td>
<td>Medical Law and Ethics</td>
<td>2</td>
</tr>
<tr>
<td>ADM 154</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>SDV 153</td>
<td>Pre-employment Strategies</td>
<td>2</td>
</tr>
<tr>
<td>ADM 131</td>
<td>Office Calculators*</td>
<td>2</td>
</tr>
<tr>
<td>ADM 932</td>
<td>Internship V</td>
<td>2</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations</td>
<td>3</td>
</tr>
<tr>
<td>BUS 930</td>
<td>Career Readiness</td>
<td>1</td>
</tr>
</tbody>
</table>

Program Total ......................................................................43

* Denotes courses commonly articulated with area high schools.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADM 154</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>ADM 123</td>
<td>Document Formatting</td>
<td>3</td>
</tr>
<tr>
<td>ADM 159</td>
<td>Proofreading and Editing</td>
<td>3</td>
</tr>
<tr>
<td>MAP 123</td>
<td>Administrative Medical Office Procedures #</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>Math General Education Elective</td>
<td>3</td>
</tr>
<tr>
<td>MAP 134</td>
<td>Medical Transcription I</td>
<td>1</td>
</tr>
<tr>
<td>SDV 153</td>
<td>Pre-employment Strategies</td>
<td>2</td>
</tr>
<tr>
<td>ADM 131</td>
<td>Office Calculators*</td>
<td>1</td>
</tr>
<tr>
<td>ADM 932</td>
<td>Internship V</td>
<td>2</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations</td>
<td>3</td>
</tr>
<tr>
<td>BUS 930</td>
<td>Career Readiness</td>
<td>1</td>
</tr>
</tbody>
</table>

Program Total ......................................................................43

* Denotes courses commonly articulated with area high schools.

√ Students must have earned a C (2.0) or better in courses as identified by # before registering for this course.

Updated 5/16/13
Administrative Office Support

Diploma
Sioux City Campus

Program Overview and Opportunities:
Note: Previously the Secretary program.

In the Administrative Office Support program, the student will develop skills for entry-level office employment, with emphasis on office technology. Technology is playing a big role in the nine percent increase in administrative support occupations expected between 2006 and 2016. The program emphasizes the development of multifunctional office and computer skills in proofreading and editing, keyboarding and document formatting, filing, human relations, machine transcription, computerized 10-key, and accounting.

Students will become familiar with up-to-date office procedures and equipment. Utilizing a Windows operating system, they will be trained on computers to use applications for document formatting, word processing, spreadsheets, databases, and presentation graphics.

Graduates of this program are encouraged to go into the Administrative Office Management program, which leads to an Associate of Applied Science degree. Graduates with an AAS are prepared for positions as office managers, office support supervisors, or as assistants to top executives.

Administrative Office Support Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ADM 105</td>
<td>Introduction to Keyboarding*</td>
<td>1</td>
</tr>
<tr>
<td>ADM 176</td>
<td>Electronic Records System</td>
<td>3</td>
</tr>
<tr>
<td>ACC 131</td>
<td>Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>ADM 166</td>
<td>Office Procedures I* #</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>ADM 159</td>
<td>Proofreading and Editing #</td>
<td>3</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations</td>
<td>3</td>
</tr>
<tr>
<td>ADM 123</td>
<td>Document Formatting* #</td>
<td>3</td>
</tr>
<tr>
<td>ADM 167</td>
<td>Office Procedures II</td>
<td>3</td>
</tr>
<tr>
<td>ADM 154</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>Math General Education Elective</td>
<td>3</td>
</tr>
<tr>
<td>BUS 930</td>
<td>Career Readiness</td>
<td>1</td>
</tr>
<tr>
<td>ADM 131</td>
<td>Office Calculators*</td>
<td>1</td>
</tr>
<tr>
<td>SDV 153</td>
<td>Pre-employment Strategies</td>
<td>2</td>
</tr>
<tr>
<td>ADM 932</td>
<td>Internship √</td>
<td>2</td>
</tr>
</tbody>
</table>

Program Total ......................................................39

* Denotes courses commonly articulated with area high schools.
√ Students must have earned a C (2.0) or better in courses as identified by # before registering for this course.

Curriculum Updated 5/31/13

Program Advisors
Mitzi Kirwan, MA
Room A146
Ext. 3214
mitzi.kirwan@witcc.edu

Kari Hadden, MS
Room A146
Ext. 1263
kari.hadden@witcc.edu

Cindy Zortman, MED, Division Chair
Room A146
Ext. 1351
cindy.zortman@witcc.edu

Are You a Part-time Student?
This program could be taken on a part-time basis. Some of the courses are offered online. Please see an advisor to develop an individualized plan of study.

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. Please see an advisor to ensure correct course sequence.
Program Overview and Opportunities:
This certificate program provides students the opportunity to create, collect, manage, retrieve, and access medical records using an electronic records system. Students will use software to create/edit patient demographic and provider files used in an ambulatory care setting.

Medical Records and Health Information Technicians organize and manage health information data by ensuring its quality, accuracy, accessibility, and security in both paper and electronic systems. They use various classification systems to code and categorize patient information for reimbursement purposes, for databases and registries, and to maintain patients’ medical and treatment histories.

Employment of Medical Records and Health Information Technicians is expected to increase by 21 percent from 2010 to 2020, faster than the average for all occupations. The demand for health services is expected to increase as the population ages. An aging population will need more medical tests, treatments, and procedures. This will also mean more claims for reimbursement from private and public insurance. Additional records, coupled with widespread use of electronic health records by all types of healthcare providers, should lead to an increased need for technicians to organize and manage the associated information in all areas of the healthcare industry. (Bureau of Labor Statistics, 2012-2013)

Are You a Part-time Student?
This program could be taken on a part-time basis. Some of the courses are offered online. Please see an advisor to develop an individualized plan of study.

Program Advisors
Carmen Monk, BS, CMA, (AAMA) Ext. 1487
carmen.monk@witcc.edu
Room L314
Rexann Smith, RN, MSN, RMA Ext. 1209
rexann.smith@witcc.edu
Room L314
Gloria Stewart, RN, EdD, Division Chair Ext. 1350
gloria.stewart@witcc.edu
Room L313

Health Information Technology Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>BIO 163</td>
<td>Essentials of Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>HSC 114</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>MAP 123</td>
<td>Administrative Medical Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>HIT 301</td>
<td>Electronic Health Records</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total: 17

Updated 9/17/13
Office Assistant
Certificate
Sioux City Campus

Program Overview and Opportunities:
The Office Assistant Certificate is designed for students who wish to obtain an Office Assistant Certificate at an accelerated pace.

This program assists students with little or no current office skills or students who have acquired employment but need additional training. It will develop skills for entry-level office employment by concentrating on those areas of study that students will need to be employed in an office. Because technology will play a big role in the future growth of administrative-support occupations, several computer-based courses will be offered as part of the certificate. Once the certificate program is completed, students are encouraged to go into the Administrative Office Support Diploma program and to then continue on to the Administrative Office Management AAS degree program.

Office Assistant Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ADM 105</td>
<td>Introduction to Keyboarding*</td>
<td>1</td>
</tr>
<tr>
<td>ADM 131</td>
<td>Office Calculators*</td>
<td>1</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>ADM 176</td>
<td>Electronic Records System</td>
<td>3</td>
</tr>
<tr>
<td>ADM 166</td>
<td>Office Procedures I*</td>
<td>3</td>
</tr>
<tr>
<td>ADM 123</td>
<td>Document Formatting</td>
<td>3</td>
</tr>
<tr>
<td>ADM 159</td>
<td>Proofreading and Editing</td>
<td>3</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Program Total</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

Program Advisors
Mitzi Kirwan, MA
Room A146
Ext. 3214
mitzi.kirwan@witcc.edu

Kari Hadden, MS
Room A146
Ext. 1263
kari.hadden@witcc.edu

Cindy Zortman, MED, Division Chair
Room A146
Ext. 1351
cindy.zortman@witcc.edu

Page updated 5/9/13
Agriculture Transfer

Associate of Arts Degree (Transfer)
Sioux City Campus

Program Overview and Opportunities:
The Agriculture Transfer degree is designed to transfer to Iowa State University to complete the baccalaureate degree.


<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>AGA 114</td>
<td>Principles of Agronomy*</td>
<td>3</td>
</tr>
<tr>
<td>AGS 113</td>
<td>Survey of the Animal Industry</td>
<td>3</td>
</tr>
<tr>
<td>ENG 106</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>ECN 120</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>AGS 319</td>
<td>Animal Nutrition*</td>
<td>3</td>
</tr>
<tr>
<td>AGC 420</td>
<td>Issues in Agriculture</td>
<td>3</td>
</tr>
<tr>
<td>BIO 116</td>
<td>General Biology IB</td>
<td>4</td>
</tr>
<tr>
<td>SOC 115</td>
<td>Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>AGS 270</td>
<td>Foods of Animal Origin</td>
<td>3</td>
</tr>
<tr>
<td>PHI 101</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>FLS 141</td>
<td>Elementary Spanish I</td>
<td>4</td>
</tr>
<tr>
<td>CHM 122</td>
<td>Introduction to General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>HIS 110</td>
<td>Western Civilization: Ancient to Early Modern</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

Program Total .................................................65

* Denotes courses commonly articulated with area high schools.

Are You a Part-time Student?
This program could be taken on a part-time basis. Some of the courses are offered online. Please see an advisor to develop an individualized plan of study.

Program Advisor
Steve Ebsen, BS, Division Chair
Ext. 1232
Room T219
steve.ebsen@witcc.edu

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.
Agribusiness Technology

Associate of Applied Science Degree
Sioux City Campus - Online

Program Overview and Opportunities:
The Agri-Systems Technology program is designed to enable students to find employment in the areas of production agriculture and agribusiness. Instructional areas include crop production, animal production, management, sales and marketing. Students will be provided with a combination of classroom instruction and agriculture/cooperative work experience.

Since agriculture and its supporting businesses employ about 25 percent of the labor force in the United States, there is a definite need for program graduates in the area, state and nation.


This Agribusiness Technology degree is only offered online.

Agribusiness Technology Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>AGC 216</td>
<td>Career Seminar</td>
<td>2</td>
</tr>
<tr>
<td>AGA 114</td>
<td>Principles of Agronomy*</td>
<td>3</td>
</tr>
<tr>
<td>AGS 270</td>
<td>Foods of Animal Origin</td>
<td>3</td>
</tr>
<tr>
<td>AGA 154</td>
<td>Fundamentals of Soil Science*</td>
<td>3</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>AGS 113</td>
<td>Survey of Animal Industry</td>
<td>3</td>
</tr>
<tr>
<td>AGC 420</td>
<td>Issues in Agriculture</td>
<td>3</td>
</tr>
<tr>
<td>AGS 319</td>
<td>Animal Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>AGC 403</td>
<td>Transitioning to Organic Farming &amp; Certification</td>
<td>2</td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math (3) OR</td>
<td></td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra (4)</td>
<td>3 or 4</td>
</tr>
<tr>
<td>AGC 936</td>
<td>Occupational Experience</td>
<td>3</td>
</tr>
<tr>
<td>AGB 466</td>
<td>Agriculture Finance*</td>
<td>3</td>
</tr>
<tr>
<td>AGT 250</td>
<td>Food and Bio-security Issues</td>
<td>1</td>
</tr>
<tr>
<td>ECN 120</td>
<td>Principles of Macroeconomics OR</td>
<td></td>
</tr>
<tr>
<td>ECN 130</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations*</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Business Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education Elective</td>
<td></td>
</tr>
<tr>
<td>MGT 101</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>SDV 153</td>
<td>Pre-employment Strategies</td>
<td>2</td>
</tr>
<tr>
<td>AGB 437</td>
<td>Commodity Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKT 140</td>
<td>Principles of Selling</td>
<td>3</td>
</tr>
<tr>
<td>AGC 936</td>
<td>Occupational Experience</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Healthful Living/Leisure Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Program Total</td>
<td>71</td>
</tr>
</tbody>
</table>

* Denotes courses commonly articulated with area high schools.

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.
Agriculture Management

Associate of Applied Science Degree
Sioux City Campus

Program Overview and Opportunities:
The Agriculture Management program provides a broad agriculture knowledge-base for students. The graduates may secure employment in the areas of production agriculture and agribusiness. Instructional areas include crop production, animal production, finance, management, sales, and marketing. This Agriculture Management degree is offered online. Students may gain relevant hands-on experience with agribusinesses within their locality or beyond.

Since agriculture and its supporting businesses employ about 25 percent of the labor force in the United States, there is a need for the program graduates at the local, regional, state, and/or national levels.


Agriculture Management Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>AGA 114</td>
<td>Principles of Agronomy*</td>
<td>3</td>
</tr>
<tr>
<td>AGA 154</td>
<td>Fundamentals of Soil Science*</td>
<td>3</td>
</tr>
<tr>
<td>AGS 113</td>
<td>Survey of the Animal Industry</td>
<td>3</td>
</tr>
<tr>
<td>AGS 242</td>
<td>Animal Health</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Agriculture Elective</td>
<td>3</td>
</tr>
<tr>
<td>AGB 235</td>
<td>Introduction to Ag Markets</td>
<td>3</td>
</tr>
<tr>
<td>AGB 470</td>
<td>Farm Records Acct. Analysis</td>
<td>3</td>
</tr>
<tr>
<td>AGB 336</td>
<td>Agricultural Selling</td>
<td>3</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math (3) OR Higher Math (4)</td>
<td>3 or 4</td>
</tr>
<tr>
<td></td>
<td>Agriculture Elective</td>
<td>3</td>
</tr>
<tr>
<td>AGC 936</td>
<td>Occupational Experience</td>
<td>3</td>
</tr>
<tr>
<td>AGB 437</td>
<td>Commodity Marketing</td>
<td>3</td>
</tr>
<tr>
<td>AGB 330</td>
<td>Farm Business Management</td>
<td>3</td>
</tr>
<tr>
<td>AGP 329</td>
<td>Introduction to GPS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Agriculture Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education Elective (SOC or PSY)</td>
<td>3</td>
</tr>
<tr>
<td>AGA 158</td>
<td>Soil Fertility</td>
<td>3</td>
</tr>
<tr>
<td>AGH 284</td>
<td>Pesticide Application Certification</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Agriculture Electives</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>General Education Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Humanities or Healthful Living</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total ............................................. 74

* Denotes courses commonly articulated with area high schools.

Agriculture Electives from which to choose:

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGA 376</td>
<td>Integrated Pest Management</td>
<td>3</td>
</tr>
<tr>
<td>AGB 210</td>
<td>Ag Law</td>
<td>2</td>
</tr>
<tr>
<td>AGB 331</td>
<td>Entrepreneurship in Agriculture</td>
<td>3</td>
</tr>
<tr>
<td>AGC 420</td>
<td>Issues in Agriculture</td>
<td>3</td>
</tr>
<tr>
<td>AGM 153</td>
<td>Equipment Management</td>
<td>1.5</td>
</tr>
<tr>
<td>AGS 228</td>
<td>Beef Cattle Sciences</td>
<td>5</td>
</tr>
<tr>
<td>AGS 270</td>
<td>Foods of Animal Origin</td>
<td>3</td>
</tr>
<tr>
<td>AGS 319</td>
<td>Animal Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>AGC 403</td>
<td>Transitioning to Organic Farming and Certification</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Minimum Required Agriculture Electives</td>
<td>16</td>
</tr>
</tbody>
</table>

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.

Program Advisor

Steve Ebsen, BS, Division Chair
Ext. 1232
Room T219
steve.ebsen@witcc.edu
Agriculture

Diploma
Sioux City Campus

Program Overview and Opportunities:
This two-semester diploma option will give the graduate entry-level skills in crop production, livestock management, and agricultural marketing. This agriculture diploma is offered online. Students may gain relevant hands-on experience with agribusinesses within their locality or beyond.

Program Advisor
Steve Ebsen, BS, Division Chair
Room T219
Ext. 1232
steve.ebsen@witcc.edu

Agriculture Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>AGA 114</td>
<td>Principles of Agronomy*</td>
<td>3</td>
</tr>
<tr>
<td>AGA 154</td>
<td>Fundamentals of Soil Science*</td>
<td>3</td>
</tr>
<tr>
<td>AGS 113</td>
<td>Survey of the Animal Industry</td>
<td>3</td>
</tr>
<tr>
<td>AGS 242</td>
<td>Animal Health</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>AGB 235</td>
<td>Introduction to Ag Marketing</td>
<td>3</td>
</tr>
<tr>
<td>AGB 330</td>
<td>Farm Business Management</td>
<td>3</td>
</tr>
<tr>
<td>AGB 336</td>
<td>Agricultural Selling</td>
<td>3</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math (3) OR</td>
<td>3 or 4</td>
</tr>
<tr>
<td>MAT</td>
<td>Higher Math (4)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Agriculture Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total.................................................. 37 or 38

* Denotes courses commonly articulated with area high schools.

Agriculture Electives from which to choose:

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGB 331</td>
<td>Entrepreneurship in Agriculture</td>
</tr>
<tr>
<td>AGB 155</td>
<td>Equipment Management</td>
</tr>
<tr>
<td>AGC 420</td>
<td>Issues in Agriculture</td>
</tr>
<tr>
<td>AGS 319</td>
<td>Animal Nutrition</td>
</tr>
<tr>
<td>AGA 376</td>
<td>Scouting Integrated Pest Management</td>
</tr>
<tr>
<td>AGB 210</td>
<td>Ag Law</td>
</tr>
<tr>
<td>AGS 228</td>
<td>Beef Cattle Sciences</td>
</tr>
<tr>
<td>AGS 270</td>
<td>Foods of Animal Origin</td>
</tr>
</tbody>
</table>

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.
Veterinary Assistant

Diploma
Sioux City Campus

Program Overview and Opportunities:
The Veterinary Assistant program prepares students to work as veterinary assistants in a variety of settings including animal hospitals and clinics, animal shelters, laboratories, zoos, and animal parks. The veterinary assistant provides basic care, performs laboratory procedures, and assists in the veterinary clinic with other functions.

The program includes classroom theory, laboratory, and internship experience in local veterinary clinics. Students receive hands-on experience with animals. Program content requires the application of basic math, technical reading, and communication skills.

Graduates will be able to provide basic nursing animal care and assist with laboratory procedures used in veterinary clinics, including surgical procedures in clinics as well as in field settings.

The Iowa Workforce Information Network shows the demand for Veterinary Assistants increasing by 16.8% by 2014. The average salary of people entering this profession in Iowa is $9.33 per hour or $26,750 per year. (2009)

Veterinary Assistant Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>AGC 216</td>
<td>Career Seminar</td>
<td>2</td>
</tr>
<tr>
<td>AGV 121</td>
<td>Veterinary Medical Terminology</td>
<td>2</td>
</tr>
<tr>
<td>AGV 156</td>
<td>Veterinary Reception &amp; Administration Skills</td>
<td>2</td>
</tr>
<tr>
<td>AGV 176</td>
<td>Animal Nursing (Small and Large)</td>
<td>3</td>
</tr>
<tr>
<td>AGS 242</td>
<td>Animal Health</td>
<td>3</td>
</tr>
<tr>
<td>AGS 319</td>
<td>Animal Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>AGV 109</td>
<td>Pharmacy Skills</td>
<td>2</td>
</tr>
<tr>
<td>AGV 157</td>
<td>Animal Anatomy &amp; Physiology</td>
<td>2</td>
</tr>
<tr>
<td>AGV 173</td>
<td>Veterinary Surgical Concepts</td>
<td>3</td>
</tr>
<tr>
<td>AGV 174</td>
<td>Clinical Studies</td>
<td>3</td>
</tr>
<tr>
<td>AGS 113</td>
<td>Survey of the Animal Industry</td>
<td>3</td>
</tr>
<tr>
<td>AGV 932</td>
<td>Internship</td>
<td>3</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total: 39

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses and formally accepted into the Veterinary Assistant program.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see a program advisor to ensure correct course sequence.

Are You a Part-time Student?
The following courses could be taken on a part-time basis before acceptance into the Vet Assistant program. Some of these courses are offered online.

Refresher reading, or math if CPT scores warrant; AGC 216, AGS 242, CSC 110, AGS 113, AGS 319, and Math 772. These courses are available for non-Vet Asst. students or prospective program students.

Please see a program advisor to develop an individualized plan of study.

Program Advisor
Steve Ebsen, BS, Division Chair
Room T219
Ext. 1232
steve.ebsen@witcc.edu

800.352.4649 or www.witcc.edu
Program Overview and Opportunities:
The Air Conditioning, Heating, and Refrigeration (HVAC) program includes a study of air conditioning, heating, and refrigeration for residential and light commercial equipment. Students are trained to be HVAC technicians in a real-world, hands-on lab environment.

The HVAC facility is equipped with state-of-the-art HVAC systems including geo-thermal and other high-efficiency systems. In addition, students will have ample opportunity to work on conventional HVAC systems.

Technicians will be needed to troubleshoot and maintain HVAC systems because of the increasing number of new residential and commercial structures and to respond to the increased demand for energy management, conservation and other “green” technologies.

According to the Bureau of Labor Statistics, employment of heating, air-conditioning, and refrigeration mechanics and installers is expected to grow as fast as the average for all occupations through the year 2014. (Occupational Outlook Handbook. Bureau of Labor Statistics 2010.)

Are You a Part-time Student?
This program could be taken on a part-time basis. Some of the courses are offered online. Please see an advisor to develop an individualized plan of study.

Air Conditioning, Heating, and Refrigeration Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ELE 112</td>
<td>Basic Electrical Theory</td>
<td>3</td>
</tr>
<tr>
<td>HCR 112</td>
<td>Heating Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>HCR 120</td>
<td>Gas Heating</td>
<td>3</td>
</tr>
<tr>
<td>HCR 125</td>
<td>Oil &amp; Hydronic Heating</td>
<td>3</td>
</tr>
<tr>
<td>HCR 430</td>
<td>Electric Motors and Controls</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>Math General Ed Elective</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers OR</td>
<td></td>
</tr>
<tr>
<td>BCA 206</td>
<td>Applied Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>HCR 205</td>
<td>Air Conditioning Principles</td>
<td>3</td>
</tr>
<tr>
<td>HCR 410</td>
<td>Electrical Applications I</td>
<td>3</td>
</tr>
<tr>
<td>HCR 305</td>
<td>Fundamentals of Refrigeration</td>
<td>3</td>
</tr>
<tr>
<td>HCR 140</td>
<td>Heat Pumps</td>
<td>3</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human &amp; Work Relations OR</td>
<td>3</td>
</tr>
<tr>
<td>COM 723</td>
<td>Workplace Communication</td>
<td>3</td>
</tr>
<tr>
<td>HCR 715</td>
<td>Blueprint Reading</td>
<td>1</td>
</tr>
<tr>
<td>HCR 850</td>
<td>HVACR Shop Practices</td>
<td>4</td>
</tr>
<tr>
<td>HCR 240</td>
<td>Troubleshooting Air Conditioning Systems</td>
<td></td>
</tr>
</tbody>
</table>

Program Total.................................................45

* ELE 112 must be taken in the initial fall or spring semester of attendance.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. The courses listed above are grouped in the order that they should be taken each semester. Please see an air conditioning, heating, and refrigeration program advisor to ensure correct course sequence.
Air Conditioning

Certificate
Sioux City Campus

Program Overview and Opportunities:
This certificate will prepare the student to maintain and troubleshoot residential air-conditioning equipment. Students are trained to be cooling technicians in a real-world, hands-on lab environment. The HVAC facility is equipped with state-of-the-art and conventional air-conditioning systems in which students experience ample hands-on training.

According to the Bureau of Labor Statistics, employment of air conditioning technicians is expected to grow as fast as average for all occupations through the year 2014. As the population and number of buildings grow, so does the demand for residential, commercial, and industrial climate-control systems. (Occupational Outlook Handbook. Bureau of Labor Statistics 2010.)

Air Conditioning Certificate Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ELE 112</td>
<td>Basic Electrical Theory*</td>
<td>3</td>
</tr>
<tr>
<td>HCR 205</td>
<td>Air Conditioning Principles</td>
<td>3</td>
</tr>
<tr>
<td>HCR 305</td>
<td>Fundamentals of Refrigeration</td>
<td>3</td>
</tr>
<tr>
<td>HCR 140</td>
<td>Heat Pumps</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total............................................... 13

* Denotes courses commonly articulated with area high schools.

Heating

Certificate
Sioux City Campus

Program Overview and Opportunities:
This certificate will prepare the student to maintain and troubleshoot residential heating equipment. Students are trained to be heating technicians in a real-world hands-on lab environment. The HVAC facility is equipped with state-of-the-art and conventional heating systems in which students experience ample hands-on training.

According to the Bureau of Labor Statistics, employment of heating, air-conditioning, and refrigeration mechanics and installers is expected to grow as fast as the average for all occupations through the year 2014. (Occupational Outlook Handbook. Bureau of Labor Statistics 2010.)

Heating Certificate Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ELE 112</td>
<td>Basic Electrical Theory*</td>
<td>3</td>
</tr>
<tr>
<td>HCR 112</td>
<td>Heating Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>HCR 120</td>
<td>Gas Heating</td>
<td>3</td>
</tr>
<tr>
<td>HCR 125</td>
<td>Oil and Hydronic Heating</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total............................................... 13

* Denotes courses commonly articulated with area high schools.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see an air conditioning, heating, and refrigeration program advisor to ensure correct course sequence.

Program Advisors
Anthony Bell, AAS
Room D314
anthony.bell@witcc.edu

Steve Ebsen, BS, Division Chair
Room T219
steve.ebsen@witcc.edu

Program Advisors
Anthony Bell, AAS
Room D314
anthony.bell@witcc.edu

Steve Ebsen, BS, Division Chair
Room T219
steve.ebsen@witcc.edu
Art and Design

Associate of Arts Degree
Sioux City Campus

Program Overview and Opportunities:
The Art and Design program prepares students who plan to transfer to a four-year college to earn a degree in visual arts. This program also provides selected art courses and general education courses for students in career programs.

The curriculum focuses on studies in art and design, including creative experiences, and technical training and esthetics principles of various art forms. Students will be provided information on transfer options and on the preparation and presentation of a portfolio of work for a four-year program.

As an art and design major the student will have a chance to explore the process of painting from every angle. The student will work in oils, acrylics, and watercolors to develop their own style. As an art major the student will have the opportunity to experiment with abstract as well as representational art, and everything in between. The student may hang their work in student shows, spend hours in the studio, and visit galleries and art museums. Art helps a person be observant, open-minded, and creative.

Persons interested in this program should possess a strong interest in the visual world and a desire to produce art work using traditional as well as non-traditional media as modes for self expression.

Art and design majors with a bachelor’s degree may find careers in graphic design, publishing, illustrating, recreational therapy, primary and secondary education, teaching at art centers and private studios.

Are You a Part-time Student?
This program could be taken on a part-time basis. Some of the courses are offered online. Please see an advisor to develop an individualized plan of study.

Art and Design Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ART 101</td>
<td>Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>ART 121</td>
<td>2-D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 133</td>
<td>Drawing</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td></td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>ART</td>
<td>Art Elective (See Below)</td>
<td>6</td>
</tr>
<tr>
<td>ART 123</td>
<td>3-D Design</td>
<td>3</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ART 134</td>
<td>Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>BIO 105</td>
<td>Introductory Biology OR</td>
<td></td>
</tr>
<tr>
<td>BIO</td>
<td>Science Elective</td>
<td>4</td>
</tr>
<tr>
<td>ART</td>
<td>Art Elective (See Below)</td>
<td>3</td>
</tr>
<tr>
<td>ART 203</td>
<td>Art History I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 106</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>CLS 212</td>
<td>Diversity OR</td>
<td></td>
</tr>
<tr>
<td>SOC 212</td>
<td>Diversity</td>
<td>3</td>
</tr>
<tr>
<td>ART</td>
<td>Art Elective (See Below)</td>
<td>3</td>
</tr>
<tr>
<td>ART 204</td>
<td>Art History II</td>
<td>3</td>
</tr>
<tr>
<td>DRA 101</td>
<td>Introduction to Theatre OR</td>
<td></td>
</tr>
<tr>
<td>MMS 101</td>
<td>Mass Media OR</td>
<td></td>
</tr>
<tr>
<td>MUS 100</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>REL 300</td>
<td>Survey of World Religions</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Social &amp; Behavioral Gen Ed Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Program Total</td>
<td>66</td>
</tr>
</tbody>
</table>

FOR ART ELECTIVES:
CHOOSE ONE OF THE PROGRAMS BELOW

DRAWING AND PAINTING

| ART 143 | Painting I                                 | 3       |
| ART 144 | Painting II                                | 3       |
| ART 186 | Digital Photography                        |         |

PHOTOGRAPHY

| ART 184 | Photography I                             | 3       |
| ART 185 | Photography II                            | 3       |
| ART 186 | Digital Photography                       | 3       |

ART EDUCATION

| EDU 210 | Photography I                             | 3       |
| ART 143 | Painting I                                 | 3       |
| EDU 240 | Educational Psychology                     | 3       |
| ART 144 | Painting II                                | 3       |

Program Advisor
Michael Rohlena, MFA, Division Chair
Room A146
michael.rohlena@witcc.edu

800.352.4649 or www.witcc.edu 59  Western Iowa Tech Community College 2013-2014 Catalog
Audio Engineering

Audio Engineering Technician

Associate of Applied Science Degree
Sioux City Campus

This program presents the world of audio, sound studio operations, current music technologies, and music and sound production as they are implemented for music, film, video, television, and interactive media.

Program Overview and Opportunities:
Through a combination of hands-on exercises, lectures, team projects, and real-world applications, students are introduced to audio theory and competency with industry-standard tools. Familiarity with professional standards and the aesthetic considerations of audio and music are emphasized. Operation of a professional sound-mixing and recording studio will provide a key element in this program.

Skills students will acquire include the ability to engage in sound design, which is an integral part of productions for film, video, music, and video game design. Sound mixing and editing skills, use of various kinds of audio recording equipment, directing skills productions, a working knowledge of the sound recording industry, and incorporation of creative and technical skills are an integral aspect of this program.

Graduates are prepared to seek entry-level employment as a sound technician and audio mixer.

Audio Engineering Technician Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ELE 101</td>
<td>Industrial Safety</td>
<td>1</td>
</tr>
<tr>
<td>MUS 282</td>
<td>Sound Theory</td>
<td>3</td>
</tr>
<tr>
<td>MUS 283</td>
<td>Audio Principles</td>
<td>3</td>
</tr>
<tr>
<td>MUS 299</td>
<td>Sound Systems on Location I</td>
<td>2</td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communication OR</td>
<td></td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>BCA 206</td>
<td>Applied Computer Concepts OR</td>
<td></td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>MUS 288</td>
<td>Topics in the Modern Music Industry</td>
<td>2</td>
</tr>
<tr>
<td>MUS 285</td>
<td>Audio Production &amp; Equipment I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 267</td>
<td>Pro Tools</td>
<td>3</td>
</tr>
<tr>
<td>MUS 947</td>
<td>Practicum</td>
<td>2</td>
</tr>
<tr>
<td>MUS 100</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math OR</td>
<td></td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MUS 287</td>
<td>Audio Production &amp; Equipment II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 289</td>
<td>System Assembly &amp; Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>MUS 302</td>
<td>Studio Production in Mass Communication</td>
<td>3</td>
</tr>
<tr>
<td>MUS 300</td>
<td>Sound Systems on Location II</td>
<td>2</td>
</tr>
<tr>
<td>BUS 102</td>
<td>Introduction to Business OR</td>
<td></td>
</tr>
<tr>
<td>PHT 104</td>
<td>Introduction to Lighting OR</td>
<td></td>
</tr>
<tr>
<td>ELT 110</td>
<td>Electronics</td>
<td>3</td>
</tr>
<tr>
<td>GRA 100</td>
<td>Mac OS</td>
<td>1</td>
</tr>
<tr>
<td>MUS 303</td>
<td>Studio Production</td>
<td>3</td>
</tr>
<tr>
<td>MUS 301</td>
<td>Live Sound Production</td>
<td>3</td>
</tr>
<tr>
<td>MUS 932</td>
<td>Internship</td>
<td>3</td>
</tr>
<tr>
<td>BUS 130</td>
<td>Introduction to Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>MMS 265</td>
<td>Mass Communications Law OR</td>
<td></td>
</tr>
<tr>
<td>MUS 102</td>
<td>Music Fundamentals OR</td>
<td></td>
</tr>
<tr>
<td>ELT 680</td>
<td>Guitar &amp; Amplifier Electronics</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total: 65

Program Advisor

Michael Rohlena, MFA, Division Chair
Room A146
Ext. 3217
michael.rohlena@witcc.edu
Audio Production Assistant

Diploma
Sioux City Campus

This program presents the world of audio, sound studio operations, current music technologies, and music and sound production as they are implemented for music, film, video, television, and interactive media.

Program Overview and Opportunities:
Through a combination of hands-on exercises, lectures, team projects, and real-world applications, students are introduced to audio theory and competency with industry-standard tools. Familiarity with professional standards and the aesthetic considerations of audio and music are emphasized. Operation of a professional sound-mixing and recording studio will provide a key element in this program.

Skills students will acquire include the ability to engage in sound design, which is an integral part of productions for film, video music, and video game design. Sound mixing and editing skills, use of various kinds of audio recording equipment, directing skills productions, a working knowledge of the sound recording industry, and incorporation of creative and technical skills are an integral aspect of this program.

Graduates are prepared to seek entry-level employment as a sound technician and audio mixer.

Audio Production Assistant Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ELE 101</td>
<td>Industrial Safety</td>
<td>1</td>
</tr>
<tr>
<td>MUS 282</td>
<td>Sound Theory</td>
<td>3</td>
</tr>
<tr>
<td>MUS 283</td>
<td>Audio Principles</td>
<td>3</td>
</tr>
<tr>
<td>MUS 299</td>
<td>Sound Systems on Location I</td>
<td>2</td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communication OR</td>
<td></td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>BCA 206</td>
<td>Applied Computer Concepts OR</td>
<td></td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>MUS 288</td>
<td>Topics in the Modern Music Industry</td>
<td>2</td>
</tr>
<tr>
<td>MUS 285</td>
<td>Audio Production &amp; Equipment I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 267</td>
<td>Pro Tools</td>
<td>3</td>
</tr>
<tr>
<td>MUS 947</td>
<td>Practicum</td>
<td>2</td>
</tr>
<tr>
<td>MUS 100</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math OR</td>
<td></td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total .............................................................. 32

Program Advisor

Michael Rohlena, MFA, Division Chair
Ext. 3217
Room A146
michael.rohlena@witcc.edu

Are You a Part-time Student?
This program could be taken on a part-time basis. Some of the courses are offered online. Please see an advisor to develop an individualized plan of study.

Some suggested courses for the part-time student before program entry include:
English, Math, or PSY-102 or PSY-111.

Are You a Part-time Student?
**Program Overview and Opportunities:**
America is a nation on wheels. Every part of our society and all our industries are dependent on vehicles of one form or another. With over 124 million cars, vans, and trucks on American roads, there is a continuous need for skilled auto body repair people. It is estimated that between 30 and 40 million vehicles pass through collision repair shops each year for major repairs. Millions of additional vehicles pass through bump and paint shops for minor repairs.

The Auto Collision Repair Technology program prepares the student for a career as a specialist in auto body repair. The automobile repair business is becoming even more important today as many car owners are having their present vehicles repaired rather than buying new ones. Students will receive training in sheet metal welding and cutting, cost estimating, basic business procedures, metal straightening, frame repair, suspension, glass, plastic, and fiberglass repair, body construction, automotive painting and refinishing. The student will gain practical experience by working on damaged vehicles in a state-of-the-art auto collision facility.

According to the Bureau of Labor Statistics, employment of auto body repairers is expected to grow faster than average for all occupations through the year 2014. Demand for qualified body repairers will increase as the number of vehicles on the road continues to grow. (Occupational Outlook Handbook. Bureau of Labor Statistics 2006-2007.)

**Are You a Part-time Student?**
This program could be taken on a part-time basis. Please see an advisor to develop an individualized plan of study.

Some suggested courses for the part-time student before program entry include:

- English, Math, or PSY 102 or PSY 111.

**Program Advisors**
- Ben Ricklefs, AAS
  Room D421
  Ext. 1454
  ben.ricklefs@witcc.edu
- Tim Hardyk, AAS
  Room D405
  Ext. 1312
  tim.hardyk@witcc.edu
- John Heiden, AAS
  John Heiden, AAS
  712-263-6598
  john.heiden@witcc.edu
- Greg Strong, BS, BA, Division Chair
  Room A111
  Ext. 1480
  greg.strong@witcc.edu

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see an auto collision repair program advisor to ensure correct course sequence.
Auto Body Refinishing

Diploma
Denison and Sioux City Campuses

Program Overview and Opportunities:
This diploma option prepares the student to do standard refinishing procedures, color blending, color tinting, and identify solutions to common paint problems. The student will gain practical experience by working on damaged vehicles in a state of the art auto collision facility.

Are You a Part-time Student?
This program could be taken on a part-time basis. Please see an advisor to develop an individualized plan of study.
Some suggested courses for the part-time student before program entry include:
English, Math, or PSY 102 or PSY 111.

Auto Body Refinishing Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>CRR 811</td>
<td>Surface Preparation*</td>
<td>4</td>
</tr>
<tr>
<td>CRR 805</td>
<td>Refinishing I</td>
<td>4</td>
</tr>
<tr>
<td>CRR 834</td>
<td>Refinishing II</td>
<td>4</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math</td>
<td>3</td>
</tr>
<tr>
<td>CRR 411</td>
<td>Interior Body Construction*</td>
<td>3</td>
</tr>
<tr>
<td>CRR 403</td>
<td>Exterior Body Construction*</td>
<td>3</td>
</tr>
<tr>
<td>CRR 742</td>
<td>Estimating Theory</td>
<td>2</td>
</tr>
<tr>
<td>CRR 874</td>
<td>Advanced Refinishing</td>
<td>4</td>
</tr>
<tr>
<td>COM 723</td>
<td>Workplace Communications*</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total............................................................31

* Denotes courses commonly articulated with area high schools.
CRR 411 and CRR 403 are offered fall semester.
Auto Body Structural Repair

Diploma
Sioux City Campus

Program Overview and Opportunities:
This diploma option prepares the student to do basic body repairs, panel replacements, frame repair and analysis, and unibody structural repairs. The student will gain practical experience by working on damaged vehicles in a state-of-the-art auto collision facility.

Auto Body Structural Repair Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>CRR 102</td>
<td>Sheet Metal Welding*</td>
<td>3</td>
</tr>
<tr>
<td>CRR 323</td>
<td>Sheet Metal Fundamentals*</td>
<td>3</td>
</tr>
<tr>
<td>CRR 411</td>
<td>Interior Body Construction*</td>
<td>3</td>
</tr>
<tr>
<td>CRR 403</td>
<td>Exterior Body Construction*</td>
<td>3</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math</td>
<td>3</td>
</tr>
<tr>
<td>CRR 202</td>
<td>Plastic Repair</td>
<td>3</td>
</tr>
<tr>
<td>CRR 504</td>
<td>Frame and Unibody Damage Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CRR 533</td>
<td>Structural Repair</td>
<td>3</td>
</tr>
<tr>
<td>CRR 551</td>
<td>Integral Body Repair</td>
<td>3</td>
</tr>
<tr>
<td>COM 723</td>
<td>Workplace Communications* OR</td>
<td></td>
</tr>
<tr>
<td>COM 753</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total.................................................32

* Denotes courses commonly articulated with area high schools.

Are You a Part-time Student?
This program could be taken on a part-time basis. Please see an advisor to develop an individualized plan of study.

Program Advisors
Ben Ricklefs, AAS
Room D421
ben.ricklefs@witcc.edu
Ext. 1454

Tim Hardyk, AAS
Room D405
tim.hardyk@witcc.edu
Ext. 1312

John Heiden, AAS
712-263-6598
john.heiden@witcc.edu

Greg Strong, BS, BA, Division Chair
Room A111
greg.strong@witcc.edu
Ext. 1480

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see an auto collision repair program advisor to ensure correct course sequence.
**Auto Body Procedures**

Certificate  
Denison and Sioux City Campuses

**Program Overview and Opportunities:**  
The student with this certificate will be prepared to complete minor collision damage, windshield repair, and replacement of damaged panels. The student will gain practical experience by working on damaged vehicles in a state-of-the-art auto collision facility.

---

**Auto Body Procedures Curriculum**  

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>CRR 102</td>
<td>Sheet Metal Welding*</td>
<td>3</td>
</tr>
<tr>
<td>CRR 411</td>
<td>Interior Body Construction</td>
<td>3</td>
</tr>
<tr>
<td>CRR 403</td>
<td>Exterior Body Construction</td>
<td>3</td>
</tr>
<tr>
<td>CRR 323</td>
<td>Sheet Metal Fundamentals*</td>
<td>3</td>
</tr>
</tbody>
</table>

**Program Total..................................................13**

* Denotes courses commonly articulated with area high schools.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see an auto collision repair program advisor to ensure correct course sequence.

---

**Automotive Painting**

Certificate  
Denison and Sioux City Campuses

**Program Overview and Opportunities:**  
Students take this certificate course of study to develop or enhance their skills in the painting of sheet metal and fiberglass panels. The student will gain practical experience by working on damaged vehicles in a state-of-the-art auto collision facility.

---

**Automotive Painting Curriculum**  

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>CRR 811</td>
<td>Surface Preparation*</td>
<td>4</td>
</tr>
<tr>
<td>CRR 805</td>
<td>Refinishing I....................................</td>
<td>4</td>
</tr>
<tr>
<td>CRR 834</td>
<td>Refinishing II................................,...</td>
<td>4</td>
</tr>
</tbody>
</table>

**Program Total..................................................13**

* Denotes courses commonly articulated with area high schools.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see an auto collision repair program advisor to ensure correct course sequence.
Automotive Technology

Associate of Applied Science Degree
Cherokee, Denison, and Sioux City Campuses

Program Overview and Opportunities:
The Automotive Technology program is a two-year degree program designed to prepare the student to perform a wide range of diagnostics, repairs, and preventative maintenance on automobiles and light trucks.** Students have the opportunity to learn in an industry certified facility.

Students will have extensive hands-on training in engine overhaul, manual and automatic drive train, front end alignment, brake service and repair, fuel systems, ignition systems, and air conditioning. In addition, the program provides training in electrical and electronic control systems, engine performance diagnosis, and on-board computerized engine control systems diagnosis.

The majority of graduates will work in dealerships, independent repair shops, fleet service facilities, and service stations. Over 20 percent will be self-employed.

According to the Bureau of Labor Statistics, employment of automotive service technicians and mechanics is expected to grow much faster than average for all occupations through the year 2014. Employment growth will create many new jobs, but total job openings will be significantly larger because many skilled technicians are expected to retire. (Occupational Outlook Handbook. Bureau of Labor Statistics 2006-2007.)

Program Advisors
John Kraemer, AAS
Room H302
ejohn.kraemer@witcc.edu

Shane Sampson
Room H302
ejohn.sampson@witcc.edu

Greg Strong, BS, BA, Division Chair
Room A111
greg.strong@witcc.edu

Automotive Technology Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDY 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>AUT 115</td>
<td>Automotive Shop Safety*</td>
<td>4</td>
</tr>
<tr>
<td>AUT 615</td>
<td>Automotive Electricity/Electronics</td>
<td>4</td>
</tr>
<tr>
<td>AUT 633</td>
<td>Automotive Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>AUT 671</td>
<td>Automotive Body Computer Systems</td>
<td>3</td>
</tr>
<tr>
<td>MAT 104</td>
<td>Math General Education Elective</td>
<td>3</td>
</tr>
<tr>
<td>AUT 807</td>
<td>Automotive Engine Performance</td>
<td>5</td>
</tr>
<tr>
<td>AUT 838</td>
<td>Automotive Adv. Fuel &amp; Ignition Systems</td>
<td>5</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations</td>
<td>3</td>
</tr>
<tr>
<td>AUT 947</td>
<td>Practicum</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td>Humanities or Healthful Living/Leisure</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education Elective</td>
<td></td>
</tr>
<tr>
<td>AUT 703</td>
<td>Automotive Heating &amp; Air Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>AUT 503</td>
<td>Automotive Brake Systems</td>
<td>3</td>
</tr>
<tr>
<td>AUT 404</td>
<td>Automotive Suspension and Steering</td>
<td>4</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers OR BCA 206</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Applied Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>AUT 164</td>
<td>Automotive Engine Repair*</td>
<td>4</td>
</tr>
<tr>
<td>AUT 503</td>
<td>Automotive Brake Systems</td>
<td>3</td>
</tr>
<tr>
<td>AUT 404</td>
<td>Automotive Suspension and Steering</td>
<td>4</td>
</tr>
<tr>
<td>ENG/LIT/COM</td>
<td>English General Education Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Program Total</td>
<td>65</td>
</tr>
</tbody>
</table>

* Denotes courses commonly articulated with area high schools.
** Completion of the CPT and Aptitude Test is required prior to admission to the Automotive Technology program.

Program Total: 65 credits

Are You a Part-time Student?
This program could be taken on a part-time basis. Please see an advisor to develop an individualized plan of study.

Automotive Technology

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see an auto collision repair program advisor to ensure correct course sequence.
Auto Mechanics

Diploma
Cherokee, Denison, and Sioux City Campuses

Program Overview and Opportunities:
This three-semester diploma will prepare the student to enter the auto repair industry with basic skills in electrical/electronics, engine overhaul, cooling, and suspension systems. Students have the opportunity to learn in an industry certified facility.

According to the Bureau of Labor Statistics, employment of automotive service technicians and mechanics is expected to grow much faster than average for all occupations through the year 2014. Employment growth will create many new jobs, but total job openings will be significantly larger because many skilled technicians are expected to retire and will need to be replaced. (Occupational Outlook Handbook. Bureau of Labor Statistics 2006-2007.)

Are You a Part-time Student?
This program could be taken on a part-time basis. Please see an advisor to develop an individualized plan of study.

Auto Mechanics Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>AUT 115</td>
<td>Automotive Shop Safety*</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(Must take first semester of enrollment)</td>
<td></td>
</tr>
<tr>
<td>AUT 615</td>
<td>Automotive Electricity/Electronics</td>
<td>4</td>
</tr>
<tr>
<td>AUT 633</td>
<td>Automotive Electrical Systems</td>
<td>4</td>
</tr>
<tr>
<td>AUT 671</td>
<td>Automotive Body Computer Systems</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>Math General Ed Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(AUT 104 may be substituted for AUT 115 and AUT 671)</td>
<td></td>
</tr>
<tr>
<td>AUT 404</td>
<td>Automotive Suspension and Steering</td>
<td>4</td>
</tr>
<tr>
<td>AUT 164</td>
<td>Automotive Engine Repair</td>
<td>4</td>
</tr>
<tr>
<td>AUT 503</td>
<td>Automotive Brake Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENG/LIT/COM</td>
<td>English General Ed Elective</td>
<td>3</td>
</tr>
<tr>
<td>AUT 703</td>
<td>Automotive Heating &amp; Air Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations OR</td>
<td>3</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total............................................................36

* Denotes courses commonly articulated with area high schools.

Program Advisors
John Kraemer, AAS
Room H302
Ext. 1466
john.kraemer@witcc.edu

Shane Sampson
Room H302
Ext. 1310
shane.sampson@witcc.edu

Greg Strong, BS, BA, Division Chair
Room A111
Ext. 1480
greg.strong@witcc.edu

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.
The courses listed above are grouped in the order that they should be taken each semester. Please see an auto collision repair program advisor to ensure correct course sequence.
Automotive Drive Train

Certificate
Sioux City Campus

Program Overview and Opportunities:
This certificate prepares the student to rebuild transmissions. Upon completion of the certificate, graduates will work in dealerships and transmission repair shops. Students have the opportunity to learn in an industry certified facility.

Automotive Drive Train Curriculum
Course #       Title                                      Credits
AUT 304       Automotive Manual Drive Train & Axles ...............4
AUT 205       Automotive Automatic Transmissions/Transaxles ..........5
AUT 115       Automotive Shop Safety* OR
AUT 104       Introduction to Automotive Technology*...............1

Program Total.........................................................10

* Denotes courses commonly articulated with area high schools.

Program Advisors
John Kraemer, AAS                                      Ext. 1466
Room H302                                           john.kraemer@witcc.edu
Shane Sampson                                       Ext. 1310
Room H302                                           shane.sampson@witcc.edu
Greg Strong, BS, BA, Division Chair                  Ext. 1480
Room A111                                           greg.strong@witcc.edu

Are You a Part-time Student?
This program could be taken on a part-time basis. Please see an advisor to develop an individualized plan of study.

Automotive Electrical

Certificate
Cherokee, Denison, and Sioux City Campuses

Program Overview and Opportunities:
This certificate will prepare the student to trace and troubleshoot electrical and electronic problems and make repairs in automotive electrical systems. Students have the opportunity to learn in an industry certified facility.

Automotive Electrical Curriculum
Course #       Title                                      Credits
SDV 108       The College Experience..............................1
AUT 115       Automotive Shop Safety* OR
AUT 104       Introduction to Automotive Technology*.............1
AUT 671       Automotive Body Computer Systems......................3
AUT 615       Automotive Electricity/Electronics....................4
AUT 633       Automotive Electrical Systems........................4

Program Total.........................................................13

* Denotes courses commonly articulated with area high schools.

Program Advisors
John Kraemer, AAS                                      Ext. 1466
Room H302                                           john.kraemer@witcc.edu
Shane Sampson                                       Ext. 1310
Room H302                                           shane.sampson@witcc.edu
Greg Strong, BS, BA, Division Chair                  Ext. 1480
Room A111                                           greg.strong@witcc.edu

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.
The courses listed above are grouped in the order that they should be taken each semester. Please see an auto collision repair program advisor to ensure correct course sequence.
Band Instrument Repair

Associate of Applied Science Degree

Program Overview and Opportunities:
In the Band Instrument Repair program, students develop job-entry skills in all areas of band instrument repair and restoration. They become acquainted with the characteristics, physical properties, and problems involved with each musical instrument, as well as the basics of playing each instrument. Work is performed with tools unique to the trade and with other common tools. Students learn to safely operate a machine lathe, buffing and scratchbrushing equipment, lacquering equipment, and special dent removing equipment. Techniques in woodwind repair, padding, adjustment, metal forming, soldering, cleaning, polishing, and refinishing are also developed. The course is designed for those who intend to become band instrument repair persons. Course offerings include independent study, field projects, and/or other electives.

Band Instrument Repair Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>BIR 118</td>
<td>Woodwind Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>BIR 122</td>
<td>Brass Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>BIR 131</td>
<td>Clarinet Lab</td>
<td>3</td>
</tr>
<tr>
<td>BIR 121</td>
<td>Flute Lab</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers OR</td>
<td>3</td>
</tr>
<tr>
<td>BCA 206</td>
<td>Applied Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>BIR 120</td>
<td>Woodwind Overhaul</td>
<td>3</td>
</tr>
<tr>
<td>BIR 123</td>
<td>Brass Lab I</td>
<td>4</td>
</tr>
<tr>
<td>BIR 130</td>
<td>Saxophone Fundamentals</td>
<td>2</td>
</tr>
<tr>
<td>BIR 125</td>
<td>Saxophone Lab</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Humanities or Healthful Living/Leisure General Elective</td>
<td>3</td>
</tr>
<tr>
<td>ENG/COM</td>
<td>English General Elective</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>Math General Elective</td>
<td>3</td>
</tr>
<tr>
<td>BIR 227</td>
<td>Double Reed Fundamentals</td>
<td>2</td>
</tr>
<tr>
<td>BIR 207</td>
<td>Brass Lab II</td>
<td>4</td>
</tr>
<tr>
<td>BIR 206</td>
<td>Harmony Woodwinds</td>
<td>3</td>
</tr>
<tr>
<td>BIR 209</td>
<td>Oboe Overhaul</td>
<td>3</td>
</tr>
<tr>
<td>PSY</td>
<td>Psychology General Elective</td>
<td>3</td>
</tr>
<tr>
<td>BIR 126</td>
<td>Woodwind Machine Operations</td>
<td>3</td>
</tr>
<tr>
<td>BIR 219</td>
<td>Orchestral String Repair</td>
<td>1</td>
</tr>
<tr>
<td>BIR 211</td>
<td>Major Brass Repair</td>
<td>4</td>
</tr>
<tr>
<td>BIR 214</td>
<td>Bassoon Overhaul</td>
<td>2</td>
</tr>
<tr>
<td>BIR 215</td>
<td>Shop Management Practices</td>
<td>3</td>
</tr>
<tr>
<td>Program Total</td>
<td>65</td>
<td></td>
</tr>
</tbody>
</table>

Program Advisors
Mark Schmedinghoff, BA
Room A48L
Ext. 1306
mark.schmedinghoff@witcc.edu

Michael Rohlena, MFA, Division Chair
Room A144
Ext. 3217
michael.rohlena@witcc.edu

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. The courses listed above are grouped in the order that they should be taken each semester. Please see a band instrument repair program advisor to ensure correct course sequence.
Biology

Associate of Science Degree
Biology Emphasis

Successful completion of SDV 108 is a requirement of graduation.

I. Associate of Science Requirements
   A. English and Speech (minimum of 9 credits)
      ENG 105 and 106
      SPC 112
   B. Mathematics and Laboratory Sciences (minimum of 20 credits)
      Must include one math course and one lab science course.
      Math and science course selections should be made with advisor’s recommendation.
      BIO 116, 117, 169, and BIO 174
      BIO 186
      CHM 166 and 176
      CHM 261 and 271
      MAT 121, 156, 157, or higher
      PHY 162 and 172 or PHY 212 and 222
   C. Social and Behavioral Sciences (minimum of 6 credits)
      CIS 212 or SOC 212 required
      Choose one course from section 2:
      Section 1. History and Diverse Cultures
      ANT 105
      GEO 121
      HIS 110, 111, 151, 152, 211
      LIT 150
      SOC 200, 210
      Section 2. Social and Political Sciences
      ECN 120, 130
      POL 111, 112, 121, 125, 151, 211
      PSY 111, 121
      SOC 110, 120
   D. Humanities (minimum of 6 credits)
      Choose two courses from at least two of the following disciplines
      ART 101, 203, 204
      LIT 101, 124, 133, 185, 199
      DRA 101, 112
      MMS 101
      ENG 221
      MUS 100, 202
      FLF 141, 142
      PHI 101, 105, 111
      FLG 141, 142, 231, 232
      REL 101, 150
      FLS 141, 142, 231, 232
      SPC 122
      HUM 101, 220
   E. Computer Literacy/Computer Technology (minimum of 3 credits)
      CSC 110
   II. Electives (16 additional credits)
      SDV 108, The College Experience (required)
      Consult advisor when selecting electives

PROGRAM TOTAL........................................................................(Minimum) 64

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>BIO 116</td>
<td>General Biology IB</td>
<td>4</td>
</tr>
<tr>
<td>CHM 166</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>BIO 117</td>
<td>General Biology II</td>
<td>4</td>
</tr>
<tr>
<td>CHM 176</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>CHM 261</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CLS 212</td>
<td>Humanities General Elective</td>
<td>3 or 4</td>
</tr>
<tr>
<td>ENG 106</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>PHY 162</td>
<td>College Physics I</td>
<td>4</td>
</tr>
<tr>
<td>CHM 271</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>Humanities General Elective</td>
<td>3 or 4</td>
<td></td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences, Sec. 2 Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHY 172</td>
<td>College Physics II</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Program Total</td>
<td></td>
<td>65</td>
</tr>
</tbody>
</table>

Biology Emphasis, A.S. Program Advisors

Rod Tondreau, MS                             Ext. 1384
Room L307                                  rod.tondreau@witcc.edu
Susan McDonald, MA                          Ext. 1453
Room L307                                  susan.mcdonald@witcc.edu
Greg Romig, DA                              Ext. 1447
Room L307                                  greg.romig@witcc.edu
Renee Romig, PhD                            Ext. 1303
Room L307                                  renee.romig@witcc.edu
John Jorstad, MA                            Ext. 1436
Room L307                                  john.jorstad@witcc.edu
Frank O’Neill, DC                           Ext. 2417
Cherokee                                    frank.onell@witcc.edu
Darin Moeller, Division Chair               Ext. 1493
Room L314 / MED                             darin.moeller@witcc.edu
Business Administration
Associate of Arts Degree

Business Administration Emphasis
Mathematics and English placement determined by examination.

Students are eligible for the Associate of Arts degree upon successful completion of 64 transfer credits, including a minimum of each of the following requirements:

I. General Education Core
   A. English and Speech (minimum of 9 credits)
      ENG 105 and 106
      SPC 112
   B. Mathematics and Laboratory Sciences (minimum of 8 credits)
      Must include one math course and one lab science course from the following:
      BIO 105, 125, 163
      CHM 122
      ENV 111
      MAT 111, 117, 121, 129, 130, 141, 157, 201, 211, 217, 219
      PHS 120, 151
   C. Social and Behavioral Sciences (minimum of 9 credits)
      CLS 212 or SOC 212 (required)
      Choose one course from section 2 plus one course from section 1 or 2:
      Section 1. History and Diverse Cultures (additional distribution choices)
      ANT 105
      GEO 121
      HIS 110, 111, 151, 152, 211
      LIT 150
      SOG 200, 210
      Section 2. Social and Political Sciences
      ECN 120, 130
      POL 111, 112, 121, 125, 151, 211
      PSY 111, 121
      SOC 110, 120

D. Humanities (minimum of 9 credits)
   Choose three courses from at least two of the following disciplines
   ART 101, 203, 204
   LIT 101, 124, 133, 185, 189
   DRA 101, 112
   ENG 221
   FLG 141, 142, 231, 232
   FLF 141, 142, 231, 232
   HIPI 101, 105, 111
   HUM 101, 220
   LIT 124, 133, 185, 189
   MUS 100, 202
   PHI 101, 105, 111
   REL 101, 150
   SPC 122
   THE 101, 124
   WITTC 220

E. Computer Literacy/Technology - Suggested Elective
   Computer literacy is critical to your success as a college student. It is strongly recommended that you consider your competency in computer applications. Some major programs at transfer institutions may require a computer applications course. Consult with your advisor regarding this suggested course.
   CLS 110, Introduction to Computers

F. Distributed requirement (6 credits required)
   Take two additional courses from any of these areas: Mathematics, Laboratory Science, Social and Behavioral Sciences, and Humanities.

II. Area of Concentration (12 additional credits)
   ACC 131, 132, BUS 102, 185, 186; MGT 101

III. Electives (credits vary)
   SDV 108, The College Experience (required)
   Consult a faculty advisor, the transferring institution and page 18 of the catalog.

Program Total ................................................................. (Minimum) 64

---

**Suggested Plan of Study**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>BUS 102</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ECN 120</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>BUS 185</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MGT 101</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>ECN 130</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>BUS 186</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>ENG 106</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>ACC 131</td>
<td>Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>ART 101</td>
<td>Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MAT 157</td>
<td>Statistics</td>
<td>4</td>
</tr>
<tr>
<td>MUS 100</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communications</td>
<td>3</td>
</tr>
<tr>
<td>ACC 132</td>
<td>Principles of Accounting II</td>
<td>4</td>
</tr>
<tr>
<td>BIO 105</td>
<td>Introduction to Biology</td>
<td>3</td>
</tr>
<tr>
<td>PHI 105</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>CLS 212</td>
<td>Diversity</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total .................................................................. 66

---

**Program Advisors**

Sandra Mueller, MSAS
Room A146
800.352.4649 or www.witcc.edu
sandra.mueller@witcc.edu
Ext. 1283

Cindy Zortman, MED, Division Chair
Room A146
Cindy.zortman@witcc.edu
Ext. 1351

---

800.352.4649 or www.witcc.edu 71 Western Iowa Tech Community College 2013-2014 Catalog
Business Management

Associate of Applied Science Degree
Cherokee, Denison, and Sioux City Campuses

Program Overview and Opportunities:
The Business Management program is aimed primarily at students seeking employment as first-line supervisors and entry-level management. The program is also of interest to the student who is a first-line supervisor and needs to improve his or her skills. Students acquire a background in basic business including accounting, budgeting, math and economics as well as practical supervisory skills.

As companies downsize and eliminate middle-management positions, the need for qualified first-line supervisors increases dramatically. Though virtually every company employs first-line supervisors, the amount of training provided in-house varies considerably.

Many courses in the degree program may be accepted toward a baccalaureate degree at some colleges and universities.

If you plan to transfer, meet with program advisor for other general education options.

Program Advisors
Sandra Mueller, MSAS
Room A146 Ext. 1283
sandra.mueller@witcc.edu

Cindy Zortman, MED, Division Chair
Room A146 Ext. 1351
cindy.zortman@witcc.edu

Business Management Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>BUS 102</td>
<td>Introduction to Business #</td>
<td>3</td>
</tr>
<tr>
<td>MKT 110</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MGT 170</td>
<td>Human Resource Management #</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>Math General Education Elective</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>ADM 154</td>
<td>Business Communication #</td>
<td>3</td>
</tr>
<tr>
<td>BUS 185</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>ECN 120</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ACC 131</td>
<td>Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations</td>
<td>3</td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>PHI 105</td>
<td>Introduction to Ethics #</td>
<td>3</td>
</tr>
<tr>
<td>SDV 153</td>
<td>Pre-employment Strategies</td>
<td>2</td>
</tr>
<tr>
<td>MGT 101</td>
<td>Principles of Management #</td>
<td>3</td>
</tr>
<tr>
<td>MGT 200</td>
<td>Managing Diversity #</td>
<td>3</td>
</tr>
<tr>
<td>BUS 150</td>
<td>E-Commerce</td>
<td>3</td>
</tr>
<tr>
<td>MGT 130</td>
<td>Principles of Supervision #</td>
<td>3</td>
</tr>
<tr>
<td>ACC 132</td>
<td>Principles of Accounting II</td>
<td>4</td>
</tr>
<tr>
<td>FIN 130</td>
<td>Principles of Finance</td>
<td>3</td>
</tr>
<tr>
<td>BUS 930</td>
<td>Career Readiness</td>
<td>1</td>
</tr>
<tr>
<td>BUS 124</td>
<td>Business Innovation</td>
<td>3</td>
</tr>
<tr>
<td>BUS 934</td>
<td>Capstone Experience</td>
<td>1</td>
</tr>
<tr>
<td>MGT 938</td>
<td>On-the-Job Training √</td>
<td>2</td>
</tr>
<tr>
<td>BUS 130</td>
<td>Intro to Entrepreneurship</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total..........................................................69

* Denotes courses commonly articulated with area high schools.
√ Students must have earned a C (2.0) or better in courses as identified by # before registering for this course.

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.
Financial Services

Associate of Applied Science Degree
Cherokee, Denison, and Sioux City Campuses

Program Overview and Opportunities:
This program is designed to give students a broad-based background in the growing industry of financial services. Introductory courses are all part of this program and will allow students to explore different facets of the industry. The program also includes an Internship or service learning component to allow students to gain practical hands-on experience.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>BUS 102</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>FIN 121</td>
<td>Personal Finance #</td>
<td>3</td>
</tr>
<tr>
<td>ACC 131</td>
<td>Principles of Accounting I #</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>Math General Education Elective</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>ADM 154</td>
<td>Business Communication #</td>
<td>3</td>
</tr>
<tr>
<td>BUS 185</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>ECN 120</td>
<td>Principles of Macroeconomics #</td>
<td>3</td>
</tr>
<tr>
<td>BUS 124</td>
<td>Business Innovation</td>
<td>3</td>
</tr>
<tr>
<td>ACC 132</td>
<td>Principles of Accounting II #</td>
<td>4</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations OR</td>
<td>3</td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>PHI 105</td>
<td>Introduction to Ethics #</td>
<td>3</td>
</tr>
<tr>
<td>MGT 101</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MKT 140</td>
<td>Principles of Selling #</td>
<td>3</td>
</tr>
<tr>
<td>BCA 147</td>
<td>Basic Spreadsheets</td>
<td>2</td>
</tr>
<tr>
<td>ECN 130</td>
<td>Principles of Microeconomics #</td>
<td>3</td>
</tr>
<tr>
<td>FIN 130</td>
<td>Principles of Finance #</td>
<td>3</td>
</tr>
<tr>
<td>ACC 161</td>
<td>Payroll Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACC 261</td>
<td>Income Tax Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MKT 110</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 930</td>
<td>Career Readiness</td>
<td>1</td>
</tr>
<tr>
<td>BUS 934</td>
<td>Capstone Experience</td>
<td>1</td>
</tr>
<tr>
<td>MGT 938</td>
<td>On-the-Job Training (2) √ OR</td>
<td>1</td>
</tr>
<tr>
<td>FIN 975</td>
<td>Service Learning</td>
<td>1</td>
</tr>
</tbody>
</table>

Program Total: .................................................................................. 68 or 69

√ Students must have earned a C (2.0) or better in courses as identified by # before registering for this course.

If you plan to transfer, meet with program advisor for other general education options.

Are You a Part-time Student?
This program could be taken on a part-time basis. Please see an advisor to develop an individualized plan of study.

Program Advisors
Jennifer McCune, MBA, CPA
Ext. 1401
Jennifer.mccune@witcc.edu

Cindy Zortman, MED, Division Chair
Ext. 1351
Cindy.zortman@witcc.edu

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.
Business

Human Resource Management

Associate of Applied Science Degree
Cherokee, Denison, and Sioux City Campuses

Available online

Program Overview and Opportunities:
The graduates of this program will obtain the skills necessary to enter the exciting field of Human Resource Management. Graduates will be able to perform entry-level functions in the human resources department of business and industry. Typical entry-level work includes interviewing applicants, administering pre-employment tests, conducting new hire orientation, processing transfers, promotions, and terminations. Human resource workers may also analyze job duties, write job descriptions, calculate payroll, and maintain accident reports. They work with the computerized flow of information and reports about employees, their benefits and programs. Although the HRM Associate of Applied Science degree is not designed to be a transfer program, many courses in the degree program may be accepted toward a Baccalaureate degree at some institutions.

According to the Bureau of Labor Statistics, overall employment for human resources workers is projected to grow by 21 percent between 2010 and 2020 about as fast as the average for all occupations. In addition to human resources management and specialists’ jobs created over the 2010-2020 projection period, many job openings will arise from the need to replace workers who transfer to other occupations, retire, or leave the labor force for other reasons. Annual salary rates for human resources workers vary according to occupation, level of experience, training, location, and firm size. (Occupational Outlook Handbook. Bureau of Labor Statistics 2012-2013)

Are You a Part-time Student?
This program could be taken on a part-time basis. All of the courses are offered online. However, an internship will need to be completed. Please see an advisor to develop an individualized plan of study.

Human Resource Management Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>3</td>
</tr>
<tr>
<td>BUS 102</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>MKT 110</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MGT 170</td>
<td>Human Resource Management#</td>
<td>3</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>ADM 154</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>BUS 185</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>ECN 120</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ACC 131</td>
<td>Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>MGT 177</td>
<td>Staffing#</td>
<td>3</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations</td>
<td>3</td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>PHI 105</td>
<td>Introduction to Ethics #</td>
<td>3</td>
</tr>
<tr>
<td>MGT 101</td>
<td>Principles of Management#</td>
<td>3</td>
</tr>
<tr>
<td>MGT 178</td>
<td>Employment Law#</td>
<td>3</td>
</tr>
<tr>
<td>SDV 153</td>
<td>Pre-employment Strategies</td>
<td>2</td>
</tr>
<tr>
<td>BCA 221</td>
<td>Integrated Computer Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>MGT 200</td>
<td>Managing Diversity</td>
<td>3</td>
</tr>
<tr>
<td>ACC 161</td>
<td>Payroll Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MGT 174</td>
<td>Training and Employee Development</td>
<td>3</td>
</tr>
<tr>
<td>BUS 930</td>
<td>Career Readiness</td>
<td>1</td>
</tr>
<tr>
<td>BUS 124</td>
<td>Business Innovation</td>
<td>3</td>
</tr>
<tr>
<td>BUS 934</td>
<td>Capstone Experience</td>
<td>1</td>
</tr>
<tr>
<td>MGT 938</td>
<td>On-the-Job Training Proficiency</td>
<td>2</td>
</tr>
</tbody>
</table>

Program Total.............................................................................68

* Denotes courses commonly articulated with area high schools.
√ Students must have earned a C (2.0) or better in courses as identified by # before registering for this course.

If you plan to transfer, meet with program advisor for other general education options.

In addition to the morning and afternoon classes, there are evening and online classes available (on a rotational basis).

Updated 9/17/13

Program Advisors
Rosanne Lienhard, JD
Room A146
Ext. 1393
rosanne.lienhard@witcc.edu

Cindy Zortman, MED, Division Chair
Room A146
Ext. 1351
cindy.zortman@witcc.edu

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see a Human Resource Management advisor to ensure correct course sequence.
## Technical Business Management

### Associate of Applied Science Degree Option
Cherokee, Denison, and Sioux City Campuses

### Program Overview and Opportunities:
A one-plus-one program culminating in an Associate of Applied Science degree. This program will allow the diploma graduate of a trades and industry program to complete a degree in business management.

### Technical Business Management Curriculum
Completion of a diploma in any career field is required upon entry to this program.
Select 24 credit hours from at least three of the following categories:

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 111</td>
<td>Introduction to Accounting*</td>
<td>3</td>
</tr>
<tr>
<td>ACC 131</td>
<td>Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>ACC 261</td>
<td>Income Tax Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACC 161</td>
<td>Payroll Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUS 124</td>
<td>Business Innovation</td>
<td>3</td>
</tr>
<tr>
<td>BUS 130</td>
<td>Introduction to Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>BUS 185</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 186</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>BUS 133</td>
<td>Entrepreneurial Studies</td>
<td>3</td>
</tr>
<tr>
<td>MGT 130</td>
<td>Principles of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>MGT 177</td>
<td>Staffing</td>
<td>3</td>
</tr>
<tr>
<td>MGT 178</td>
<td>Employment Law</td>
<td>3</td>
</tr>
<tr>
<td>MGT 170</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>MKT 150</td>
<td>Principles of Advertising</td>
<td>3</td>
</tr>
<tr>
<td>MKT 110</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKT 140</td>
<td>Principles of Selling</td>
<td>3</td>
</tr>
<tr>
<td>MKT 125</td>
<td>Applied Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

**General Education – Required Credits**
- General Education Electives (check with advisor to select) 9
- SDV 108 The College Experience 1
- BUS 930 Career Readiness 1
- BUS 934 Capstone Experience 1

**Program Total** 64

* Denotes courses commonly articulated with area high schools.

---

### Program Advisors
Sandra Mueller, MSAS
Room A146
Ext. 1283
sandra.mueller@witcc.edu

Cindy Zortman, MED, Division Chair
Room A146
Ext. 1351
cindy.zortman@witcc.edu

Page Updated 5/21/13
Entrepreneurship

Diploma
Sioux City Campus

Program Overview and Opportunities:
This program is designed to prepare individuals to become entrepreneurs. Students will gain the knowledge of entrepreneurship through application of business concepts and ideas in the creation of a business plan.

Entrepreneurship Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>BUS 130</td>
<td>Introduction to Entrepreneurship#</td>
<td>3</td>
</tr>
<tr>
<td>ACC 111</td>
<td>Introduction to Accounting*</td>
<td>3</td>
</tr>
<tr>
<td>MKT 110</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>BUS 124</td>
<td>Business Innovation</td>
<td>3</td>
</tr>
<tr>
<td>MKT 140</td>
<td>Principles of Selling</td>
<td>3</td>
</tr>
<tr>
<td>ACC 131</td>
<td>Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>MKT 125</td>
<td>Applied Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 133</td>
<td>Entrepreneurial Studies#</td>
<td>3</td>
</tr>
<tr>
<td>BCA 221</td>
<td>Integrated Business Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>BUS 930</td>
<td>Career Readiness</td>
<td>1</td>
</tr>
<tr>
<td>COM 723</td>
<td>Workplace Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUS 185</td>
<td>Business Law I</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total: 39 credits

* Denotes courses commonly articulated with area high schools.
# Students must have earned a C (2.0) or better in courses as identified by # before graduation.

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.

Human Resources

Diploma
Cherokee, Denison, and Sioux City Campuses

Program Overview and Opportunities:
This diploma program is appropriate for both newcomers to the human resource field and those with some experience who wish to expand their knowledge base. Graduates of this program are encouraged to enroll in the Human Resources Management program which leads to an Associate of Applied Science degree.

Human Resources Diploma Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>MGT 170</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT 178</td>
<td>Employment Law</td>
<td>3</td>
</tr>
<tr>
<td>MGT 200</td>
<td>Managing Diversity</td>
<td>3</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations</td>
<td>3</td>
</tr>
<tr>
<td>MGT 177</td>
<td>Staffing</td>
<td>3</td>
</tr>
<tr>
<td>MGT 174</td>
<td>Training and Employee Development</td>
<td>3</td>
</tr>
<tr>
<td>BCA 221</td>
<td>Integrated Computer Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>BUS 930</td>
<td>Career Readiness</td>
<td>1</td>
</tr>
<tr>
<td>BUS 124</td>
<td>Business Innovation</td>
<td>3</td>
</tr>
<tr>
<td>ADM 154</td>
<td>Business Communication*</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total: 32 credits

* Denotes courses commonly articulated with area high schools.

Program Advisors
Sandra Mueller, MSAS
Room A146  Ext. 1283  sandra.mueller@witcc.edu
Cindy Zortman, MED, Division Chair
Room A146  Ext. 1351  cindy.zortman@witcc.edu
Human Resources Technician
Certificate
Cherokee, Denison, and Sioux City Campuses

Program Overview and Opportunities:
This certificate program is appropriate for those with some experience in the human resources field wishing to expand their knowledge base.

Are You a Part-time Student?
This program could be taken on a part-time basis. Some of the courses are offered online. Please see an advisor to develop an individualized plan of study.

Program Advisors
Rosanne Lienhard, JD
Room A146
Ext. 1393
rosanne.lienhard@witcc.edu
Cindy Zortman, MED, Division Chair
Room A146
Ext. 1351
cindy.zortman@witcc.edu

Human Resources Technician Curriculum
Course # Title Credits
SDV 108 The College Experience ........................................1
CSC 110 Introduction to Computers .................................3
MGT 170 Human Resource Management ..........................3
MGT 178 Employment Law .............................................3
MGT 200 Managing Diversity .........................................3
MGT 177 Staffing .........................................................3
MGT 174 Training and Employee Development .................3
PSY 102 Human and Work Relations .............................3
BCA 221 Integrated Computer Business Applications ..........3

Program Total ..................................................................25

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. Please see an advisor to ensure correct course sequence.

Entrepreneurship Concepts
Certificate
Cherokee, Denison, and Sioux City Campuses

Program Overview and Opportunities:
This certificate program is designed to give individuals basic knowledge on how to start a business. Courses cover selling techniques, bookkeeping systems, and basic business plan development.

Program Advisors
Sandra Mueller, MSAS
Room A146
Ext. 1283
sandra.mueller@witcc.edu
Cindy Zortman, MED, Division Chair
Room A146
Ext. 1351
cindy.zortman@witcc.edu

Entrepreneurship Concepts
Certificate Curriculum
Course # Title Credits
SDV 108 The College Experience ........................................1
MKT 140 Principles of Selling ...........................................3
ACC 111 Introduction to Accounting* (3) OR 
ACC 131 Principles of Accounting I (4) ...........................3 or 4
BUS 130 Introduction to Entrepreneurship .......................3
BUS 124 Business Innovation ..........................................3

Program Total ..................................................................13 or 14

* Denotes courses commonly articulated with area high schools.

Are You a Part-time Student?
This program could be taken on a part-time basis. All of the courses are offered online. Please see an advisor to develop an individualized plan of study.
Chemistry

Associate of Science Degree
Chemistry Emphasis

I. Associate of Science Requirements
   A. English and Speech (minimum of 9 credits)
      ENG 105 and 106
      SPC 112
   B. Mathematics and Laboratory Sciences
      (minimum of 20 credits)
      Must include one math course and one lab science course.
      Math and science course selections should be made with advisor's recommendation.
      CHM 166 and 176
      CHM 261 and 271
      MAT 121 or higher; recommend: MAT 211, 217, 219
      PHY 212 and 222
   C. Social and Behavioral Sciences (minimum of 6 credits)
      CIS 212 or SOC 212 required
      Choose one course from section 2:
      Section 1. History and Diverse Cultures
      ANT 105
      GEO 121
      HIS 110, 111, 151, 152, 211
      LIT 150
      SOC 200, 210
      Section 2. Social and Political Sciences
      ECN 120, 130
      POL 111, 112, 121, 125, 151, 211
      PSY 111, 121
      SOC 110, 120
   D. Humanities (minimum of 6 credits)
      Choose two courses from at least two of the following disciplines
      ART 101, 203, 204
      DRA 101, 112
      ENG 221
      FLG 141, 142, 231, 232
      FLR 141, 142, 231, 232
      HUM 101, 220
      LIT 101, 124, 133, 185, 189
      MMS 101
      MSU 100, 202
      PHI 101, 105, 111
      REL 101, 150
      SPC 122, 140
      WITCC Club
   E. Computer Literacy/Computer Technology
      (minimum of 3 credits)
      CSC 110

II. Electives (16 additional credits)
   SDV 108, The College Experience (required)
   Consult advisor when selecting electives

PROGRAM TOTAL.................................................(Minimum) 64

Chemistry Emphasis, A.S. Program Advisors
Manoj Patil, MS
Room L307
manoj.patil@witcc.edu
Ext. 1296
Renee Romig, PhD
Room L307
renee.romig@witcc.edu
Ext. 1303
Darin Moeller/MED, Division Chair
Room L314
darin.moeller@witcc.edu
Ext. 1493

Updated 9/17/13
See also programs in:

- Cyber Security and Digital Crime ................................................................. 86
- LAN Technician ............................................................................................ 140
- Network Administration and Security ......................................................... 139
Construction

Diploma
Sioux City

Program Overview and Opportunities:
The Construction program provides students with the knowledge and skills needed for employment as a carpenter or concrete specialist. Study includes residential and commercial construction, with all phases explored and applied on a job site or in the lab. Specialized coursework includes drywall installation and finishing, blueprint reading, construction estimating, concrete stamping, and construction materials.

Graduates of the program may be employed in general carpentry work, commercial carpentry, or may specialize in one area such as finish carpentry. Career potential includes foreman of a construction company or owning your own construction company.

Another advantage of a WITCC Construction education is the accelerated rate of advancement that the graduates experience. Quite often Construction graduates enter into the field slightly above entry-level positions. Because of their educational background graduates quickly advance to crew leaders, foremen, and field supervisors. After gaining experience, many go on to own their own businesses because of their formal training and experience.

According to the Bureau of Labor Statistics, employment of carpenters is expected to increase as fast as the average for all occupations through the year 2014. The need for carpenters should grow as construction activity increases in response to demand for new housing, office and retail space, and the demand for modernizing and expanding schools and industrial plants. (Occupational Outlook Handbook. Bureau of Labor Statistics 2006-2007.)

Construction Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDY 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>CON 136</td>
<td>Intro to Construction Shop*</td>
<td>1</td>
</tr>
<tr>
<td>CON 204</td>
<td>Basic Framing Techniques*</td>
<td>4</td>
</tr>
<tr>
<td>CON 216</td>
<td>Advanced Framing and Roofing</td>
<td>6</td>
</tr>
<tr>
<td>CON 366</td>
<td>Exterior Finishing*</td>
<td>4</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math</td>
<td>3</td>
</tr>
<tr>
<td>CON 136</td>
<td>Intro to Construction Shop* (spring entry)</td>
<td>1</td>
</tr>
<tr>
<td>CON 209</td>
<td>Intro to Drywall</td>
<td>1</td>
</tr>
<tr>
<td>CON 365</td>
<td>Advanced Drywall</td>
<td>1.5</td>
</tr>
<tr>
<td>CON 367</td>
<td>Interior Doors, Cabinets, and Millwork</td>
<td>2.5</td>
</tr>
<tr>
<td>CON 258</td>
<td>Wall Coverings and Coatings</td>
<td>1.5</td>
</tr>
<tr>
<td>CON 259</td>
<td>Floor Coverings and Coatings</td>
<td>1.5</td>
</tr>
<tr>
<td>CON 132</td>
<td>Footings and Foundations</td>
<td>3</td>
</tr>
<tr>
<td>CON 234</td>
<td>Concrete Specialties</td>
<td>3</td>
</tr>
<tr>
<td>COM 723</td>
<td>Workplace Communications* OR English Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total ........................................... 36

* Denotes courses commonly articulated with area high schools.

Are You a Part-time Student?
See a program advisor for a list of available courses for part-time students and to develop an individualized plan of study.

Program Advisors
Robert Wilcke, AA
Bldg. H, Room 202
Ext. 1473
bob.wilcke@witcc.edu

Steve Ebsen, BS, Division Chair
Room T219
Ext. 1232
steve.ebsen@witcc.edu

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see a Construction program advisor to ensure correct course sequence.


**Construction**

### Carpentry

**Certificate**  
**Sioux City Campus**

**Program Overview and Opportunities:**  
The Carpentry certificate prepares graduates for entry-level jobs in the construction industry. The latest in carpentry techniques and building materials are covered in classes.

**Are You a Part-time Student?**  
See a program advisor for a list of available courses for part-time students and to develop an individualized plan of study.

**Program Advisors**  
Robert Wilcke, AA  
Bldg. H, Room 202  
Ext. 1473  
obw.wilcke@witcc.edu  

Steve Ebsen, BS, Division Chair  
Room T219  
Ext. 1232  
steve.ebsen@witcc.edu

#### Carpentry Certificate Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>CON 136</td>
<td>Intro to Construction Shop</td>
<td>1</td>
</tr>
<tr>
<td>CON 204</td>
<td>Basic Framing Techniques</td>
<td>4</td>
</tr>
<tr>
<td>CON 366</td>
<td>Exterior Finishing</td>
<td>4</td>
</tr>
<tr>
<td>CON 209</td>
<td>Intro to Drywall</td>
<td>1</td>
</tr>
<tr>
<td>CON 367</td>
<td>Interior Doors, Cabinets, and Millwork</td>
<td>2.5</td>
</tr>
<tr>
<td>MAT</td>
<td>Math General Education Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

* Program Total .......................................................... 16.5

* Denotes courses commonly articulated with area high schools.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see a Construction program advisor to ensure correct course sequence.

### Drywall

**Certificate**  
**Sioux City**

**Program Overview and Opportunities:**  
With the knowledge obtained in the drywall and advanced drywall courses, graduates will be able to fasten drywall panels, tape, texture, and then prepare these panels for painting by taping and finishing joints and other imperfections.

**Program Advisors**  
Robert Wilcke, AA  
Bldg. H, Room 202  
Ext. 1473  
obw.wilcke@witcc.edu  

Steve Ebsen, BS, Division Chair  
Room T219  
Ext. 1232  
steve.ebsen@witcc.edu

#### Drywall Certificate Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON 136</td>
<td>Intro to Construction Shop*</td>
<td>1</td>
</tr>
<tr>
<td>CON 209</td>
<td>Intro to Drywall</td>
<td>1</td>
</tr>
<tr>
<td>CON 365</td>
<td>Advanced Drywall</td>
<td>1.5</td>
</tr>
</tbody>
</table>

* Program Total .......................................................... 3.5

* Denotes courses commonly articulated with area high schools.
Interior Finishing

Certificate
Sioux City Campus

Program Overview and Opportunities:
The Interior Finishing certificate helps prepare students to perform the finishing work within the home, installing doors, cabinets, flooring, etc. Interior finishing carpenters work for homebuilders, supply and install companies, or as independent contractors. The Intro to Construction Shop, Wall Coverings and Coatings, Floor Coverings and Coatings, Intro to Drywall, Advanced Drywall, and Interior Doors, Cabinets, and Millwork courses could also be taken for the individual looking for help with home improvement projects dealing with floor and wall coverings, drywall, as well as doors and cabinets.

Are You a Part-time Student?
See a program advisor for a list of available courses for part-time students and to develop an individualized plan of study.

Interior Finishing Certificate Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON 136</td>
<td>Intro to Construction Shop</td>
<td>1</td>
</tr>
<tr>
<td>CON 209</td>
<td>Intro to Drywall</td>
<td>1</td>
</tr>
<tr>
<td>CON 365</td>
<td>Advanced Drywall</td>
<td>1.5</td>
</tr>
<tr>
<td>CON 367</td>
<td>Interior Doors, Cabinets, and Millwork</td>
<td>2.5</td>
</tr>
<tr>
<td>CON 258</td>
<td>Wall Coverings and Coatings</td>
<td>1.5</td>
</tr>
<tr>
<td>CON 259</td>
<td>Floor Coverings and Coatings</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Program Total .......................................................... 9

* Denotes courses commonly articulated with area high schools.

Program Advisors
Robert Wilcke, AA
Bldg. H, Room 202
bob.wilcke@witcc.edu
Ext. 1473

Steve Ebsen, BS, Division Chair
Room T219
steve.ebsen@witcc.edu
Ext. 1232

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see a Construction program advisor to ensure correct course sequence.
Concrete Specialties

Certificate
Sioux City Campus

Program Overview and Opportunities:
The Concrete Specialties Certificate helps students explore advanced and innovative ways of using concrete in the construction industry. It also allows for American Concrete Institute (ACI) concrete certification.

Concrete Specialties Certificate Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON 136</td>
<td>Intro to Construction Shop</td>
<td>1</td>
</tr>
<tr>
<td>CON 132</td>
<td>Footings and Foundations</td>
<td>3</td>
</tr>
<tr>
<td>CON 234</td>
<td>Concrete Specialties</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total .................................................7

Program Advisors
Robert Wilcke, AA  Ext. 1473
Bldg. H, Room 202  bob.wilcke@witcc.edu
Steve Ebsen, BS, Division Chair  Ext. 1232
Room T219  steve.ebsen@witcc.edu

Wall Framing and Roofing

Certificate
Sioux City Campus

Program Overview and Opportunities:
The content offers a background in woods, fasteners and materials, blueprint reading, framing of exterior and interior walls, doors, and window openings. Students will also be exposed to multiple types of rafter construction, roof framing and finishing, and steel framing in the residential and light commercial setting. Training to receive the 10-hour OSHA safety card is also completed with this certificate.

Wall Framing and Roofing Certificate Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON 136</td>
<td>Intro to Construction Shop</td>
<td>1</td>
</tr>
<tr>
<td>CON 204</td>
<td>Basic Framing Techniques</td>
<td>4</td>
</tr>
<tr>
<td>CON 216</td>
<td>Advanced Framing and Roofing</td>
<td>6</td>
</tr>
</tbody>
</table>

Program Total .................................................11

Program Advisors
Robert Wilcke, AA  Ext. 1473
Bldg. H, Room 202  bob.wilcke@witcc.edu
Steve Ebsen, BS, Division Chair  Ext. 1232
Room T219  steve.ebsen@witcc.edu

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.
The courses listed above are grouped in the order that they should be taken each semester. Please see a Construction program advisor to ensure correct course sequence.
Cyber Security and Digital Crime

Associate of Applied Science Degree
Sioux City Campus

Program Overview and Opportunities:
This program is designed to fill a critical and growing need for cyber crime personnel in the public and private sector. Students completing this curriculum will be capable of investigating computer crimes, properly seizing and recovering computer evidence, and aiding in the prosecution of cyber criminals. To combat cyber crime, students in the Cyber Security and Digital Crime program will understand counter measures against hacking, spam, and computer viruses through cyber sleuthing and evidence gathering.

The work of cyber crime investigators often aids in criminal investigations, supports lawsuits, and prevents future attacks. Course work in this curriculum will include work in the disciplines of criminal justice and computer information systems and business security. Additionally, students will be required to take specific cyber crime classes. Graduates should qualify to become entry-level computer crime investigators for criminal justice agencies and be competent to work with computer security specialists and private business.

According to the Bureau of Labor Statistics, demand for computer security specialists will grow as businesses and government continue to invest heavily in "cyber security," protecting vital computer networks and electronic infrastructures from attack. The information security field is expected to generate many new system administrator jobs over the next decade as firms across all industries place a high priority on safeguarding their data and systems. (Occupational Outlook Handbook. Bureau of Labor Statistics 2010-2011.)

Are You a Part-time Student?
All of these courses can be taken on a part-time basis. See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. Please see an advisor to ensure correct course sequence.

Program Advisors
Ryan Sporrer
Room T217
Ext. 1494
ryan.sporrer@witcc.edu

Steve Ebsen, BS, Division Chair
Room T219
Ext. 1232
steve.ebsen@witcc.edu

Cyber Security and Digital Crime Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>NET 161</td>
<td>IT Essentials I: PC Hardware and Software</td>
<td>4</td>
</tr>
<tr>
<td>NET 162</td>
<td>IT Essentials II: Advanced Hardware and Software</td>
<td>3</td>
</tr>
<tr>
<td>NET 217</td>
<td>CCNA Exploration Network Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>NET 612</td>
<td>Fundamentals of Network Security</td>
<td>3</td>
</tr>
<tr>
<td>NET 636</td>
<td>Digital Crime and Computer Law</td>
<td>3</td>
</tr>
<tr>
<td>PHI 105</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>NET 423</td>
<td>Securing a Linux Environment</td>
<td>3</td>
</tr>
<tr>
<td>NET 218</td>
<td>CCNA Exploring Routing Concepts</td>
<td>3</td>
</tr>
<tr>
<td>NET 542</td>
<td>MS Server Network Infrastructure MCTS</td>
<td>3</td>
</tr>
<tr>
<td>NET 520</td>
<td>Microsoft Workstation (MCTS)</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers OR</td>
<td>3</td>
</tr>
<tr>
<td>BCA 206</td>
<td>Applied Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>COM 723</td>
<td>Workplace Communications</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>Math General Education Elective</td>
<td>4</td>
</tr>
<tr>
<td>NET 424</td>
<td>Securing a Linux Environment II</td>
<td>3</td>
</tr>
<tr>
<td>NET 633</td>
<td>Computer Forensics Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>NET 730</td>
<td>Computer Forensics and Investigation</td>
<td>3</td>
</tr>
<tr>
<td>NET 624</td>
<td>Offensive Security I</td>
<td>3</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>NET 625</td>
<td>Offensive Security II</td>
<td>3</td>
</tr>
<tr>
<td>NET 638</td>
<td>Network Firewalls and VPNs</td>
<td>3</td>
</tr>
<tr>
<td>NET 846</td>
<td>Cyber Crime Projects</td>
<td>3</td>
</tr>
<tr>
<td>NET 617</td>
<td>Implementing Security Policies and Procedures</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Program Total</td>
<td>68</td>
</tr>
</tbody>
</table>

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. The courses listed above are grouped in the order that they should be taken each semester. Please see a Cyber Security and Digital Crime program advisor to ensure correct course sequence.

Updated 9/17/13
Data Recovery

Certificate
 Sioux City Campus

Program Overview and Opportunities:
This certificate program provides students with basic knowledge in recovering digital information. Students use the latest hardware and software tools to image and explore digital storage devices enabling them to recover data that has been marked for deletion or lost. Students receiving this certificate are prepared for careers specializing in the retrieval of digital information from all forms of devices including computers, PDAs, and cell phones.

Data Recovery Certificate Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>NET 161</td>
<td>IT Essentials I: PC Hardware and Software</td>
<td>4</td>
</tr>
<tr>
<td>NET 162</td>
<td>IT Essentials II: Advanced PC Hardware and Software</td>
<td>3</td>
</tr>
<tr>
<td>NET 612</td>
<td>Fundamentals of Network Security</td>
<td>3</td>
</tr>
<tr>
<td>NET 633</td>
<td>Computer Forensics Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>NET 730</td>
<td>Computer Forensics and Investigations</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total: 17

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see a program advisor to ensure correct course sequence.

Program Advisors
Ryan Sporrer Ext. 1494
Room T217 ryan.sporrer@witcc.edu
Steve Ebsen, BS, Division Chair Ext. 1232
Room T219 steve.ebsen@witcc.edu

Network Security

Certificate
 Sioux City Campus

Program Overview and Opportunities:
This certificate program provides students with basic knowledge and network threat information in order to secure a computer network against attacks. Students learn about basic operating systems, networking concepts, security threats, and mitigation tools. Labs for this certificate enable students to create a working network and, using current hacking tools and methods, spot vulnerabilities, safeguarding the network before any real threats occur. The practice of “penetration testing” by certified ethical hackers is employed in an isolated network environment by the students learning these skills.

Network Security Certificate Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>NET 161</td>
<td>IT Essentials I: PC Hardware and Software</td>
<td>4</td>
</tr>
<tr>
<td>NET 612</td>
<td>Fundamentals of Network Security</td>
<td>3</td>
</tr>
<tr>
<td>NET 217</td>
<td>CCNA Exploration Network Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>NET 617</td>
<td>Implementing Security Policies and Procedures</td>
<td>3</td>
</tr>
<tr>
<td>NET 638</td>
<td>Network Firewalls and VPNs</td>
<td>3</td>
</tr>
<tr>
<td>NET 218</td>
<td>CCNA Exploring Routing Concepts</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total: 20

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see a program advisor to ensure correct course sequence.

Program Advisors
Ryan Sporrer Ext. 1494
Room T217 ryan.sporrer@witcc.edu
Steve Ebsen, BS, Division Chair Ext. 1232
Room T219 steve.ebsen@witcc.edu
Early Childhood Education

Associate of Applied Science Degree
Cherokee, Denison, and Sioux City Campuses

Program Overview and Opportunities:
The Early Childhood Education program is designed for students who are interested in fulfilling leadership roles in early childhood facilities. The purpose of the program is to prepare graduates to develop, manage and evaluate early childhood programs as well as implement developmentally appropriate curriculum for children from birth through age 8. Students develop skills needed to support culturally, linguistic and ability diverse children and their families.

This program can be taken part time or full time. All classes are available online. Persons who are employed in an early childhood facility in Woodbury County can apply for the Siouxland Human Investment Partnership (SHIP) scholarship. For more information, please call the Financial Aid office. See an early childhood advisor to develop a study plan that is appropriate for you.


Students will be required to complete field experience or practicum hours outside of regular class time and complete criminal, child abuse and dependent adult abuse background checks and health requirements in order to complete the program.

Early Childhood Education Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ECE 103</td>
<td>Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 112</td>
<td>Portfolio I</td>
<td>1</td>
</tr>
<tr>
<td>ECE 158</td>
<td>Early Childhood Curriculum I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 170</td>
<td>Child Growth &amp; Development</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers OR</td>
<td></td>
</tr>
<tr>
<td>BCA 206</td>
<td>Applied Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>ENG</td>
<td>English General Education Elective</td>
<td>3</td>
</tr>
<tr>
<td>ECE 133</td>
<td>Child Health, Safety &amp; Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ECE 159</td>
<td>Early Childhood Curriculum II</td>
<td>3</td>
</tr>
<tr>
<td>ECE 241</td>
<td>Early Childhood Lab</td>
<td>2</td>
</tr>
<tr>
<td>ECE 221</td>
<td>Infant/Toddler Care &amp; Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 243</td>
<td>Early Childhood Guidance</td>
<td>3</td>
</tr>
<tr>
<td>SOC 110</td>
<td>Introduction to Sociology OR</td>
<td>3</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ECE 215</td>
<td>Home, School, Community Relations</td>
<td>3</td>
</tr>
<tr>
<td>ECE 262</td>
<td>Early Childhood Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>ECE 287</td>
<td>Exceptional Learner</td>
<td>3</td>
</tr>
<tr>
<td>EDU 220</td>
<td>Human Relations OR</td>
<td>3</td>
</tr>
<tr>
<td>CLS 212</td>
<td>Diversity OR</td>
<td>3</td>
</tr>
<tr>
<td>SOC 212</td>
<td>Diversity</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>Math General Education Elective</td>
<td>3</td>
</tr>
<tr>
<td>ECE 246</td>
<td>Observation and Assessment</td>
<td>4</td>
</tr>
<tr>
<td>ECE 296</td>
<td>Administration of Childcare Services</td>
<td>5</td>
</tr>
<tr>
<td>LIT 105</td>
<td>Children’s Literature</td>
<td>3</td>
</tr>
<tr>
<td>ECE 113</td>
<td>Portfolio II</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>General Education Elective (D or F)</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total: 65

Updated 10/30/13

Program Advisors
Jennifer Weber, MAEd
Room L323
Ext. 1389
jennifer.weber@witcc.edu

Gloria Stewart, RN, EdD, Division Chair
Room L313
Ext. 1350
gloria.stewart@witcc.edu

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see a child care program advisor to ensure correct course sequence.
Early Childhood Studies

Diploma
Cherokee, Denison, and Sioux City Campuses

Program Overview and Opportunities:
The purpose of the Early Childhood Studies diploma program is to prepare graduates to provide early childhood education services within a structured child care program. The program emphasis is on developmentally appropriate activities across developmental domains, guidance techniques, and beginning observation skills.

The classes leading to a diploma can be taken part time or full time. All classes are available online. Persons who are employed in an early childhood facility in Woodbury County can apply for the Siouxland Human Investment Partnership (SHIP) scholarship. For more information, please call the Financial Aid office. See an early childhood advisor to develop a plan of study that is appropriate for you.


Students will be required to complete field experience or practicum hours outside of regular class time and complete criminal, child abuse and dependent adult abuse background checks and health requirements in order to complete the program.

Early Childhood Studies Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ECE 103</td>
<td>Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 112</td>
<td>Portfolio I</td>
<td>1</td>
</tr>
<tr>
<td>ECE 158</td>
<td>Early Childhood Curriculum I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 170</td>
<td>Child Growth &amp; Development</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers OR</td>
<td></td>
</tr>
<tr>
<td>BCA 206</td>
<td>Applied Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>ENG</td>
<td>English General Education Elective</td>
<td>3</td>
</tr>
<tr>
<td>ECE 133</td>
<td>Child Health, Safety &amp; Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ECE 159</td>
<td>Early Childhood Curriculum II</td>
<td>3</td>
</tr>
<tr>
<td>ECE 241</td>
<td>Early Childhood Lab</td>
<td>2</td>
</tr>
<tr>
<td>ECE 221</td>
<td>Infant/Toddler Care &amp; Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 243</td>
<td>Early Childhood Guidance</td>
<td>3</td>
</tr>
<tr>
<td>SOC 110</td>
<td>Introduction to Sociology OR</td>
<td></td>
</tr>
<tr>
<td>PSY 111</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total..........................................................34

Program Advisors
Jennifer Weber, MAEd
Room L323 Ext. 1389 jennifer.weber@witcc.edu

Gloria Stewart, RN, EdD, Division Chair
Room L313 Ext. 1350 gloria.stewart@witcc.edu

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see a child care program advisor to ensure correct course sequence.
Child Development

Certificate
Cherokee, Denison, and Sioux City Campuses

Program Overview and Opportunities:
This certificate is designed to enable the student to become a trained child care assistant. These courses may be applied toward the certificate, diploma in Early Childhood Studies, or associate degree program in Early Childhood Education.

Classes are available for the early childhood teacher/provider who is working toward an Infant/Toddler or Preschool Child Development Associate (CDA). A CDA is a nationally recognized credential for early childhood personnel who show achievement of a series of competencies. It is administrated by the Council for Professional Recognition in Washington, DC. The student does not earn the CDA by completing these courses; these courses are the educational component of the CDA.

These courses can be taken part time or full time. All classes are available online. Persons who are employed in an early childhood facility in Woodbury County can apply for the Siouxland Human Investment Partnership (SHIP) scholarship. For more information please call the Financial Aid office. See an early childhood advisor to develop a study plan appropriate for you.

Child Development Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ECE 103</td>
<td>Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 133</td>
<td>Child Health, Safety &amp; Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ECE 158</td>
<td>Early Childhood Curriculum I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 170</td>
<td>Child Growth &amp; Development</td>
<td>3</td>
</tr>
<tr>
<td>ECE 243</td>
<td>Early Childhood Guidance</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total............................................................ 16

*INFANT/TODDLER EMPHASIS:

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ECE 103</td>
<td>Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 133</td>
<td>Child Health, Safety &amp; Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ECE 170</td>
<td>Child Growth &amp; Development</td>
<td>3</td>
</tr>
<tr>
<td>ECE 221</td>
<td>Infant/Toddler Care &amp; Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total............................................................ 16

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. The courses listed above are grouped in the order that they should be taken each semester. Please see an early childhood advisor to ensure correct course sequence.
Education

Associate of Arts Degree (Transfer)
Cherokee, Denison, and Sioux City Campuses

Program Overview and Opportunities:
The College’s range of education programs allow students planning a career in teaching to complete the first two years of a baccalaureate program and earn an Associate of Arts degree whether they plan to teach elementary or secondary school. The education curriculum is designed to provide orientation and background for future teachers, introducing students to the demands and standards of the profession and helping them make decisions about entering the teaching field.

All students should be aware that the requirements of transfer institutions vary and that the standards of the Iowa Department of Education specify differing preparations for elementary and secondary school teachers. Therefore, students are strongly advised to familiarize themselves with the education program at the college to which they plan to transfer and work with the advisors and counselors at WITCC to plan a program to meet those requirements.

Employment projections show an anticipated teacher shortage in the near future. Job prospects look good, especially in high demand areas such as math, technology, and science. According to the Bureau of Labor Statistics, job opportunities for teachers over the next 10 years will vary from good to excellent, depending on the locality, grade level, and subject taught. Most job openings will result from the need to replace the large number of teachers who are expected to retire over the 2008-14 period. (Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2008-09 Edition)

Are You a Part-time Student?
You may take any of the courses in this program as a part-time student. Please refer to any prerequisites before signing up for upper level courses.

Education Associate of Arts Degree
Successful completion of SDV 108 is a requirement of graduation.

I. General Education Core

A. English and Speech (minimum of 9 credits)
   ENG 105 and 106
   SPC 112

B. Mathematics and Laboratory Sciences (minimum of 8 credits)
   Must include one math course and one lab science course from the following:
   BIO 105, 125, 163
   CHM 122
   ENV 111
   MAT 111, 117, 121,
   PHS 120, 151

C. Social and Behavioral Sciences (minimum of 9 credits)
   CLS 212 or SOC 212 (required)
   Choose one course from section 2 plus one course from section 1 or 2:
   Section 1. History and Diverse Cultures
   (additional distribution choices)
   ANT 105
   GEO 121
   HIS 110, 111, 151, 152, 211
   LIT 150
   SOC 200, 210
   Section 2. Social and Political Sciences
   ECN 120, 130
   POL 111, 112, 121, 125, 151, 211
   PSY 111, 121
   SOC 110, 120

D. Humanities (minimum of 9 credits)
   Choose three courses from at least two of the following disciplines
   ART 101, 203, 204
   DRA 101, 112
   ENG 221
   MUS 100, 202
   FLF 141, 142
   REL 101, 150
   FLS 141, 142, 231, 232
   HUM 101, 220

E. Computer Literacy/Technology - Suggested Elective
   Computer literacy is critical to your success as a college student. It is strongly recommended that you consider your competency in computer applications. Some major programs at transfer institutions may require a computer applications course. Consult with your advisor regarding this suggested course.
   CSC 110, Introduction to Computers

F. Distributed requirement (6 credits required)
   Take two additional courses from any of these areas:
   Mathematics, Laboratory Science, Social and Behavioral Sciences, and Humanities.

II. Electives (credits vary)
   SDV 108, The College Experience (required)
   Consult a faculty advisor, the transferring institution and page 18 of the catalog.

PROGRAM TOTAL.............................................................................64
Paraeducator

Certificate
Sioux City, Cherokee, Denison, and Le Mars Campuses

Program Overview and Opportunities:
This teacher aide certificate program is approved by the Iowa Department of Education. Upon successful completion of this program, students will be able to apply to the State of Iowa Department of Education for a five-year Paraeducator Level I: Generalist Certificate. School districts receiving Title I funds are required to have certified paraeducators under the No Child Left Behind requirements. This certificate meets both the No Child Left Behind legislation and the State of Iowa Department of Education voluntary certification requirements. The certificate is valid in Iowa. Applicants must be 18 years of age and possess a high school diploma or GED.

Paraeducator Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 120</td>
<td>Communication, Ethics, and Confidentiality</td>
<td>2</td>
</tr>
<tr>
<td>EDU 122</td>
<td>Roles and Responsibilities</td>
<td>2</td>
</tr>
<tr>
<td>EDU 121</td>
<td>Behavior Improvement</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Program Total</td>
<td>6</td>
</tr>
</tbody>
</table>

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see an early childhood advisor to ensure correct course sequence.

Are You a Part-time Student?
See a program advisor for a list of available courses for part-time students and to develop an individualized plan of study.
Education – Early Childhood

Associate of Arts Degree (Transfer)
Cherokee, Denison, and Sioux City Campuses

Program Overview and Opportunities:
The purpose of the Education–Early Childhood Associate of Arts degree program is to prepare graduates in the field of early childhood education and to broaden the students’ background in general education. The early childhood aspect of the program emphasizes creating developmentally appropriate plans across developmental domains/guidance techniques, and beginning observation skills. Students completing this program may choose to transfer to a 4-year institution or to seek employment with many entities providing early childhood education services.

This program may be taken part time or full time. All classes are available online; however, courses with a lab, field experience or practicum component will require the student to attend an early childhood site on a weekly basis. All students should be aware that the requirements of transfer institutions vary and that the standards of the Iowa Department of Education specify differing preparations for elementary and secondary school teachers. Therefore students are strongly advised to contact the college to which they plan to transfer and to work with the advisors to plan a program to best meet those requirements.

Job opportunities for graduates of this program may include lead teacher or assistant teacher at a child care center, assistant teacher in voluntary 4-year-old preschool, or in-home provider. Additionally, students who complete the required bachelor’s degree after transfer may gain employment as the lead teacher in voluntary 4-year-old preschool.

For successful completion of this program, students will be required to complete field experience hours outside of regular class time and to complete criminal and abuse background checks as well as to meet training and health requirements. Additionally, students will need to provide proof of high school graduation of GED before completion of the Early Childhood Lab course.

Are You a Part-time Student?
You may take any of the courses in this program as a part-time student. Please refer to any prerequisites before signing up for upper level courses.

Program Advisors
Jennifer Weber, MAEd                      Ext. 1389  jennifer.weber@witcc.edu
Room L323
Gloria Stewart, RN, EdD, Division Chair   Ext. 1350  gloria.stewart@witcc.edu
Room L313

Education – Early Childhood Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ECE 103</td>
<td>Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 112</td>
<td>Portfolio I</td>
<td>1</td>
</tr>
<tr>
<td>ECE 158</td>
<td>Early Childhood Curriculum I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 170</td>
<td>Child Growth &amp; Development</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ECE 133</td>
<td>Child Health, Safety &amp; Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ECE 159</td>
<td>Early Childhood Curriculum II</td>
<td>3</td>
</tr>
<tr>
<td>ECE 241</td>
<td>Early Childhood Lab</td>
<td>2</td>
</tr>
<tr>
<td>ECE 221</td>
<td>Infant/Toddler Care &amp; Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 243</td>
<td>Early Childhood Guidance</td>
<td>3</td>
</tr>
<tr>
<td>SOC 110</td>
<td>Introduction to Sociology OR</td>
<td>3</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ENG 106</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>ECE 262</td>
<td>Early Childhood Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>CLS 212</td>
<td>Diversity OR</td>
<td>3</td>
</tr>
<tr>
<td>SOC 212</td>
<td>Diversity</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>Math Elective</td>
<td>4</td>
</tr>
<tr>
<td>MAT</td>
<td>General Education Elective (Distribution)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Lab Science Elective</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>History/Diverse Cultures or Political Science Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Social/Political Science Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Humanities Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Humanities Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education Elective (Distribution)</td>
<td>2</td>
</tr>
</tbody>
</table>

Program Total ...........................................................................71

Updated 10/30/13
Electrician

Diploma
Mapleton Campus

Program Overview and Opportunities:
The Electrical program offers an industry recognized curriculum providing the basic knowledge and skills in applied electrical theory; residential, commercial, and industrial wiring; blueprint reading; estimating; and building codes. Proper safety practices in the use of test equipment and hand and power tools are also stressed. Students gain valuable on-site electrical experience through wiring the Western Iowa Tech Project House. On-site training and lab instruction are designed to build student confidence and skills which better prepare the graduates to enter into the workforce.

Electricians may choose to work in electrical construction or industrial electrical maintenance. Positions are also available with electric utility companies and in electrical material sales. Graduates may use the program as a “stepping stone” into apprenticeship training.

According to the Bureau of Labor Statistics, employment of electricians is expected to grow as fast as the average for all occupations through the year 2014. Electrical workers are among the highest paid workers in the skilled construction trades. As the population and economy grow, more electricians will be needed to install and maintain electrical devices and wiring in homes, factories, offices, and other structures. An increase in power plant construction over the next ten years will require many additional electricians. (Occupational Outlook Handbook. Bureau of Labor Statistics 2006-2007.)

Are You a Part-time Student?
See a program advisor for a list of available courses for part-time students and to develop an individualized plan of study.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. The courses listed above are listed in the order that they should be taken each semester. Please see an Electrician program advisor to ensure correct course sequence.

Program Advisors
Ben Segebart
712-882-2401
ben.segebart@witcc.edu
WITCC Center, Highway 75N, Mapleton, Iowa

Greg Strong, BS, BA, Division Chair Ext. 1480
Room A111 greg.strong@witcc.edu

Electrician Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ELE 112</td>
<td>Basic Electrical Theory</td>
<td>3</td>
</tr>
<tr>
<td>ELE 132</td>
<td>Introduction to Wiring</td>
<td>3</td>
</tr>
<tr>
<td>ELE 135</td>
<td>Installation of Wiring Systems</td>
<td>4</td>
</tr>
<tr>
<td>ELE 192</td>
<td>Principles of Motors/Transformers</td>
<td>3</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math* OR</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>Math Elective</td>
<td></td>
</tr>
<tr>
<td>ELE 157</td>
<td>Advanced Commercial Wiring</td>
<td>4</td>
</tr>
<tr>
<td>ELE 195</td>
<td>Motor Control</td>
<td>3</td>
</tr>
<tr>
<td>ELE 184</td>
<td>Field Installed Commercial Systems</td>
<td>3</td>
</tr>
<tr>
<td>ELT 250</td>
<td>Programmable Logic Controllers</td>
<td>3</td>
</tr>
<tr>
<td>COM 723</td>
<td>Workplace Communications* OR</td>
<td>3</td>
</tr>
<tr>
<td>ENG/LIT/COM</td>
<td>English Elective</td>
<td></td>
</tr>
</tbody>
</table>

Program Total .............................................33

* Denotes courses commonly articulated with area high schools.

Updated 9/17/13
Program Overview and Opportunities:
Rapid advancement in the electronics field over the last three decades has fueled tremendous changes in all technically-oriented fields of our modern society. Virtually every industry uses electronic systems to some degree, including aviation, automotive, banking, communication, computing, drafting, entertainment, farming, global positioning, transportation, etc. Applications to design, analyze, measure, visualize, simulate, and control electronic systems will be studied.

Students will explore numerous electronic systems, including communication systems, consumer (Smart Home) systems, and industrial systems. Manufacturing, servicing, operations, design and development are a few of the technical fields in which Electronic Systems Technology graduates will find meaningful employment.

According to the Bureau of Labor Statistics, employment of electrical and electronics technicians is expected to grow by 7 percent. Electronic equipment will become more sophisticated and will be used more frequently as businesses strive to lower costs. Companies increasingly will rely on repairers because malfunctions that idle commercial and industrial equipment will continue to be costly. (Occupational Outlook Handbook. Bureau of Labor Statistics 2006-2007.)

Electronic Systems Technology Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ELT 382</td>
<td>Electronic Circuit Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers OR</td>
<td></td>
</tr>
<tr>
<td>BCA 206</td>
<td>Applied Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math</td>
<td>3</td>
</tr>
<tr>
<td>ELT 154</td>
<td>Industrial Electronics</td>
<td>3</td>
</tr>
<tr>
<td>EGT 420</td>
<td>PLTW–Digital Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ELT 560</td>
<td>Electronic Circuit Analysis II</td>
<td>4</td>
</tr>
<tr>
<td>NET 123</td>
<td>Computer Hardware Basics</td>
<td>4</td>
</tr>
<tr>
<td>NET 143</td>
<td>Essentials of Networking</td>
<td>3</td>
</tr>
<tr>
<td>ELT 250</td>
<td>Programmable Logic Controllers</td>
<td>3</td>
</tr>
<tr>
<td>ELT 230</td>
<td>PLC Applications</td>
<td>3</td>
</tr>
<tr>
<td>COM 723</td>
<td>Workplace Communications</td>
<td></td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations</td>
<td>3</td>
</tr>
<tr>
<td>PEA, PEC or PHE</td>
<td>Healthful Living/Leisure Elective</td>
<td></td>
</tr>
<tr>
<td>ELT 402</td>
<td>Introduction to Communication Systems</td>
<td>3</td>
</tr>
<tr>
<td>ELT 431</td>
<td>Telephone/Data Circuits</td>
<td>3</td>
</tr>
<tr>
<td>ELT 692</td>
<td>Digital Home Technology Integration +</td>
<td>4</td>
</tr>
<tr>
<td>BPT 114</td>
<td>Instrumentation I</td>
<td>2</td>
</tr>
<tr>
<td>BPT 115</td>
<td>Instrumentation II</td>
<td>2</td>
</tr>
<tr>
<td>ELT 891</td>
<td>Communication Licenses</td>
<td>3</td>
</tr>
<tr>
<td>ELT 545</td>
<td>Computer-Aided Circuit Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ELT 856</td>
<td>Communication Projects</td>
<td>3</td>
</tr>
<tr>
<td>ELT 404</td>
<td>Advanced Communications</td>
<td>4</td>
</tr>
<tr>
<td>ATR 125</td>
<td>Advanced Automation Systems/Robotics</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total .......................................................... 72

+ College transfer courses may be substituted for these courses. See advisor.

Program Under Review

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. The courses listed above are grouped in the order that they should be taken each semester. Please see an Electronics Systems Technology program advisor to ensure correct course sequence.
Biomedical Electronics

Certificate
Sioux City Campus

Program Overview and Opportunities:
The ever-increasing reliance on electronics to test and monitor patients in health care facilities has created a need for biomedical electronics technicians, both in the health care industry and the electronic equipment industry. Biomedical electronic technicians must be competent in interpretation of schematics and wiring diagrams of electronic equipment used in hospitals. In addition to these skills, students in the Biomedical Electronics program are also trained in logical troubleshooting techniques and in the electronic principles needed to properly understand and analyze highly sophisticated equipment.

Program graduates are hired by hospitals and clinics, manufacturers, contract service firms, and equipment distributors.

Students must have completed Electronics Systems Technology A.A.S. degree to enroll in these courses.

Are You a Part-time Student?
See a program advisor for a list of available courses for part-time students and to develop an individualized plan of study.

Biomedical Electronics Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 163</td>
<td>Essentials of Anatomy and Physiology</td>
<td></td>
</tr>
<tr>
<td>ELE 117</td>
<td>Electronics</td>
<td></td>
</tr>
</tbody>
</table>

Program Total ........................................ 7

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an Electronic Maintenance Technology program advisor to ensure correct course sequence.

Program Under Review

Updated 8/20/13

Program Advisors
Donnin Custer, BAS
Room A146
donnin.custer@witcc.edu

David McDonald, AAS
Room A146
dave.mcdonald@witcc.edu

Greg Strong, BS, BA, Division Chair
Room A111
greg.strong@witcc.edu

Electronic Musical Instrument Repair

Certificate
Sioux City Campus

Program Overview and Opportunities:
This certificate program was developed to provide training to students interested in repairing electronic instruments used in live performances in the entertainment industry. Courses will consist of both theory and hands-on instruction.

According to the Bureau of Labor Career Advice section, the demand for people trained to repair musical instruments has increased due to the number of people employed as musicians and to the slight increase of students of all ages playing musical instruments. Because instruments are quite expensive to purchase, growing numbers of instrument repairers will be needed to work on rental equipment leased to students, schools and other organizations. (Occupational Outlook Handbook. Bureau of Labor Statistics 2006-2007.)

Electronic Musical Instrument Repair Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELT 680</td>
<td>Guitar and Amplifier Electronics</td>
<td></td>
</tr>
<tr>
<td>ELE 112</td>
<td>Basic Electrical Theory (3) OR</td>
<td></td>
</tr>
<tr>
<td>ELT 110</td>
<td>Electronics</td>
<td></td>
</tr>
</tbody>
</table>

Program Total ........................................ 5 or 6

Program Under Review

Updated 8/20/13

Program Advisors
Donnin Custer, BAS
Room A146
donnin.custer@witcc.edu

Greg Strong, BS, BA, Division Chair
Room A111
greg.strong@witcc.edu

Western Iowa Tech Community College 2013-2014 Catalog 94 800.352.4649 or www.witcc.edu
Smart Home Technology Specialist

Certificate
Sioux City Campus

Program Overview and Opportunities:
This certificate program was developed to provide training in Home Technology Integration (Smart Home Technologies). Students will master the core competencies needed for the installation, integration, and troubleshooting of the following automated home sub-systems: Home Security, Audio/Video, Computer Networks, Electrical Wiring, HVAC (Heating/Air Conditioning Systems), Cable/Satellite, Broadband, Telecommunications, and Structured Wiring.

This certification prepares students for the national certification exams which can be taken at the Western Iowa Tech Testing Center. Students must register and pay for the tests online via the VUE Testing Center Web site at www.vue.com.

Employment opportunities continue to grow. As home electronic equipment costs decrease more consumers are investing in home electronics equipment and systems. Certified technicians and sales professionals are needed to meet this demand.

Smart Home Technician Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ELE 112</td>
<td>Basic Electrical Theory</td>
<td>3</td>
</tr>
<tr>
<td>NET 161</td>
<td>IT Essentials I: PC Hardware &amp; Software</td>
<td>4</td>
</tr>
<tr>
<td>ELT 692</td>
<td>Digital Home Technology Integration +</td>
<td>4</td>
</tr>
<tr>
<td>NET 143</td>
<td>Essentials of Networking</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total .................................................. 15

Are You a Part-time Student?
See a program advisor for a list of available courses for part-time students and to develop an individualized plan of study.

Program Advisors
Donnin Custer, BAS
Room A146
Ext. 1392
donnin.custer@witcc.edu

David McDonald, AAS
Room A146
Ext. 1281
dave.mcdonald@witcc.edu

Greg Strong, BS, BA, Division Chair
Room A111
Ext. 1480
greg.strong@witcc.edu

Updated 8/20/13

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an Electronics Systems Technology program advisor to ensure correct course sequence.
Emergency & Disaster Management

Associate of Applied Science Degree
Sioux City Campus

Program Overview and Opportunities:
This program is designed to fill a critical and growing need for emergency and disaster management personnel in the public and private sectors. This program will prepare the student for positions in the disaster management profession or to transfer to a four-year college or university. The graduate is prepared for employment in government agencies, private corporations, industry, educational and health care institutions. Students with prior training or certifications in similar fields may receive college credits toward their degree. Students must complete a minimum of 34 credits to earn an Associate of Applied Science Degree in Emergency & Disaster Management. The degree program can build upon the existing skills of first responders and others who complete college certificated training, military training, and/ or are certified as law enforcement officers, emergency medical technicians, paramedics, firefighters, safety professionals, or hazardous material technicians.

This program is an option for those individuals who seek a degree in an exciting and rewarding career field. To be accepted into the program, students much achieve the following scores on the Computerized Placement Test (CPT):
80 Reading; 86 Sentence Structure; 56 Arithmetic or 38 Elementary Algebra.

National employment trends show job growth predictions of 18-26 percent with median salaries of entry level employees of $12 to $39/hour: 80 percent of these positions require some college or a college degree. The median hourly wage in Iowa is $18.22. (Career Voyages: http://www.careervoyages.gov/homelandsecurity-main.cfm)

Are You a Part-time Student?
All of the courses could be taken on a part-time basis. Check the course descriptions for any pre-requisites. All of these courses are also offered online.

Refresher reading, English, or math course if CPT scores warrant; ENG-105; POL, PSY, SOC elective; MGT; EMS 114; Computer Elective and SOC 110 could all be taken before entry into the EDM program. Please see an EDM advisor to develop an individualized plan of study.

Program Advisor
Steve Ebsen, BS, Division Chair
Room T219  Ext. 1232  steve.ebsen@witcc.edu

Emergency & Disaster Management Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>EDM 110</td>
<td>Principles of Emergency Management</td>
<td>3</td>
</tr>
<tr>
<td>EDM 111</td>
<td>Developing Emergency Management Skills</td>
<td>3</td>
</tr>
<tr>
<td>EDM 112</td>
<td>Emergency Planning</td>
<td>3</td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking</td>
<td></td>
</tr>
<tr>
<td>EDM 210</td>
<td>Communications and Public Relations for Emergency Management</td>
<td>3</td>
</tr>
<tr>
<td>EDM 211</td>
<td>Hazard Mitigation</td>
<td>3</td>
</tr>
<tr>
<td>EDM 222</td>
<td>Practicum II</td>
<td>3</td>
</tr>
<tr>
<td>POL/PSY/SOC</td>
<td>Select 2 courses from 2 disciplines</td>
<td>6</td>
</tr>
<tr>
<td>EDM 220</td>
<td>Hazardous Materials Planning &amp; Management</td>
<td>3</td>
</tr>
<tr>
<td>EDM 221</td>
<td>Homeland Security &amp; Emergency Management</td>
<td>3</td>
</tr>
<tr>
<td>MGT</td>
<td>Management (select one course).</td>
<td>3</td>
</tr>
<tr>
<td>EMS 114</td>
<td>Emergency Medical Responder (2) OR</td>
<td></td>
</tr>
<tr>
<td>EMS 217</td>
<td>Emergency Medical Technician (7)</td>
<td>2 or 7</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math (3) OR</td>
<td></td>
</tr>
<tr>
<td>EDM 224</td>
<td>Practicum III</td>
<td>3 or 4</td>
</tr>
</tbody>
</table>

Program Total ...........................................65-71

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses and formally accepted into the EDM program.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. Please see an EDM advisor to ensure correct course sequence.
Technical Emergency & Disaster Management

Associate of Applied Science Degree
Sioux City Campus

Program Overview and Opportunities:
This program is an option for those individuals with prior experience and documented training in public services who seek a degree.

This program is designed to fill a critical and growing need for emergency and disaster management personnel in public and private sectors. This program will prepare the student for positions in the disaster management profession or to transfer to a 4-year college or university. The student obtaining this degree is prepared for employment in government agencies, private corporations, industry, educational and health care institutions. Students with prior training or certifications in similar fields may receive college credits toward their degree. Students must complete a minimum of 66 credits to earn an Associate of Applied Science Degree in Emergency & Disaster Management.

The degree program can build upon the existing skills of first responders and those individuals who complete college certificated training, military training, and/or are certified, as law enforcement officers, emergency medical technicians, paramedics, firefighters, safety professionals, or hazardous material technicians.

National employment trends show job growth predictions of 18-26 percent with median salaries of entry level employees of $12 to $39/hour. 80 percent of these positions require some college or a college degree. The median hourly wage in Iowa is $18.22/hour. (Career Voyages: www.careervoyages.gov/homelandsecurity-main.cfm)

To be accepted into the program, students must achieve the following scores on the Computerized Placement Test: 80 Reading; 86 Sentence Structure; 56 Arithmetic or 38 Elementary Algebra.

Program Advisor
Steve Ebsen, BS, Division Chair
Room T219
Ext. 1232
steve.ebsen@witcc.edu

Technical Emergency & Disaster Management Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDM 110</td>
<td>Principles of Emergency Management</td>
</tr>
<tr>
<td>EDM 111</td>
<td>Developing Emergency Management Skills</td>
</tr>
<tr>
<td>EDM 112</td>
<td>Emergency Planning</td>
</tr>
<tr>
<td>EDM 120</td>
<td>Special Populations in a Disaster</td>
</tr>
<tr>
<td>EDM 121</td>
<td>Emergency Disaster Response &amp; Recovery</td>
</tr>
<tr>
<td>EDM 122</td>
<td>Incident Management Systems and Emergency Operations Centers</td>
</tr>
<tr>
<td>EDM 210</td>
<td>Communications and Public Relations for Emergency Managers</td>
</tr>
<tr>
<td>EDM 211</td>
<td>Hazard Mitigation</td>
</tr>
<tr>
<td>EDM 222</td>
<td>Practicum II</td>
</tr>
<tr>
<td>EDM 223</td>
<td>Exercise Planning</td>
</tr>
<tr>
<td>EDM 220</td>
<td>Hazardous Materials Planning &amp; Management</td>
</tr>
<tr>
<td>EDM 221</td>
<td>Homeland Security &amp; Emergency Management</td>
</tr>
<tr>
<td>EDM 224</td>
<td>Practicum III</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking OR Interpersonal Communications</td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communications</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math (3) OR College Algebra (4)</td>
</tr>
<tr>
<td>POL/PSY/SOC</td>
<td>Select 2 courses from the 3 disciplines</td>
</tr>
<tr>
<td>EDM-949</td>
<td>Special Topics</td>
</tr>
</tbody>
</table>

Program Total: 67 credits

Successful completion of SDV 108 is a requirement of graduation.

Select 24 credits from the following EDM courses:

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDM 110</td>
<td>Principles of Emergency Management</td>
</tr>
<tr>
<td>EDM 111</td>
<td>Developing Emergency Management Skills</td>
</tr>
<tr>
<td>EDM 112</td>
<td>Emergency Planning</td>
</tr>
<tr>
<td>EDM 120</td>
<td>Special Populations in a Disaster</td>
</tr>
<tr>
<td>EDM 121</td>
<td>Emergency Disaster Response &amp; Recovery</td>
</tr>
<tr>
<td>EDM 122</td>
<td>Incident Management Systems and Emergency Operations Centers</td>
</tr>
<tr>
<td>EDM 210</td>
<td>Communications and Public Relations for Emergency Managers</td>
</tr>
<tr>
<td>EDM 211</td>
<td>Hazard Mitigation</td>
</tr>
<tr>
<td>EDM 222</td>
<td>Practicum II</td>
</tr>
<tr>
<td>EDM 223</td>
<td>Exercise Planning</td>
</tr>
<tr>
<td>EDM 220</td>
<td>Hazardous Materials Planning &amp; Management</td>
</tr>
<tr>
<td>EDM 221</td>
<td>Homeland Security &amp; Emergency Management</td>
</tr>
<tr>
<td>EDM 224</td>
<td>Practicum III</td>
</tr>
</tbody>
</table>

Select 27 credits from any of the categories below:

Fire Science
Police Science or Criminal Justice
Emergency Medical Services
Hazardous Materials Concentration
EDM-949 Special Topics

NOTE: 3 credits awarded for completion of the FEMA Professional Series (online at fema.gov)

See course descriptions in the back of the catalog to determine semester availability and more detailed information about the courses, including course prerequisites and co-requisites.

Please see an EDM program advisor to ensure correct course sequence.
Program Overview and Opportunities:
This program is designed to fill a critical and growing need for emergency and disaster management personnel in the public and private sector. This program will prepare the student for positions in the disaster management profession or to transfer to a four-year college or university. The student obtaining this diploma is prepared for employment in government agencies, private corporations, industry, educational and health care institutions. Students with prior training or certifications in similar fields may receive college credits toward their degree. Students must complete a minimum of 33 credits to earn a diploma in Emergency & Disaster Management Methods & Tactics. The diploma program can build upon the existing skills of first responders and those individuals who complete college certificated training, military training, and/or are certified as law enforcement officers, emergency medical technicians, paramedics, firefighters, safety professionals, or hazardous material technicians.

National employment trends show job growth predictions of 18-26 percent with median salaries of entry level employees of $12 to $39/hour. 80 percent of these positions require some college or a college degree. The median hourly wage in Iowa is $18.22. (Career Voyages: www.careervoyages.gov/homelandsecurity-main.cfm)

To be accepted into the program, students must achieve the following scores on the Computerized Placement Test: 80 Reading; 86 Sentence Structure; 56 Arithmetic or 38 the following scores on the Computerized Placement Test: 80 Reading; 86 Sentence Structure; 56 Arithmetic or 38

Emergency & Disaster Management
Methods & Tactics

Diploma
Sioux City Campus

To be accepted into the program, students must achieve the following scores on the Computerized Placement Test: 80 Reading; 86 Sentence Structure; 56 Arithmetic or 38

Program Overview and Opportunities:
This program is designed to fill a critical and growing need for emergency and disaster management personnel in the public and private sector. This program will prepare the student for positions in the disaster management profession or to transfer to a four-year college or university. The student obtaining this diploma is prepared for employment in government agencies, private corporations, industry, educational and health care institutions. Students with prior training or certifications in similar fields may receive college credits toward their degree. Students must complete a minimum of 33 credits to earn a diploma in Emergency & Disaster Management Methods & Tactics. The diploma program can build upon the existing skills of first responders and those individuals who complete college certificated training, military training, and/or are certified as law enforcement officers, emergency medical technicians, paramedics, firefighters, safety professionals, or hazardous material technicians.

National employment trends show job growth predictions of 18-26 percent with median salaries of entry level employees of $12 to $39/hour. 80 percent of these positions require some college or a college degree. The median hourly wage in Iowa is $18.22. (Career Voyages: www.careervoyages.gov/homelandsecurity-main.cfm)

To be accepted into the program, students must achieve the following scores on the Computerized Placement Test: 80 Reading; 86 Sentence Structure; 56 Arithmetic or 38

Are You a Part-time Student?
All of the courses could be taken on a part-time basis. Check the course descriptions for any pre-requisites. All of these courses are also offered online.

Refresher reading, English, or math course if CPT scores warrant; ENG-105; POL, PSY, SOC elective; MGT; EMS 114; Computer Elective and SOC 110 could all be taken before entry into the EDM program. Please see an EDM advisor to develop an individualized plan of study.

Program Advisor
Steve Ebsen, BS, Division Chair
Ext. 1232
Room T219
steve.ebsen@witcc.edu

See course descriptions in the back of the catalog to determine semester availability and more detailed information about the courses, including course prerequisites and co-requisites.

Please see an EDM program advisor to ensure correct course sequence.

Western Iowa Tech Community College 2013-2014 Catalog
Emergency & Disaster Management

Technical Emergency & Disaster Management

Certificate
Sioux City Campus

Program Overview and Opportunities:
These certificates were designed to fill a critical and growing need for emergency and disaster management personnel in the public and private sector. These certificates will prepare the student for positions in the disaster management profession and apply toward the diploma, degree or transfer to a four-year college or university. The student obtaining a certificate is better prepared for employment in government agencies, private corporations, industry, educational and health care institutions. Students with prior training or certifications in similar fields may receive college credits toward their degree. Contact a program advisor for more information. Students must complete the minimum number of credits to earn a certificate. The certificates can build upon the existing skills of first responders and those individuals who complete college certificated training, military training, and/or are certified as law enforcement officers, emergency medical technicians, paramedics, firefighters, safety professionals, or hazardous material technicians.

This program is an option for those individuals with prior experience and documented training in public services who seek a degree. National employment trends show job growth predictions of 18-26 percent with median salaries of entry level employees of $12 to $39/hour. 80 percent of these positions require some college or a college degree. The median hourly wage in Iowa is $18.22. (Career Voyages: www.careervoyages.gov/homelandsecurity-main.cfm)

To be accepted into the program, students must achieve the following scores on the Computerized Placement Test: 80 Reading; 86 Sentence Structure; 56 Arithmetic or 38 Elementary Algebra.

Program Advisor
Steve Ebsen, BS, Division Chair
Ext. 1232
steve.ebsen@witcc.edu

Technical Emergency & Disaster Management Certificate Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>EDM 122</td>
<td>Incident Management Systems and Emergency Operations Centers</td>
<td>3</td>
</tr>
<tr>
<td>EDM 111</td>
<td>Developing Emergency Management Skills</td>
<td>3</td>
</tr>
<tr>
<td>EDM 210</td>
<td>Communications and Public Relations for Emergency Management</td>
<td>3</td>
</tr>
<tr>
<td>EDM 110</td>
<td>Principles of Emergency Management</td>
<td>3</td>
</tr>
<tr>
<td>EDM 949</td>
<td>Special Topics: FEMA Professional Development Series (PDS) online at fema.gov (work experience credit)</td>
<td>3</td>
</tr>
<tr>
<td>Program Total</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

Emergency Planning

First Semester
SDV 108 The College Experience 1
EDM 112 Emergency Planning 3
EDM 211 Hazard Mitigation 3
Second Semester
EDM 212 Practicum I 3
EDM 121 Emergency Disaster Response & Recovery 3
EDM 949 Special Topics: FEMA Professional Development Series (PDS) online at fema.gov (work experience credit) 3
Program Total 16

Emergency Disaster
EDM 112 Emergency Planning 3
EDM 121 Emergency Disaster Response & Recovery 3
EDM 122 Incident Management Systems and Emergency Operations Centers 3
Program Total 9

See course descriptions in the back of the catalog to determine semester availability and more detailed information about the courses, including course prerequisites and co-requisites.

Please see an EDM program advisor to ensure correct course sequence.
Emergency Medical Services

Emergency Medical Services–Paramedic

Associate of Applied Science Degree
Sioux City Campus

Program Overview and Opportunities:
The Emergency Medical Technician - Paramedic program provides information and skill training to initiate and maintain treatment for medical, trauma, and cardiac emergencies. The Paramedic Specialist is the highest level of emergency responder training. The Paramedic AAS Degree offers a comprehensive course of study that prepares the graduate to sit for the EMT and EMT-Paramedic certification examinations as well as meet the requirements for the AAS degree.

Graduates are prepared to deliver emergency care to patients prior to their arrival at a hospital. Students are trained in life support procedures performed by following orders of the physicians or by following standard operating protocols.

Successful completion of course requirements allows students to write the certification examination for the EMT-P (Paramedic).

Employment of emergency medical technicians and paramedics is expected to grow by 19 percent between 2006 and 2016, which is faster than the average for all occupations. Full-time paid EMTs and paramedics will be needed to replace unpaid volunteers. It is becoming increasing difficult for emergency medical services to recruit and retain unpaid volunteers because of the amount of training and the large time commitment these positions require. As a result, more paid EMTs and paramedics are needed. Furthermore, as a large segment of the population—aging members of the baby boom generation—becomes more likely to have medical emergencies, demand will increase for EMTs and paramedics. There also will still be demand for part-time, volunteer EMTs and paramedics in rural areas and smaller metropolitan areas.

Median salaries in 2006 were $27,070 annually. (Bureau of Labor Statistics, 2010-2011)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>EMS 217</td>
<td>Emergency Medical Technician</td>
<td>7</td>
</tr>
<tr>
<td>BIO 169</td>
<td>Human Anatomy &amp; Physiology 1A w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math</td>
<td>3</td>
</tr>
<tr>
<td>ENG</td>
<td>English General Elective</td>
<td>3</td>
</tr>
<tr>
<td>BIO 174</td>
<td>Human Anatomy &amp; Physiology 2A w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers OR</td>
<td></td>
</tr>
<tr>
<td>BCA 206</td>
<td>Applied Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Humanities/Healthful Living Elective</td>
<td>3</td>
</tr>
<tr>
<td>EMS 540</td>
<td>NSC Paramedic I</td>
<td>13</td>
</tr>
<tr>
<td>EMS 541</td>
<td>Clinical I</td>
<td>3</td>
</tr>
<tr>
<td>EMS 810</td>
<td>Advanced Cardiac Life Support</td>
<td>1</td>
</tr>
<tr>
<td>EMS 820</td>
<td>Prehospital Trauma Life Support</td>
<td>1</td>
</tr>
<tr>
<td>EMS 545</td>
<td>NSC Paramedic II</td>
<td>13</td>
</tr>
<tr>
<td>EMS 546</td>
<td>Clinical II</td>
<td>3</td>
</tr>
<tr>
<td>EMS 815</td>
<td>Advanced Pediatric Life Support</td>
<td>1</td>
</tr>
<tr>
<td>EMS 825</td>
<td>Advanced Medical Life Support</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Program Total</strong></td>
<td><strong>67</strong></td>
</tr>
</tbody>
</table>

Are You a Part-time Student?
The following courses could be taken on a part-time basis before acceptance into the Paramedic Specialist program. Some of these courses are offered online.

Refresher reading, English, or math course if CPT scores warrant; ENG general ed. elective; MAT 772; Please see an EMS advisor to develop an individualized plan of study.

See course descriptions in the back of the catalog to determine semester availability and more detailed information about the courses, including course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see an advisor to ensure correct course sequence.
Emergency Medical Services

Advanced Emergency Medical Technician

Certificate
Sioux City, Cherokee, and Denison Campuses

Program Overview and Opportunities:
This course will provide the student with roles and responsibilities of the EMS provider; well-being including injury prevention and infections disease; an overview of human systems; pharmacology; venous access; airway management; training for management of medical and trauma emergencies; special considerations of the obstetric, neonatal, pediatric, and geriatric patients; and a focus on assessment-based management. This course will also provide the student the opportunity to apply past and current cognitive knowledge and psychomotor skills in a supervised clinical or field setting. Student must have current Iowa EMT certification, AGA HCP card, and state approved Mandatory Adult and Adult Reporter. Instructor consent required.

Advanced Emergency Medical Technician Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>EMS 217</td>
<td>Emergency Medical Technician</td>
<td>7</td>
</tr>
<tr>
<td>EMS 312</td>
<td>Advanced Emergency Medical Technician</td>
<td>7</td>
</tr>
<tr>
<td>Program Total</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

See course descriptions in the back of the catalog to determine semester availability and more detailed information about the courses, including course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see an advisor to ensure correct course sequence.

Program Advisors
Terry Sudrla, BS, MA
Room L434
LaDonna Crilly, BA
Room L434
Steve Ebsen, BS, Division Chair
Room T219

800.352.4649 or www.witcc.edu
Emergency Medical Services

Paramedic

Diploma
Sioux City Campus

Program Overview and Opportunities:
Students must be a certified EMT to enroll in the diploma program.

The Emergency Medical Technician - Paramedic program provides information and skill training to initiate and maintain treatment for medical, trauma, and cardiac emergencies. The Paramedic is the highest level of emergency responder training. The Paramedic diploma offers a comprehensive course of study that prepares the graduate to sit for the EMT-P certification examination as well as meeting the requirements for the degree. The course offerings also apply toward the AAS degree.

Graduates are prepared to deliver emergency care to patients prior to their arrival at a hospital. Students are trained in life support procedures performed by following orders of the physicians or by following standard operating protocols.

Successful completion of course requirements allows students to write the certification examination for the EMT-P (Paramedic).

Employment of emergency medical technicians and paramedics is expected to grow by 19 percent between 2006 and 2016, which is faster than the average for all occupations. Full-time paid EMTs and paramedics will be needed to replace unpaid volunteers. It is becoming increasing difficult for emergency medical services to recruit and retain unpaid volunteers because of the amount of training and the large time commitment these positions require. As a result, more paid EMTs and paramedics are needed. Furthermore, as a large segment of the population–aging members of the baby boom generation–becomes more likely to have medical emergencies, demand will increase for EMTs and paramedics. There also will still be demand for part-time, volunteer EMTs and paramedics in rural areas and smaller metropolitan areas. Median salaries in 2010 were $12.99-$15.45 per hour. (Bureau of Labor Statistics, 2010-2011)

Program Advisors
Terry Sudrla, BS, MA
Room L434
Ext. 1415
terry.sudrla@witcc.edu

LaDonna Crilly, BA
Room L434
Ext. 1286
ladonna.crilly@witcc.edu

Steve Ebsen, BS, Division Chair
Room T219
Ext. 1232
steve.ebsen@witcc.edu

See course descriptions in the back of the catalog to determine semester availability and more detailed information about the courses, including course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see an advisor to ensure correct course sequence.
Emergency Medical Services

Emergency Medical Technician

Certificate
Sioux City, Cherokee, and Denison Campuses

Program Overview and Opportunities:
Emergency Medical Technician provides students with the knowledge and skill necessary to perform basic emergency care and transport. Some advanced skills are taught.

Emergency Medical Technician Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS 217</td>
<td>Emergency Medical Technician</td>
<td>7</td>
</tr>
</tbody>
</table>

Program Total ........................................... 7

* Denotes courses commonly articulated with area high schools.

Program Advisors
Terry Sudrla, BS, MA    Ext. 1415    terry.sudrla@witcc.edu
Room L434
LaDonna Crilly, BA     Ext. 1286    ladonna.crilly@witcc.edu
Room L434
Steve Ebsen, BS, Division Chair  Ext. 1232    steve.ebsen@witcc.edu
Room T219

Emergency Medical Responder

Certificate
Sioux City, Cherokee, and Denison Campuses

Program Overview and Opportunities:
This course emphasizes the development of student skills in emergency medical care procedures. Curriculum includes life-threatening emergencies, injuries to various body parts, techniques of moving patients, CPR-BLS, Mandatory Reporting, and bloodborne pathogens. Successful completion of course requirements allows students to write certification examination for Emergency Medical Responder. Course meets pre-admission requirements for all health occupations.

Emergency Medical Responder Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS 114</td>
<td>Emergency Medical Responder*</td>
<td>2</td>
</tr>
</tbody>
</table>

Program Total ........................................... 2

* Denotes courses commonly articulated with area high schools.

Program Advisors
Terry Sudrla, BS, MA    Ext. 1415    terry.sudrla@witcc.edu
Room L434
LaDonna Crilly, BA     Ext. 1286    ladonna.crilly@witcc.edu
Room L434
Steve Ebsen, BS, Division Chair  Ext. 1232    steve.ebsen@witcc.edu
Room T219

See course descriptions in the back of the catalog to determine semester availability and more detailed information about the courses, including course prerequisites and co-requisites. Please see an Emergency Medical Services program advisor to ensure correct course sequence.
English

Associate of Arts Degree (Transfer)
Cherokee, Denison, and Sioux City Campuses

Program Overview and Opportunities:
With its focus on critical thinking and clear communication, the English program includes a variety of composition and literature courses which satisfy the requirements for the Associate of Arts degree while preparing students to finish the baccalaureate degree at four-year colleges and universities.

English students become adept at distilling meaning from complex situations and texts through the development of critical thinking and analytical skills. This discipline offers students the chance to read, write, and argue effectively about contemporary issues as well as perennial questions. All of these activities lead to students' becoming stronger writers and thinkers.

A degree in English provides students with excellent preparation for many careers. Graduates with a bachelor's degree in English frequently enter careers in education, journalism, publishing and editing, technical writing, advertising, and public relations. English is also a pre-professional major for careers in law, business, politics, and the ministry.

Are You a Part-time Student?
All of these courses can be taken on a part-time basis. See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. Please see an advisor to ensure correct course sequence.

Program Advisors
Leslie Erickson, PhD
Room L314
Ext. 1801
leslie.ericsson@witcc.edu

Theresa M. Jackson, MA
Room L314
Ext. 1248
theresa.jackson@witcc.edu

Helen Lewis, MA
Room L314
Ext. 1423
helen.lewis@witcc.edu

Beth Wulf, MA
Denison
Ext. 2628
beth.wulf@witcc.edu

Darin Moeller, MED, Division Chair
Room L314
Ext. 1493
darin.moeller@witcc.edu

English Associate of Arts Degree
Successful completion of SDV 108 is a requirement of graduation.

I. General Education Core
A. English and Speech (minimum of 9 credits)
   ENG 105 and 106
   SPC 112

B. Mathematics and Laboratory Sciences
   (minimum of 8 credits)
   Must include one math course and one lab science course from the following:
   BIO 105, 125, 163
   CHM 122
   ENV 111
   MAT 111, 121,
   PHS 120, 151

C. Social and Behavioral Sciences (minimum of 9 credits)
   CLS 212 or SOC 212 (required)
   Choose one course from section 2 plus one course from section 1 or 2:
   Section 1. History and Diverse Cultures
   (additional distribution choices)
   ANT 105
   GEO 121
   HIS 110, 111, 151, 152, 211
   LIT 150
   SOC 200, 210
   Section 2. Social and Political Sciences
   ECN 120, 130
   POL 111, 112, 121, 125, 151, 211
   PSY 111, 121
   SOC 110, 120

D. Humanities (minimum of 9 credits)
   Choose three courses from at least two of the following disciplines
   ART 101, 203, 204
   DRA 101, 112
   ENG 221
   GEO 121
   HIS 110, 111, 151, 152, 211
   LIT 150
   MUS 100, 202
   PHI 101, 105, 111
   REL 101, 105
   SC 110
   The College Experience (required)
   Consult a faculty advisor and the transferring institution and page 18 of the catalog.

II. Area of Concentration (minimum of 9 credits)
   ENG 150, 221; LIT 101, 110, 111, 124, 133, 140, 141, 150, 151, 185, 189

III. Electives (credits vary)
   SDV 108, The College Experience (required)
   Consult a faculty advisor, the transferring institution and page 18 of the catalog.

PROGRAM TOTAL

Western Iowa Tech Community College 2013-2014 Catalog

800.352.4649 or www.witcc.edu
Fire Science Technology

Associate of Applied Science Degree  
Sioux City Campus

Program Overview and Opportunities:
The Fire Science Technology program is designed to prepare students for entry-level technical or administrative careers in the fire science field by providing them with the necessary knowledge of the subject field, professional skills, and state-of-the-art techniques necessary for a successful career.

Employment possibilities include public sector fire services or private careers in areas such as firefighter, sprinkler and alarm system installer, safety engineering technician, fire safety and building inspection assistant or technician, insurance property damage appraiser/adjuster, property loss claims investigator, building codes inspector, and more.

Increasing opportunities also exist for transfer and articulation into four-year baccalaureate degree programs in fire science, public safety, and emergency management and planning.

This program is being designed in cooperation with officials of the local area fire departments and is intended to address the professional educational needs of practicing firefighters as well as to provide an educational path for those seeking a career.

Credit may be awarded for existing certifications and verified transcripted industry training toward the diploma.

Contact the program advisor for details.

Employment opportunities are predicted to grow by 19 percent between 2008 and 2018. The median annual earnings of a firefighter in 2010 was $45,250. The median annual earnings of a first-line supervisor in 2010 was $67,440. (Occupational Outlook Handbook. Bureau of Labor Statistics 2010-2011.)

To be accepted into the program, students much achieve the following scores on the Computerized Placement Test: 80 Reading; 86 Sentence Structure; 56 Arithmetic or 38 Elementary Algebra.

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.

Program Advisor
Steve Ebsen, BS, Division Chair  
Ext. 1232  
Room T219  
steve.ebsen@witcc.edu

Fire Science Technology Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>FIR 213</td>
<td>Principles of Emergency Services</td>
<td>3</td>
</tr>
<tr>
<td>FIR 127</td>
<td>Fire Behavior and Combustion</td>
<td>3</td>
</tr>
<tr>
<td>FIR 214</td>
<td>Legal Aspects of Emergency Services</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>FIR 145</td>
<td>Strategy and Tactics</td>
<td>3</td>
</tr>
<tr>
<td>FIR 200</td>
<td>Occupational Safety and Health in Emergency Services</td>
<td>3</td>
</tr>
<tr>
<td>FIR 152</td>
<td>Fire Protection Systems</td>
<td>3</td>
</tr>
<tr>
<td>FIR 124</td>
<td>Building Construction</td>
<td>3</td>
</tr>
<tr>
<td>PEA 148</td>
<td>Physical Fitness (2) OR</td>
<td></td>
</tr>
<tr>
<td>CRJ 257</td>
<td>Physical Fitness and Conditioning (1)</td>
<td>1 or 2</td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>FIR 140</td>
<td>Fire Fighter I</td>
<td>2</td>
</tr>
<tr>
<td>FIR 141</td>
<td>Fire Fighter II</td>
<td>2</td>
</tr>
<tr>
<td>EMS 217</td>
<td>Emergency Medical Technician</td>
<td>7</td>
</tr>
<tr>
<td>SOC/PSY</td>
<td>Sociology/Psychology Elective</td>
<td>3</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math (3) OR</td>
<td></td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra (4)</td>
<td>3 or 4</td>
</tr>
<tr>
<td>FIR 130</td>
<td>Fundamentals of Fire Prevention</td>
<td>3</td>
</tr>
<tr>
<td>FIR 184</td>
<td>Hazardous Materials Technician</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIR 226</td>
<td>Fire Administration I</td>
<td>3</td>
</tr>
<tr>
<td>FIR 235</td>
<td>Fire Investigation I (First Responders)</td>
<td>3</td>
</tr>
<tr>
<td>FIR 236</td>
<td>Fire Investigation II (Investigators)</td>
<td>3</td>
</tr>
<tr>
<td>FIR 149</td>
<td>Fire Protection Hydraulics and Water Supply</td>
<td>3</td>
</tr>
<tr>
<td>FIR 180</td>
<td>Chemistry of Hazardous Materials</td>
<td>3</td>
</tr>
<tr>
<td>FIR 949</td>
<td>Special Topics: can be used as electives</td>
<td>Variable</td>
</tr>
</tbody>
</table>

Program Total................................. 66 or 67

Curriculum Updated 8/8/13
Fire Science

Diploma
Sioux City Campus

Fire Science Diploma Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>FIR 213</td>
<td>Principles of Emergency Services</td>
<td>3</td>
</tr>
<tr>
<td>FIR 127</td>
<td>Fire Behavior and Combustion</td>
<td>3</td>
</tr>
<tr>
<td>FIR 214</td>
<td>Legal Aspects of Emergency Services</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td></td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td></td>
</tr>
<tr>
<td>FIR 145</td>
<td>Strategy and Tactics</td>
<td>3</td>
</tr>
<tr>
<td>FIR 200</td>
<td>Occupational Safety and Health in Emergency Services</td>
<td>3</td>
</tr>
<tr>
<td>FIR 152</td>
<td>Fire Protection Systems</td>
<td>3</td>
</tr>
<tr>
<td>FIR 124</td>
<td>Building Construction</td>
<td></td>
</tr>
<tr>
<td>PEA 148</td>
<td>Physical Fitness (2) OR</td>
<td></td>
</tr>
<tr>
<td>CRJ 257</td>
<td>Physical Fitness and Conditioning (1)</td>
<td></td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Program Total</td>
<td>32 or 33</td>
</tr>
</tbody>
</table>

To be accepted into the program, students must achieve the following scores on the Computerized Placement Test: 80 Reading; 86 Sentence Structure; 56 Arithmetic or 38 Elementary Algebra.

Are You a Part-time Student?
See a program advisor for a list of available courses for part-time students and to develop an individualized plan of study.

Program Advisor
Steve Ebsen, BS, Division Chair Ext. 1232
Room T219 steve.ebsen@witcc.edu

Fire Science Principles

Certificate
Sioux City Campus

Fire Science Principles Certificate Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>FIR 213</td>
<td>Principles of Emergency Services</td>
<td>3</td>
</tr>
<tr>
<td>FIR 127</td>
<td>Fire Behavior and Combustion</td>
<td>3</td>
</tr>
<tr>
<td>FIR 214</td>
<td>Legal Aspects of Emergency Services</td>
<td>3</td>
</tr>
<tr>
<td>FIR 145</td>
<td>Strategy and Tactics</td>
<td>3</td>
</tr>
<tr>
<td>FIR 200</td>
<td>Occupational Safety and Health in Emergency Services</td>
<td>3</td>
</tr>
<tr>
<td>FIR 152</td>
<td>Fire Protection Systems</td>
<td>3</td>
</tr>
<tr>
<td>FIR 124</td>
<td>Building Construction</td>
<td></td>
</tr>
<tr>
<td>PEA 148</td>
<td>Physical Fitness (2) OR</td>
<td></td>
</tr>
<tr>
<td>CRJ 257</td>
<td>Physical Fitness and Conditioning (1)</td>
<td></td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Program Total</td>
<td>32 or 33</td>
</tr>
</tbody>
</table>

To be accepted into the program, students must achieve the following scores on the Computerized Placement Test: 80 Reading; 86 Sentence Structure; 56 Arithmetic or 38 Elementary Algebra.

Are You a Part-time Student?
See a program advisor for a list of available courses for part-time students and to develop an individualized plan of study.

Program Advisor
Steve Ebsen, BS, Division Chair Ext. 1232
Room T219 steve.ebsen@witcc.edu

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. Please see an advisor to ensure correct course sequence.
Foreign Language

Associate of Arts Degree (Transfer)
Sioux City Campus

Program Overview and Opportunities:
Associate of Arts degree programs in the French, German, and Spanish languages are offered primarily for students who intend to major in one of these languages at four-year colleges and universities. Students who do not plan to major in foreign languages often enroll in French, German, or Spanish courses to make themselves more desirable to a prospective employer, to advance professionally, or to satisfy a personal interest. Students will learn to understand, speak, read, and write a widely spoken language as well as discover many unique traditions of French, German, or Spanish-speaking cultures.

The WITCC Spanish program offers a study abroad experience each year. Students have the opportunity to travel to Spanish speaking counties, live with families, receive intensive instruction in small class sizes, and are immersed in the culture. Students will receive credit in Spanish upon successful completion of the excursion.


Are You a Part-time Student?
All of these courses can be taken on a part-time basis. See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. Please see an advisor to ensure correct course sequence.

Foreign Language Associate of Arts Degree
Successful completion of SDV 108 is a requirement of graduation.

I. General Education Core
A. English and Speech (minimum of 9 credits)
   - ENG 105 and 106
   - SPC 112
B. Mathematics and Laboratory Sciences (minimum of 8 credits)
   - Must include one math course and one lab science course from the following:
     - BIO 105, 125, 163
     - CHM 122
     - ENV 111
     - MAT 111, 117, 121
     - PHS 120, 151
C. Social and Behavioral Sciences (minimum of 9 credits)
   - CLS 212 or SOC 212 (required)
   - Choose one course from section 2 plus one course from section 1 or 2:
     Section 1. History and Diverse Cultures (additional distribution choices)
       - ANT 105
       - GEO 121
       - HIS 110, 111, 151, 152, 211
       - LIT 150
       - SOC 200, 210
     Section 2. Social and Political Sciences
       - ECN 120, 130
       - POL 111, 112, 121, 125, 151, 211
       - PSY 111, 121
       - SOC 110, 120
D. Humanities (minimum of 9 credits)
   - Choose three courses from at least two of the following disciplines
     - ART 101, 203, 204
     - LIT 101, 124, 133, 185, 189
     - DRA 101, 112
     - MMS 101
     - ENG 221
     - MUS 100, 202
     - FLF 141, 142, 231, 232
     - PHI 101, 105, 111
     - FLG 141, 142, 231, 232
     - REL 101, 150
     - FLS 141, 142, 231, 232
     - SPC 122
     - HUM 101, 220
E. Computer Literacy/Technology - Suggested Elective
   - Computer literacy is critical to your success as a college student. It is strongly recommended that you consider your competency in computer applications. Some major programs at transfer institutions may require a computer applications course. Consult with your advisor regarding this suggested course.
   - CSC 110, Introduction to Computers
F. Distributed requirement (6 credits required)
   - Take two additional courses from any of these areas:
     - Mathematics, Laboratory Science, Social and Behavioral Sciences, and Humanities.

II. Area of Concentration (minimum of 9 credits)
   - FLG 141, 142, 231, 232
   - FLF 141, 142, 231, 232
   - FLS 141, 142, 231, 232

III. Electives (credits vary)
   - SDV 108, The College Experience (required)
   - Consult a faculty advisor, the transferring institution and page 18 of the catalog.

PROGRAM TOTAL.................................................................(Minimum) 64
Graphic Design

Associate of Applied Science Degree
Sioux City Campus

Program Overview and Opportunities:
The Graphic Design program provides students with the knowledge, skills, and a portfolio needed for employment as a designer. This field involves the use of specialized software combined with creativity, design, and problem solving skills to create visual communication. This program focuses on developing the creativity and software skills necessary to be competitive in this field. It is completed with an internship in the graphic design field that allows the student to transfer academic skills to a professional environment. Students and graduates of the Graphic Design program have won numerous design awards in the creative industry.

Employment of graphic designers is expected to grow as demand for graphic design continues to increase from advertisers, publishers, and computer design firms. Graduates may be employed as graphic designers at newspapers, print shops, advertising agencies, multimedia shops, web design shops, corporations or non-profit agencies. About 25 percent of designers are self-employed.

Many courses include hands-on lab hours with one-on-one assistance from the instructors. Credits may transfer, in whole or in part, to two- and four-year programs for continued education in a related field.

Graphic Design Curriculum

Course #     Title                                Credits
SDV 108     The College Experience             1
GRA 201     Design Principles I                3
GRA 131     Digital Layout                     3
GRA 140     Digital Imaging                   3
GRA 286     Creative Media                    3
GRA 198     Creative Career Seminar I         1
ENG 105     Composition I                     3
GRA 207     Design Principles II              3
GRA 132     Digital Layout II                 3
GRA 121     Digital Drawing                   3
GRA 151     Web Design                        3
GRA 208     Creative Career Seminar II        1
PSY 111     Intro to Psychology OR            3
SOC 110     Intro to Sociology                3
ART 186     Digital Photography              3
ENV 111     Environmental Science             4
CSC 110     Introduction to Computers OR      3
BCA 206     Applied Computer Concepts         3
GRA XXX     Digital Color Theory               3
GRA 240     Project Management for Creative Career 2
GRA 173     Typography                        3
GRA XXX     Interactive Publications (I Books) 1
GRA 202     Portfolio I                       3
SMM 110     Social Media Explored             3
GRA 255     Motion Media Design I             3
GRA 246     Design Concepts and Trends        3
GRA 203     Portfolio II                      3
XXX        Internship                         2
GRA 700     Capstone for Creative Careers     1

Program Total........................................70

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.

Program Advisors
Lana Brown, BS                                       Ext. 1410
Room A146                                           lana.brown@witcc.edu
Carol Ratcliff, BA                                     Ext. 1206
Room A146                                           carol.ratcliff@witcc.edu
Lynne Wilcke, BS                                      Ext. 1203
Room A146                                           lynne.wilcke@witcc.edu
Michael Rohlena, MFA, Division Chair                  Ext. 3217
Room A146                                           michael.rohlena@witcc.edu

Curriculum Updated 5/21/13
Web Design

Associate of Applied Science Degree
Sioux City Campus

Program Overview and Opportunities:
The Web Design program prepares students to create visually compelling Web sites that offer a positive user experience combining design principles with the right images and the right web authoring software. The student will be introduced to features of software used in web design. The program will give the students the knowledge and skills to confidently decide which software program is best suited to a specific Web design project.

With the Internet making our world a smaller place in which to work and live, the students may choose to work in small marketing firms, large corporations, or even out of their homes.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>GRA 201</td>
<td>Design Principles I</td>
<td>3</td>
</tr>
<tr>
<td>GRA 131</td>
<td>Digital Layout</td>
<td>3</td>
</tr>
<tr>
<td>GRA 140</td>
<td>Digital Imaging</td>
<td>3</td>
</tr>
<tr>
<td>GRA 286</td>
<td>Creative Media</td>
<td>3</td>
</tr>
<tr>
<td>GRA 198</td>
<td>Creative Career Seminar I</td>
<td>1</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>GRA 207</td>
<td>Design Principles II</td>
<td>3</td>
</tr>
<tr>
<td>GRA 132</td>
<td>Digital Layout II</td>
<td>3</td>
</tr>
<tr>
<td>GRA 121</td>
<td>Digital Drawing</td>
<td>3</td>
</tr>
<tr>
<td>GRA 151</td>
<td>Web Design</td>
<td>3</td>
</tr>
<tr>
<td>GRA 208</td>
<td>Creative Career Seminar II</td>
<td>1</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Intro to Psychology OR</td>
<td>3</td>
</tr>
<tr>
<td>SOC 110</td>
<td>Intro to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>BUS 150</td>
<td>E-Commerce</td>
<td>3</td>
</tr>
<tr>
<td>ART 186</td>
<td>Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers OR</td>
<td>3</td>
</tr>
<tr>
<td>BCA 206</td>
<td>Applied Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>GRA 211</td>
<td>Web Studio I</td>
<td>3</td>
</tr>
<tr>
<td>GRA XXX</td>
<td>Digital Color Theory</td>
<td>3</td>
</tr>
<tr>
<td>GRA 240</td>
<td>Project Management for Creative Career</td>
<td>2</td>
</tr>
<tr>
<td>GRA XXX</td>
<td>Interactive Publications (I Books)</td>
<td>1</td>
</tr>
<tr>
<td>GRA XXX</td>
<td>Responsive Web Design</td>
<td>3</td>
</tr>
<tr>
<td>SMM 101</td>
<td>Social Media Explored</td>
<td>3</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math</td>
<td>3</td>
</tr>
<tr>
<td>GRA 213</td>
<td>Web Studio II</td>
<td>3</td>
</tr>
<tr>
<td>GRA XXX</td>
<td>User Centered Design</td>
<td>3</td>
</tr>
<tr>
<td>GRA 255</td>
<td>Motion Media Design I</td>
<td>3</td>
</tr>
<tr>
<td>GRA 700</td>
<td>Capstone for Creative Career</td>
<td>1</td>
</tr>
</tbody>
</table>

Program Total ............................................. 70

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.
Visual Design

Certificate
Sioux City Campus

Program Overview and Opportunities:
This certificate is designed for the student pursuing a degree in graphic design or web design whose intent is to enhance their existing design skills to make them stand out in the design industry.

Upon completion of this certificate, the student should be able to show a range of creative solutions with a high degree of proficiency in strategic thinking and creative execution to further enhance their portfolio and career.

Visual Design Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>GRA 170</td>
<td>Graphic Design I*</td>
<td>2</td>
</tr>
<tr>
<td>INT 122</td>
<td>Design Theory</td>
<td>3</td>
</tr>
<tr>
<td>GRA 136</td>
<td>InDesign I</td>
<td>2</td>
</tr>
<tr>
<td>GRA 173</td>
<td>Typography</td>
<td>3</td>
</tr>
<tr>
<td>ART 120</td>
<td>2-D Design OR</td>
<td></td>
</tr>
<tr>
<td>ART 123</td>
<td>3-D Design OR</td>
<td></td>
</tr>
<tr>
<td>ART 133</td>
<td>Drawing OR</td>
<td></td>
</tr>
<tr>
<td>ART 143</td>
<td>Painting OR</td>
<td></td>
</tr>
<tr>
<td>DRA 166</td>
<td>Entertainment Drafting and Design</td>
<td>3</td>
</tr>
<tr>
<td>GRA 246</td>
<td>Design Concepts and Trends</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Program Total</td>
<td>17</td>
</tr>
</tbody>
</table>

* Denotes courses commonly articulated with area high schools.

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.
Please see an advisor to ensure correct course sequence.

Marketplace Design

Diploma
Sioux City Campus

Program Overview and Opportunities:
The Marketplace Design Diploma program increases students' visual language and builds an understanding of the connection between research, process and creative results. The curriculum focuses on how branding, marketing and design communications can influence success in the marketplace and basic knowledge of the tools and software used to create it. For more information contact Michael Rohlena (712) 274-8733, ext. 3217 or e-mail Michael.Rohlena@witcc.edu

Program Advisors
Lana Brown, BS
Room A146
Ext. 1410
lana.brown@witcc.edu

Carol Ratcliff, BA
Room A146
Ext. 1206
carol.ratcliff@witcc.edu

 Lynne Wilcke, BS
Room A146
Ext. 1203
lynne.wilcke@witcc.edu

Michael Rohlena, MFA, Division Chair
Room A146
Ext. 3217
michael.rohlena@witcc.edu

Marketplace Design Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>GRA 201</td>
<td>Design Principles I</td>
<td>3</td>
</tr>
<tr>
<td>GRA 131</td>
<td>Digital Layout</td>
<td>3</td>
</tr>
<tr>
<td>GRA 140</td>
<td>Digital Imaging</td>
<td>3</td>
</tr>
<tr>
<td>GRA 286</td>
<td>Creative Media</td>
<td>3</td>
</tr>
<tr>
<td>GRA 198</td>
<td>Creative Career Seminar I</td>
<td>1</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>1</td>
</tr>
<tr>
<td>GRA 207</td>
<td>Design Principles II</td>
<td>3</td>
</tr>
<tr>
<td>GRA 132</td>
<td>Digital Layout II</td>
<td>3</td>
</tr>
<tr>
<td>GRA 121</td>
<td>Digital Drawing</td>
<td>3</td>
</tr>
<tr>
<td>GRA 151</td>
<td>Web Design</td>
<td>3</td>
</tr>
<tr>
<td>GRA 208</td>
<td>Creative Career Seminar II</td>
<td>1</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Introduction to Psychology OR</td>
<td></td>
</tr>
<tr>
<td>SOC 110</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Program Total</td>
<td>33</td>
</tr>
</tbody>
</table>

Curriculum updated 4/30/13

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.
Please see an advisor to ensure correct course sequence.
Dental Assisting

Diploma
Hybrid Online
Sioux City Campus

Program Overview and Opportunities:
The mission of the Dental Assisting program is to prepare dental assistants to assume an active role in expanding quality dental services under the direction of a licensed dentist. Preparation includes a two-semester curriculum leading to a diploma in dental assisting. The curriculum includes classroom, laboratory, and clinical affiliation in a variety of settings.

Graduates are eligible to take the Dental Assisting National Board Examination to become a Certified Dental Assistant (C.D.A.) and may meet specific state board requirements. Credits may transfer, in whole or in part, to two- and four-year programs for continued education in the dental field. This program is accredited by the American Dental Association (ADA) Commission on Dental Accreditation, which is recognized by the Council on Postsecondary Accreditation and the United States Department of Education.

Admission to the Dental Assisting program is based on specific requirements. Applicants are required to meet the program-specific criteria. A minimum grade of “C” (2.0) must be obtained in all dental assisting and support courses to be eligible for graduation. For information on the Dental Assisting program application procedures and acceptance, contact the Admissions Office at Western Iowa Tech Community College.

Are You a Part-time Student?
See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. Please see an advisor to ensure correct course sequence.

Program Advisors
Jackie Krueger, CDA, RDA, BA
Room L307
Ext. 1267
jackie.krueger@witcc.edu

Kathy Pierce, CDA, RDA, EFDA, BS
Room L307
Ext. 1349
kathy.pierce@witcc.edu

Joni Miller, CDA, RDA, EFDA, BS
Room L307
Ext. 3240
joni.miller@witcc.edu

Gloria Stewart, RN, EdD, Division Chair
Room L313
Ext. 1350
gloria.stewart@witcc.edu

Dental Assisting Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>DEA 508</td>
<td>Fundamentals of Dental Assisting</td>
<td>7</td>
</tr>
<tr>
<td>DEA 256</td>
<td>Dental Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>DEA 270</td>
<td>Dental Therapeutics</td>
<td>3</td>
</tr>
<tr>
<td>DEA 405</td>
<td>Dental Materials</td>
<td>4</td>
</tr>
<tr>
<td>DEA 101</td>
<td>Professional Orientation</td>
<td>1</td>
</tr>
<tr>
<td>DEA 613</td>
<td>Dental Assisting Specialties</td>
<td>6</td>
</tr>
<tr>
<td>DEA 303</td>
<td>Dental Radiography</td>
<td>4</td>
</tr>
<tr>
<td>DEA 701</td>
<td>Dental Office Procedures</td>
<td>1</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Communication Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Program Total</td>
<td>35</td>
</tr>
</tbody>
</table>

Part-time Studies

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>DEA 256</td>
<td>Dental Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>DEA 270</td>
<td>Dental Therapeutics</td>
<td>3</td>
</tr>
<tr>
<td>DEA 101</td>
<td>Professional Orientation</td>
<td>1</td>
</tr>
<tr>
<td>DEA 701</td>
<td>Dental Office Procedures</td>
<td>1</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Communication Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>DEA 508</td>
<td>Fundamentals of Dental Assisting</td>
<td>7</td>
</tr>
<tr>
<td>DEA 405</td>
<td>Dental Materials</td>
<td>4</td>
</tr>
<tr>
<td>DEA 613</td>
<td>Dental Assisting Specialties</td>
<td>6</td>
</tr>
<tr>
<td>DEA 303</td>
<td>Dental Radiography</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Program Total</td>
<td>35</td>
</tr>
</tbody>
</table>

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see a Dental Assisting program advisor to ensure correct course sequence.
Pre-Dental Hygiene

Associate of Applied Science Degree
Hybrid Online
Sioux City Campus

Program Overview and Opportunities:
This degree program is designed for graduates of the dental assisting program who plan to continue their education in the dental field.

Students are strongly advised to familiarize themselves with the education program at the college to which they plan to transfer as requirements vary in each institution. Regional institutions have articulation agreements with WITCC. These can be reviewed in the Transfer Center.

Pre-Dental Hygiene Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>DEA 508</td>
<td>Fundamentals of Dental Assisting</td>
<td>7</td>
</tr>
<tr>
<td>DEA 256</td>
<td>Dental Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>DEA 270</td>
<td>Dental Therapeutics</td>
<td>3</td>
</tr>
<tr>
<td>DEA 405</td>
<td>Dental Materials</td>
<td>4</td>
</tr>
<tr>
<td>DEA 101</td>
<td>Professional Orientation</td>
<td>1</td>
</tr>
<tr>
<td>DEA 613</td>
<td>Dental Assisting Specialties</td>
<td>6</td>
</tr>
<tr>
<td>DEA 303</td>
<td>Dental Radiography</td>
<td>4</td>
</tr>
<tr>
<td>DEA 701</td>
<td>Dental Office Procedures</td>
<td>1</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Communication Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 169</td>
<td>Human Anatomy &amp; Physiology IA w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>CHM 122</td>
<td>Introduction to General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Healthful Living/Leisure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education Elective</td>
<td></td>
</tr>
<tr>
<td>BIO 174</td>
<td>Human Anatomy &amp; Physiology IIA w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>BIO 186</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>CHM 132</td>
<td>Intro to Organic and Biochemistry</td>
<td>4</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>SOC 110</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total........................................................................69

Program Advisors
Jackie Krueger, CDA, RDA, BA                                    Ext. 1267
Room L307                                                        jackie.krueger@witcc.edu

Kathy Pierce, CDA, RDA, EFDA, BS                                 Ext. 1349
Room L307                                                        kathy.pierce@witcc.edu

Joni Miller, CDA, RDA, EFDA, BS                                  Ext. 3240
Room L307                                                        joni.miller@witcc.edu

Gloria Stewart, RN, EdD, Division Chair                         Ext. 1350
Room L313                                                        gloria.stewart@witcc.edu

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see a Dental Assisting program advisor to ensure correct course sequence.
**Medical Assistant**

*Diploma*  
*Sioux City Campus*

**Program Overview and Opportunities:**
The Medical Assistant program is a three-semester diploma program that prepares students to be multi-skilled allied health professionals specifically trained to perform in ambulatory settings, such as physicians’ offices, clinics, and group practices, and perform administrative and clinical procedures.

The medical assisting diploma program is accredited by the commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB). National Certification is available to graduates.

According to the Bureau of Labor Statistics, employment of medical assistants is expected to grow much faster than average for all occupations through the year 2014. Employment growth will be driven by the increase in the number of group practices, clinics, and other health care facilities that need a high proportion of support personnel, particularly the flexible medical assistant who can handle both administrative and clinical duties. Medical assistants work primarily in outpatient settings, a rapidly growing sector of the health care industry.

*Students must achieve a grade point average of 2.0 (C) or above in all program requirements.*

---

### Medical Assistant Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>HSC 114</td>
<td>Medical Terminology*</td>
<td>3</td>
</tr>
<tr>
<td>BIO 163</td>
<td>Essentials of Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<tr>
<td>ADM 105</td>
<td>Introduction to Keyboarding</td>
<td>1</td>
</tr>
<tr>
<td>MAP 123</td>
<td>Administrative Medical Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>HIT 248</td>
<td>Essentials of Medical Coding</td>
<td>2</td>
</tr>
<tr>
<td>MAP 333</td>
<td>Fundamentals of Medical Assisting I</td>
<td>4</td>
</tr>
<tr>
<td>HSC 143</td>
<td>Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>HSC 218</td>
<td>Clinical Pathology for Allied Health</td>
<td>3</td>
</tr>
<tr>
<td>MAP 141</td>
<td>Medical Insurance</td>
<td>3</td>
</tr>
<tr>
<td>MAP 215</td>
<td>Medical Lab Techniques</td>
<td>4</td>
</tr>
<tr>
<td>MAP 338</td>
<td>Fundamentals of Medical Assisting II</td>
<td>4</td>
</tr>
<tr>
<td>HIT 313</td>
<td>Medical Office Computer Applications</td>
<td>1</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations</td>
<td>3</td>
</tr>
<tr>
<td>ADM 154</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>MAP 402</td>
<td>Medical Law and Ethics</td>
<td>2</td>
</tr>
<tr>
<td>MAP 612</td>
<td>Medical Assistant Externship</td>
<td>3</td>
</tr>
</tbody>
</table>

**Program Total** .................................................47

* Denotes courses commonly articulated with area high schools.

---

**Are You a Part-time Student?**

This program could be taken on a part-time basis. Some of the courses are offered online. Please see an advisor to develop an individualized plan of study.

---

**Program Advisors**

Carmen Monk, CMA, AAMA  
Room L314  
Ext. 1487  
carmen.monk@witcc.edu

Rexann Smith, RN, MSN  
Room L314  
Ext. 1209  
rexann.smith@witcc.edu

Gloria Stewart, RN, EdD, Division Chair  
Room L313  
Ext. 1350  
gloria.stewart@witcc.edu

---

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.
Nursing

Practical Nursing Program (Diploma)
www.witcc.edu/programs/136
Denison and Sioux City Campuses
Hybrid (online)

Associate Degree Nursing
Completion Program
(Associate of Applied Science Degree)
www.witcc.edu/programs/44
Sioux City Campus
Hybrid (online)

Western Iowa Tech Community College Nursing Programs are fully approved at the state level by the Iowa Board of Nursing and at the federal level by the National Council of State Boards of Nursing. Graduates are eligible to write licensure exams and to work in all 50 states.

Program Overview and Opportunities:
The Nursing Programs follow a 1+1 progression where the student can graduate with a diploma or a degree. The Practical Nursing Program is the diploma option (first “1”). Graduates are eligible to write the National Council Licensure Examination for Practical Nurses (NCLEX-PN). The student may choose to finish their education at this point or continue (second “1”) for an Associate Degree in Nursing (ADN). The ADN Completion Program is also an opportunity for the experienced licensed practical nurse (LPN) to continue their education to become eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN). Both programs have support courses and clinical requirements and are also available in a hybrid online format. Students have an option to enroll on a full-time or part-time basis. For further information on these health care careers, contact one of the nursing program advisors listed below.

The nursing profession offers a wide variety of opportunities and specialties. Nurses should be caring, sympathetic, responsible, and detail oriented individuals. According to the Bureau of Labor Statistics, overall job opportunities for nurses are expected to be excellent, with employment of nurses expected to grow much faster than the average for all occupations through 2016. Because the occupation is very large, many new job openings resulting from the need to replace experienced nurses leaving the occupation. (U.S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 2010-2011 edition.)

Nursing Program Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>BIO 169</td>
<td>Human Anatomy &amp; Physiology IA w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 151</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>PNN 624</td>
<td>Nursing I</td>
<td>9</td>
</tr>
<tr>
<td>BIO 174</td>
<td>Human Anatomy &amp; Physiology IIA w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PSY 121</td>
<td>Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PNN 625</td>
<td>Nursing II</td>
<td>9</td>
</tr>
<tr>
<td>PSY 241</td>
<td>Abnormal Psychology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 186</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>ADN 621</td>
<td>Nursing III</td>
<td>9</td>
</tr>
<tr>
<td>SOC 110</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I OR</td>
<td></td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Math elective</td>
<td>3</td>
</tr>
<tr>
<td>ADN 622</td>
<td>Nursing IV</td>
<td>9</td>
</tr>
<tr>
<td>Elective</td>
<td>Computer Literacy/General Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total ............................................73

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses and formally accepted into the Nursing Program.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. Please see a Nursing Program advisor to ensure correct course sequence.

Are You a Part-time Student?
The following courses could be taken on a part-time basis before acceptance into the Nursing Programs. Some of these courses are offered online.

Refresher reading, English, or math course if CPT scores warrant; BIO 169; PSY 111; BIO 151; BIO 174; PSY 121; PSY 241; BIO 186; Computer/Gen Ed. Elective; Math Elective; SOC 110; ENG 105; and SPC 112. Please see a nursing program advisor to develop an individualized plan of study.

Program Advisors

Pamela Ives, Advisor
Ext. 1313 L307 pamela.ives@witcc.edu
Heather Badar, MSN, RN Ext. 1288 L307 heather.badar@witcc.edu
Donna Eberly, MSN, RN Ext. 1388 L307 donna.eberly@witcc.edu
Kelli Engel, MSN, RN Ext. 1244 L307 kelli.engel@witcc.edu
Kelli Flack, MSN, RN Ext. 1319 L307 kelli.flack@witcc.edu
Kelly Hannah, MSN, RN Ext. 1829 L307 kelly.hannah@witcc.edu
Gabriella McDermott, MSN, RN Ext. 1224 L307 gabriella.mcdermott@witcc.edu
Deb Muller, MSN, RN Ext. 1385 L310 deb.muller@witcc.edu
Erin Neldberg, MSN, RN Ext. 1356 L307 erin.neldberg@witcc.edu
Kathy Singsank, MSN, RN Ext. 2650 Denison kathy.singsank@witcc.edu
Gloria Stewart, EdD, RN Ext. 1350 L113 gloria.stewart@witcc.edu
Jessica Thompson, MSN, RN Ext. 1824 L307 jessica.thompson@witcc.edu
Medication Aide

Certificate
Sioux City Campus

Program Overview and Opportunities:
This course is designed to train nursing assistants and residential attendants to safely administer nonparenteral medications in long-term care (nursing home) facilities and related areas.

Prerequisites:
1) Employed a minimum of six months in the facility recommending the student, and 2) Current Iowa Nurse Aide Registry status (for use in nursing home setting only).

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSC 173</td>
<td>Nurse Aide Theory</td>
<td>3</td>
</tr>
<tr>
<td>HSC 174</td>
<td>Nurse Aide Clinical</td>
<td>1</td>
</tr>
<tr>
<td>HSC 148</td>
<td>Medication Aide</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Program Total</strong></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

Program Advisor
Gloria Stewart, RN, EdD, Division Chair  Ext. 1350
Room L313  gloria.stewart@witcc.edu

Nursing Assistant

Certificate
Cherokee, Denison, and Sioux City Campuses

Program Overview and Opportunities:
This course is designed to provide the student with the fundamentals of patient care in the health care environment. Students will learn basic anatomy and physiology, medical terminology, meeting human needs, safety measures, infection control, and physical care. Co-requisite: HSC-173 and HSC-174 must be taken together.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSC 173</td>
<td>Nurse Aide Theory</td>
<td>3</td>
</tr>
<tr>
<td>HSC 174</td>
<td>Nurse Aide Clinical</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Program Total</strong></td>
<td><strong>4</strong></td>
</tr>
</tbody>
</table>

Program Advisor
Gloria Stewart, RN, EdD, Division Chair  Ext. 1350
Room L313  gloria.stewart@witcc.edu
Health Science

IV Therapy Concepts and Review (IV Therapy for LPNs)

Certificate
Sioux City Campus

Program Overview and Opportunities:
This certificate program is designed for the licensed practical nurse, registered nurse, or other interested health care professional to obtain theoretical concepts and skills associated with intravenous therapy. Successful completion of the classroom and clinical components by the LPN meets the Iowa Board of Nursing requirements for the LPN to perform procedures related to the expanded scope of practice for intravenous therapy.

Prerequisites for LPN’s only: 1) Hold a current unrestricted Iowa license as an LPN; 2) Documentation of 2080 hours of practice as an LPN; 3) Employed in a licensed hospital, a licensed skilled nursing facility, or a certified end-state renal dialysis unit whose policies allow the LPN to perform procedures related to the expanded scope of IV therapy; and, 4) Achieve a score of 90 percent or greater on the state LPN IV Math pre-test is required prior to enrollment into the course.

IV Therapy Concepts and Review Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNN 853</td>
<td>IV Therapy: Concepts and Techniques</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total..............................................................3

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.

Program Advisors
Don Young, RN, BSN Ext. 1355
don.young@witcc.edu
Room L307
Gloria Stewart, RN, EdD, Division Chair Ext. 1350
gloria.stewart@witcc.edu
Room L313

Supervision and Management in Health Care (LPN Supervisory)

Certificate
Cherokee, Denison, and Sioux City Campuses

Program Overview and Opportunities:
This certificate program is designed for the licensed practical or registered nurse to obtain supervisory and management skills. Successful completion meets the Iowa Board of Nursing requirement for LPNs who are working as supervisors in the long term care setting.

Supervision and Management in Health Care Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNN 835</td>
<td>LPN Supervising in Health Care Facilities</td>
<td>2</td>
</tr>
</tbody>
</table>

Program Total............................................................................2

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.

Program Advisors
Don Young, RN, BSN Ext. 1355
don.young@witcc.edu
Room L307
Gloria Stewart, RN, EdD, Division Chair Ext. 1350
gloria.stewart@witcc.edu
Room L313
Skill Enhancement

Certificate
Sioux City Campus

Program Overview and Opportunities:
These courses are designed for the incumbent worker to improve skills for the work site. Individual certificates will be issued upon completion of a course. Courses may be used for relicensure.

Are You a Part-time Student?
This program could be taken on a part-time basis. Please see an advisor to develop an individualized plan of study.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNN 835</td>
<td>LPN Supervising in Health Care Facilities</td>
<td>2</td>
</tr>
<tr>
<td>PNN 853</td>
<td>IV Therapy: Concepts and Techniques</td>
<td>3</td>
</tr>
<tr>
<td>HSC 143</td>
<td>Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>HSC 154</td>
<td>Basic ECG Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>HSC 138</td>
<td>Clinical Calculations for Healthcare Providers</td>
<td>2</td>
</tr>
<tr>
<td>PNN 805</td>
<td>Practical Nursing Principles and Concepts Review</td>
<td>2</td>
</tr>
<tr>
<td>ADN 823</td>
<td>RN Principles and Concepts Review</td>
<td>2</td>
</tr>
<tr>
<td>HSC 123</td>
<td>Transcultural Concepts in Health &amp; Illness</td>
<td>1</td>
</tr>
<tr>
<td>HSC 114</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>HSC 122</td>
<td>English/Spanish Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>DEA 810</td>
<td>RDA Expanded Functions I</td>
<td>2</td>
</tr>
<tr>
<td>DEA 820</td>
<td>RDA Expanded Functions II</td>
<td>1</td>
</tr>
<tr>
<td>DEA 830</td>
<td>RDA Nitrous Oxide Monitoring</td>
<td>1</td>
</tr>
<tr>
<td>DEA 803</td>
<td>Limited Dental Radiography</td>
<td>2</td>
</tr>
<tr>
<td>HSC 245</td>
<td>Team Building</td>
<td>1</td>
</tr>
<tr>
<td>HSC 109</td>
<td>Exploring Health Careers and Building Teams</td>
<td>3</td>
</tr>
<tr>
<td>HSC 111</td>
<td>Issues in Health and Society</td>
<td>3</td>
</tr>
<tr>
<td>HSC 198</td>
<td>Dental Terminology</td>
<td>3</td>
</tr>
<tr>
<td>HSC 105</td>
<td>Introduction to Health Occupations</td>
<td>1</td>
</tr>
<tr>
<td>HSC 165</td>
<td>Health Occupations Clinical Requirements</td>
<td>1</td>
</tr>
</tbody>
</table>
(Certified) Personal Trainer
Certificate or Diploma
Sioux City Campus

Program Overview and Opportunities:
The Certified Personal Trainer (CPT) program allows students to earn a nationally recognized personal training certification through the National Council of Strength and Fitness (NCSF) while earning college credit from Western Iowa Tech Community College. Upon successful completion of the certificate or diploma program, the graduate is eligible to take the NCSF-CPT certification exam. The graduate must be 18 at the time of testing. A 2.0 GPA is required to graduate.

Students in the program separate themselves from job competition by having a highly recognized professional credential. More people are seeking the advice of certified personal trainers every day to aid them in accomplishing their fitness goals. Students that successfully complete the course have the skills to excel in diverse professional environments. Graduates are employable in numerous segments of the health and fitness industry.

Certified Personal Trainer Curriculum

Certificate Requirements

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>BIO 169</td>
<td>Human Anatomy &amp; Physiology IA w/Lab*</td>
<td>4</td>
</tr>
<tr>
<td>HSC 270</td>
<td>Clinical Exercise Testing</td>
<td>3</td>
</tr>
<tr>
<td>BIO 151</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>BIO 174</td>
<td>Human Anatomy &amp; Physiology IIA w/Lab*</td>
<td>4</td>
</tr>
<tr>
<td>HSC 272</td>
<td>Certified Personal Trainer</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total: 18

Diploma Requirements

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>BIO 169</td>
<td>Human Anatomy &amp; Physiology IA w/Lab*</td>
<td>4</td>
</tr>
<tr>
<td>HSC 270</td>
<td>Clinical Exercise Testing</td>
<td>3</td>
</tr>
<tr>
<td>BIO 151</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>PEA 148</td>
<td>Physical Fitness I</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Math Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>English Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total: 32

* Denotes courses commonly articulated with area high schools.

Are You a Part-time Student?
See a program advisor for a list of available courses for part-time students and to develop an individualized plan of study.
Pharmacy Technician

Certificate
Sioux City Campus

Program Overview and Opportunities:
This certificate program is designed to provide skills for the student who wishes to work as a pharmacy technician in hospitals and the business sector. It also prepares participants to pass the national certification exam.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHR 105</td>
<td>Introduction to Pharmacy Technician</td>
<td>3</td>
</tr>
<tr>
<td>PHR 120</td>
<td>Pharmacology for Pharmacy Technician</td>
<td>3</td>
</tr>
<tr>
<td>PHR 947</td>
<td>Practicum</td>
<td>1</td>
</tr>
</tbody>
</table>

Program Total..............................................7

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. Please see the program advisor to ensure correct course sequence.

Program Advisors
Don Young, RN, BSN                           Ext. 1355
Room L307                                   don.young@witcc.edu
Gloria Stewart, RN, EdD, Division Chair     Ext. 1350
Room L313                                   gloria.stewart@witcc.edu

Pharmacy Technician

Diploma
Sioux City Campus

Program Overview and Opportunities:
The pharmacy technician diploma program will prepare students for entry-level pharmacy technician positions in both the institutional and community pharmacy setting. The pharmacy technician is one of the fastest growing professions in the medical care field. A pharmacy technician is an individual who, under the supervision of a pharmacist, assists in the day-to-day pharmacy operations that do not require the professional judgment of a pharmacist. Pharmacy technicians may perform many of the same duties as a pharmacist; however, all of their work must be checked by a pharmacist before medications can be dispensed to a customer or patient.

A central defining feature of the technician’s job is accountability to the pharmacist for the quality and accuracy of his or her performance. Preparing medications involves using sterile and nonsterile techniques to count, measure, and compound drugs. Additional duties of the pharmacy technician include: receiving and verifying written prescriptions, taking prescription refill requests, preparing IV medications, operating computer and automation systems, applying prescription and auxiliary labels to medication bottles, control and price inventorying, ordering supplies, restocking shelves, preparing insurance claim forms and operating cash registers. Students must achieve a minimum of a 2.0 (C) in all courses.

Graduates are eligible to take the National Pharmacy Technician Certification Examination. This exam is voluntary in many states; however, successful completion of the exam demonstrates a standard competency level of the individual to function in the role of a pharmacy technician throughout the United States.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>PHR 105</td>
<td>Introduction to Pharmacy Technician</td>
<td>3</td>
</tr>
<tr>
<td>HSC 114</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 163</td>
<td>Essentials of Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math</td>
<td>3</td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>PHR 120</td>
<td>Pharmacology for Pharmacy Technician</td>
<td>3</td>
</tr>
<tr>
<td>PHR 947</td>
<td>Practicum</td>
<td>1</td>
</tr>
<tr>
<td>HSC 245</td>
<td>Team Building</td>
<td>3</td>
</tr>
<tr>
<td>BCA 115</td>
<td>Internet Basics</td>
<td>1</td>
</tr>
</tbody>
</table>

Program Total..............................................33

Are You a Part-time Student?
This program could be taken on a part-time basis.
Please see an advisor to develop an individualized plan of study.

Program Advisors
Don Young, RN, BSN                           Ext. 1355
Room L307                                   don.young@witcc.edu
Gloria Stewart, RN, EdD, Division Chair     Ext. 1350
Room L313                                   gloria.stewart@witcc.edu

800.352.4649 or www.witcc.edu
Health Science

Physical Therapist Assistant (PTA)

Associate of Applied Science Degree
Sioux City Campus

Accredited by the Commission in Accreditation in Physical Therapy Education (CAPTE)

This program has specific admissions requirements. The PTA program can be taken by a part-time/eventual full-time student if general education prerequisites are taken before enrolling in the PTA program. See a PTA advisor to develop the program of study plan that is appropriate for you.

Program Overview and Opportunities:
Physical Therapist Assistants work under the supervision of a physical therapist. Their duties include assisting the physical therapist in implementing treatment programs according to the plan of care, instructing patients in exercises and activities of daily living, conducting treatments, using special equipment, administering modalities and other treatment procedures, and reporting to the physical therapist on the patient’s response to treatment. Employment is expected to grow much faster than average because of increasing demand for physical therapy services. Job prospects for physical therapist assistants are expected to be very good.


Are You a Part-time Student?
The following courses could be taken on a part-time basis before acceptance into the PTA program. Some of these courses are offered online.

Refresher reading, English, or math course if CPT scores warrant; PTA 104; HSC 114; BIO 169; BIO 174; ENG 105; PSY 111; PSY 121; MAT 121; Computer Elective; and SOC 110. Please see a PTA advisor to develop an individualized plan of study.

Program Advisors
Linda Mercer, MPT
Room L307
linda.mercer@witcc.edu

Barbara-Anne Huculak, EdD, PT
Room L307
barbara-anne.huculak@witcc.edu

Gloria Stewart, RN, EdD, Division Chair
Room L313
gloria.stewart@witcc.edu

Physical Therapist Assistant Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>BIO 169</td>
<td>Human Anatomy &amp; Physiology IA w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>PTA 104</td>
<td>Introduction to Physical Therapy</td>
<td>1</td>
</tr>
<tr>
<td>PTA 130</td>
<td>Activities of Daily Living</td>
<td>4</td>
</tr>
<tr>
<td>HSC 114</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>HSC 170</td>
<td>Health Care Interaction</td>
<td>2</td>
</tr>
<tr>
<td>BIO 174</td>
<td>Human Anatomy &amp; Physiology IIA w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>HSC 127</td>
<td>Kinesiology</td>
<td>4</td>
</tr>
<tr>
<td>PTA 170</td>
<td>Physical Therapy Science I</td>
<td>5</td>
</tr>
<tr>
<td>HSC 218</td>
<td>Clinical Pathology for Allied Health</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective
Computer Elective
College Algebra
Introduction to Psychology
Introduction to Sociology

PTA 270 | Physical Therapy Science II                       | 5       |
HSC 265 | Clinical Neurology                                | 2       |
PTA 189 | Physical Agents                                   | 3       |
PTA 260 | Management of Clinical Services                   | 3       |
Elective | Humanities/Healthful Living Elective              | 1       |
PSY 121 | Developmental Psychology                          | 3       |

PTA 441 | Clinical Affiliation I and Seminar                | 3       |
PTA 442 | Clinical Affiliation II and Seminar               | 4       |
PTA 443 | Clinical Affiliation III and Seminar              | 5       |

Program Total...............................................................76

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses and formally accepted into the PTA program.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. Please see a PTA advisor to ensure correct course sequence.
Sports Medicine - Athletic Training

**Course #** | **Title** | **Credits**
--- | --- | ---
SDV 108 | The College Experience | 1
PSY 111 | Intro to Psychology (meets Soc/Beh Sci course requirement) | 3
ENG 105 | Composition I | 3
BIO 169 | Human Anatomy & Physiology I (w/lab) | 4
SPC 122 | Interpersonal Communication (or selected humanities) | 3
TBA | Introduction to Athletic Training | 2
ENG 106 | Composition II | 3
BIO 174 | Human Anatomy & Physiology II (w/lab) | 4
HSC 127 | Kinesiology (w/lab) | 4
TBA | Prevention & Care in Athletic Training | 4
TBA | Clinical Practicum in Athletic Training I | 1
CLS 212 | Diversity | 3
MAT 121 | College Algebra | 4
CHM 166 | General Chemistry I | 5
SPC 112 | Public Speaking | 3
TBA | Clinical Practicum in Athletic Training II | 1
BIO 151 | Nutrition | 3
CHM 176 | General Chemistry II | 5
PHI 105 | Introduction to Ethics (or selected humanities course) | 3
TBA | Clinical Practicum in Athletic Training III | 1
MAT 157 | Statistics | 4

*Program Total* | 64

**Program Overview and Opportunities:**
Certified Athletic Trainers are multi-skilled allied healthcare workers that work in collaboration with physicians to provide initial prevention, evaluation, treatment, and rehabilitation of acute and chronic medical conditions. The Athletic training degree at Western Iowa Tech Community College will prepare students wanting to pursue the profession of Athletic Training through core classroom work and clinical practicum experience. Job setting for Certified Athletic Trainers include colleges, universities, hospitals clinics, secondary schools, professional sports teams, occupational, industrial, and performing arts. To learn more about the profession of Athletic Training you can visit the National Athletic Trainers’ Association (NATA) Web site at [www.nata.org](http://www.nata.org).

Students who want to become Certified Athletic Trainers must earn a bachelor’s degree from a four-year institution which has an accredited Athletic Training Education Program. Western Iowa Tech Community College has created partnerships with Athletic Training Education Programs at area colleges and universities to allow for the student to transfer at the conclusion of obtaining an Associate Degree. Students should coordinate his/her program of study with transfer staff from their designated transfer institution.

* Requirement
CCFR 1033, BLS Providers

“An ACT Score of 22 or a Science CPT score of 12/20 or better is required to take BIO 151, Nutrition or BIO 169, Anatomy and Physiology I. If a student has not achieved one of these scores BIO 070, Basic Biological Concepts is the prerequisite to BIO 151 and BIO 169. The Science CPT and BIO 070 only serve as prerequisites to BIO 151 and BIO 169, they are not used for any other purpose. If a student wishes to prepare and retake the Science CPT there are video lectures/self-assessment quizzes available for this purpose on [my.witcc.edu](http://my.witcc.edu) under “Student Resources”-Student Success Center Tutoring-Science Placement Test Preparation.”

**Program Advisors**
Darin Moeller, MED, Division Chair
Room A314
darin.moeller@witcc.edu

Page Updated 6/13/13
### Sports Medicine - General Studies

**Associate of Science Degree**  
**Sioux City Campus**

#### Program Overview and Opportunities:
The Sports Medicine program leads to an Associate of Science degree curriculum preparing students to transfer to a four-year institution. Certification athletic trainers are professionals who specialize in the prevention, diagnosis and treatment of injuries caused by athletic, physical activity. This program will provide the background and basic fundamentals needed to successfully pursue a bachelor’s degree. It also gives students exposure to the life of an athletic trainer. With the completion of a bachelor’s degree, certified athletic trainers are employed in colleges, high schools, doctor’s offices and clinics. Many athletic trainers continue their education to the master’s degree level.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>CHM 166</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>BIO 116</td>
<td>General Biology I</td>
<td>4</td>
</tr>
<tr>
<td>ENG 106</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>BIO 117</td>
<td>General Biology II</td>
<td>4</td>
</tr>
<tr>
<td>CLS 212</td>
<td>Diversity</td>
<td>3</td>
</tr>
<tr>
<td>CHM 176</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Intro To Psychology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 169</td>
<td>Human Anatomy &amp; Physiology I (w/lab)</td>
<td>4</td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communication (or selected humanities)</td>
<td>3</td>
</tr>
<tr>
<td>HSC 127</td>
<td>Kinesiology (w/lab)</td>
<td>4</td>
</tr>
<tr>
<td>PHI 105</td>
<td>Introduction to Ethics (or selected humanities course)</td>
<td>3</td>
</tr>
<tr>
<td>CHM 261</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>BIO 174</td>
<td>Human Anatomy &amp; Physiology II (w/lab)</td>
<td>4</td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>BIO 151</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>MAT 157</td>
<td>Statistics</td>
<td>4</td>
</tr>
<tr>
<td>CHM 271</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
</tbody>
</table>

**Program Total** .................................................. 71

*Requirement  
CCPR 1033, BLS Providers

"An ACT Score of 22 or a Science CPT score of 12/20 or better is required to take BIO 151, Nutrition or BIO 169, Anatomy and Physiology I. If a student has not achieved one of these scores BIO 070, Basic Biological Concepts is the prerequisite to BIO 151 and BIO 169. The Science CPT and BIO 070 only serve as prerequisites to BIO 151 and BIO 169, they are not used for any other purpose. If a student wishes to prepare and retake the Science CPT there are video lectures/self-assessment quizzes available for this purpose on my.witcc.edu under "Student Resources"-Student Success Center Tutoring-Science Placement Test Preparation."
Surgical Technology
Associate of Applied Science Degree
Sioux City Campus

Program Overview and Opportunities:
This degree program is designed for the surgical technology diploma graduate who wants to continue his or her education and receive an associate degree. With the escalating rate of change and increasing complexity of surgical procedures, the associate degree option will provide the student with a broader education basis, which may assist in career advancement.

Admission to the Surgical Technology program requires applicants to meet program specific criteria. Students must meet a predetermined CPT score and have a high school diploma or equivalent. Part-time enrollment is available. Please see an advisor to develop an individual course of study. Students must achieve “C” (2.0) or above for all program requirements.

Surgical Technology Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>BIO 169</td>
<td>Human Anatomy &amp; Physiology IA w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>SUR 127</td>
<td>Intro to Surgical Technology</td>
<td>3</td>
</tr>
<tr>
<td>SUR 203</td>
<td>Surgical Techniques</td>
<td>8</td>
</tr>
<tr>
<td>SUR 123</td>
<td>Patient Care Concepts</td>
<td>2</td>
</tr>
<tr>
<td>BIO 174</td>
<td>Human Anatomy &amp; Physiology IIA w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>SUR 228</td>
<td>Surgical Procedures I</td>
<td>6</td>
</tr>
<tr>
<td>SUR 229</td>
<td>Surgical Procedures II</td>
<td>3</td>
</tr>
<tr>
<td>SUR 525</td>
<td>Surgical Preceptorship</td>
<td>3</td>
</tr>
<tr>
<td>SUR 420</td>
<td>Pharmacology for the Surgical Technologist</td>
<td>2</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 186</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>SOC 110</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Computer Elective</td>
<td>3</td>
</tr>
<tr>
<td>BIO 151</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>PHI 105</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Math Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education Elective</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Program Total</td>
<td>66</td>
</tr>
</tbody>
</table>

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Are You a Part-time Student?
Prerequisites for this program could be taken on a part-time basis. Please see an advisor to develop an individualized plan of study.

Program Advisors
Renee Nemitz, CST, RN, AAS
Room L307
Ext. 1391
reneenemitz@witcc.edu

Gloria Stewart, RN, EdD, Division Chair
Room L313
Ext. 1350
gloria.stewart@witcc.edu
Surgical Technology

Diploma
Sioux City Campus

Program Overview and Opportunities:
The Surgical Technology program is designed to prepare students to function as members of the surgical team in hospitals and clinics with registered nurses and surgeons in the operating room. The graduate is qualified to prepare the surgical environment and function as a team member during the operative procedures. National certification is available to graduates. The surgical technology program is accredited by the Commission on Accreditation for Allied Health Education Programs (CAAHEP).

Job openings are available nationwide for graduates of the surgical technology program. Employment of surgical technologists is expected to grow faster than the average for all occupations through the year 2014 as the volume of surgery increases (Bureau of Labor statistics).

Admission to the surgical technology program requires applicants to meet program-specific criteria. For information on application procedures and acceptance, contact the Admissions Office at WITCC. Part-time enrollment is available. Please see a program advisor to develop an individual plan of study. Student must meet predetermined CPT scores and have a high school diploma or equivalent. Students must achieve a grade point average of 2.00 (C) or above in all program requirements.

Surgical Technology Diploma Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>BIO 169</td>
<td>Human Anatomy &amp; Physiology I w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>SUR 127</td>
<td>Intro to Surgical Technology</td>
<td>3</td>
</tr>
<tr>
<td>SUR 203</td>
<td>Surgical Techniques</td>
<td>8</td>
</tr>
<tr>
<td>SUR 123</td>
<td>Patient Care Concepts</td>
<td>2</td>
</tr>
<tr>
<td>BIO 174</td>
<td>Human Anatomy &amp; Physiology II w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>SUR 228</td>
<td>Surgical Procedures I</td>
<td>6</td>
</tr>
<tr>
<td>SUR 229</td>
<td>Surgical Procedures II</td>
<td>3</td>
</tr>
<tr>
<td>SUR 525</td>
<td>Surgical Preceptorship</td>
<td>3</td>
</tr>
<tr>
<td>SUR 420</td>
<td>Pharmacology for the Surgical Technologist</td>
<td>2</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total............................................................39

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see the program advisor to ensure correct course sequence.
History

Associate of Arts Degree (Transfer)
Cherokee, Denison, and Sioux City Campuses

Program Overview and Opportunities:
Students completing the History program earn an Associate of Arts degree and are prepared to transfer to a four-year college or university. If you’re curious, organized, and a good reader and writer, you’ll do well as a history major if you’re able to examine details and use them to draw a “big picture” of the past. The study of the past broadens our perspective and allows us to discover the essential elements of human existence.

Qualifications include good writing and research skills, ability to communicate with diverse groups of people, ability to assess and interpret the past to determine what happened and why, to examine court documents, diaries, letters, and newspaper accounts. The curriculum provides a broad perspective of historical issues, methods of historical study, and research techniques. Skills of analysis and synthesis also provide a means to study related areas in the social sciences such as sociology and political science. In addition, the program includes a challenging distribution of humanities, mathematics, and natural science courses for a comprehensive general education background.

Graduates with a bachelor’s degree in history often enter such professions as education; government agencies—especially the foreign service and the national park service; museum direction, library, and archival work; journalism; and public policy and planning agencies. (Bureau of Labor Statistics, 2008-2009)

History Associate of Arts Degree

Successful completion of SDV 108 is a requirement of graduation.

I. General Education Core
A. English and Speech (minimum of 9 credits)
   ENG 105 and 106
   SPC 112
B. Mathematics and Laboratory Sciences (minimum of 8 credits)
   Must include one math course and one lab science course from the following:
   BIO 105, 125, 163
   CHM 122
   ENV 111
   MAT 111, 117, 121
   PHS 120, 151
C. Social and Behavioral Sciences (minimum of 9 credits)
   CLS 212 or SOC 212 (required)
   Choose one course from section 2 plus one course from section 1 or 2:
   Section 1. History and Diverse Cultures
   (additional distribution choices)
   ANT 105
   GEO 121
   HIS 110, 111, 151, 152, 211
   LIT 150
   SOC 200, 210
   Section 2. Social and Political Sciences
   ECN 120, 130
   POL 111, 121, 125, 151, 211
   PSY 111, 121
   SOC 110, 120
D. Humanities (minimum of 9 credits)
   Choose three courses from at least two of the following disciplines
   ART 101, 203, 204
   DRA 101, 112
   ENG 221
   FLF 141, 142
   FLG 141, 142, 231, 232
   FLS 141, 142, 231, 232
   HUM 101, 220
   MMS 101
   PHI 101, 105, 111
   REL 101, 150
   SPC 122
E. Computer Literacy/Technology - Suggested Elective
   Computer literacy is critical to your success as a college student. It is strongly recommended that you consider your competency in computer applications. Some major programs at transfer institutions may require a computer applications course. Consult with your advisor regarding this suggested course.
   CSC 110, Introduction to Computers
F. Distributed requirement (6 credits required)
   Take two additional courses from any of these areas:
   Mathematics, Laboratory Science, Social and Behavioral Sciences, and Humanities.

II. Area of Concentration (minimum of 9 credits)
   GEO 121; HIS 110, 111, 151, 152, 211; POL 111

III. Electives (credits vary)

   SDV 108, The College Experience (required)
   Consult a faculty advisor, the transferring institution and page 18 of the catalog.

PROGRAM TOTAL ...............................................................(Minimum) 64

Program Advisor
Darin Moeller, MED, Division Chair
Room L314
darin.moeller@witcc.edu

800.352.4649 or www.witcc.edu 125 Western Iowa Tech Community College 2013-2014 Catalog
Independent Filmmaking

Associate of Applied Science Degree
Sioux City Campus

This program offers students the opportunity to formulate, construct, and deliver film, digital video, and media arts. As digital technology and computer-generated imaging continues to transform the industry, students will become familiar with advances in the film and video industry.

Program Overview and Opportunities:
Coursework includes storyboard development and scripting, digital film and video production techniques, digital sound and recording basics, video editing, rendering and animation, directing productions, the history of film and television, and basic business and management practices.

Skills students will acquire include the ability to design productions for film or video, use writing and editing skills, apply animation techniques, use various kinds of cameras and recording equipment, direct productions, employ business and management skills, utilize a working knowledge of the film industry, and incorporate creative and technical skills.

Graduates are prepared to seek entry-level employment as a cinematographer or camera operator; audio and digital video editor, technician or producer; or animator. Also, there are hundreds of film festivals throughout the United States which provide venues for student-produced videos and “shorts.” Film festivals provide the opportunity for novice filmmakers to receive recognition of their work and provide a stepping stone to entry into this exciting field for both directors and producers of film/video production.

Independent Filmmaking Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ELE 101</td>
<td>Industrial Safety</td>
<td>1</td>
</tr>
<tr>
<td>GRA 100</td>
<td>Mac OS</td>
<td>1</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>CIN 101</td>
<td>Introduction to Filmmaking</td>
<td>3</td>
</tr>
<tr>
<td>CIN 102</td>
<td>Introduction to Screenwriting</td>
<td>3</td>
</tr>
<tr>
<td>CIN 140</td>
<td>Feature Film I</td>
<td>3</td>
</tr>
<tr>
<td>CIN 152</td>
<td>Documentaries: Team II</td>
<td>2</td>
</tr>
<tr>
<td>CIN 141</td>
<td>Feature Film II</td>
<td>3</td>
</tr>
<tr>
<td>CIN 105</td>
<td>Filmmaking Tools &amp; Software</td>
<td>3</td>
</tr>
<tr>
<td>CIN 120</td>
<td>Individual Film Project I</td>
<td>1</td>
</tr>
<tr>
<td>CIN 115</td>
<td>Global Independent Film</td>
<td>3</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations</td>
<td>3</td>
</tr>
<tr>
<td>CIN 108</td>
<td>Filmmaking Forum I</td>
<td>2</td>
</tr>
<tr>
<td>CIN 121</td>
<td>Individual Film Project II</td>
<td>1</td>
</tr>
<tr>
<td>GRA 143</td>
<td>Photoshop I</td>
<td>2</td>
</tr>
<tr>
<td>MUS 285</td>
<td>Audio Production &amp; Equipment I</td>
<td>3</td>
</tr>
<tr>
<td>CIN 200</td>
<td>Cinematography</td>
<td>3</td>
</tr>
<tr>
<td>CIN 122</td>
<td>Individual Film Project III</td>
<td>1</td>
</tr>
<tr>
<td>CIN 142</td>
<td>Feature Film III</td>
<td>3</td>
</tr>
<tr>
<td>DRA 130</td>
<td>Acting I</td>
<td>3</td>
</tr>
<tr>
<td>CIN 103</td>
<td>Intermediate Filmmaking</td>
<td>3</td>
</tr>
<tr>
<td>DRA 112</td>
<td>American Film</td>
<td>3</td>
</tr>
<tr>
<td>CIN 151</td>
<td>Storytelling: Team I</td>
<td>2</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math</td>
<td>3</td>
</tr>
<tr>
<td>CIN 123</td>
<td>Individual Film Festival IV</td>
<td>1</td>
</tr>
<tr>
<td>CIN 143</td>
<td>Feature Film IV</td>
<td>3</td>
</tr>
<tr>
<td>MMS 265</td>
<td>Mass Communications Law</td>
<td>3</td>
</tr>
<tr>
<td>CIN 109</td>
<td>Filmmaker Forum II</td>
<td>2</td>
</tr>
<tr>
<td>CIN 149</td>
<td>Internship</td>
<td>2</td>
</tr>
</tbody>
</table>

Program Total.................................................................. 70

Curriculum Updated 9/17/13
Information Systems

Associate of Arts Degree (Transfer)
Sioux City Campus

Program Overview and Opportunities:
This two-year Associate of Arts program is very hands-on and prepares students for entry-level programming jobs. The graduates of this program are well versed in Java, C++, and databases. The program provides the knowledge-base needed for entry-level job opportunities in the field and at the same time is flexible enough to meet the demands of the labor market.

Programmers are employed in almost every industry, but the largest concentration is in computer systems design and related services. Large numbers of programmers also work for telecommunications companies, software publishers, financial institutions, insurance carriers, educational institutions, and government agencies. Many in this field also work as independent contractors or consultants.

According to the Bureau of Labor Statistics, “Overall, employment of computer software engineers and computer programmers is projected to increase by 21 percent from 2008 to 2018, much faster than the average for all occupations."

Successful completion of SDV 108 is a requirement of graduation.

Information Systems Curriculum

Course # | Title | Credits
--- | --- | ---
SDV 108 | The College Experience | 1
CSC 142 | Computer Science | 4
MAT 110 or higher | 3
ENG 105 | Composition I | 3
CSC 110 | Introduction to Computers | 3
CSC 153 | Data Structures | 4
CIS 171 | Java | 3
CIS 345 | Database Design | 2
ENG 106 | Composition II | 3
CIS 215 | Server Side Scripting | 3
CIS 175 | Java II | 3
CIS 333 | Database and SQL | 2
SPC 112 | Public Speaking | 3
| Social/Behavior General Education Elective | 3
| Science General Education Elective | 4
| Social/Behavior General Education Elective | 3
| Humanities General Education Electives | 9
| Distribution Requirement | 4
| Program Total | 65

Information Systems

Associate of Arts Degree

Successful completion of SDV 108 is a requirement of graduation.

I. General Education Core
A. English and Speech (minimum of 9 credits)
   ENG 105 and 106
   SPC 112

B. Mathematics and Laboratory Sciences (minimum of 8 credits)
   Must include one math course and one lab science course from the following:
   BIO 105, 125, 163
   CHM 122
   ENV 111
   MAT 111, 117, 121
   PHS 120, 151

C. Social and Behavioral Sciences (minimum of 9 credits)
   CLS 212 or SOC 212 (required)
   Choose one course from section 2 plus one course from section 1 or 2:

   Section 1. History and Diverse Cultures (additional distribution choices)
   ANT 105
   GEO 121
   HIS 110, 111, 151, 152, 211
   LIT 150
   SOC 200, 210

   Section 2. Social and Political Sciences
   ECN 120, 130
   POL 111, 121, 125, 151, 211
   PSY 111, 121
   SOC 110, 120

D. Humanities (minimum of 9 credits)
   Choose three courses from at least two of the following disciplines
   ART 101, 203, 204
   LIT 101, 124, 133, 185, 189
   DRA 101, 112
   MMS 101
   ENG 221
   MUS 100, 202
   FLF 141, 142
   PHI 101, 105, 111
   FLG 141, 142, 231, 232
   REL 101, 150
   FLS 141, 142, 231, 232
   SPC 122
   HUM 101, 220

E. Computer Literacy/Technology - Suggested Elective
   Computer literacy is critical to your success as a college student. It is strongly recommended that you consider your competency in computer applications. Some major programs at transfer institutions may require a computer applications course. Consult with your advisor regarding this suggested course.
   CSC 110, Introduction to Computers

F. Distributed requirement (6 credits required)
   Take two additional courses from any of these areas:
   Mathematics, Laboratory Science, Social and Behavioral Sciences, and Humanities.

II. Area of Concentration (minimum of 9 credits)
CSC 142, 153

III. Electives (credits vary)
   SDV 108, The College Experience (required)
   Consult a faculty advisor, the transferring institution and page 18 of the catalog.

PROGRAM TOTAL (Minimum) 64
Industrial Plant Technology

Diploma
Sioux City Campus

Program Overview and Opportunities:
This program was developed to prepare individuals as plant maintenance technicians. Students will learn basic principles and technical skills in maintaining and troubleshooting common electro-mechanical systems used in industry. Skills are developed in basic electrical and mechanical theory as well as specific skills needed for troubleshooting and repair of today’s industrial systems.

There is a high demand for industrial maintenance technicians in the Siouxland area. Employers are seeking trained individuals with both mechanical and electrical maintenance aptitude and troubleshooting skills.

According to the Bureau of Labor Statistics, employment of industrial machinery mechanics is expected to grow 7 percent from 2006 to 2016. As factories become increasingly automated, these workers will be needed to maintain and repair the automated equipment. (Occupational Outlook Handbook. Bureau of Labor Statistics 2006-2007.)

---

Industrial Plant Technology Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td></td>
</tr>
<tr>
<td>IND 111</td>
<td>Industrial Safety Mechanical Systems</td>
<td></td>
</tr>
<tr>
<td>ELT 102</td>
<td>Blueprint Reading</td>
<td></td>
</tr>
<tr>
<td>EGT 142</td>
<td>Fluid Power I</td>
<td></td>
</tr>
<tr>
<td>EGT 143</td>
<td>Fluid Power II</td>
<td></td>
</tr>
<tr>
<td>IND 141</td>
<td>Power Transmission</td>
<td></td>
</tr>
<tr>
<td>IND 180</td>
<td>Industrial Heating &amp; Cooling</td>
<td></td>
</tr>
<tr>
<td>MFG 520</td>
<td>Predictive Maintenance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Math Gen Ed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Program Total</td>
<td>35</td>
</tr>
<tr>
<td>ELT 740</td>
<td>Industrial Safety Electrical Systems</td>
<td></td>
</tr>
<tr>
<td>ELT 150</td>
<td>Basic Electrical Theory</td>
<td></td>
</tr>
<tr>
<td>ELT 110</td>
<td>Electronics</td>
<td></td>
</tr>
<tr>
<td>ELT 208</td>
<td>Motor Control</td>
<td></td>
</tr>
<tr>
<td>EGT 780</td>
<td>Electromechanical Control Systems</td>
<td></td>
</tr>
<tr>
<td>EGT 118</td>
<td>Programmable Controllers</td>
<td></td>
</tr>
<tr>
<td>BPT 114</td>
<td>Instrumentation I</td>
<td></td>
</tr>
<tr>
<td>BPT 115</td>
<td>Instrumentation II OR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technical Support Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(ELT, MFG, or IND prefix)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>English Gen Ed</td>
<td></td>
</tr>
</tbody>
</table>

Program Total: 35

---

Are You a Part-time Student?
See a program advisor for a list of available courses for part-time students and to develop an individualized plan of study.

---

Program Advisors
David McDonald, AAS
Room A146
Ext. 1281
dave.mcdonald@witcc.edu

Greg Strong, BS, BA, Division Chair
Room A111
Ext. 1480
greg.strong@witcc.edu

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see an Industrial Plant Technology program advisor to ensure correct course sequence.
# Manufacturing

## Computer Numerical Control (CNC) Operator

**Certificate**  
**Sioux City Campus**

**Program Overview and Opportunities:**  
This certificate program provides students with the skills and knowledge required for entry-level employment as a Computer Numerical Control (CNC) operator. General areas of study will involve gaining a fundamental understanding of G-codes, M-codes, and the use of MasterCam™ software as these relate to programmable machine movement of CNC milling machines and lathes.

The demand for Computer Numerical Control (CNC) operators remains constant and future employment opportunities are expected to increase.

Prerequisite: Machine Operations Certificate, industry experience as a machinist, or instructor’s approval.

### Electrical Maintenance Technician

**Certificate**  
**Sioux City Campus**

**Program Overview and Opportunities:**  
This certificate program was developed to prepare individuals to apply basic principles and technical skills in maintaining and troubleshooting common electrical systems used in the industry. Skills are developed in basic electrical theory, motor control, drives, control systems, electronics, and PLCs. In addition, instrumentation and control of process measurement and process control will be studied.

There is a high demand for industrial maintenance technicians in the Siouxland area. Employers are seeking trained individuals with both mechanical and electrical maintenance aptitude and troubleshooting skills.

### Computer Numerical Control (CNC) Operator Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFG 249</td>
<td>Fundamentals of Engine Lathe Operations</td>
<td>2</td>
</tr>
<tr>
<td>MFG 269</td>
<td>Basic Machine</td>
<td>2</td>
</tr>
<tr>
<td>MFG 301</td>
<td>Intro to Computer Numerical Control</td>
<td>2</td>
</tr>
<tr>
<td>MFG 322</td>
<td>Intro to CAD/CAM</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Program Total</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

### Program Advisors

- Tom Helzer, AAS  
  Ext. 1373  
  Room L415  
  tom.helzer@witcc.edu
- Greg Strong, BS, BA, Division Chair  
  Ext. 1480  
  Room A111  
  greg.strong@witcc.edu

---

## Electrical Maintenance Technician Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ELT 740</td>
<td>Industrial Safety Electrical Systems</td>
<td>1</td>
</tr>
<tr>
<td>ELT 150</td>
<td>Basic Electrical Theory</td>
<td>2</td>
</tr>
<tr>
<td>ELT 110</td>
<td>Electronics</td>
<td>2</td>
</tr>
<tr>
<td>ELT 208</td>
<td>Motor Control</td>
<td>2</td>
</tr>
<tr>
<td>ELT 708</td>
<td>Electromechanical Control Systems</td>
<td>2</td>
</tr>
<tr>
<td>ELT 118</td>
<td>Programmable Controllers</td>
<td>2</td>
</tr>
<tr>
<td>BPT 114</td>
<td>Instrumentation I</td>
<td>2</td>
</tr>
<tr>
<td>BPT 115</td>
<td>Instrumentation II</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Program Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

### Program Advisor

- Greg Strong, BS, BA, Division Chair  
  Ext. 1480  
  Room A111  
  greg.strong@witcc.edu

---

Page Updated 5/21/13
Manufacturing

Machine Operations

Certificate
Sioux City Campus

Program Overview and Opportunities:
The Machine Operations program provides students with the knowledge of the capabilities of various machines and to prepare them as machine operators. A balance of practical shop work and related instruction provides a solid foundation for future advancements in the trade. Related instruction includes computer numerical control (CNC), shop math, blueprint reading, digital readout, and machine technology. The practical shop work is individualized so that students can progress at their own rate.

Students learn the operation and maintenance of measuring and layout tools and develop skills on basic machine tools and production equipment.

Program Advisors
Tom Helzer, AAS
Room L415
tom.helzer@witcc.edu

Greg Strong, BS, BA, Division Chair
Room A111
greg.strong@witcc.edu

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. The courses listed above are grouped in the order that they should be taken each semester. Please see a Manufacturing program advisor to ensure correct course sequence.

Mechanical Maintenance Technician

Certificate
Sioux City Campus

Program Overview and Opportunities:
This certificate program was developed to prepare individuals to apply basic principles and technical skills in maintaining and troubleshooting common mechanical systems used in the industry. Skills are developed in fluid power, power transmission, HVAC, boiler control and steam traps. In addition, predictive maintenance topics of vibration analysis, thermography, machinery oil analysis, and ultrasonics will also be included.

There is a high demand for industrial maintenance technicians in the Siouxland area. Employers are seeking trained individuals with both mechanical and electrical maintenance aptitude and troubleshooting skills.

Program Advisor
Greg Strong, BS, BA, Division Chair
Room A111
greg.strong@witcc.edu

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. The courses listed above are grouped in the order that they should be taken each semester. Please see a Manufacturing program advisor to ensure correct course sequence.
Mass Media

Associate of Arts Degree
Sioux City Campus

Program Overview and Opportunities:
The Mass Media program is designed for the student who plans to pursue a career in entry-level positions with mass media outlets or continue on to a four-year college with a mass communications major or minor. This program encompasses study in the history of mass media, news writing, photography, public relations and graphic design.

Graduates will be able to seek opportunities in a wide-ranging field of media publication, digital communication and production, demonstrating the skills necessary to work with converging media technologies, for a widely divergent global community. (Bureau of Labor Statistics, 2008-2009)

Mass Media Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>MMS 101</td>
<td>Mass Media</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>ENG 150</td>
<td>Fundamentals of English Grammar</td>
<td>3</td>
</tr>
<tr>
<td>SMM 101</td>
<td>Social Media Explored</td>
<td>3</td>
</tr>
<tr>
<td>MMS 132</td>
<td>Writing For Mass Media</td>
<td>3</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ART 186</td>
<td>Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>MMS 932</td>
<td>Internship OR</td>
<td>2</td>
</tr>
<tr>
<td>MMS 941</td>
<td>Practicum</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Program Total</td>
<td>65</td>
</tr>
</tbody>
</table>

MASS MEDIA ELECTIVES

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOU 120</td>
<td>Beginning Newswriting</td>
<td>3</td>
</tr>
<tr>
<td>JOU 123</td>
<td>Intermediate Newswriting</td>
<td>3</td>
</tr>
<tr>
<td>MMS 105</td>
<td>Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>MMS 130</td>
<td>Video Field Production</td>
<td>3</td>
</tr>
<tr>
<td>MMS 265</td>
<td>Mass Communications Law</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Advisor
Michael Rohlena, MFA, Division Chair
Ext. 3217
Room A146
michael.rohlena@witcc.edu
Mathematics

Mathematics

Associate of Science Degree

Successful completion of SDV 108 is a requirement of graduation.

I. General Education Core
   A. English and Speech (minimum of 9 credits)
      ENG 105 and 106
      SPC 112
   B. Mathematics and Laboratory Sciences
      (minimum of 6 credits)
      Must include one math course and one lab science course.
      Math and science course selections should be made with advisor’s recommendation.
      BIO 116 and 117
      CHM 166 and 176
      CHM 261 and 271
      PHY 162 and 172
      PHY 212 and 222
   C. Social and Behavioral Sciences (minimum of 6 credits)
      Choose one course from each section:
      Section 1. History and Diverse Cultures
      ANT 105
      GEO 121
      HIS 110, 111, 151, 152, 211
      LIT 150
      SOC 200, 210
      Section 2. Social and Political Sciences
      ECN 120, 130
      POL 111, 112, 121, 125, 151, 211
      PSY 111, 121
      SOC 110, 120
   D. Humanities (minimum of 6 credits)
      ART 101, 203, 204
      LIT 101, 124, 133, 185, 189
      DRA 101, 112
      MMS 101
      ENG 221
      MUS 100, 202
      FLF 141, 142
      PHI 101, 105, 111
      FLG 141, 142, 231, 232
      REL 101, 150
      FLS 141, 142, 231, 232
      SPC 122, 140
      HUM 101, 220
   E. Computer Literacy/Computer Technology
      (minimum of 3 credits)
      CSC 110

II. Mathematics and Sciences (14 credits)
   Course selections should be made with math or science advisor’s recommendation.

III. Electives (16 additional credits)
   SDV 108, The College Experience (required)
   Consult advisor when selecting electives

PROGRAM TOTAL.......................................................(Minimum) 64

Mathematics Program Advisors

Sima Dabir, MED
Room L314
Ext. 1419
sima.dabir@witcc.edu

Lisa Knecht, MA
Room L314
Ext. 1425
lisa.knecht@witcc.edu

Maziar Ouliaeinia, MA
Room L314
Ext. 1335
maziar.ouliaeinia@witcc.edu

Darin Moeller, MED, Division Chair
Room A145
Ext. 1493
darin.moeller@witcc.edu
Program Overview and Opportunities:
The Mechanical Engineering Technology program provides students with the opportunity to enter the engineering technology field as a drafter, designer, or various other positions within an engineering design team. Graduates find themselves working within an industry where they take a product from conception and design and through the manufacturing process. The program of study includes computer-assisted drafting, design engineering practices, and course work in mechanical design. Students will gain an understanding of the effects of forces, motion, material strengths, and the principles of hydraulics and pneumatics.

Industrial expansion and technological developments in the last decade have created an ever-increasing demand for qualified technicians. Numerous employment opportunities await every graduate.

According to the Bureau of Labor Statistics, the best opportunities are expected for those with two years of professional training. Industrial growth and increasingly complex design problems associated with new products and manufacturing processes will increase the demand for drafting services. (Occupational Outlook Handbook. Bureau of Labor Statistics 2006-2007.)

Program Advisors
Tom Helzer, AAS
Room L415
Ext. 1373
tom.helzer@witcc.edu

Jim Wiederspan, BS
Room L415
Ext. 1374
jim.wiederspan@witcc.edu

Greg Strong, BS, BA, Division Chair
Room A111
Ext. 1480
greg.strong@witcc.edu
Motorcycle/Powersports Technology

Program Overview and Opportunities:
The popularity of motorcycles has increased dramatically in recent years. Motorcycles are used by a wide variety of drivers for commuting, weekend touring, and racing. With the increasing cost of gasoline many people are choosing to drive a motorcycle due to the fuel efficiency. Based on this popularity there is an increased need for qualified motorcycle/powersports mechanics and technicians. This career field is responsible for diagnosing, maintaining, repairing, and overhauling motorcycles. Many also repair other types of small engine equipment including mopeds, dirt bikes, and all-terrain vehicles. In addition to diagnosing, repairing, and maintaining motorcycle engines, students may work on transmissions, brakes, exhaust and ignition systems, and make minor repairs to damaged sections of the motorcycle’s body. Students in the program will also be exposed to engines related to residential and commercial property maintenance.

Skills learned in this program can lead graduates to positions as technicians, assemblers, service managers, parts managers, or racing pit crew members. Graduates may pursue their interests in owning their own motorcycle/powersports maintenance and repair business.

Motorcycle/Powersports Technology AAS Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>MOT 108</td>
<td>Powersports Shop Safety</td>
<td>2</td>
</tr>
<tr>
<td>MOT 105</td>
<td>Fundamentals of Small Engines</td>
<td>2</td>
</tr>
<tr>
<td>MOT 107</td>
<td>Air-Cooled V-Twin Engines</td>
<td>2</td>
</tr>
<tr>
<td>MOT 128</td>
<td>Motorcycle Engines Two- and Four-Stroke I</td>
<td>2</td>
</tr>
<tr>
<td>MOT 129</td>
<td>Motorcycle Engines Two- and Four-Stroke II</td>
<td>2</td>
</tr>
<tr>
<td>MOT 137</td>
<td>Transmissions and Drive Systems I</td>
<td>2</td>
</tr>
<tr>
<td>MOT 103</td>
<td>Motorcycle Powersports License and Inspection</td>
<td>1</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math</td>
<td>3</td>
</tr>
<tr>
<td>MOT 133</td>
<td>Motorcycle Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>MOT 126</td>
<td>Fuel and Ignition Systems</td>
<td>4</td>
</tr>
<tr>
<td>MOT 127</td>
<td>Suspension and Brake Systems</td>
<td>4</td>
</tr>
<tr>
<td>MOT 123</td>
<td>Wheels and Tires</td>
<td>2</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations</td>
<td>3</td>
</tr>
<tr>
<td>MOT 947</td>
<td>Practicum</td>
<td>4</td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communications</td>
<td>3</td>
</tr>
<tr>
<td>MOT 204</td>
<td>ATV &amp; UTV Powersports Vehicles</td>
<td>4</td>
</tr>
<tr>
<td>MOT 138</td>
<td>Transmissions and Drive Systems II</td>
<td>2</td>
</tr>
<tr>
<td>MOT 212</td>
<td>Motorcycle &amp; ATV Tune Up/Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>MOT 205</td>
<td>Advanced Diagnostics &amp; Troubleshooting</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers OR</td>
<td>3</td>
</tr>
<tr>
<td>BCA 206</td>
<td>Applied Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>MOT 130</td>
<td>Engine Overhaul/Repair</td>
<td>3</td>
</tr>
<tr>
<td>MOT 132</td>
<td>Motorcycle &amp; ATV Electrical Systems Diagnostics</td>
<td>2</td>
</tr>
<tr>
<td>MOT 255</td>
<td>Performance Engine Tuning</td>
<td>2</td>
</tr>
<tr>
<td>MFG 179</td>
<td>Intro to Machining and Fabrication</td>
<td>3</td>
</tr>
<tr>
<td>MOT 259</td>
<td>Shop Management</td>
<td>2</td>
</tr>
<tr>
<td>COM 723</td>
<td>Workplace Communications</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total............................................................70

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see a band instrument repair program advisor to ensure correct course sequence.
Motorcycle Mechanic Diploma

Diploma
Certificate
Sioux City Campus

Program Overview and Opportunities:
The popularity of motorcycles has increased dramatically in recent years. Motorcycles are used by a wide variety of drivers for commuting, weekend touring, and racing. With the increasing cost of gasoline many people are choosing to drive a motorcycle due to the fuel efficiency. Based on this popularity there is an increased need for qualified motorcycle/powersports mechanics and technicians.

This career field is responsible for diagnosing, maintaining, repairing, and overhauling motorcycles. Many also repair other types of small engine equipment including mopeds, dirt bikes, and all-terrain vehicles. In addition to diagnosing, repairing, and maintaining motorcycle engines, students may work on transmissions, brakes, exhaust and ignition systems, and make minor repairs to damaged sections of the motorcycle’s body. Students in the program will also be exposed to engines related to residential and commercial property maintenance.

Skills learned in this program can lead graduates to positions as technicians, assemblers, service managers, parts managers, or racing pit crew members. Graduates may pursue their interests in owning their own motorcycle/powersports maintenance and repair business.

Motorcycle Mechanic

Diploma Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>MOT 108</td>
<td>Powersports Shop Safety</td>
<td>2</td>
</tr>
<tr>
<td>MOT 105</td>
<td>Fundamentals of Small Engines</td>
<td>2</td>
</tr>
<tr>
<td>MOT 107</td>
<td>Air-Cooled V-Twin Engines</td>
<td>2</td>
</tr>
<tr>
<td>MOT 128</td>
<td>Motorcycle Engines Two- and Four-Stroke I</td>
<td>2</td>
</tr>
<tr>
<td>MOT 129</td>
<td>Motorcycle Engines Two- and Four-Stroke II</td>
<td>2</td>
</tr>
<tr>
<td>MOT 137</td>
<td>Transmissions and Drive Systems</td>
<td>2</td>
</tr>
<tr>
<td>MOT 103</td>
<td>Motorcycle Powersports License and Inspection</td>
<td>1</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math</td>
<td>3</td>
</tr>
<tr>
<td>MOT 133</td>
<td>Motorcycle Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>MOT 126</td>
<td>Fuel and Ignition Systems</td>
<td>4</td>
</tr>
<tr>
<td>MOT 127</td>
<td>Suspension and Brake Systems</td>
<td>4</td>
</tr>
<tr>
<td>MOT 123</td>
<td>Wheels and Tires</td>
<td>2</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations</td>
<td>3</td>
</tr>
<tr>
<td>MOT 947</td>
<td>Practicum</td>
<td>4</td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communications</td>
<td>3</td>
</tr>
<tr>
<td><strong>Program Total</strong></td>
<td></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

Small Engine Mechanic

Certificate Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOT 108</td>
<td>Powersports Shop Safety</td>
<td>2</td>
</tr>
<tr>
<td>MOT 105</td>
<td>Fundamentals of Small Engines</td>
<td>2</td>
</tr>
<tr>
<td>MOT 133</td>
<td>Motorcycle Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td><strong>Program Total</strong></td>
<td></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see a band instrument repair program advisor to ensure correct course sequence.
Program Overview and Opportunities:
The two-year degree program in Music at Western Iowa Tech gives students the flexibility to apply their Associate of Arts degree to pursue a bachelor’s degree in music performance, musical theater, music education or arts administration. Non-majors who enjoy musical performance and wish to continue their musical activity past high school are welcome in WITCC’s performance ensembles, musicals, and Applied Music classes.

The award-winning WITCC choir, jazz choir, and jazz combo maintain active performance schedules on campus and in the community. Partner performances with the Sioux City Symphony, Siouxland Master Chorale, Sioux City Community Theater, Morningside College, and Briar Cliff University provide enhanced performance opportunities for WITCC students. WITCC music students also have the opportunity to travel and perform, with recent trips to Cozumel, Belize, and Greece. WITCC hosts the annual Lewis and Clark Jazz Festival, which draws jazz choirs and jazz bands from the tri-state region. Students meet and study with visiting professional musicians through the WITCC Masters of the Arts Series.

Successful completion of SDV 108 is a requirement of graduation.

Music

Associate of Arts Degree (Transfer)
Sioux City Campus

Program Advisors
William Darwin, Jr., MA
Room A146 & D222
Ext. 1713
william.darwin@witcc.edu

Michael Rohlena, MFA, Division Chair
Room A146
Ext. 3217
michael.rohlena@witcc.edu

Music Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>MUS 100</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUS 115</td>
<td>Music Theory I</td>
<td>2</td>
</tr>
<tr>
<td>MUS 125</td>
<td>Ear Training/Sight Singing I</td>
<td>2</td>
</tr>
<tr>
<td>MUS 140</td>
<td>Concert Choir</td>
<td>1</td>
</tr>
<tr>
<td>MUA 119</td>
<td>Class Piano I</td>
<td>1</td>
</tr>
<tr>
<td>MUS 128</td>
<td>Music Notation</td>
<td>2</td>
</tr>
<tr>
<td>MUA/MUS</td>
<td>See choice of directed electives below</td>
<td>1</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 116</td>
<td>Music Theory II</td>
<td>2</td>
</tr>
<tr>
<td>MUS 126</td>
<td>Ear Training/Sight Singing II</td>
<td>2</td>
</tr>
<tr>
<td>MUS 141</td>
<td>Concert Choir II</td>
<td>1</td>
</tr>
<tr>
<td>MUA 219</td>
<td>Class Piano II</td>
<td>1</td>
</tr>
<tr>
<td>MUA/MUS</td>
<td>See choice of directed electives below</td>
<td>1</td>
</tr>
<tr>
<td>ENG 106</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Humanities Elective (not MUS prefix)</td>
<td>3</td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Social &amp; Behavioral Sciences Elective</td>
<td>3</td>
</tr>
<tr>
<td>MUS 117</td>
<td>Music Theory III</td>
<td>2</td>
</tr>
<tr>
<td>MUS 225</td>
<td>Ear Training/Sight Singing III</td>
<td>2</td>
</tr>
<tr>
<td>MUS 142</td>
<td>Concert Choir III</td>
<td>1</td>
</tr>
<tr>
<td>MUA 225</td>
<td>Class Piano III</td>
<td>1</td>
</tr>
<tr>
<td>MUA/MUS</td>
<td>See choice of directed electives below</td>
<td>1</td>
</tr>
<tr>
<td>MUS 202</td>
<td>World Music</td>
<td>3</td>
</tr>
<tr>
<td>CLS 212</td>
<td>Diversity OR</td>
<td>3</td>
</tr>
<tr>
<td>SOC 212</td>
<td>Diversity</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Social &amp; Behavioral Sciences Elective</td>
<td>3</td>
</tr>
<tr>
<td>MUS 215</td>
<td>Music Theory IV</td>
<td>2</td>
</tr>
<tr>
<td>MUS 226</td>
<td>Ear Training/Sight Singing IV</td>
<td>2</td>
</tr>
<tr>
<td>MUS 240</td>
<td>Concert Choir IV</td>
<td>1</td>
</tr>
<tr>
<td>MUA 235</td>
<td>Class Piano IV</td>
<td>1</td>
</tr>
<tr>
<td>MUA/MUS</td>
<td>See choice of directed electives below</td>
<td>1</td>
</tr>
<tr>
<td>PHI 105</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BIO 105</td>
<td>Introduction to Biology OR</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Mathematics and Laboratory Sciences Elective</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Distributions Requirement Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Program Total</td>
<td>74</td>
</tr>
</tbody>
</table>

MUA/MUS ELECTIVES

| MUA 101 | Applied Voice MUA 170 | Applied Woodwind |
| MUA 120 | Applied Piano MUA 180 | Applied Percussion |
| MUA 124 | Applied Guitar MUS 138 | Jazz Choir |
| MUA 126 | Applied Strings MUS 189 | Jazz Combo |
| MUA 143 | Applied Bass        |

Please see a music program advisor in regard to additional music classes that may be of interest to you.
# Networking

## Network Administration and Security

**Associate of Applied Science Degree**  
**Sioux City Campus**

### Program Overview and Opportunities:

The Networking Administration and Security program is a comprehensive course of study. Students will be trained for computer PC repair and maintenance, operating systems installation and troubleshooting, computer networking, and system administration and security. Through both theory and hands-on instruction, students will achieve a thorough understanding of the design, installation, maintenance, and troubleshooting of computers, operating systems and wired/wireless networks.

Specific network instruction includes LAN/WAN system design, installation, configuration, administration and troubleshooting. Network and system security issues will be addressed as they pertain to each individual course.

Upon completion of this degree, the students will be better prepared to take national certification exams which may be taken on campus at the Western Iowa Tech Testing Center. The course fees for most classes include the cost of the national certification exam voucher.

According to the Bureau of Labor Statistics, Employment of network and computer systems administrators is expected to increase by 27 percent from 2006 to 2016, which is much faster than the average for all occupations. Computer networks have become an integral part of business, and demand for these workers will increase as firms continue to invest in new technologies. The wide use of electronic commerce and the increasing adoption of mobile technologies mean that more establishments will use the Internet to conduct business online. This growth translates into a need for systems administrators who can help organizations use technology to communicate with employees, clients, and consumers. (Occupational Outlook Handbook. Bureau of Labor Statistics 2006-2007.)

### Network Administration and Security Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>NET 612</td>
<td>Fundamentals of Network Security</td>
<td>3</td>
</tr>
<tr>
<td>NET 161</td>
<td>IT Essentials I: PC Hardware and Software</td>
<td>4</td>
</tr>
<tr>
<td>NET 162</td>
<td>IT Essentials II: Advanced PC Hardware and Software</td>
<td>3</td>
</tr>
<tr>
<td>NET 217</td>
<td>CCNA Exploration Network Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>Math General Education Elective</td>
<td>3</td>
</tr>
<tr>
<td>NET 218</td>
<td>CCNA Exploration Routing Concepts</td>
<td>3</td>
</tr>
<tr>
<td>NET 219</td>
<td>CCNA Exploration Switching and Wireless</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers* OR</td>
<td>3</td>
</tr>
<tr>
<td>BCA 206</td>
<td>Applied Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>NET 155</td>
<td>Intro to Wireless Networks</td>
<td>3</td>
</tr>
<tr>
<td>NET 520</td>
<td>Microsoft Workstation–MCTS</td>
<td>3</td>
</tr>
<tr>
<td>NET 542</td>
<td>Microsoft Server Network Infrastructure MCTS</td>
<td>3</td>
</tr>
<tr>
<td>NET 501</td>
<td>Basic Linux Operating System</td>
<td>3</td>
</tr>
<tr>
<td>NET 543</td>
<td>Microsoft Server Applications Infrastructure MCTS</td>
<td>3</td>
</tr>
<tr>
<td>NET 540</td>
<td>Microsoft Server Active Directory MCTS</td>
<td>3</td>
</tr>
<tr>
<td>NET 547</td>
<td>Microsoft Server Enterprise Admin. MCITP</td>
<td>3</td>
</tr>
<tr>
<td>NET 220</td>
<td>CCNA Exploration Accessing the WAN</td>
<td>3</td>
</tr>
<tr>
<td>COM 753</td>
<td>Technical Communications*</td>
<td>3</td>
</tr>
<tr>
<td>NET 536</td>
<td>Microsoft Exchange MCTS</td>
<td>3</td>
</tr>
<tr>
<td>NET 216</td>
<td>Cisco CCNA Security</td>
<td>3</td>
</tr>
<tr>
<td>NET 616</td>
<td>NET VMware VCP</td>
<td>3</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations*</td>
<td>3</td>
</tr>
</tbody>
</table>

**Program Total** .......................................................... 71

* Denotes courses commonly articulated with area high schools.

### Are You a Part-time Student?

All of these courses can be taken on a part-time basis. See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. Please see an advisor to ensure correct course sequence.

---

**Program Advisors**  
Keith Price, MCSE, MCP, A+, CCNA  
Room T215  
Ext. 1809  
keith.price@witcc.edu

Peter Albright  
Room T215  
Ext. 3233  
peter.albright@witcc.edu

Steve Ebsen, BS, Division Chair  
Room T219  
Ext. 1232  
steve.ebsen@witcc.edu

---

Updated 9/17/13

The courses listed above are grouped in the order that they should be taken each semester.
LAN Technician

Diploma
Sioux City Campus

**Program Overview and Opportunities:**
The Local Area Network (LAN) Technician program is a one-year diploma program designed to prepare the student to perform a wide range of computer PC troubleshooting and maintenance. Students will also be trained to perform entry-level LAN network troubleshooting, diagnosis, network monitoring, and maintenance of LAN networks. Students also receive hands-on training with various computer applications and hardware.

This diploma program should not be confused with the Computer Networking/Information Systems two-year degree program which requires more extensive study within each of these areas leading to a more thorough understanding of both LAN and WAN competencies.

Students may not always be able to schedule these classes in two semesters. Check with an advisor for specific scheduling of courses each semester.

**LAN Technician Curriculum**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>NET 612</td>
<td>Fundamentals of Network Security</td>
<td>3</td>
</tr>
<tr>
<td>NET 161</td>
<td>IT Essentials I: PC Hardware and Software</td>
<td>4</td>
</tr>
<tr>
<td>NET 162</td>
<td>IT Essentials II: Advanced PC Hardware and Software</td>
<td>3</td>
</tr>
<tr>
<td>NET 217</td>
<td>CCNA Exploration Network Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Math General Education Elective</td>
<td>3</td>
</tr>
<tr>
<td>NET 218</td>
<td>CCNA Exploration Routing Concepts</td>
<td>3</td>
</tr>
<tr>
<td>NET 219</td>
<td>CCNA Exploration Switching and Wireless</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers OR</td>
<td></td>
</tr>
<tr>
<td>BCA 206</td>
<td>Applied Computer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>NET 155</td>
<td>Intro to Wireless Networks</td>
<td>3</td>
</tr>
<tr>
<td>NET 520</td>
<td>Microsoft Workstation MCTS</td>
<td>3</td>
</tr>
<tr>
<td>NET 542</td>
<td>Microsoft Server Network Infrastructure MCTS</td>
<td>3</td>
</tr>
</tbody>
</table>

*Program Total* .......................................................... 35

Sections of shading above indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.

---

**Program Advisors**
Keith Price, MCSE, MCP, A+, CCNA
Room T215
keith.price@witcc.edu
Ext. 1809

Peter Albright
Room T215
peter.albright@witcc.edu
Ext. 3233

Steve Ebsen, BS, Division Chair
Room T219
steve.ebsen@witcc.edu
Ext. 1232

Updated 9/17/13
A+ Certification

Certificate
Sioux City Campus

Program Overview and Opportunities:
This certificate program was developed to provide training in computer PC repair. Students will gain a fundamental understanding of a PC through hands-on and theory-based instruction. Specific topics include computer hardware and software installation, troubleshooting, and maintenance.

Upon completion of these courses, the students will be better prepared to take national certification tests, which may be taken on campus at the Western Iowa Tech Testing Center. Students must register and pay for the tests online via the VUE testing center Web site at www.VUE.com.

A+ Certification Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NET 161</td>
<td>IT Essentials I: PC Hardware and Software</td>
<td>..........4</td>
</tr>
<tr>
<td>NET 162</td>
<td>IT Essentials II: Advanced PC Hardware and Software</td>
<td>..........3</td>
</tr>
</tbody>
</table>

Program Total ........................................................... 7

Students may not always be able to schedule these classes in two semesters. Check with an advisor for specific scheduling of courses each semester.

Program Advisors
Keith Price, MCSE, MCP, A+, CCNA
Ext. 1809
keith.price@witcc.edu
Room T215

Peter Albright
Ext. 3233
peter.albright@witcc.edu
Room T215

Steve Ebsen, BS, Division Chair
Ext. 1232
steve.ebsen@witcc.edu
Room T219

Cisco Certified Network Associate–CCNA

Certificate
Sioux City Campus

Program Overview and Opportunities:
This certificate program was developed in response to the growing demand for network technicians throughout the world. Cisco is recognized as an industry leader in developing computer network hardware such as routers, switches, hubs, etc. Western Iowa Tech is a Cisco Regional Training Academy and has Cisco certified instructors trained to deliver the Cisco curriculum.

Upon completion of these courses, the students will be better prepared to take national certification tests. The national certification tests may be taken on campus at the Western Iowa Tech Testing Center.

CCNA–Cisco Certified Network Associate Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>..........1</td>
</tr>
<tr>
<td>NET 161</td>
<td>IT Essentials I: PC Hardware and Software</td>
<td>..........4</td>
</tr>
<tr>
<td>NET 162</td>
<td>IT Essentials II: Advanced PC Hardware and Software</td>
<td>..........3</td>
</tr>
<tr>
<td>NET 217</td>
<td>CCNA Exploration: Network Fundamentals</td>
<td>..........3</td>
</tr>
<tr>
<td>NET 218</td>
<td>CCNA Exploration Routing Concepts</td>
<td>..........3</td>
</tr>
<tr>
<td>NET 219</td>
<td>CCNA Exploration Switching and Wireless</td>
<td>..........3</td>
</tr>
<tr>
<td>NET 220</td>
<td>CCNA Exploration Accessing the WAN</td>
<td>..........3</td>
</tr>
<tr>
<td>NET 216</td>
<td>Cisco CCNA Security</td>
<td>..........3</td>
</tr>
</tbody>
</table>

Program Total ........................................................... 23

Students may not always be able to schedule these classes in two semesters. Check with an advisor for specific scheduling of courses each semester.

Program Advisors
Keith Price, MCSE, MCP, A+, CCNA
Ext. 1809
keith.price@witcc.edu
Room T215

Peter Albright
Ext. 3233
peter.albright@witcc.edu
Room T215

Steve Ebsen, BS, Division Chair
Ext. 1232
steve.ebsen@witcc.edu
Room T219

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. The courses listed above are grouped in the order that they should be taken each semester. Please see a Networking program advisor to ensure correct course sequence.

Updated 9/17/13
Networking

Microsoft Certified Technology Specialist (MCTS)

Certificate
Sioux City Campus

Program Overview and Opportunities:
This certificate program was developed in response to the growing demand for network technicians throughout the world. Cisco is recognized as an industry leader in developing computer network hardware such as routers, switches, hubs, etc. Western Iowa Tech is a Cisco Regional Training Academy and has Cisco certified instructors trained to deliver the Cisco curriculum.

Upon completion of these courses, the students will be better prepared to take national certification tests. The national certification tests may be taken on campus at the Western Iowa Tech Testing Center.

Microsoft Certified Technology Specialist (MCTS) Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>NET 612</td>
<td>Fundamentals of Networking Security</td>
<td>3</td>
</tr>
<tr>
<td>NET 161</td>
<td>IT Essentials I: PC Hardware and Software</td>
<td>4</td>
</tr>
<tr>
<td>NET 162</td>
<td>IT Essentials II: Advanced PC Hardware and Software</td>
<td>3</td>
</tr>
<tr>
<td>NET 520</td>
<td>Microsoft Workstation – MCTS</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total ........................................................ 14

Students may not always be able to schedule these classes in two semesters. Check with an advisor for specific scheduling of courses each semester.

Program Advisors
Keith Price, MCSE, MCP, A+, CCNA Ext. 1809 keith.price@witcc.edu
Room T215
Peter Albright Ext. 3233 peter.albright@witcc.edu
Room T215
Steve Ebsen, BS, Division Chair Ext. 1232 steve.ebsen@witcc.edu
Room T219

Microsoft Certified IT Professional (MCITP)

Certificate
Sioux City Campus

Program Overview and Opportunities:
This program was developed to provide students with the knowledge and training needed to obtain an MCITP certification. Role-based training reinforces key skills required to successfully administer current Microsoft systems.

Students benefit by using official training materials, up-to-date systems labs supplemented with online training from Microsoft. Courses cover configuration and administration of workstations, active directory domains, application infrastructure, network infrastructure, multi-domain enterprises, and e-mail systems. Upon completion of each course, students will be better prepared to take a specific Microsoft certification exam. While passing Microsoft certification exams are not required, Microsoft exam vouchers are included in course fees and exams may be taken at the Western Iowa Tech Testing Center. Most certification exams are heavily discounted for Microsoft IT Academy students.

Microsoft Certified Professional (MCP) Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>NET 162</td>
<td>IT Essentials II: Advanced PC Hardware and Software</td>
<td>3</td>
</tr>
<tr>
<td>NET 520</td>
<td>Microsoft Workstation MCTS</td>
<td>3</td>
</tr>
<tr>
<td>NET 536</td>
<td>Microsoft Exchange Server MCTS</td>
<td>3</td>
</tr>
<tr>
<td>NET 540</td>
<td>Microsoft Server Active Directory MCTS</td>
<td>3</td>
</tr>
<tr>
<td>NET 542</td>
<td>Microsoft Server Network Infrastructure MCTS</td>
<td>3</td>
</tr>
<tr>
<td>NET 543</td>
<td>Microsoft Server Applications Infrastructure MCTS</td>
<td>3</td>
</tr>
<tr>
<td>NET 547</td>
<td>Microsoft Server Enterprise Admin. MCITP</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total ........................................................ 22

Program Advisors
Keith Price, MCSE, MCP, A+, CCNA Ext. 1809 keith.price@witcc.edu
Room T215
Peter Albright Ext. 3233 peter.albright@witcc.edu
Room T215
Steve Ebsen, BS, Division Chair Ext. 1232 steve.ebsen@witcc.edu
Room T219
**Program Overview and Opportunities:**
If you’ve always been fascinated by law and the judicial system, but don’t really want to go as far as becoming a lawyer, explore WITCC’s paralegal program to get you on your way to a lucrative and exciting paralegal career. Paralegals are responsible for work on cases under the supervision of a lawyer, without having to put in the demanding hours of a full-time lawyer.

The job of a lawyer is often times taxing, as long hours and extremely difficult work are required. As a paralegal who completes our program, you can take the time to actually see if you enjoy a legal career, before committing to the demanding time and money that law school requires. In addition, with only two years of post-secondary study, you will gain the skills to pursue a professional career with above average starting wages.

Most paralegals work in law offices, under the supervision of a lawyer, while others work for government agencies. Paralegals who have successfully completed their paralegal studies work in all different types of law including: litigation, family law, corporate law, and many other areas. Because law has become so complex in recent years, many paralegals have specialties and focus on specific aspects of the law and cases.

The Paralegal program will provide students with the legal knowledge and administrative skills to serve as paralegals, working closely with not only attorneys in law firms, but also corporations, real estate companies, government agencies and the banking industry.

The courses taught in the program will focus on realistic projects, case studies, and practical application of classroom instruction. In both the classroom and through internships the students will develop professional networking relationships and have the opportunity to investigate various aspects of the paralegal/legal assistant profession. The program provides the educational background enabling the student to prepare for and take the NALA and NALS national certification exams.

Paralegals are projected to grow faster than the average for all occupations through 2020. Paralegals have a predicted growth projection of 18 percent by 2020. Employment growth stems from law firms and other employers with legal staffs increasingly hiring paralegals to lower the cost and increase the availability and efficiency of legal services. The majority of job openings for paralegals in the future will be new jobs created by rapid employment growth.

Paralegal students also have the opportunity to pursue the NALA (National Association of Legal Assistants) or NALS (National Association of Legal Secretaries) national certification exams.

**Legal Office Aide Certificate Curriculum**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ADM 105</td>
<td>Introduction to Keyboarding</td>
<td>1</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>BUS 185</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>PRL 101</td>
<td>Paralegal Studies Orientation</td>
<td>3</td>
</tr>
<tr>
<td>ADM 166</td>
<td>Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ENG 106</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>PRL 281</td>
<td>Legal Ethics</td>
<td>2</td>
</tr>
<tr>
<td>BUS 186</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>ADM 176</td>
<td>Electronic Records System</td>
<td>3</td>
</tr>
<tr>
<td>ADM 123</td>
<td>Document Formatting</td>
<td>3</td>
</tr>
<tr>
<td>ADM 159</td>
<td>Proofreading and Editing</td>
<td>3</td>
</tr>
<tr>
<td>PRL 131</td>
<td>Torts and Litigation I</td>
<td>3</td>
</tr>
<tr>
<td>PRL 112</td>
<td>Legal Research &amp; Writing I</td>
<td>3</td>
</tr>
<tr>
<td>PRL 201</td>
<td>Criminal Procedure</td>
<td>3</td>
</tr>
<tr>
<td>PRL 113</td>
<td>Legal Research &amp; Writing II</td>
<td>3</td>
</tr>
<tr>
<td>PRL 118</td>
<td>Computerized Legal Research</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>Math General Education Elective</td>
<td>3</td>
</tr>
<tr>
<td>PRL 161</td>
<td>Family Law</td>
<td>3</td>
</tr>
<tr>
<td>PRL 932</td>
<td>Internship</td>
<td>3</td>
</tr>
</tbody>
</table>

**Program Total** ...........................................23

√ Students must have earned a C (2.0) or better in courses as identified by # before registering for this course.

The Legal Office Aide certificate will provide students with the basic legal knowledge and administrative skills to serve attorneys in law firms, or support legal departments in corporations, real estate companies, government agencies, and the banking industry.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see a program advisor to ensure correct course sequence.
Professional Photography

Associate of Applied Science Degree
Sioux City Campus

Program Overview and Opportunities:
The two-year degree in Photography is designed for individuals planning careers in photography, professionals wishing to update their skills, students intending to transfer to a four-year degree program, and those seeking a creative and personal venue for their talents and interests.

Students have the opportunity to build upon the knowledge and skills acquired in the coursework and lab experiences of the Diploma curriculum.

Career opportunities for graduates include photojournalist, photographer in a number of specializations, digital photographer, and photo lab technician.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>GRA 100</td>
<td>MAC OS OR</td>
<td></td>
</tr>
<tr>
<td>BCA 206</td>
<td>Applied Computer Concepts OR</td>
<td></td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>ART 184</td>
<td>Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART 186</td>
<td>Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHT 104</td>
<td>Introduction to Lighting</td>
<td>3</td>
</tr>
<tr>
<td>PHT 107</td>
<td>Digital Darkroom</td>
<td>2</td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>ART 292</td>
<td>Studio Photography</td>
<td>3</td>
</tr>
<tr>
<td>BUS 130</td>
<td>Intro to Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>ART 185</td>
<td>Photography II</td>
<td>3</td>
</tr>
<tr>
<td>PHT 202</td>
<td>Basic Portraiture</td>
<td>3</td>
</tr>
<tr>
<td>PHT 204</td>
<td>Basic Commercial Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHT 947</td>
<td>Practicum</td>
<td>1</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math (3) OR</td>
<td></td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra (4)</td>
<td>3 or 4</td>
</tr>
<tr>
<td>PHT 208</td>
<td>Basic Photojournalism</td>
<td>3</td>
</tr>
<tr>
<td>ART 101</td>
<td>Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>PHT 103</td>
<td>Print Presentation Techniques</td>
<td>3</td>
</tr>
<tr>
<td>PHT 207</td>
<td>Advanced Digital Darkroom</td>
<td>3</td>
</tr>
<tr>
<td>PHT 214</td>
<td>Advanced Lighting</td>
<td>3</td>
</tr>
<tr>
<td>PHT 239</td>
<td>Advanced Photojournalism</td>
<td>3</td>
</tr>
<tr>
<td>ART 103</td>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>PHT 243</td>
<td>Wedding Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHT 230</td>
<td>Advanced Portraiture</td>
<td>3</td>
</tr>
<tr>
<td>PHT 236</td>
<td>Advanced Commercial Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHT 298</td>
<td>Photography Capstone Experience</td>
<td>2</td>
</tr>
</tbody>
</table>

Program Total ................................................. 69 or 70

Updated 9/17/13
Professional Photography Technician

Diploma
Sioux City Campus

Program Overview and Opportunities:
The Professional Photography diploma introduces students to the photography profession and provides the basic skills needed to photograph and operate cameras and other photography equipment and software. Composition, lighting, color and design usage and application are explored both on location and in a studio setting. Course content and skills are applicable to a career in commercial photography and for individuals wishing to pursue a baccalaureate degree.

Graduates are prepared to seek entry-level employment in positions such as:
- Commercial Photographer
- Digital Photographer
- Photo Lab Technician

Professional Photography Technician Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ART 184</td>
<td>Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART 186</td>
<td>Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHT 104</td>
<td>Introduction to Lighting</td>
<td>3</td>
</tr>
<tr>
<td>PHT 107</td>
<td>Digital Darkroom</td>
<td>2</td>
</tr>
<tr>
<td>GRA 100</td>
<td>Mac OS OR</td>
<td></td>
</tr>
<tr>
<td>BCA 206</td>
<td>Applied Computers OR</td>
<td></td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>ART 292</td>
<td>Studio Photography</td>
<td>3</td>
</tr>
<tr>
<td>BUS 130</td>
<td>Intro to Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>ART 185</td>
<td>Photography II</td>
<td>3</td>
</tr>
<tr>
<td>PHT 202</td>
<td>Basic Portraiture</td>
<td>3</td>
</tr>
<tr>
<td>PHT 204</td>
<td>Basic Commercial Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHT 947</td>
<td>Practicum Studio</td>
<td>1</td>
</tr>
</tbody>
</table>

Program Total ........................................... 34

Program Advisors
Michael Northrup, MAIS
Room E15  Ext. 1404  michael.northrup@witcc.edu

Michael Rohlena, MFA, Division Chair
Room A146  Ext. 3217  michael.rohlena@witcc.edu

Updated 9/17/13
Physical Education

Associate of Arts Degree (Transfer)
Sioux City Campus

Program Overview and Opportunities:
The Physical Education program is designed to meet the needs of the student who desires to transfer to a senior institution and complete a baccalaureate degree with a major or minor in physical education or a related area. Students can transfer into teacher education, lifetime fitness, sports management, or sports science at receiving colleges. Through a diversified program of courses and activities, the program encourages maintenance of health and physical activity, and the art of socialization through recreation and play. The curriculum features a broad academic base of knowledge in general studies areas, including humanities, social science, natural science, and mathematics. Elective opportunities in health and performance courses provide all students with an opportunity to build a foundation for a lifetime of enriched living.

Employment projections show an anticipated teacher shortage in the near future. According to the Bureau of Labor Statistics, job opportunities for teachers over the next ten years will vary from good to excellent, depending on the locality, grade level, and subject taught. Most job openings will result from the need to replace the large number of teachers who are expected to retire over the 2008-14 period. (Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2008-09 Edition)

Are You a Part-time Student?
You may take any of the courses in this program as a part-time student. Please refer to any prerequisites before signing up for upper level courses.

Program Advisor
Steve Ebsen, BS, Division Chair
Ext. 1232
steve.ebsen@witcc.edu

Physical Education Associate of Arts Degree
Successful completion of SDV 108 is a requirement of graduation.

I. General Education Core
A. English and Speech (minimum of 9 credits)
   ENG 105 and 106
   SPC 112

B. Mathematics and Laboratory Sciences (minimum of 8 credits)
   Must include one math course and one lab science course from the following:
   BIO 105, 125, 163
   CHM 122
   ENV 111
   MAT 111, 117,
   PHS 120, 151

C. Social and Behavioral Sciences (minimum of 9 credits)
   CLS 212 or SOC 212 (required)
   Choose one course from section 2 plus one course from section 1 or 2:
   Section 1. History and Diverse Cultures (additional distribution choices)
   ANT 105
   GEO 121
   HIS 110, 111, 151, 152, 211
   LIT 150
   SOC 200, 210

   Section 2. Social and Political Sciences
   ECN 120, 130
   POL 111, 112, 121, 125, 151, 211
   PSY 111, 121
   SOC 110, 120

D. Humanities (minimum of 9 credits)
   Choose three courses from at least two of the following disciplines
   ART 101, 203, 204
   DRA 101, 112
   ENG 221
   MUS 100, 202
   FLF 141, 142, 231, 232
   REL 101, 150
   FLS 141, 142, 231, 232
   SPC 122, 140
   HUM 101, 220

E. Computer Literacy/Technology - Suggested Elective
   Computer literacy is critical to your success as a college student. It is strongly recommended that you consider your competency in computer applications. Some major programs at transfer institutions may require a computer applications course. Consult with your advisor regarding this suggested course.
   CSC 110, Introduction to Computers

F. Distributed requirement (6 credits required)
   Take two additional courses from any of these areas: Mathematics, Laboratory Science, Social and Behavioral Sciences, and Humanities.

II. Area of Concentration (minimum of 9 credits)
   PEA--any course; PEC--any course; PEH--any course

III. Electives (credits vary)
   SDV 108, The College Experience (required)
   Consult a faculty advisor, the transferring institution and page 18 of the catalog.

PROGRAM TOTAL...............................(Minimum) 64
Physical Education

Coaching

Certificate
Cherokee, Denison and Sioux City Campuses

Program Overview and Opportunities:
Individuals who meet state certification for teaching in a K-12 institution have a better opportunity to gain coaching positions.


Coaching Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEC 110</td>
<td>Coaching Ethics, Techniques and Theory</td>
<td>1</td>
</tr>
<tr>
<td>PEC 115</td>
<td>Athletic Development and Human Growth</td>
<td>1</td>
</tr>
<tr>
<td>PEC 120</td>
<td>Body Structure and Function</td>
<td>1</td>
</tr>
<tr>
<td>PEC 126</td>
<td>Athletic Injury Prevention</td>
<td>2</td>
</tr>
</tbody>
</table>

Program Total..............................................................5

Are You a Part-time Student?
All of these courses can be taken on a part-time basis.
See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. Please see an advisor to ensure correct course sequence.

Program Advisor
Steve Ebsen BS, Division Chair
Room A145
Ext. 1232
steve.ebsen@witcc.edu

Page Updated 6/13/13
Police Science

Police Science–Corrections

Associate of Applied Science Degree
Sioux City Campus

Program Overview and Opportunities:
The Corrections program is designed for the student who wishes to pursue entry level employment in the field of corrections, take additional classes to receive a degree or to transfer to a four-year institution. The graduate will be prepared for entry level positions in law enforcement as well as positions with private security, corrections, juvenile work, and private investigation.

To be accepted into the program, students much achieve the following scores on the Computerized Placement Test (CPT): 80 Reading; 86 Sentence Structure; 56 Arithmetic or 38 Elementary Algebra.

Employment trends show the demand for correctional officers to increase by 9 percent between 2008 and 2018. Median annual earnings of correctional officers and jailers were $38,000 in May 2006. Median annual earnings in the public sector were $50,830 in the Federal Government, $36,140 in State government, and $34,820 in local government. Employment trends show the demand for probation officers to increase by 9 percent between 2008 and 2018. Median annual earnings of probation officers and correctional treatment specialists in May 2008 were $45,910. (Bureau of Labor Statistics)

Are You a Part-time Student?
The following courses could be taken on a part-time basis before acceptance into the Police Science program. Some of these courses are offered online.

Refresher reading, English, math or science course if CPT scores warrant; CRJ 100, PSY 111, ENG 105, MAT 121, SOC 110, BIO 116, CHM 166, ART 184, SOC 200, SPC 122, FLS 100, FLS 141, and CSC 110. Please see a program advisor to develop an individualized plan of study.

Program Advisors
Ron Barnes, AAS, EMT-Paramedic
Room A75L
ron.barnes@witcc.edu

Don Dorn, AAS, BS, MS
Room A76L
don.dorn@witcc.edu

Gary Powell, AAS, BS
Room A23L
gary.powell@witcc.edu

Steve Ebsen, BS, Division Chair
Room T219
steve.ebsen@witcc.edu

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. The courses listed above are grouped in the order that they should be taken each semester. Please see a police science program advisor to ensure correct course sequence.

Police Science–Corrections Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>CRJ 100</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 133</td>
<td>Constitutional Criminal Procedure</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 140</td>
<td>Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Intro to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 120</td>
<td>Intro to Corrections</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 201</td>
<td>Juvenile Delinquency</td>
<td>3</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math OR</td>
<td>3</td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra (4)</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 262</td>
<td>Fingerprint Technology</td>
<td>2</td>
</tr>
<tr>
<td>CRJ 223</td>
<td>Correctional Administration</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 101</td>
<td>Ethics in Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 144</td>
<td>Police Photography</td>
<td>2</td>
</tr>
<tr>
<td>CRJ 200</td>
<td>Criminology</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 217</td>
<td>Selective Drug Enforcement</td>
<td>2</td>
</tr>
<tr>
<td>EMS 114</td>
<td>Emergency Medical Responder*</td>
<td>2</td>
</tr>
<tr>
<td>CRJ 224</td>
<td>Correctional Institutions</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>General Education Electives</td>
<td>6</td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>PSY 241</td>
<td>Abnormal Psychology</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 221</td>
<td>Probation and Parole</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 131</td>
<td>Criminal Law and Procedure</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 220</td>
<td>Community-Based Corrections</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>General Education Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total........................................................................70
Police Science

Police Science–Forensics Investigation

Associate of Applied Science Degree
Sioux City Campus

Program Overview and Opportunities:
This unique program covers introductory courses in a continuum of forensic and criminalistics inquiries, preparing the student for initial and subsequent crime scene investigations to evidence examination and analyses to criminal legal proceedings.

To be accepted into the program, students must achieve the following scores on the Computerized Placement Test (CPT): 80 Reading; 86 Sentence Structure; 56 Arithmetic or 38 Elementary Algebra.

Students will acquire an introduction to the scientific methods underlying forensic investigations. Use of case studies and practical laboratory exercises fosters examinations of how forensic science influences the outcomes of investigative and legal processes.

Attorneys, police officers, case workers, public defenders, insurance investigators, authors, physicians, nurses, private investigators, and other professionals in fields related to forensics will find this program challenging and rewarding.

Graduates of this program may seek employment as entry-level crime scene technicians or transfer to a four-year institution.


Police Science–Forensics Investigation Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 100</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 140</td>
<td>Criminal Investigation</td>
<td>1</td>
</tr>
<tr>
<td>CRJ 110</td>
<td>Patrol Procedures</td>
<td>3</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 133</td>
<td>Constitutional Criminal Procedure</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 131</td>
<td>Criminal Law and Procedure</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 262</td>
<td>Fingerprint Technology</td>
<td>2</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 101</td>
<td>Ethics in Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>SOC 110</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 210</td>
<td>Law Enforcement Management</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 260</td>
<td>Medicolegal Death Investigation</td>
<td>3</td>
</tr>
<tr>
<td>BIO 116</td>
<td>General Biology I</td>
<td>4</td>
</tr>
<tr>
<td>CHM 166</td>
<td>General Chemistry I OR</td>
<td></td>
</tr>
<tr>
<td>BIO 169</td>
<td>Anatomy and Human Physiology IA w/Lab</td>
<td>4</td>
</tr>
<tr>
<td>ART 184</td>
<td>Photography</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 144</td>
<td>Police Photography</td>
<td>2</td>
</tr>
<tr>
<td>CRJ 241</td>
<td>Applied Criminalistics</td>
<td>2</td>
</tr>
<tr>
<td>SOC 200</td>
<td>Minority Group Relations OR</td>
<td></td>
</tr>
<tr>
<td>CRJ 200</td>
<td>Criminology</td>
<td>3</td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>FLS 100</td>
<td>Spanish for Professionals: Law Enforcement OR</td>
<td></td>
</tr>
<tr>
<td>FLS 141</td>
<td>Elementary Spanish I (4)</td>
<td>1</td>
</tr>
<tr>
<td>CRJ 243</td>
<td>Traffic Collision Investigation</td>
<td>2</td>
</tr>
<tr>
<td><strong>Program Total</strong></td>
<td></td>
<td><strong>65</strong></td>
</tr>
</tbody>
</table>

Are You a Part-time Student?
The following courses could be taken on a part-time basis before acceptance into the Police Science program. Some of these courses are offered online.

Refresher reading, English, math or science course if CPT scores warrant; CRJ 100, PSY 111, ENG 105, MAT 121, SOC 110, BIO 116, CHM 166, ART 184, SOC 200, SPC 122, FLS 100, FLS 141, and CSC 110. Please see a program advisor to develop an individualized plan of study.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see a police science program advisor to ensure correct course sequence.
Police Science

Police Science Technology

Associate of Applied Science Degree
Sioux City Campus

Program Overview and Opportunities:
The Police Science Technology program provides students with classroom, laboratory, and hands-on training as preparation for entry into law enforcement. To be accepted into the program, students must achieve the following scores on the Computerized Placement Test (CPT): 80 Reading; 86 Sentence Structure; 56 Arithmetic or 38 Elementary Algebra.

Traditional classroom academic education is combined with laboratory courses and the practical application of learned skills to prepare students for job entry. Although traditional law enforcement careers are the goal of most entering students, other available options include positions with private security, corrections, juvenile work, and private investigation. Students may elect to continue their education in colleges accepting transfer credits.

Positions available for students greatly exceed the number of graduates from the program. The placement rate of graduates has remained at 85 percent throughout the lifetime of the program. Increasing national population and unresolved and complex social problems indicate a constant and ever-increasing demand for law enforcement personnel.

Law enforcement officers typically: provide for public safety by maintaining order, responding to emergencies, protecting people and property, enforcing motor vehicle and criminal laws, and promoting good community relations; identify, pursue, and arrest suspects and perpetrators of criminal acts; record facts to prepare reports that document incidents and activities; review facts of incidents to determine if criminal act or statute violations were involved; render aid to accident victims and other persons requiring first aid for physical injuries; testify in court to present evidence or act as witness in traffic and criminal cases; evaluate complaint and emergency-request information to determine response requirements.

Employment trends show the demand for security officers, police and sheriff’s deputies increasing by 17 percent until 2014. Iowa salaries for security officers range from $10 to $17/hour with 36 percent of the jobs requiring some college. Salaries for police and deputies range from $23 to $35/hour, with 50 percent of the positions requiring some college or a degree. (Bureau of Labor Statistics, 2006-2007)

Are You a Part-time Student?
The following courses could be taken on a part-time basis before acceptance into the Police Science program. Some of these courses are offered online.

Refresher reading, English, or math course if CPT scores warrant; CRJ 100, PEA 148, PSY 111, ENG 105, MAT 772, CSC 110, and EMS 110. Please see a program advisor to develop an individualized plan of study.

Program Advisors
Ron Barnes, AAS, EMT-Paramedic
Room A75L
Ext. 1347
ron.barnes@witcc.edu

Don Dorn, AAS, BS, MS
Room A76L
Ext. 1448
don.dorn@witcc.edu

Gary Powell, AAS, BS
Room A23L
Ext. 1463
gary.powell@witcc.edu

Steve Ebsen, BS, Division Chair
Room T219
Ext. 1232
steve.ebsen@witcc.edu

Police Science Technology Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>CRJ 100</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 133</td>
<td>Constitutional Criminal Procedure</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 201</td>
<td>Juvenile Delinquency</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 257</td>
<td>Physical Fitness &amp; Conditioning</td>
<td>1</td>
</tr>
<tr>
<td>CRJ 140</td>
<td>Criminal Investigation</td>
<td>1</td>
</tr>
<tr>
<td>CRJ 113</td>
<td>Field Strategies</td>
<td>3</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education Elective</td>
<td>1</td>
</tr>
<tr>
<td>CRJ 262</td>
<td>Fingerprint Technology</td>
<td>2</td>
</tr>
<tr>
<td>CRJ 101</td>
<td>Ethics in Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>ENG 105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 210</td>
<td>Law Enforcement Management</td>
<td>3</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 150</td>
<td>Defensive Tactics</td>
<td>1</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 280</td>
<td>Police Science Practicum I</td>
<td>2</td>
</tr>
<tr>
<td>CRJ 200</td>
<td>Criminology</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 253</td>
<td>Basic Firearms</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 110</td>
<td>Patrol Procedures</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 144</td>
<td>Police Photography</td>
<td>2</td>
</tr>
<tr>
<td>EMS 114</td>
<td>Emergency Medical Responder*</td>
<td>2</td>
</tr>
<tr>
<td>CRJ 217</td>
<td>Selective Drug Enforcement</td>
<td>2</td>
</tr>
<tr>
<td>CRJ 241</td>
<td>Applied Criminalistics</td>
<td>2</td>
</tr>
<tr>
<td>CRJ 120</td>
<td>Intro to Corrections</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 255</td>
<td>Advanced Firearms</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 243</td>
<td>Traffic Collision Investigation</td>
<td>2</td>
</tr>
<tr>
<td>CRJ 281</td>
<td>Police Science Practicum II</td>
<td>2</td>
</tr>
<tr>
<td>CRJ 231</td>
<td>Traffic Law</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 131</td>
<td>Criminal Law and Procedure</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total.............................................72

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see a police science program advisor to ensure correct course sequence.

* Denotes courses commonly articulated with area high schools.

Western Iowa Tech Community College 2013-2014 Catalog 148 800.352.4649 or www.witcc.edu
Political Science

Associate of Arts Degree (Transfer)
Cherokee, Denison, and Sioux City Campuses

Program Overview and Opportunities:
The Political Science program is designed to provide the academic course work for students who want to complete the first two years of a baccalaureate degree. The curriculum emphasizes government and history and provides an excellent basis for pre-law, public administration, various majors related to government service, and further concentration in political science. Students will study how political systems are created, the nature of social contract between people and governments, political parties, political behavior, and the evolution of political institutions. The program also offers a well balanced distribution of language arts, natural science, mathematics, and humanities courses for a broad educational experience. (Bureau of Labor Statistics, 2008-2009)

Successful completion of SDV 108 is a requirement of graduation.

Are You a Part-time Student?
You may take any of the courses in this program as a part-time student. Please refer to any prerequisites before signing up for upper level courses.

Program Advisors
Robert Creasey, JD
Denison Campus
Ext. 1458
bob.creasey@witcc.edu

Darin Moeller, MED, Division Chair
Room A314
Ext. 1493
darin.moeller@witcc.edu

Political Science Associate of Arts Degree
Successful completion of SDV 108 is a requirement of graduation.

I. General Education Core
A. English and Speech (minimum of 9 credits)
   ENG 105 and 106
   SPC 112

B. Mathematics and Laboratory Sciences (minimum of 8 credits)
   Must include one math course and one lab science course from the following:
   BIO 105, 125, 163
   CHM 122
   ENV 111
   MAT 111, 117, 121
   PHS 120, 151

C. Social and Behavioral Sciences (minimum of 9 credits)
   CLS 212 or SOC 212 (required)
   Choose one course from section 2 plus one course from section 1 or 2:
   Section 1. History and Diverse Cultures (additional distribution choices)
   ANT 105
   GEO 121
   HIS 110, 111, 151, 152, 211
   LIT 150
   SOC 200, 210
   Section 2. Social and Political Sciences
   ECN 120, 130
   POL 111, 112, 121, 125, 151, 211
   PSY 111, 121
   SOC 110, 120

D. Humanities (minimum of 9 credits)
   Choose three courses from at least two of the following disciplines
   ART 101, 203, 204
   LIT 101, 124, 133, 185, 189
   DRA 101, 112
   MMS 101
   ENG 221
   MUS 100, 202
   FLF 141, 142
   PHI 101, 105, 111
   FLG 141, 142, 231, 232
   REL 101, 150
   FLS 141, 142, 231, 232
   SPC 122
   HUM 101, 220

E. Computer Literacy/Technology - Suggested Elective
   Computer literacy is critical to your success as a college student. It is strongly recommended that you consider your competency in computer applications. Some major programs at transfer institutions may require a computer applications course. Consult with your advisor regarding this suggested course.
   CSC 110, Introduction to Computers

F. Distributed requirement (6 credits required)
   Take two additional courses from any of these areas:
   Mathematics, Laboratory Science, Social and Behavioral Sciences, and Humanities.

II. Area of Concentration (minimum of 9 credits)
Consult your academic advisor when selecting concentration courses.

III. Electives (credits vary)
SDV 108, The College Experience (required)
Consult a faculty advisor, the transferring institution and page 18 of the catalog.

PROGRAM TOTAL..................................................(Minimum) 64
Psychology

Associate of Arts Degree (Transfer)
Sioux City Campuses

The psychology program is a transfer program that could be continued at a four-year institution as part of a bachelor’s degree. It’s important to consult with your advisor as you take courses to ensure they meet the requirements at the four-year institution to which you intend to transfer.

Program Overview and Opportunities:
Most vocational opportunities in psychology require advanced professional training. With a bachelor’s degree in psychology, you would be prepared for jobs that use people skills (such as ability to communicate with and relate to people from diverse backgrounds as is required for case workers, counselor’s aides, and in sales, marketing, personnel, and management positions); analytical skills (for example, figuring out why a certain problem occurs and how to minimize or eliminate it); writing skills (for example, writing a logically developed report; and research skills (using statistics and graphs to analyze problems). Psychiatrists are physicians (M.D.’s) with specialized training.

With a Master’s degree there are opportunities to teach psychology at the junior college or high school level or for work in a business, school, or hospital. Counseling, social work, business, probation officer, corrections officer, health and recreation, and education are all possible fields. Clinical Psychologist requires a doctorate. Psychiatrists are physicians (M.D.’s) with specialized training.

Psychologists conduct both basic and applied research, serve as consultants to communities and organizations, diagnose and treat people, and teach future psychologists an other types of students. They test intelligence and personality. Many psychologists work as health care providers. They study how human beings relate to each other and also to machines, and they work to improve these relationships. And with America undergoing large changes in its population makeup, psychologies bring important knowledge and skills to understanding diverse cultures.

The U.S. Bureau of Labor Statistics expects that opportunities in psychology will continue to grow over the next decade. “Employment in health care will grow fastest in outpatient mental health and substance abuse treatment clinics. Numerous job opportunities will also arise in schools, public and private social services agencies, and management consulting services. Companies will use psychologists’ expertise in survey design, analysis, and research to provide marketing evaluation and statistical analysis. The increase in employee assistance programs, which offer employees help with personal problems, also should spur job growth.

Successful completion of SDV 108 is a requirement of graduation.

General education core course requirements for Associate of Arts Degree are listed on page 18.

General education core course requirements for Associate of Science Degree are listed on page 19.

Consult advisor when selecting electives.

Area of concentration is a minimum of nine credits from the list below. These nine credits are in addition to the general education core.

Select from the following courses:

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 121</td>
<td>Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 171</td>
<td>Health Psychology (online only)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 211</td>
<td>Psychology of Adjustment (online only)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 222</td>
<td>Child Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 224</td>
<td>Adolescent Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 241</td>
<td>Abnormal Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 248</td>
<td>Counseling Theory</td>
<td>3</td>
</tr>
<tr>
<td>PSY 251</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 261</td>
<td>Human Sexuality (online only)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 295</td>
<td>Addictive and Mental Disorders</td>
<td>3</td>
</tr>
<tr>
<td>PSY 932</td>
<td>Internship (Addictions Counseling Track only)</td>
<td>1</td>
</tr>
<tr>
<td>PSY 949</td>
<td>Special Topics (by special permission)</td>
<td>1</td>
</tr>
</tbody>
</table>

Program Advisors

Deb Gifford, MED
Room L314
Ext. 1354
deb.gifford@witcc.edu

Robert Creasey, JD
Denison Campus
Ext. 2623
bob.creasey@witcc.edu

Rhonda Briggs, EdD
Room L314
Ext. 1202
rhonda.briggs@witcc.edu

Darin Moeller, MED, Division Chair
Room A314
Ext. 1493
darin.moeller@witcc.edu
Social Media Marketing

Associate of Applied Science
Sioux City Campus

Program Overview and Opportunities:
The Social Media Marketing assists in the design and development of social media strategy utilizing various media platforms (Twitter, Facebook, YouTube).

The curriculum focuses on management of social media campaigns, engagement of social communities, development of content for reputable brand management ensuring positive consumer experience using integrated marketing promotions.

This program also included a capstone project that allows students to gain practical hands on experience. They will collaborate with other creative programs to seamlessly integrate design solutions to meet complex marketing challenges. For more information contact Michael Rohlena (712) 274-8733, ext. 3217 or e-mail Michael.Rohlena@witcc.edu.

Social Media Marketing Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>GRA 201</td>
<td>Design Principles I</td>
<td>3</td>
</tr>
<tr>
<td>GRA 131</td>
<td>Digital Layout</td>
<td>3</td>
</tr>
<tr>
<td>GRA 140</td>
<td>Digital Imaging</td>
<td></td>
</tr>
<tr>
<td>GRA 286</td>
<td>Creative Media</td>
<td>3</td>
</tr>
<tr>
<td>GRA 198</td>
<td>Creative Career Seminar I</td>
<td>1</td>
</tr>
<tr>
<td>ENG 105</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>GRA 207</td>
<td>Design Principles II</td>
<td>3</td>
</tr>
<tr>
<td>GRA 132</td>
<td>Digital Layout II</td>
<td>3</td>
</tr>
<tr>
<td>GRA 121</td>
<td>Digital Drawing</td>
<td></td>
</tr>
<tr>
<td>GRA 151</td>
<td>Web Design</td>
<td>3</td>
</tr>
<tr>
<td>GRA 208</td>
<td>Creative Career Seminar II</td>
<td>1</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Introduction to Psychology OR SOC 110</td>
<td>3</td>
</tr>
<tr>
<td>ART 186</td>
<td>Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>Math Elective</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Intro to Computers OR BCA 206</td>
<td>3</td>
</tr>
<tr>
<td>GRA 240</td>
<td>Project Management for Creative Careers</td>
<td>2</td>
</tr>
<tr>
<td>BUS 150</td>
<td>E-Commerce</td>
<td>3</td>
</tr>
<tr>
<td>SMM 101</td>
<td>Social Media Explored</td>
<td>3</td>
</tr>
<tr>
<td>MKT 110</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MMS 132</td>
<td>Writing for the Mass Comm</td>
<td>3</td>
</tr>
<tr>
<td>BUS 124</td>
<td>Business Innovations</td>
<td>3</td>
</tr>
<tr>
<td>GRA 246</td>
<td>Design Concepts and Trends</td>
<td>3</td>
</tr>
<tr>
<td>SMM 107</td>
<td>Applied Social Marketing</td>
<td>3</td>
</tr>
<tr>
<td>GRA 247</td>
<td>Business Presentations</td>
<td></td>
</tr>
<tr>
<td>GRA 255</td>
<td>Motion Media Design I</td>
<td>3</td>
</tr>
<tr>
<td>GRA 700</td>
<td>Capstone for Creative Careers</td>
<td>1</td>
</tr>
</tbody>
</table>

Program Total................................................72

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. The courses listed above are grouped in the order that they should be taken each semester. Please see a police science program advisor to ensure correct course sequence.

Curriculum updated 9/17/13

Program Advisors
Kendra Bergenske, MA
Room L314
kendra.bergenske@witcc.edu

Michael Rohlena, MFA, Division Chair
Room A146
michael.rohlena@witcc.edu
Social Work Cooperative 2+2 Programs

Western Iowa Tech Community College currently offers specific transfer agreements to

- Briar Cliff University
- University of South Dakota
- Buena Vista University

Speak directly to an academic advisor for a list of transfer courses specific to each college.

Program Overview and Opportunities:
Social work is a helping profession. Social workers assess human problems and engage in problem solving. The social worker understands the process of individual development and the interaction with the social environment. The baccalaureate major in social work prepares generalist social workers at the undergraduate level for entry-level positions in social work and for graduate social work. It develops professional knowledge, skills, and attitudes that are needed by professional social workers in various fields of social work practice. It enables students to initiate and promote desirable social change through responsible community action.

Social work is a profession for individuals wanting to improve the lives of others. There are many different kinds of social workers: child, family, and school social workers; medical and public health social workers; mental health and substance abuse social workers. Employment rates for trained social workers will be much greater than the average occupation; in fact, according to the 2008-2009 Occupational Outlook Handbook, employment is expected to increase by 22 percent from 2006-16. (Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2008-09 Edition)

Are You a Part-time Student?
All of these courses can be taken on a part-time basis
See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.
Please see an advisor to ensure correct course sequence.

Program Advisors
Jill Moravek, PhD
Room L314 Ext. 1443 jill.moravek@witcc.edu

Darin Moeller, MED, Division Chair
Room A314 Ext. 1493 darin.moeller@witcc.edu
Sociology

ASSOCIATE OF ARTS DEGREE

Successful completion of SDV 108 is a requirement of graduation.

I. General Education Core
   A. English and Speech (minimum of 9 credits)
      ENG 105 and 106
      SPC 112
   B. Mathematics and Laboratory Sciences
      (minimum of 8 credits)
      Must include one math course and one lab science
      course from the following:
      BIO 105, 125, 163
      CHM 122
      ENV 111
      MAT 111, 117, 121
      PHS 120, 151
   C. Social and Behavioral Sciences (minimum of 9 credits)
      CLS 212 or SOC 212 (required)
      Choose one course from section 2 plus one course from
      section 1 or 2:
      Section 1. History and Diverse Cultures
      (additional distribution choices)
      ANT 105
      GEO 121
      HIS 110, 111, 151, 152, 211
      LIT 150
      SOC 200, 210
      Section 2. Social and Political Sciences
      ECN 120, 130
      POL 111, 112, 121, 125, 151, 211
      PSY 111, 121
      SOC 110, 120
   D. Humanities (minimum of 9 credits)
      Choose three courses from at least two of the following disciplines
      ART 101, 203, 204
      LIT 101, 124, 133, 185, 189
      DRA 101, 112
      MMS 101
      ENG 221
      MUS 100, 202
      FLF 141, 142
      PHI 101, 105, 111
      FLG 141, 142, 231, 232
      REL 101, 150
      FLS 141, 142, 231, 232
      SPC 122
      HUM 101, 220
   E. Computer Literacy/Technology - Suggested Elective
      Computer literacy is critical to your success as a college
      student. It is strongly recommended that you consider your
      competency in computer applications. Some major programs
      at transfer institutions may require a computer applications
      course. Consult with your advisor regarding this
      suggested course.
      CSC 110, Introduction to Computers
   F. Distributed requirement (6 credits required)
      Take two additional courses from any of these areas:
      Mathematics, Laboratory Science, Social and Behavioral Sciences,
      and Humanities.

II. Electives (credits vary)
   SDV 108, The College Experience (required)
   Consult a faculty advisor, the transferring institution and page 18 of
   the catalog.

Program Total.................................................................................(Minimum) 64

Program Advisors
Jill Moravek, PhD
Room L314
jill.moravek@witcc.edu
Ext. 1443
Darin Moeller, MED, Division Chair
Room A314
darin.moeller@witcc.edu
Ext. 1493

800.352.4649 or www.witcc.edu
Technical Studies

Associate of Applied Science Degree
Sioux City Campus

Purpose
This associate degree is designed to meet the specific educational needs of students, businesses, and industry. The Technical Studies Associate of Applied Science degree is a customized program drawing from existing course offerings. The degree will allow students to combine skills and knowledge from different disciplines, enabling the graduate to meet a specific job opportunity. Students will develop an approved Plan of Study in cooperation with their academic advisors. The Plan of Study must include a rationale, sequenced courses, and sufficient evidence of academic rigor to warrant the confirmation of the Associate of Applied Science degree. The Plan of Study must be approved by the respective division chair(s) and dean(s). The amount of time required to complete this degree will vary.

Are You a Part-time Student?
This program could be taken on a part-time basis.
Please see an advisor to develop an individualized plan of study.

Degree Requirements
A minimum of 64 credit hours must be achieved through a combination of the following options.
Successful completion of SDV 108 is a requirement of graduation.

Technical Courses:
A minimum of 43 credit hours in vocational/technical courses as defined in the student’s approved Plan of Study. Registered Apprenticeships* and/or documented Credit for Prior Learning may apply in this category.

General Education:
A minimum of 15 credit hours of general education distributed over at least five of the six content areas are required for the Associate of Applied Science degree as defined in the College catalog.

Internship:
Up to six (6) credit hours are allowed for an approved internship.**

* Registered Apprenticeship is a training system that produces highly skilled workers to meet the demands of employers competing in a global economy. Registered Apprenticeship ensures quality training by combining on-the-job training with theoretical and practical classroom instruction to prepare exceptional workers for American industry. (Department of Labor, 2003)

** Internships offer a structured learning experience within a job setting. These experiences provide students with the opportunity to apply classroom theory and hone their skills. An internship is provided under the direction and supervision of the designated College department. This requirement may be waived in part or total and replaced by credits earned through additional coursework identified in the student’s approved Plan of Study.

Program Advisors
Steve Ebsen, BS, Division Chair
Room T219
Ext. 1232
steve.ebsen@witcc.edu

Gloria Stewart, EdD, Division Chair
Room L313
Ext. 1350
gloria.stewart@witcc.edu

Greg Strong, BS, BA, Division Chair
Room A111
Ext. 1480
greg.strong@witcc.edu

Cindy Zortman, MED, Division Chair
Room L326
Ext. 1351
Cindy.zortman@witcc.edu

Darin Moeller, MED, Division Chair
Room A314
Ext. 1493
darin.moeller@witcc.edu

Michael Rohlena, MFA, Division Chair
Room A146
Ext. 3217
michael.rohlena@witcc.edu

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.
The courses listed above are grouped in the order that they should be taken each semester. Please see an advisor to ensure correct course sequence.
Video Game Design

Associate of Applied Science Degree
Sioux City Campus

Program Overview and Opportunities:
Video Game Design is a program of study in game design, interactive software development, and programming. Students develop skills and technical knowledge that apply to traditional artistry, 3D modeling, animation, fundamentals of game engine development, and artificial intelligence for games. They develop an understanding of the full game development life cycle through the art and design process and are able to design, develop, test, and deploy interactive software. With an understanding of the full cycle of creating game software, students can assume responsibility for a specific job within this cycle. Graduates could pursue a career as a 3D modeler, animator, game support specialist, computer programmer, game analyst, and more.

Video Game Design
Technical Artistic Track Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>COM 753</td>
<td>Technical Communications</td>
<td>3</td>
</tr>
<tr>
<td>CIS 162</td>
<td>C++</td>
<td>4</td>
</tr>
<tr>
<td>CIS 381</td>
<td>Intro to 3D Modeling &amp; Topology</td>
<td>1</td>
</tr>
<tr>
<td>CIS 386</td>
<td>Game Design 101</td>
<td>3</td>
</tr>
<tr>
<td>CIS 387</td>
<td>Game Development Process</td>
<td>3</td>
</tr>
<tr>
<td>CIS 383</td>
<td>Digital Composition/Graphics I</td>
<td>2</td>
</tr>
<tr>
<td>CIS 398</td>
<td>Creative Writing for Games</td>
<td>3</td>
</tr>
<tr>
<td>CIS 389</td>
<td>Level Design I</td>
<td>3</td>
</tr>
<tr>
<td>CIS 392</td>
<td>Interface Design for Games</td>
<td>3</td>
</tr>
<tr>
<td>MAT 102</td>
<td>Intermediate Algebra</td>
<td>4</td>
</tr>
<tr>
<td>CIS 165</td>
<td>Advanced C++</td>
<td>4</td>
</tr>
<tr>
<td>CIS 390</td>
<td>Level Design II</td>
<td>3</td>
</tr>
<tr>
<td>ART 370</td>
<td>Traditional &amp; New Media Art 2-D Design</td>
<td>3</td>
</tr>
<tr>
<td>CIS 395</td>
<td>Game Engines</td>
<td>3</td>
</tr>
<tr>
<td>CIS 391</td>
<td>Animation for Games</td>
<td>2</td>
</tr>
<tr>
<td>CIS 394</td>
<td>Introduction to Game Programming</td>
<td>3</td>
</tr>
<tr>
<td>MAT 141</td>
<td>Finite Math</td>
<td>4</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers OR</td>
<td></td>
</tr>
<tr>
<td>BCA 206</td>
<td>Applied Computer Concepts OR</td>
<td></td>
</tr>
<tr>
<td>GRA 100</td>
<td>Mac OS</td>
<td>3</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>CIS 396</td>
<td>Game Development Team</td>
<td>3</td>
</tr>
<tr>
<td>CIS 397</td>
<td>Physics for Game Design</td>
<td>4</td>
</tr>
<tr>
<td>CIS 398</td>
<td>Game Final Submission</td>
<td>2</td>
</tr>
</tbody>
</table>

Program Total...................................................................70

Video Game Design
Artistic Track Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>COM 753</td>
<td>Technical Communications</td>
<td>3</td>
</tr>
<tr>
<td>CIS 162</td>
<td>C++</td>
<td>4</td>
</tr>
<tr>
<td>CIS 381</td>
<td>Intro to 3D Modeling &amp; Topology</td>
<td>1</td>
</tr>
<tr>
<td>CIS 386</td>
<td>Game Design 101</td>
<td>3</td>
</tr>
<tr>
<td>CIS 387</td>
<td>Game Development Process</td>
<td>3</td>
</tr>
<tr>
<td>CIS 383</td>
<td>Digital Composition/Graphics I</td>
<td>2</td>
</tr>
<tr>
<td>CIS 388</td>
<td>Creative Writing for Games</td>
<td>3</td>
</tr>
<tr>
<td>CIS 389</td>
<td>Level Design I</td>
<td>3</td>
</tr>
<tr>
<td>CIS 392</td>
<td>Interface Design for Games</td>
<td>3</td>
</tr>
<tr>
<td>ART 371</td>
<td>Traditional &amp; New Media Art 3-D Design</td>
<td>3</td>
</tr>
<tr>
<td>MAT 102</td>
<td>Intermediate Algebra</td>
<td>4</td>
</tr>
<tr>
<td>CIS 384</td>
<td>Digital Composition &amp; Graphics Pipeline I</td>
<td>2</td>
</tr>
<tr>
<td>CIS 390</td>
<td>Level Design II</td>
<td>3</td>
</tr>
<tr>
<td>ART 370</td>
<td>Traditional &amp; New Media Art 2-D Design</td>
<td>3</td>
</tr>
<tr>
<td>CIS 395</td>
<td>Game Engines</td>
<td>3</td>
</tr>
<tr>
<td>CIS 391</td>
<td>Animation for Games</td>
<td>2</td>
</tr>
<tr>
<td>ART 373</td>
<td>Digital Color, Lighting, &amp; Rendering</td>
<td>2</td>
</tr>
<tr>
<td>CIS 393</td>
<td>Introduction to 3-D Gaming Art</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers OR</td>
<td></td>
</tr>
<tr>
<td>BCA 206</td>
<td>Applied Computer Concepts OR</td>
<td></td>
</tr>
<tr>
<td>GRA 100</td>
<td>Mac OS</td>
<td>3</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SPC 112</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>CIS 396</td>
<td>Game Development Team</td>
<td>3</td>
</tr>
<tr>
<td>CIS 397</td>
<td>Physics for Game Design</td>
<td>4</td>
</tr>
<tr>
<td>CIS 398</td>
<td>Game Final Submission</td>
<td>2</td>
</tr>
</tbody>
</table>

Program Total...................................................................69

Program Advisors
Frank Heffner, PhD
Room A104
Ext. 1426
frank.heffner@witcc.edu

Michael Rohlena, MFA, Division Chair
Room A146
michael.rohlena@witcc.edu

800.352.4649 or www.witcc.edu

Western Iowa Tech Community College 2013-2014 Catalog
**Program Overview and Opportunities:**
Audio is an important component of modern video games, including sound effects, voice editing and recording, and interactive music. Audio production for games requires knowledge of audio file management, production workflow, sound libraries, mixing, sequencing, recording, Foley effects, audio middleware, audio design documents, composition, and interactive game music development. The Game Audio Certificate prepares students for positions such as sound effects artist, sound designer, and other game audio production positions. The certificate also prepares students for working in smaller to medium-sized studios where additional skillsets are required.

### Video Game Audio Production

#### Course #
- **SDV 108** The College Experience ..........................1
- **CIS 373** Introduction to Game Audio .....................3
- **CIS 374** Sound Design for Games ........................3
- **MUS 102** Music Fundamentals ..............................3
- **CIS 375** Music and Composition for Games ..............3

**Program Total:** .............................................13

---

**Program Advisors**
Frank Heffner, PhD  
Room A104  
Ext. 1426  
frank.heffner@witcc.edu

Michael Rohlena, MFA, Division Chair  
Room A146  
Ext. 3217  
michael.rohlena@witcc.edu

---

**Digital Character Animation**

#### Program Overview and Opportunities:
Animation (character, dynamics, and visual effects) is a vital skill in the computer graphics industry (including video game design, motion picture animation, web design, and simulation). Animation requires knowledge of basic principles of animation, anatomy, cinematography, 2D and 3D animation techniques, character rigging, keyframe animation, forward and inverse kinematics, special effects animation, camera animation, compositing, and other skills. The Animation Certificates prepare students for positions such as in-game animators, cinematic animators, riggers, technical artists, and other animation production positions.

### Digital Character Animation Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CIS 376</strong></td>
<td>Anatomy for Digital Artists</td>
<td>2</td>
</tr>
<tr>
<td><strong>CIS 391</strong></td>
<td>Animation for Games</td>
<td>2</td>
</tr>
<tr>
<td><strong>CIS 377</strong></td>
<td>Character Animation</td>
<td>3</td>
</tr>
<tr>
<td><strong>CIS 163</strong></td>
<td>Animation Project</td>
<td>2</td>
</tr>
</tbody>
</table>

**Program Total:** .............................................9

**Updated 9/17/13**
Video Game Design

Dynamic & Visual Effects

Program Overview and Opportunities:
Animation (character, dynamics, and visual effects) is a vital skill in the computer graphics industry (including video game design, motion picture animation, web design, and simulation). Animation requires knowledge of basic principles of animation, anatomy, cinematography, 2D and 3D animation techniques, character rigging, keyframe animation, forward and inverse kinematics, special effects animation, camera animation, compositing, and other skills. The Animation Certificates prepare students for positions such as in-game animators, cinematic animators, riggers, technical artists, and other animation production positions.

Program Advisors
Frank Heffner, PhD
Room A104
Ext. 1426
frank.heffner@witcc.edu

Michael Rohlena, MFA, Division Chair
Room A146
Ext. 3217
michael.rohlena@witcc.edu

Updated 9/17/13
Advanced Welding
Diploma
Sioux City Campus

Program Overview and Opportunities:
A diploma in advanced welding is offered upon successful completion of the third semester of pipe welding.

Qualified Welding
Diploma
Sioux City Campus

Program Overview and Opportunities:
This Welding Diploma is designed to offer three different skill levels of training. After one semester of training the student can enter a job market as a beginning welder. During the second term, the student will learn the required competencies to meet code requirements for plate welding, out-of-position SMAW welding, gas tungsten arc welding, blueprint reading, and fabrication skills. Upon completion of the first and second semesters, the student will receive a diploma in qualification welding.

Program Advisors
Bill Berens, BS
Room H402
Ext. 1806
bill.berens@witcc.edu
Karl Stodden
Room B121
Ext. 1317
karl.stodden@witcc.edu
Greg Strong, BS, BA, Division Chair
Room A111
Ext. 1480
greg.strong@witcc.edu

Qualified Welding Curriculum
Course # | Title | Credits
--- | --- | ---
SDV 108 | The College Experience | 1
WEL 186 | GMAW* | 4
WEL 161 | Arc Welding I (SMAW)* | 6
WEL 120 | Oxy Fuel Welding and Cutting* | 2
MAT 772 | Applied Math | 3
WEL 111 | Welding Blueprint Reading | 3
WEL 191 | Gas Tungsten Arc Welding* | 3
WEL 164 | Arc Welding II (SMAW) OR | 4
WEL 700 | Robotic Welding | 2
WEL 208 | Intro to Fabrication | 2
ENG | English General Education Elective* | 3
WEL 312 | Pipe Welding/GTAW and SMAW | 7

Program Total | | 31

* Denotes courses commonly articulated with area high schools.

Program Advisors
Bill Berens, BS
Room H402
Ext. 1806
bill.berens@witcc.edu
Karl Stodden
Room B121
Ext. 1317
karl.stodden@witcc.edu
Greg Strong, BS, BA, Division Chair
Room A111
Ext. 1480
greg.strong@witcc.edu

Advanced Welding Curriculum
Course # | Title | Credits
--- | --- | ---
SDV 108 | The College Experience | 1
WEL 186 | GMAW* | 4
WEL 161 | Arc Welding I (SMAW)* | 6
WEL 120 | Oxy Fuel Welding and Cutting* | 2
MAT 772 | Applied Math | 3
WEL 111 | Welding Blueprint Reading | 3
WEL 191 | Gas Tungsten Arc Welding* | 3
WEL 164 | Arc Welding II (SMAW) OR | 4
WEL 700 | Robotic Welding | 2
WEL 208 | Intro to Fabrication | 2
ENG | English General Education Elective* | 3
WEL 312 | Pipe Welding/GTAW and SMAW | 7

Program Total | | 38

* Denotes courses commonly articulated with area high schools.

* New students may begin this program anytime throughout the semester.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites. The courses listed above are grouped in the order that they should be taken each semester. Please see a welding advisor to ensure correct course sequence.
Welding

Industrial Welding

Certificate
Sioux City Campus

Program Overview and Opportunities:
This program is designed to offer three different skill levels of training. After one semester of training the student can enter the job market as a beginning welder. In this initial term, the student learns entry level skills, basic shielded arc (stick), oxyacetylene, and basic metal arc gas welding. These courses can be applied toward the fulfillment of the welding diploma.


Industrial Welding Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDY 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>WEL 186</td>
<td>GMAW*</td>
<td>4</td>
</tr>
<tr>
<td>WEL 161</td>
<td>Arc Welding I (SMAW)*</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>(WEL 147 and WEL 148 may be substituted for WEL 161)</td>
<td></td>
</tr>
<tr>
<td>WEL 120</td>
<td>Oxy Fuel Welding and Cutting*</td>
<td>2</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total.................................................................. 16

* Denotes courses commonly articulated with area high schools.
* New students may begin this program anytime throughout the semester.

Program Advisors
Bill Berens, BS
Room H402
Ext. 1806
bill.berens@witcc.edu

Karl Stodden
Room B121
Ext. 1317
karl.stodden@witcc.edu

Greg Strong, BS, BA, Division Chair
Room A111
Ext. 1480
greg.strong@witcc.edu

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

The courses listed above are grouped in the order that they should be taken each semester. Please see a welding advisor to ensure correct course sequence.
Wind Energy Technician

Wind Energy

Associate of Applied Science Degree
Sioux City Campus

Program Overview and Opportunities:
The number of wind turbines in Iowa and in the United States continues to increase, as does the need for skilled workers who are able to install, maintain, service, and operate them. The Wind Energy Technician program encompasses the skill sets needed as a technician and/or operator, depending on the career path students choose. A number of certificate and diploma options will be available, allowing students to customize their interests and training accordingly.

Wind is the fastest growing energy source in the United States. In 2007, wind energy production increased by 21 percent, and a recent report by the U.S. Department of Energy suggests that it could contribute 20 percent of the nation's electricity by 2030. Although BLS does not collect data specifically on wind energy employment, the American Solar Energy Society estimates that in 2006 there were 16,000 jobs in wind turbine construction and maintenance.

Wind Turbine Maintenance Specialist Diploma Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td></td>
</tr>
<tr>
<td>WTT 103</td>
<td>Introduction to Wind Energy</td>
<td>1</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math</td>
<td>3</td>
</tr>
<tr>
<td>WTT 139</td>
<td>Wind Turbine Maintenance Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>ELE 112</td>
<td>Basic Electrical Theory</td>
<td>3</td>
</tr>
<tr>
<td>BCA 206</td>
<td>Applied Computer Concepts OR</td>
<td></td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>ELE 224</td>
<td>Electric Code Safety &amp; Grounding Fundamentals</td>
<td>1</td>
</tr>
<tr>
<td>COM 723</td>
<td>Workplace Communications</td>
<td>3</td>
</tr>
<tr>
<td>EGT 142</td>
<td>Fluid Power I</td>
<td>2</td>
</tr>
<tr>
<td>WTT 149</td>
<td>Wind Tech Safety Standards and Procedures</td>
<td>3</td>
</tr>
<tr>
<td>MFG 520</td>
<td>Predictive Maintenance</td>
<td>2</td>
</tr>
<tr>
<td>ELT 154</td>
<td>Industrial Electronics</td>
<td>3</td>
</tr>
<tr>
<td>WTT 131</td>
<td>Wind Turbine Mechanical Systems</td>
<td>2</td>
</tr>
<tr>
<td>WTT 201</td>
<td>Wind Turbine Site Construction and Location</td>
<td>1</td>
</tr>
<tr>
<td>WTT 932</td>
<td>Wind Turbine Internship</td>
<td>4</td>
</tr>
</tbody>
</table>

Program Total........................................................................37

Wind Site Assessment Specialist Certificate Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>WTT 204</td>
<td>Wind Turbine Siting</td>
<td>4</td>
</tr>
<tr>
<td>WTT 225</td>
<td>Data Acquisition and Assessment</td>
<td>4</td>
</tr>
<tr>
<td>PHS 166</td>
<td>Meteorology, Weather, &amp; Climate</td>
<td>4</td>
</tr>
</tbody>
</table>

Program Total........................................................................13

Wind Energy Technician AAS Degree Curriculum

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience</td>
<td>1</td>
</tr>
<tr>
<td>WTT 103</td>
<td>Introduction to Wind Energy</td>
<td>3</td>
</tr>
<tr>
<td>MAT 772</td>
<td>Applied Math</td>
<td>3</td>
</tr>
<tr>
<td>WTT 139</td>
<td>Wind Turbine Maintenance Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>ELE 112</td>
<td>Basic Electrical Theory</td>
<td>3</td>
</tr>
<tr>
<td>BCA 206</td>
<td>Applied Computer Concepts OR</td>
<td>3</td>
</tr>
<tr>
<td>CSC 110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>ELE 224</td>
<td>Electric Code Safety &amp; Grounding Fundamentals</td>
<td>1</td>
</tr>
<tr>
<td>COM 723</td>
<td>Workplace Communications</td>
<td>3</td>
</tr>
<tr>
<td>EGT 142</td>
<td>Fluid Power I</td>
<td>2</td>
</tr>
<tr>
<td>WTT 149</td>
<td>Wind Tech Safety Standards and Procedures</td>
<td>3</td>
</tr>
<tr>
<td>MFG 520</td>
<td>Predictive Maintenance</td>
<td>2</td>
</tr>
<tr>
<td>ELT 154</td>
<td>Industrial Electronics</td>
<td>3</td>
</tr>
<tr>
<td>WTT 131</td>
<td>Wind Turbine Mechanical Systems</td>
<td>2</td>
</tr>
<tr>
<td>WTT 201</td>
<td>Wind Turbine Site Construction and Location</td>
<td>1</td>
</tr>
<tr>
<td>WTT 932</td>
<td>Wind Turbine Internship</td>
<td>4</td>
</tr>
<tr>
<td>PSY 102</td>
<td>Human and Work Relations</td>
<td>3</td>
</tr>
<tr>
<td>ELT 250</td>
<td>Programmable Logic Controllers</td>
<td>3</td>
</tr>
<tr>
<td>BPT 114</td>
<td>Instrumentation I</td>
<td>2</td>
</tr>
<tr>
<td>ELE 192</td>
<td>Principles of Motor/Transformers</td>
<td>3</td>
</tr>
<tr>
<td>WTT 151</td>
<td>Wind Turbine System Operations</td>
<td>4</td>
</tr>
<tr>
<td>WTT 147</td>
<td>Gauging and Measurement</td>
<td>2</td>
</tr>
<tr>
<td>WTT 153</td>
<td>Wind Turbine Systems Troubleshooting</td>
<td>4</td>
</tr>
<tr>
<td>EMS 114</td>
<td>Emergency Medical Responder</td>
<td>2</td>
</tr>
<tr>
<td>WTT 214</td>
<td>Basic Networking &amp; Computer Technology</td>
<td>3</td>
</tr>
<tr>
<td>PEA 148</td>
<td>Physical Fitness I</td>
<td>2</td>
</tr>
</tbody>
</table>

Program Total........................................................................65

Sections of shading indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.

Program Advisors
Chad Plante, BS Ext. 1326 chad.plante@witcc.edu
Room L314
Greg Strong, BS, BA, Division Chair Ext. 1480 greg.strong@witcc.edu
Room A111

Page Updated 5/17/13
Corporate College

Western Iowa Tech, through its Corporate College, delivers effective and economical training programs, both publicly and through contract training. This training can be done at various sites including company facilities or at our training facilities. The College tailors existing programs to meet a company’s specific training needs or the College draws upon its many resources to design new courses and seminars.

The Corporate College staff is dedicated to constantly improving services in the business and public community.

Areas in which the Corporate College specializes:

- Consulting and Facilitation
- Business Solutions
  - Management Training
  - Workplace Skills (Customer Service, Communication)
  - LEAN/Quality Management
  - Computer/IT
  - Business Language
  - Workplace Spanish
  - English as a Second Language (ESL)
- Safety
  - OSHA 10 and 30 Hour
  - Construction
  - General Industry
  - Tower Safety
    > Competent Person
    > Authorized Climber
  - Forklift and Aerial Lift Operator
- Industrial Maintenance
  - Programmable Logic Controllers
  - Boiler Operations
  - Basic Electrical Theory
  - Blueprint Reading
  - Instrumentation
  - Motor Control
  - Welding – Arc., Oxyacetylene, MIG, TIG
- Security
  - Rapid Communications
  - Incident Command Systems
  - Building Security
  - Loss Prevention
- Logistics

Truck Driver Training

Sioux City Campus

Program Overview and Opportunities:
The Truck Driver Training program provides students with the knowledge and skills needed to obtain their Commercial Drivers License (CDL) certification. Areas of instruction include: instrument clusters, 9-, 10-, super 10-, and 13-speed transmissions, brake system operation and inspection, diesel engines, trailer specifications, coupling and uncoupling trailers safely, shifting theory, driving techniques, backing tractor-trailers, federal motor carrier safety regulations, and hours of service.

Job placement assistance is available.

Program Length:
The Truck Driver Training program is a four-week program. Classes are scheduled Monday through Saturday.

Program Advisor
Carmen Wilson, BS
Beltway Center
712-274-6449
carmen.wilson@witcc.edu
## Course Numbers

The Iowa community colleges have a common course numbering system for all credit courses offered by Iowa community colleges. The numbering system facilitates transfer and articulation processes for Iowa community college students.

### Key to Course Prefixes

<table>
<thead>
<tr>
<th>ACC</th>
<th>Accounting</th>
<th>CSC</th>
<th>Computer Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADM</td>
<td>Administrative Assistant</td>
<td>DEA</td>
<td>Dental Assistant</td>
</tr>
<tr>
<td>ADN</td>
<td>Associate Degree Nursing</td>
<td>DRA</td>
<td>Film and Theatre</td>
</tr>
<tr>
<td>AGA</td>
<td>Agriculture – Agronomy</td>
<td>DRF</td>
<td>Drafting</td>
</tr>
<tr>
<td>AGB</td>
<td>Agriculture – Farm Management Business</td>
<td>ECE</td>
<td>Early Childhood Education</td>
</tr>
<tr>
<td>AGC</td>
<td>Agriculture – Comprehensive Miscellaneous</td>
<td>ECN</td>
<td>Economics</td>
</tr>
<tr>
<td>AGH</td>
<td>Agriculture – Horticulture</td>
<td>EMD</td>
<td>Emergency &amp; Disaster Management</td>
</tr>
<tr>
<td>AGM</td>
<td>Agriculture – Mechanics</td>
<td>EDU</td>
<td>Education</td>
</tr>
<tr>
<td>AGP</td>
<td>Agriculture – Precision Ag</td>
<td>EGT</td>
<td>Engineering Technology</td>
</tr>
<tr>
<td>AGS</td>
<td>Agriculture – Animal Science</td>
<td>ELE</td>
<td>Electrical Technology</td>
</tr>
<tr>
<td>AGT</td>
<td>Agriculture – Technology</td>
<td>ELT</td>
<td>Electronics</td>
</tr>
<tr>
<td>AGV</td>
<td>Agriculture – Veterinary Tech</td>
<td>EMS</td>
<td>Emergency Medical Services</td>
</tr>
<tr>
<td>ANT</td>
<td>Anthropology</td>
<td>ENG</td>
<td>English Composition</td>
</tr>
<tr>
<td>ARC</td>
<td>Architectural</td>
<td>ENV</td>
<td>Environmental Science</td>
</tr>
<tr>
<td>ART</td>
<td>Art</td>
<td>ESL</td>
<td>Intensive ESL</td>
</tr>
<tr>
<td>ATR</td>
<td>Automation Tech and Robotics</td>
<td>FIN</td>
<td>Finance</td>
</tr>
<tr>
<td>AUT</td>
<td>Automotive Technology</td>
<td>FIR</td>
<td>Fire Science</td>
</tr>
<tr>
<td>BCA</td>
<td>Business Computer Apps</td>
<td>FLA</td>
<td>Foreign Language–French</td>
</tr>
<tr>
<td>BIO</td>
<td>Biology</td>
<td>FLG</td>
<td>Foreign Language–German</td>
</tr>
<tr>
<td>BIR</td>
<td>Band Instrument Repair</td>
<td>FLS</td>
<td>Foreign Language–Spanish</td>
</tr>
<tr>
<td>BMA</td>
<td>Building Maintenance</td>
<td>GEO</td>
<td>Geography</td>
</tr>
<tr>
<td>BPT</td>
<td>Bioprocess Technology</td>
<td>GRA</td>
<td>Graphic Communications</td>
</tr>
<tr>
<td>BUS</td>
<td>Business</td>
<td>HCR</td>
<td>Heating and Air Conditioning</td>
</tr>
<tr>
<td>CAD</td>
<td>Computer Aided Drafting</td>
<td>HIS</td>
<td>History</td>
</tr>
<tr>
<td>CHM</td>
<td>Chemistry</td>
<td>HIT</td>
<td>Health Information Technology</td>
</tr>
<tr>
<td>CIN</td>
<td>Cinematography</td>
<td>HSC</td>
<td>Health Science</td>
</tr>
<tr>
<td>CIS</td>
<td>Computer Programming</td>
<td>HUM</td>
<td>Humanities</td>
</tr>
<tr>
<td>CLS</td>
<td>Cultural Studies</td>
<td>IND</td>
<td>Industrial Technology</td>
</tr>
<tr>
<td>COM</td>
<td>Communication</td>
<td>INT</td>
<td>Interior Design</td>
</tr>
<tr>
<td>CON</td>
<td>Construction</td>
<td>JOU</td>
<td>Journalism</td>
</tr>
<tr>
<td>CRJ</td>
<td>Criminal Justice</td>
<td>LIT</td>
<td>Literature</td>
</tr>
<tr>
<td>CRR</td>
<td>Collision Repair and Refinish</td>
<td>MAP</td>
<td>Medical Assistant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MAT</td>
<td>Mathematics</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MFG</td>
<td>Manufacturing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGT</td>
<td>Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKT</td>
<td>Marketing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MMS</td>
<td>Mass Media Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOT</td>
<td>Motorcycle Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUA</td>
<td>Applied Music</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS</td>
<td>General Music</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NET</td>
<td>Computer Networking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEA</td>
<td>Physical Education Activities</td>
<td>PEH</td>
<td>General Physical Education</td>
</tr>
<tr>
<td>PEC</td>
<td>Coaching Officiating</td>
<td></td>
<td>and Health</td>
</tr>
<tr>
<td>PHI</td>
<td>Philosophy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHR</td>
<td>Pharmacy Tech</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHS</td>
<td>Physical Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHT</td>
<td>Commercial Photography</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHY</td>
<td>Physics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNN</td>
<td>Practical Nursing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POL</td>
<td>Political Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRL</td>
<td>Paralegal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY</td>
<td>Psychology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTA</td>
<td>Physical Therapist Assistant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RDG</td>
<td>Reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REL</td>
<td>Religion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SVD</td>
<td>Student Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SER</td>
<td>Sustainable Energy Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMM</td>
<td>Social Media and Marketing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC</td>
<td>Sociology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPC</td>
<td>Speech</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUR</td>
<td>Surgical Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WEL</td>
<td>Welding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WTT</td>
<td>Wind Energy and Turbine Tech</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Semester listings at the end of course descriptions denote when the course is typically offered.

**ACC – Accounting**

**ACC-111 Intro to Accounting** 3
This course is designed to teach the key concepts and skills required to record a variety of accounting entries for both a service and merchandising business, to prepare financial statements, to record payroll entries, to prepare payroll records and to utilize good cash management skills. The skills learned will prepare students for direct job entry as small business owners and entrepreneurs. These accounting concepts are applied to a variety of companies. Fall, Spring, Summer

**ACC-131 Principles of Accounting I** 4
This course is designed to accross the student with the basic accounting concepts applicable to the operation of a service oriented or retaining sole proprietorship. Fall, Spring, Summer

**ACC-132 Principles of Accounting II** 4
This course is a continuation of Principles of Accounting I with the emphasis on partnership, corporation, cost, and management accounting. Prerequisite: ACC-131; Fall, Spring, Summer

**ACC-161 Payroll Accounting** 3
This course presents the payroll accounting methods for computing wages and salaries, calculating deductions, journalizing payroll entries, and preparing federal and state government reports. It emphasizes the timeliness and standard procedures of payroll data reporting required of employers. Prerequisite: ACC-111 or ACC-131; Fall, Spring, Summer

**ACC-221 Cost Accounting** 3
This course covers the procedures necessary for the accumulation and analysis of accounting information in a manufacturing setting. Topics covered include job-order, process cost, and standard cost systems as well as variance analysis and budgeting. Prerequisite: ACC-132; Fall

**ACC-231 Intermediate Accounting I** 4
This course is an in-depth study of the underlying principles, procedures, and reporting requirements necessary to prepare and interpret the financial reports of business entities. Studies include a theoretical foundation of financial accounting, financial statements, cash, receivables, inventory, operational assets and depreciation. Prerequisite: ACC-132; Fall

**ACC-232 Intermediate Accounting II** 4
This course is an in-depth study of the underlying principles, procedures, and reporting requirements necessary to prepare and interpret financial reports of business entities. Topics covered include liabilities, investments in securities, pension plans, leases, earnings per share, and statement of cash flows. Spring

**ACC-261 Income Tax Accounting** 3
This course is an introduction to federal individual income tax laws. Topics include income, adjustments, deductions, and credits. Prerequisite: ACC-131; Fall, Spring

**ACC-281 Auditing** 3
This course is an introduction to the auditing profession. Students study the principles and rules governing the auditing profession, the regulatory environment, and the role of corporate governance. Students also learn how to conduct an integrated audit and how to report the results of the audit. Prerequisite: ACC-231; Spring

**ACC-311 Computer Accounting** 3
This course utilizes computer software to teach the accounting procedures for service and merchandising businesses. Concepts include processing transactions and generating reports for customers, vendors, inventory, and payroll; generating financial statements; performing closing procedures; and, customizing company setup. Prerequisite: ACC-131; Fall, Spring, Summer

**ACC-975 Service Learning** 1
This course integrates service in the community with practical application of the competencies learned in program coursework. It involves a coordinated effort among the student, WITCC faculty member, and a work supervisor in a non-profit community organization that will meet identified community needs and advance the students’ understanding of course related content. Permission of instructor and 2.0 cumulative GPA and a C (2.0) or better in core courses as defined by the program advisor is required. Fall, Spring

**ADM – Administrative Assistant**

**ADM-105 Introduction to Keyboarding** 1
This course emphasizes keyboard mastery and develops accuracy and speed control of the keyboard. Students are taught to type 30 gross words a minute (GWAM) on a 3-minute official timing with a maximum of 3 errors. Correcting errors is not allowed. Fall, Spring, Summer

**ADM-123 Document Formatting** 3
This course is designed for mastery of the alphabetic keyboard. Students will review numeric and symbol keyboard reaches and the formatting of business documents including memorandums, block and modified block letters, forms and tables. Students must take the prerequisite course twice for a total of 60 gross words a minute with 6 or less errors. Prerequisite: ADM 105 Introduction to Keyboarding or type 30 gross words a minute for two minutes with 3 errors or less. Prerequisite: ADM-105; Fall, Spring, Summer

**ADM-124 Document Formatting II** 3
In this course students’ keyboarding skills are enhanced by developing a balance of speed and accuracy. Emphasis is placed on the development of production skills in formatting business documents and learning advanced features of word processing using the computer. Prerequisite: ADM-123; Spring

**ADM-131 Office Calculators** 1
This course teaches students how to use the numeric keypad with speed and accuracy using industry standards for data entry. Attaining proficiency on three employment tests used by three large interstate corporations helps the student meet employment standards. Fall, Spring, Summer

**ADM-148 Transcription** 2
This course teaches machine transcription, a fusion of skills that combines keyboarding, oral and written communications, listening, and decision-making. The course is designed to train students, as transcriptionists, to become adept at simultaneously operating the equipment and applying the cognitive skills of spelling, punctuation, grammar, formatting, and problem solving during the transcription process. Prerequisite: ADM-159; ADM-123; Spring

**ADM-154 Business Communication** 3
This course covers the principles of business writing emphasizing the most important and frequently written business correspondence including business letters, memorandums, and reports. Attention is given to logical organization and psychological application of writing procedures as well as proper formatting at the keyboard. Students cover units most appropriate to the needs of their individual programs. Fall, Spring, Summer

**ADM-159 Proofreading and Editing** 3
This course covers the proofreading and editing of handwritten, typewritten, and printed material. Grammar principles including sentence structure and correct usage of all parts of speech are addressed, as well as a strong emphasis on punctuation. Students also learn techniques in utilizing business reference tools and language skills within the context of a business environment. Fall, Spring

**ADM-166 Office Procedures I** 3
This course familiarizes the student with the many dimensions of the professional secretary’s position in a modern day office, including personal traits, telephone skills, communications processing capabilities, filing and records management, office supplies and equipment, and material utilization. The student will be equipped to handle these functions in a modern day office. Fall, Spring

**ADM-167 Office Procedures II** 3
This course provides an introduction to the job dimensions and responsibilities of the professional administrative assistant. The specific job skills introduced are utilization of business resources, making travel
arrangements, arranging meetings and conferences and performing banking responsibilities. Students also continue to refine skills associated with communicating effectively in the office. Prerequisite: ADM-123; Spring

**ADN-176 Electronic Records System**

This course provides students the opportunity to create, collect, process, maintain, retrieve, use, store, disseminate, and dispose of records using an electronic records system. Students use the Windows environment to store records according to ARMA (Association of Records Managers and Administrators) alphabetic rules. Numeric, geographic, and subject filing rules are also explored. Students will research and present up-to-date information on retention, retrieval, and storage of records. Fall, Spring

**ADN-180 Administrative Management**

This course acquaints students with the broad areas of administrative office management, including the managerial process. It emphasizes application of learned concepts through problem-solving techniques, and includes several specialized areas of study which are generally relegated to office managers. Prerequisite: ADM-123, ADM-159; Fall

**ADN-204 Legal Office Procedures**

This course is an introduction to the career of legal assistants based on the Basic Manual for the Lawyer's Assistant written by NALS, the association for legal professionals. Students look at career paths, study the court system, review communication skills, learn how to keep the law library current, and review ethical guidelines for legal office workers. Recommended prerequisite: ADM-166; Spring

**ADN-241 Advanced Office Skills**

The course is a terminal course for office students to demonstrate their knowledge and skills in administrative office procedures and practice. A variety of formats will be used for students to demonstrate proficiencies, including Microsoft Office software review, electronic calendaring and scheduling, proofreading and editing, keyboarding speed and document production, and certification testing. Instructor consent required. Spring

**ADN-932 Internship**

This course provides on-the-job experience on campus or in the business community giving the student experience and practical application of the competencies learned in the Administrative Assistant programs. The internship is coordinated by the college instructor and supervised by an industry professional at the work site. Student must be in the final semester of the program before enrolling in this course. Prerequisite: Permission of instructor; 2.0 cumulative GPA and a C (2.0) or better in core courses as defined by the program advisor. Fall, Spring, Summer

**ADN – Associate Degree Nursing**

**ADN-621 Nursing III**

This course combines: classroom, lab, and clinical. Nursing III prepares the student to safely manage the care of clients throughout the lifespan and prepares the student for the role of caregiver, manager, and member of profession from the level of the practical nurse to the registered nurse. Concepts of health, illness, and environment as they relate to nursing practice are discussed. Emphasis is placed on predictable and variable needs of the client utilizing Gordon's Functional Health Patterns within the nursing process. Critical thinking is inherent in the nursing process and incorporated throughout the course. Completion of WITCC Practical Nursing Program or valid LPN license, and 6 to 8 hours of anatomy and physiology required. Prerequisites for the hybrid online section: valid LPN license and 6-8 hours of anatomy and physiology, proof of all required support courses. Advisor permission required. Corequisite: BIO-186

**ADN-622 Nursing IV**

This course combines: classroom, lab, clinical, and preceptorship. Nursing IV prepares the student to safely manage the care of clients throughout the lifespan and prepares the student to assume the registered nurse (RN) roles of caregiver, manager, and member of profession. Concepts of health, illness, and environment as they relate to nursing practice are discussed. Emphasis is placed on predictable and variable needs of the client utilizing Gordon's Functional Health Patterns within the nursing process. Critical thinking is inherent in the nursing process and incorporated throughout the course. Clinical preceptorship provides an opportunity for students to mentor with a RN. Students will practice clinical and leadership skills necessary to successfully transition into the role of an entry-level RN. Focus is placed on the enhancement of leadership and collaboration skills, organization, supervision, delegation, prioritization, and management of multiple clients in an acute care setting. Valid LPN license and advisor permission required. Prerequisite: ADN-621, BIO-186, PSY-241

**ADN-823 RN Principles & Concepts Review**

This is a two-semester hour course involving interactive review. This course is designed to integrate and review nursing care for clients within the scope of the registered nurse and to review the strategies needed in taking NCLEX-RN examination.

**AGA – Agriculture – Agronomy**

**AGA-114 Principles of Agronomy**

This course presents the information necessary to understand the reasons and methods of soil and crop management. The course provides answers to practical crop production questions and introduces students to further study of the sciences involved. Fall

**AGA-154 Fundamentals of Soil Science**

This course is an introduction to the physical and chemical properties of soil including their formation, classification, and distribution. Soil fertility and fertilizer use is also discussed. Fall

**AGA-158 Soil Fertility**

This course explains the phenomena involved in making and keeping a soil in its most economical, productive state. Students learn why soils must be managed differently due to differences in origin and make up. Laboratory work will be used to increase the understanding of key concepts. Corequisite: AGA-154

**AGA-376 Integrated Pest Management**

This course teaches observation techniques for pest control which includes disease, insect and weed problems as well as techniques for developing and evaluating pest management programs, and procedures involved in integrated pest management. Fall

**AGB – Agriculture – Farm Management – Business**

**AGB-210 Ag Law**

This course is designed to make the student aware of the legalities of the farm business in regard to estate planning, leasing, contracts and legal liability. Fall, Spring

**AGB-235 Introduction to Agriculture Markets**

This course enables students to identify the quality grades, yield grades and the production value of cattle, hogs and sheep. It covers how to calculate values of livestock and select an appropriate market alternative. Spring

**AGB-330 Farm Business Management**

This course is a study of the use of the principles of farm management in developing a farm or farm business operation. Spring

**AGB-331 Entrepreneurship in Agriculture**

This course relates specifically to management of agriculture farms and businesses. Course content emphasizes budget planning, record keeping, record analysis, Ag finance/credit, and machinery and land management. Management exercises simulating farm activities and decisions are incorporated. Computers are used to aid in the completion of these management exercises. Fall, Spring

**AGB-336 Agricultural Selling**

This course addresses the principles of selling applied to agricultural settings. Examination of agricultural consumers' buying habits and the development of sales strategies to meet these consumers' needs and wants serves as a foundation of the course. Two main activities dominate this course: students spend a day shadowing an agricultural sales professional to observe and report on specific practices, and in a final activity, students prepare and deliver a sales presentation to an agricultural sales professional. Spring

**AGB-437 Commodity Marketing**

This course examines basis, fundamental and technical price analysis, commodity futures, futures options, alternative cash contracts, sources and uses of marketing information, and relevant agricultural marketing strategies. Fall

**AGB-466 Agriculture Finance**

This course is a study of the terminology and tools of agricultural finance. It emphasizes the preparation of financial statements, cash flows, budgets and bookkeeping principles. It also discusses financial risk strategies and credit costs. Fall

Western Iowa Tech Community College 2013-2014 Catalog

800.352.4649 or www.witcc.edu
AGB-470  Farm Records, Accounts, Analysis  3
This course is a study of the use of the principles of farm management in developing a farm or farm business operation. An emphasis is placed on the importance of records as an essential management tool. Fall, Spring

AGC – Agriculture
Comprehensive Miscellaneous

AGC-216  Career Seminar  2
This course is designed to help students explore and discover the many opportunities that are available in the profession of agriculture and related industries both nationally and internationally. Fall

AGC-403  Transitioning to Organic Farming & Cert  2
This course provides students the necessary information and knowledge to successfully convert their farming operation from conventional to organic farming, including transitioning farming methods that enhance their future organic farm productivity. Spring

AGC-420  Issues in Agriculture  3
This course provides students the opportunity to collect, discuss, interpret, and defend current economic, environmental and social issues that affect the production of agricultural commodities. Spring

AGC-936  Occupational Experience  3
This course provides an "on-the-job" experience at a local business. The business will provide a training sponsor in cooperation with an instructor/ coordinator from the college staff. Students will gain hands-on experience in observing and by demonstrating the knowledge and skills developed in the classroom. Prerequisite: AGC-420; AGB-437; Summer

AGH – Agriculture – Horticulture

AGH-284  Pesticide Application Certification  3
This course reviews the materials and testing procedures required to become a certified commercial pesticide applicator. Spring

AGM – Agriculture – Mechanics

AGM-155  Farm Equipment Management  1.5
In this course, students will utilize operator’s manuals to find information concerning the operation, lubrication and adjustment of farm machinery. In addition, students will properly adjust and operate the following equipment: 1) row-crop cultivator; 2) square baler; 3) disk/harrow; and 4) field cultivator. The course will also address safe handling procedures and the use of herbicides, calibration of the field sprayer for proper operation, and adjusting the grain drill to plant soybeans and small seeds. Fall, Spring

AGP – Agriculture – Precision

AGP-329  Introduction to GPS  3
This course is an introduction to the use of GPS and VRT as it impacts agricultural producers. Students will use field mapping software and GPS systems as part of the class. Fall

AGS – Agriculture – Animal Science

AGS-113  Survey of the Animal Industry  3
This course is an introductory animal science course which examines how animals fit into society and how they contribute to the well-being of humans from a worldwide perspective. Information on animal feeding, breeding, and management is also included. Fall, Spring

AGS-228  Beef Cattle Science  5
This course deals with the retail beef industry. Topics include management decisions of cow-calf and yearling-stocker producers, major health problems and their prevention/treatment, ruminant nutrition balance rations and forage resource management. Fall, Spring

AGS-242  Animal Health  3
This course provides information about the cause, nature, prevention, and treatment of common health problems of farm animals. Topics include identifying animal behavior and developing a herd health program. Fall, Spring

AGS-270  Foods of Animal Origin  3
This course is a general agri-food science course that deals with world food needs and available food supplies, types of food and their nutritive value and use, and the methods used and challenges involved in food production, transportation, preservation/processing, storage, distribution, marketing and consumption. The course covers foods of animal origin. Fall

AGS-319  Animal Nutrition  3
This course is a comprehensive study of animal nutrition. Topics include digestive systems, feedstuffs, processing, nutrition values, ration formulation and practical application. Spring

AGS-331  Animal Reproduction  3
A combined lecture and lab course, this course is presented with the agriculture student in mind. The first unit, Physiology, addresses cellular digestion, reproduction, genetics and ecology. The second unit, Applications, teaches the practical application of animal science. The third unit instructs students in the interpretation of performance data for judging and evaluating livestock. Fall

AGT – Agriculture – Technology

AGT-250  Food and Biosecurity Issues  1
This course focuses on threats to food system biosecurity. Students research and discuss contemporary issues regarding biosecurity, vulnerabilities of the food system from pre-harvest through post-processing, consumption and potential threats by class of agents. Fall

AGV – Agriculture – Veterinary Tech.

AGV-102  Animal Handling & Restraint  1
This course provides hands-on opportunities for students to practice restraint techniques that are needed in the veterinary field. The labs include concepts for blood collection, medicine administration, rope tying, and more. The lab projects involve both individual and team work. Corequisite: AGV-121, AGV-156; AGV-176; Fall

AGV-109  Pharmacy Skills  2
This course reviews the basic concepts of animal anatomy and physiology in relation to medicine administration. Students are familiarized with veterinary drugs, their modes of administration and specific function in animal body systems. Prerequisite: AGV-121, AGV-156; AGV-176; Corequisite: AGV-157; Spring

AGV-121  Veterinary Medical Terminology  2
This course familiarizes students with the veterinary terminology that is used in practice. Students will learn laboratory, diagnostic and treatment terminology. Corequisite: AGV-156, AGV-176, AGV-102; Fall

AGV-156  Veterinary Reception & Admin Skills  2
This course introduces students to veterinary practices, facilities and administrative duties. The course integrates applied human relations, accounting and business procedures that are relevant to the veterinary profession. Corequisite: AGV-121, AGV-176; Fall

AGV-157  Animal Anatomy & Physiology  3
This course provides information regarding animal anatomic landmarks, terminology and the function of body systems. Comparisons of the structure and function of various animals will be conducted. Prerequisite: AGV-121, AGV-156, AGV-176; Corequisite: AGV-109; Spring

AGV-173  Veterinary Surgical Concepts  3
This course introduces selected phases of veterinary surgical nursing, application of sterile techniques, and surgical equipment. Topics include pre-anesthetic considerations, general anesthetic agents, anesthesia monitoring and diagnostic imaging techniques. Prerequisite: AGV-102, AGV-121, AGV-156, AGV-176; Corequisite: AGV-157, AGV-109, AGV-174; Spring

AGV-174  Clinical Studies  3
This course introduces the basic knowledge of identifying parasites, urine collection, examining blood samples, identification of animal pathogens, and chemical constituents of body fluids. Through the lecture and lab format, students use hands-on activities to integrate theory with application. Prerequisite: AGV-102, AGV-121, AGV-156, AGV-176; Corequisite: AGV-109, AGV-157, AGV-102; Spring
ARCH – Architectural

ARCH-113 Architectural Drafting I 4
This course focuses on fundamental drafting skills and how they are applied to the architectural drafting profession. The course presents current drafting standards and trends in the architectural industry. It emphasizes standardization and the necessary foundation of drafting training as well as implementation of a common approach to drafting. Prerequisite: DFR-113

ARCH-129 Residential/Light Commercial Drafting 4
This course introduces the student to residential and light commercial building drafting. Students will be introduced to floor plan layout, dimensioning, electrical, plumbing, HVAC plans, roof plans, elevations, structural framing methods and building codes. Prerequisite: ARC-113

ARCH-140 Architectural Materials and Methods I 3
This is the first of a two-course series designed to provide background knowledge of building materials and construction methods, techniques and specialties.

ARCH-145 Arch Materials & Methods II 3
This is the second of two-course series designed to provide background knowledge of building materials and construction methods, techniques, and specialties.

ARCH-149 Metal Building Systems Drafting 6
This is a combined lecture and lab course covering Metal Building Systems. Students will be introduced to building materials used, design concepts, construction details, construction procedures, manufacturing process/detailed, and industry terminology. Prerequisite: ARC-155, MAT-775

ARCH-150 Metal Building Systems Drafting 5
This is a combined lecture and lab course covering Metal Building Systems. Students will be introduced to building materials used, design concepts, construction details, construction procedures, manufacturing process/detailed, and industry terminology. Prerequisite: ARC-155, MAT-775

ARCH-152 Post Frame Structure Drafting 5
This course covers engineering and drafting technology, and concept and procedure applications for the post frame building industry. Topics include detail drafting, design principles, manufacturing processes and construction practices, load carrying capacity, and specialized uses; and decision-making processes for solving building design problems. Prerequisite: ARC-149, ARC-155, MAT-775

ARCH-155 Structural Steel Drafting 4
This course is designed to provide students with the fundamental and practical knowledge of how structural steel is used to construct support frames for modern commercial and industrial buildings. Special emphasis is placed on how structural drafters in both structural design and fabrication offices prepare the working drawings required to help transform the architect’s vision into reality. Prerequisite: ARC-129; Corequisite: CAD-172

ARCH-170 Intro to Surveying/Bldg Layout 2
This course introduces and provides a foundation for the student in the use of surveying instruments and their care, along with surveying techniques and methods of proper building layout.

ART – Art

ART-101 Art Appreciation 3
This course explores the creative process emphasizing art as a visual form of communication. It presents useful criteria for evaluation and enjoyment of art through the development of visual vocabulary and knowledge of art processes, as well as art in a historical context. Fall, Spring, Summer

ART-120 2-D Design 3
This is a combined lecture and lab course that introduces the concepts of two-dimensional design and spatial orientation to original design creation. Topics included are pattern, texture, line, shape, value, mass and color theory. Fall

ART-123 3-D Design 3
This is a combined lecture and lab course that studies the fundamentals of three-dimensional arts. It addresses problems based on space organization utilizing the elements of design and emphasizes application of design concepts to original design. Spring

ART-132 Color Theory 3
This course is an in-depth exploration of color as a critical element in design. Students examine the properties of color based on the color systems of Munsell and Brewer/Prange. Also, students learn to identify the shades, tints and color schemes, and the effect of light on color is demonstrated. Spring

ART-133 Drawing 3
This is a combined lecture and lab course. A foundations studio course, it introduces basic drawing principles such as line, shape, form, texture, value, space, perspective and composition, as well as serving as an introduction to medias including pencil, pen, charcoal, conte, chalk and other alternate media. It stresses perception, visual awareness, sensitivity, and critical thinking/judgment, and may include still life, landscape, portrait, live model and non-objective forms. Focus is on the student’s preferential media, subject and content with an emphasis on the criteria of composition as determining a work’s success, as opposed to visual perception, rendering or technique. Students will be expected to make “finished” works of art for presentation and to move beyond strictly studies or technical assignments. Prerequisite: ART-133; Spring

ART-143 Painting 3
This is a combined lecture and lab course. A foundation course in studio painting, it employs contemporary styles, techniques and materials in various media. Fall, Spring, Summer

ART-144 Painting II 3
This is a combined lecture and lab course. It is a continuation of ART-143 with emphasis on material, composition and color. Prerequisite: ART-143; Spring, Summer

ART-184 Photography 3
This is a combined lecture and lab course that introduces students to black and white photography, its history and its growth as a fine art medium. Students will develop the skills necessary for basic camera, studio and
darkroom applications. No previous experience is required. A 35mm single-lens Reflex camera is required. Fall, Spring, Summer

ART-185  Photography II  3
In Photography II, students will continue to explore advanced camera and darkroom techniques while producing a portfolio of their photographic artwork for formal presentation. Photography as a medium of artistic expression and the critical thought processes occurring through the lens will be investigated. Exploration of alternative processes, studio portrait work, commercial photography, photo technology, and electronic imaging will also be examined. Students will prepare for photographic careers through preparing portfolios and understanding the job interviewing process. A 35mm single-lens Reflex camera is required. Spring

ART-186  Digital Photography  3
This course introduces students to the digital camera. Students study and practice the varied artistic applications of digital images as enhanced with computer software. A digital camera is required. Fall, Spring, Summer

ART-203  Art History I  3
This course is a survey of the visual arts from prehistoric times through the Middle Ages with an emphasis on the relationship between art and social, economic, religious and geographical conditions. It discusses the historical context of contemporary forms of expression when relevant. Fall, Spring, Summer

ART-204  Art History II  3
This course is a survey of the visual arts from the Renaissance to the present time with an emphasis on the relationship between art and social, economic, religious and technological development. It stresses the historical context of contemporary forms of expression and examines human concerns as they are revealed in art. Fall, Spring, Summer

ART-292  Studio Photography  3
This course teaches students to create a photograph through a deliberate process. Students arrange and analyze elements in a scene and use artificial light to produce the desired effect. Projects created by students demonstrate imagination, creativity, technical skills, and willingness to experiment. Instructor consent is required. Prerequisite: ART-186, prerequisite: ART-186; Spring

ART-370  Traditional & New Media Art 2-D Design  3
This course introduces students to key concepts of two-dimensional design, design problem-solving, and spatial orientation such as texture, line, shape, value, mass, and color theory. The course bridges traditional and new media art with an emphasis on application using digital medium. Fall

ART-371  Traditional & New Media Art 3-D Design  3
This course covers the fundamentals of three-dimensional design and composition. Concepts covered include organizing principles of design, shape, value, color, and texture. It emphasizes application of traditional three-dimensional art concepts using digital medium. New media art design requires synthesizing artistic and technological skills. Spring, Summer

ART-373  Digital Color, Lighting & Rendering  2
This course is a study of color theory and use for digital application, digital lighting, and effective rendering. Color theory and digital lighting are particularly relevant to digital artists such as video game designers, cinematographers, and animators. Color and lighting are intrinsically powerful elements of design and understanding color, lighting, and rendering is vital for successful digital design, composition, and art. Fall

ART-947  Practicum  1
This course is designed to allow the student to work, generally on campus, in a faculty supervised activity with well-defined expectations, activities and outcomes, applying the knowledge and skills from prior learning. This will be a co-requisite course effort between the student, faculty member(s), and the work supervisor involving evaluations and assessment. This course may be repeated for credit. Instructor consent is required. Fall, Spring

**ART – Automation Tech and Robotics**

**ART-120  Automation Systems/Robotics  3**
This lecture course will introduce basic concepts of industrial process automation and programmed machine movement. Students will investigate careers in robotics, automation and the evolution of industrial automated systems. Corequisite: ELT-115

**ART-121  Automation Systems/Robotics Lab  3**
This lab course introduces the basic concepts of industrial process automation and programmed machine movement in a hands-on setting. Students will program various robots to perform industry related tasks. Prerequisite: EGT-420

**ART-125  Advanced Automation Systems/Robotics  3**
This lab course provides hands on experience in setting up networked manufacturing cells. Students will complete the programming of computer integrated manufacturing and set up Ethernet communication between the cells. Students will also use serial communication to read a digital scale, read a laser scan micrometer, control various robots and control a conveyor belt. Prerequisite: ELT-154, ELT-250, ELT-230

**ART-130  Computer Integrated Manufacturing Systems I  4**
This course will expand on the student’s knowledge of automation and robotics, exploring vision systems, serial and Ethernet communication, and analog instrumentation. Prerequisite: ART-125

**ART-131  Computer Integrated Manufacturing Systems II  4**
This course expands the student’s knowledge of automation and robotics, focusing on Networked PLC’s, Variable Frequency Control and Industrial Networked Sensors. Prerequisite: EGT-450

**AUT – Automotive Technology**

**AUT-104  Introduction to Automotive Technology  4**
This course provides basic instruction in shop skills including precision measuring, the use of hand tools, power tool use, fittings, fasteners, service manual use and related shop equipment. It covers the basics of electrical systems, drive train, fuel, brakes, heating, air conditioning, wheels and tires. It also emphasizes shop safety practices in each area of study.

**AUT-115  Automotive Shop Safety  1**
This course is designed to provide basic instruction in shop skills including precision measuring, the use of hand tools, power tool use, fittings, fasteners, service manual use, and related shop equipment. It emphasizes shop safety practices in each area of study. Fall, Spring

**AUT-120  Small Engine Repair  3**
This is a combined lecture and lab course that provides training and information of the operation and service of small gas engines. The course emphasizes theory, construction and service of small engine systems.

**AUT-164  Automotive Engine Repair  4**
This is a combined lecture and lab course that provides information in areas of engine mechanical diagnosis and service. It includes lab experience in the overhaul of a variety of automotive engines, cylinder head service, and engine machining. It also covers overhead cam and multiple valve technology. Prerequisite: AUT-115; Spring

**AUT-205  Automotive Automatic Transmissions  5**
This is a combined lecture and lab course that focuses on the operation; diagnosis, service and overhaul of rear wheel drive automatic transmissions. It includes both mock-up and live repair work in a laboratory setting and covers electronically controlled transmissions and all-wheel drive options. Prerequisite: AUT-115; Fall

**AUT-304  Automotive Manual Drive Train and Axles  4**
This is a combined lecture and lab course that focuses on the operation, repair, and service of manual drive train systems. This course covers drive shafts, FWD axle and joints, manual transmissions; clutches, rear drive axle assemblies, and transfer cases. Prerequisite: AUT-115; Fall

**AUT-404  Automotive Suspension and Steering  4**
This is a combined lecture and lab course that studies the operation and service of today’s suspension systems. It covers suspension service and alignment techniques and includes training on a-frame and McPherson suspension repair, rack and pinion steering, front and rear alignment, four-wheel alignment, electronic alignment systems, wheel balancing, and electronic leveling control systems. Prerequisite: AUT-115; Spring

**AUT-503  Automotive Brake Systems  3**
This is a combined lecture and lab course that provides training in the operation and service of today’s brake systems. It emphasizes repair and service of drum and disk brake systems, and electronic antilock systems. Prerequisite: AUT-115; Spring
AUT-615 Auto Electricity/Electronics  
This course covers theory, diagnosis and service practices related to electronic systems found on today’s automobiles. The basics of electricity, meter use and circuit analysis is extensively covered. Special emphasis is made in the areas of schematics use, electrical system diagnosis, and circuit theory. Students use computer and operator operation will also be covered. Prerequisite: AUT-115; Fall

AUT-633 Automotive Electrical Systems  
This course introduces students to electrical theory, diagnosis, and service practices related to the electrical systems found on today’s automobiles. There is an emphasis on battery starting and charging systems, lighting systems, and hybrid vehicle electrical systems. Practical applications of schematics and electrical system diagnosis using circuit theory are discussed. Prerequisite: AUT-615; Fall

AUT-671 Automotive Body Computer Systems  
This course introduces students to the functions of automotive body computer systems, including theft deterrent/security, electronic instrument displays, air bags, keyless entry and navigation/communication. Diagnosis and repair of these key electrical systems are emphasized along with safety considerations. Prerequisite: AUT-633; Fall

AUT-703 Automotive Heating and Air Conditioning  
This is a combined lecture and lab course that covers the theory, operation, and service of automotive heating and air conditioning systems. It presents component repair, charging, and leak service and emphasizes the diagnosis of electronic climate control systems and safe recovery of refrigerant compounds. Prerequisite: AUT-115; Fall

AUT-807 Automotive Engine Performance  
This course introduces students to the operation, diagnosis, and repair of tune-up and drivability related systems. Students explore the operation of fuel delivery systems, ignition and timing control, emissions systems, and computerized engine testing. Emphasis is placed on advanced tune-up techniques and diagnosis. Prerequisite: AUT-663, AUT-671; Spring

AUT-838 Automotive Advanced Fuel and Ignition  
This course allows students to discover various vehicle control computer systems and their components. Students concentrate individually on each domestic manufacturer’s system including system operation and factory diagnostic methods. Emphasis is placed on computerized electronic fuel injection systems and computer-controlled ignition systems. Prerequisite: AUT-633, Corequisite: AUT-807; Spring

AUT-947 Practicum  
This course provides on the job experience and practical application of the competencies studied in the Auto Technology course work. It involves a coordinated effort between the student, Western Iowa Tech Community College faculty members, and the work supervisor in the business for these experimental activities. Students are required to complete a minimum of 256 hours at an automotive business. Permission of the instructor is required. Prerequisite: Completion of a minimum of 29 hours of program requirement.

BCA – Business Computer Apps

BCA-051 Fundamentals of Computer Operations  
This is a foundations course introducing students to a computer and its applications through a hands-on approach. Students will learn basic skills in keyboarding, computer hardware, word processing, spreadsheets, e-mail, and internet usage. This course does not substitute for CSC 110. Credit for this class does not apply to graduation requirements. Fall, Spring

BCA-109 Windows Operating System  
This course is an introduction to the Windows operating environment. It covers loading the Windows operating systems, moving around within the Windows operating environment and mouse operation. Students also practice using built in features and setting up other windows and non-Windows applications. Fall, Spring

BCA-115 Internet Basics  
This course provides instruction in browsing the World Wide Web, doing research on the Internet using search engines and search directories, setting up e-mail accounts, using an e-mail client, subscribing to newsgroups, identification of file types used on the Internet and downloading files from the Internet. It also provides an overview of the development of the Internet. Fall, Spring, Summer

BCA-129 Basic Word Processing  
This course addresses basic and intermediate levels of word processing using Microsoft Word. Skills introduced include using and manipulating Windows, entering and editing text, formatting paragraphs and text, using the spelling checker and thesaurus, selecting printers and printing documents, and applying document formatting options. Fall, Spring

BCA-130 Advanced Word Processing  
This course covers the advanced features of Microsoft Word. Skills introduced include using mail merge features; sorting text and data records; creating macros; document notations; using basic desktop publishing features; and creating online forms. Fall, Spring

BCA-147 Basic Spreadsheets  
This course is designed to acquaint the student with the basic concepts of an electronic spreadsheet program. Hands-on practice in designing, building, and editing spreadsheets will develop the basic skills necessary to construct spreadsheets for home and business use. Fall, Spring, Summer

BCA-148 Advanced Spreadsheets  
This course acquaints students with additional features of the Excel spreadsheet program. Topics include templates, macros, data validation, importing external data, pivot charts, and pivot tables. Prerequisite: BCA-147; Fall, Spring

BCA-156 Basic Databases  
This course teaches the fundamentals of database design and database creation. Students learn to create databases, query databases, maintain databases, using design and update features, create custom reports, forms and combo boxes and create and use a data access page that allows users to utilize an Access database using the Internet. Fall, Spring

BCA-166 Advanced Databases  
This course teaches advanced features of database design. Students learn to create an application using macros, wizards, and the Switchboard Manager; create a report using design view; customize forms using PivotChart and PivotTable objects; use Switchboard Manager; export Access to other applications; and administer a database system. Prerequisite: BCA-165; Fall, Spring

BCA-175 Basic Presentation Software  
This course covers the development of presentation visuals using presentation software on a computer. Included in the course are how to plan and organize presentations and develop materials such as slides, black and white handouts and overheads. Students learn to integrate materials from several software sources, purchased graphics and art, and scanned materials. Preparing presentations for the Web is also covered. Fall, Spring

BCA-206 Applied Computer Concepts  
This is an introductory course in basic electronic information processing. The emphasis is on computer literacy designed to give students a general understanding of computer software and hardware. Students gain hands-on experience with an operating system and software applications. Students are exposed to basic computer terminology, file management, e-mail usage, digital devices, Internet, social networking, and security and privacy issues. This course may not transfer to other institutions. It is advisable to be able to key a minimum of 20 wpm in order to be successful in this course. Fall, Spring

BCA-221 Integrated Computer Business  
This course allows students to utilize their Microsoft Office knowledge and skills. Students will receive instruction on specific Office application integration and e-mail features. Prerequisites: CSC-110 or BCA-129, BCA-147, BCA-175, BCA-165; Fall, Spring, Summer

BIO – Biology

BIO-070 Basic Biological Concepts  
This is a developmental course that provides a basic foundation for further course work in biological sciences designed for the student with little or no background in biology or chemistry, or for students who need a refresher course. Topics covered include cell structure and function, enzymes, biochemical pathways, DNA and RNA, mitosis and meiosis and biologically emphasized chemistry. Credit for this class does not apply to graduation requirements. Fall, Spring, Summer

BIO-105 Introductory Biology  
This is a combined lecture and lab course that is a biological concepts survey for non-science majors. Topics covered include biochemistry, molecular and cellular biology, genetics, evolution, plant and animal classification, structure and function and ecology. Fall, Spring, Summer
BIO-116 General Biology IB 4
This is a combined lecture and lab course that provides a foundation of the science of living things including biochemistry, cytology, genetics and evolution. Fall

BIO-117 General Biology IIB 4
This is a combined lecture and lab course that is the continuation of General Biology IB. Topics covered include classification, interrelationships between tissues, organs, and systems, immunity, sexual reproduction, embryology, animal behavior, and ecological relationships. Prerequisite: BIO-116; Spring

BIO-125 Plant Biology 4
This is a combined lecture and lab course covering plant biology. Topics covered include the major divisions of algae, plants and fungi with a strong emphasis on classification, form and function and the evolution and ecological relationships of specific examples. Fall, Summer

BIO-151 Nutrition 3
This course presents the relationship between proper nutrition and good health. Topics covered include digestion, absorption, and metabolism of carbohydrates, lipids and proteins. Also included are vitamins, minerals, physical activity, maintenance of a healthy body weight, nutritional needs throughout the entire life cycle, and evaluation of nutritional claims. Fall, Spring, Summer

BIO-163 Essentials of Anatomy and Physiology 4
This is a terminal one-semester lecture and lab course covering the structure and function of the human organ systems and their organs. It also includes an introduction to medical terminology, homeostasis, basic cell and tissue structure and function. Students are required to identify specific organs including the major bones, the major muscles and the major blood vessels. Fall, Spring, Summer

BIO-169 Human Anatomy and Physiology IA w/Lab 4
This is a combined lecture and lab course that explores the relationship between structure, function and homeostasis in the human body. This course covers the skeletal, muscular, integumentary, and nervous systems, as well as cytology and histology. Prerequisite: BIO-070 Basic Biological Concepts or appropriate WITCC science placement test score. Fall, Spring, Summer

BIO-174 Human Anatomy & Physiology IIA w/Lab 4
This is a combined lecture and lab course that is a continuation of Anatomy and Physiology IA. Topics studied include the structure and function of the cardiovascular, lymphatic, endocrine, respiratory, digestive, urinary, and reproductive systems. Prerequisite: BIO-169; Fall, Spring, Summer

BIO-186 Microbiology 4
This is a combined lecture and lab course that covers the study of microorganisms with emphasis on bacteria and viruses. Topics covered include morphology, physiology, genetics, culturing techniques, identification, control, disease and disease resistance of microbes. Prerequisite: BIO-116 or BIO-169; Fall, Spring, Summer

BIO-197 Aquatic Biology I 4
This is a combined lecture and lab course for non-science majors. Five Missouri River habitats are studied - reservoirs, oxbow lakes, a channelized river reach, an unchannelized river reach and tributaries. They are explored from the viewpoint of river history, stream formation and past control practices, physical and chemical water parameters, and aquatic biotic communities. Course requirements differentiate between the outcomes for non-science vs. science majors. Prerequisite: BIO-105

BIO-297 Aquatic Biology II 4
This is a combined lecture and lab course for non-science majors. Five Missouri River habitats are studied - reservoirs, oxbow lakes, a channelized river reach, an unchannelized river reach and tributaries. They are explored from the viewpoint of river history, stream formation and past control practices, physical and chemical water parameters, and aquatic biotic communities. Course requirements differentiate between the outcomes for non-science vs. science majors. Prerequisite: BIO-117

BIR – Band Instrument Repair

BIR-118 Woodwind Fundamentals 3
This course covers fundamental playing techniques, key identification, nomenclature, characteristics, physical properties, and manufacturing methods of woodwind instruments. Students will learn basic repair shop safety procedures and an overview of the instrument repair industry. Special problem areas of clarinet and flute are emphasized. Corequisite: BIR-121, BIR-131; Fall

BIR-120 Woodwind Overhaul 3
This is a combined lecture and lab course including woodwind key and mechanism repair, woodwind body repair, padding techniques, corking, spring installation, and regulation of woodwind instruments. It reinforces skills learned in the Flute and Clarinet Lab courses and addresses more advanced repair topics on these instruments. Prerequisite: BIR-118, Spring

BIR-121 Flute Lab 3
This is a combined lecture and lab course that covers key pad installation, key alignment and adjustment procedure for flutes. Corequisite: BIR-118, BIR-131; Fall

BIR-122 Brass Fundamentals 3
This course presents fundamental playing and repair techniques for brass instruments. It covers nomenclature, characteristics, physical properties, manufacturing methods and problem areas of brass instruments as well as basic repair techniques, machine operations and tool making. Fall

BIR-123 Brass Lab I 4
This combined lecture and lab course emphasizes brass instrument refinishing, techniques for buffing, degreasing and lacquering. Students learn disassembly, dent removal, valve and casing repair, slide repair, metal annealing and burning and overhauling of the trumpet and trombone. Corequisite: BIR-122; Spring

BIR-125 Saxophone Lab 3
This combined lecture and lab course focuses on key pad installation, key repair, key alignment and adjustment procedures for the saxophone. Additional topics include neck and key corks, tone hole repair, dent removal, soldering techniques and post and key guard repair. Prerequisite: BIR-118; Corequisite: BIR-130; Spring

BIR-126 Woodwind Machine Operations 3
This combined lecture and lab course covers lathe operations for woodwind instruments. Students learn tenon replacement, tone hole replacement, socket grafting and tenon capping. Prerequisite: BIR-206, BIR-209; Spring

BIR-130 Saxophone Fundamentals 2
This lecture course presents the fundamental playing techniques, key identification, nomenclature, characteristics, physical properties and manufacturing methods of the saxophone. The course focuses on special problem areas of the saxophone. Prerequisite: BIR-118; Corequisite: BIR-125; Spring

BIR-131 Clarinet Lab 3
This is a combined lecture and lab course that provides training in key pad installation, key alignment and adjustment procedure for the clarinet. Corequisite: BIR-118, BIR-121; Fall

BIR-206 Harmony Woodwinds 3
This is a combined lecture and lab course that provides training in the padding and key adjustment procedures of harmony woodwind instruments. Special problem areas of brass and alto clarinets, baritone saxophones, etc. will be included. Prerequisite: BIR-119; Fall

BIR-207 Brass Lab II 4
This is a combined lecture and lab course in which students will develop the skills to refurbish large brass instruments. Students will learn burnishing machine techniques, refinishing procedure, and the use of special tools for low brass instruments (baritone horns, tubas, etc.) Prerequisite: BIR-123; Fall

BIR-209 Oboe Lab 3
This is a combined lecture and lab course that presents the complete restoration of basic and full conservatory system oboes. It includes disassembly, buffing and polishing, key and body repair, padding, corking and key adjustments. Fall

BIR-211 Major Brass Repair 4
This combined lecture and lab course continues the study of overhaul and restoration of large brass instruments. Students develop the skills required to perform intermediate and advanced repairs on large brass instruments. Prerequisite: BIR-207; Spring

BIR-214 Bassoon Lab 2
This is a combined lecture and lab course that studies complete restoration procedures of the bassoon, including disassembly, buffing and polishing, techniques of body repair, padding, corking and final adjustment. Prerequisite: BIR-227; Spring
BIR-215 Shop Management Practices 3
This capstone course prepares students for employment in the field of band instrument repair. Topics include customer recruiting and retention, customer relations, repair pricing and estimating, time management, inventories and suppliers, employment strategies, retail music business practices, and shop set-up and design. Prerequisite: BIR-206, BIR-207; Corequisite: BIR-219; Spring

BIR-219 Orchestral String Repair 1
This course presents fundamental playing techniques, characteristics, physical properties, manufacturing methods and basic repairs on orchestral string instruments. The course covers techniques for replacing strings, bridges, sound posts and tuning pegs, as well as repairing minor structural damage. Corequisite: BIR-215; Spring

BIR-227 Double Reed Fundamentals 2
This is a lecture-based course emphasizing the fundamental playing techniques, key identification, nomenclature, characteristics and physical properties of the oboe and bassoon. It presents basic repair techniques on both instruments, including key pad installation, key and tenon corksing and key alignment and adjusting procedures. Prerequisite: BIR-120; Fall

BMA – Building Maintenance

BMA-161 Water Treatment for Boiler Systems 2
This course explores and defines renewable fuel sources, production and distribution. Students gain knowledge of proper water treatment and processes in boiler systems. Students will learn to apply pretreatment concepts to water systems, water treatment and energy efficiency techniques to boiler systems and test for various parameters of water quality and treatment.

BMA-162 Steam Plant I 1.5
In this course students will learn the components and related equipment necessary to safely operate basic low pressure steam and hot water systems. The student may earn 500 hours of work experience towards obtaining a Third Class Boiler Operators license for The City of Sioux City.

BMA-163 Steam Plant II 1.5
This course is the continuation of the Steam Plant I course with an emphasis on high pressure boilers. This class covers steam generation and distribution which would be utilized in larger facilities including universities, hospitals, process manufacturing and power generation utility boilers. At the completion of the course the student will have acquired another 500 hours toward attaining their City of Sioux City Third class Stationary engineer’s license. The student will also be eligible to take a course administered National test from the American Society of Power Engineer’s Third Class Engineer’s License. This license is recognized nationally and is required at Military installations and V.A. hospitals. This course features a lab which contains live steam boilers and additional training simulators. Prerequisite: BMA-162

BPT – Bioprocess Technology

BPT-114 Instrumentation I 2
This course is designed to provide the student with an introduction to basic process and continuous process control. This course teaches two of the most common types of process control systems, flow and liquid level, and the basic concepts on which other systems are based. Students will learn to calibrate, adjust, install, operate, and connect process control systems in industrial applications thus broadening their employment opportunities. Topics include, but are not limited to, feedback, modes, characteristics, variables, instrumentation and connections. Fall, Spring, Summer

BPT-115 Instrumentation II 2
This course is a continuation of Instrumentation I and covers one of the most common types of process control systems, temperature control. Topics include process measurement, calibration and test equipment. Fall, Spring, Summer

BPT-116 Industrial Process Measurement/Controls 3
A combined lecture and lab course. Lectures introduce concepts of data acquisition, calibration, basic measurement statistics, and control theory. Laboratory work will include experiments and projects in pressure control, fluid control, and temperature control.

BPT-117 Industrial Systems Programming 3
This combined lecture and lab course will introduce basic concepts of computer programming as it relates to process control and automation systems. Data acquisition and serial communication will be emphasized. National Instruments LabVIEW software programming language will be taught. LabVIEW is the industry- standard software for data acquisition and instrument control. More than 24,000 companies around the world use National Instruments products in industries ranging from aerospace, entertainment, pharmaceuticals, sporting goods, and telecommunications. Corequisite: ATR-125

BPT-118 Process Control Systems 3
This class will provide the student with an overview of Process Control Technology. Safety and environmental responsibility are emphasized, as the student explores the equipment, systems, and control strategies used in process plants.

BPT-119 Process Control Systems Lab 3
This course introduces the student to the process of precise control of the temperature of liquids in a wide variety of industrial applications including food processing, chemical manufacturing and biotechnology. This lab course will give the student hands-on experience in calibration, adjustment, operation and tuning of process control systems.

BPT-280 Process Technology Projects 4
This is a capstone course in which students will demonstrate competency in Process Technology, Automated Systems, PLCs, Industrial Systems Programming, Instrumentation, and Documentation. Concepts of project management will be introduced.

BUS – Business

BUS-102 Introduction to Business 3
This course provides a broad overview of business including internal and external functions. Topics include economics, marketing, entrepreneurship, and management as well as related domestic and international business issues. Fall, Spring, Summer

BUS-124 Business Innovation 3
This course is designed to help students get in touch with the innovative business mindset required for success in the 21st century. Students learn to be contributors, catalysts and thinkers within the innovation process. They develop skills as individuals and the team skills needed to collaborate, using available creative resources to leverage ideas and concepts throughout the innovation process. Fall, Spring, Summer

BUS-130 Intro to Entrepreneurship 3
This course covers small business management issues via case studies. It emphasizes insights into the organization, financial decision making, and marketing practices of small businesses. Familiarity with basic accounting principles, concepts applicable to the operation of a service oriented or retailing sole proprietorship, and the internal and external functions of a business will support work in this course. Fall, Spring

BUS-133 Entrepreneurial Studies 3
This course is an intensive application of concepts and ideas through the writing of a business plan. Prerequisite: ACC-131, MKT-110; Spring

BUS-150 E-Commerce 3
This course is designed to familiarize individuals with current and emerging electronic commerce technologies using the Internet. Some of the topics include Internet technology for business advantage, managing electronic commerce funds transfer, reinventing the future of business through electronic commerce, business opportunities in electronic commerce, electronic commerce Web site design, social, political, and ethical issues associated with electronic commerce, and business plans for technology ventures. Fall, Spring

BUS-185 Business Law I 3
This course is an introduction to laws and court procedures relating to business. It emphasizes the ethical, constitutional and regulatory aspects of business. The course concludes with an in-depth study of the laws governing the formation and enforcement of contracts.

BUS-186 Business Law II 3
This course emphasizes the Uniform Commercial Code and its importance to business enterprises and covers property, agency and business organizations. It is a continuation of Business Law I. Prerequisite: BUS-185

BUS-220 Introduction to International Business 3
This course is an overview of international business. The course is designed to provide a global perspective on international trade including, but not
limited to, foreign investments, impact of international financial markets, international marketing, and the operation of multinational corporations. Spring

**BUS-930 Career Readiness I**
This course provides students with career development and foundational skill attainment in the core areas of Reading, Mathematics and Locating Information, as well as other soft skills. Students will prepare for an take the National Career Readiness Exam, culminating in the National Career Readiness Certificate. This nationally recognized certificate verifies to employers that an individual has essential core employability skills. Fall, Spring, Summer

**BUS-934 Capstone Experience**
This course promotes integration and connections between general education and the academic major. It further provides meaningful connections between the program of study content and work and career experiences. Students complete a major project or set of multiple projects with minimal instructor support. Students will demonstrate their knowledge and skills in a variety of formats. Fall, Spring, Summer

**CAD – Computer Aided Drafting**

**CAD-170 Intro to Cad: Pro Desktop**
This course is an introduction to computer-aided drafting with the use of industrial software. The student will learn Pro Desktop, basic commands and progress to specific command sequence operations. Prerequisite: DRF-113

**CAD-172 Intro to Cad: Autocad**
This course is an introduction to computer-aided drafting using industrial software. The student will learn AutoCAD basic commands and progress to specific command sequence operations. Prerequisite: DRF-113 or INT145; Fall, Spring

**CAD-173 Intro to Cad: Versa Cad**
This course is an introduction to computer-aided drafting using industrial software. The student will learn Versa CAD basic commands and progress to specific command sequence operations. Prerequisite: DRF-113

**CAD-174 Intro to Cad: Pro-Engineer**
This course is an introduction to computer-aided drafting using industrial software. The student will learn Pro-Engineer’s basic commands and progress to specific command sequence operations. Prerequisite: DRF-113; Fall, Spring

**CAD-175 Advanced Cad: AutoCad**
This course is a continuation of Intro to CAD: Auto CAD. The student will learn advanced techniques in software customization to increase productivity. System management options will also be covered. Prerequisite: CAD-172

**CAD-180 Intro to SolidWorks**
This is a combined collaborative learning and lab course that serves as an introduction to computer-aided drafting using SolidWorks software. It develops skills in SolidWorks basic commands and specific command sequence operations. Data entry will be by keyboard and pull down menus. Prerequisite: DRF-113; Fall, Spring

**CAD-181 Intro to Autodesk Inventor**
This is a combined collaborative learning and lab course that serves as an introduction to computer-aided drafting using AutoDesk Inventor software. It develops skills in Inventor’s basic commands and specific command sequence operations. Data entry will be by keyboard and pull down menus. Prerequisite: DRF-113; Fall, Spring

**CAD-199 Introduction to Revit Architecture**
This course introduces students interested in Architectural Engineering and/or Construction to Revit software and Building Information Model (BIM). Students learn to set up a project and navigate through several drawing components in order to create plan views, elevations and sections for a project. This course is the first of a two part Revit series. Previous CAD courses and experience is required along with a thorough knowledge of architectural construction. Prerequisite: CAD-172

**CAD-205 Intermediate Revit Architecture**
This course is the second of a two part series. The students are required to add additional skills to enhance the level of proficiency in their use of Revit. Students utilize skills gained in the first course, along with the learning/ experiences they have acquired and apply them to this course by creating/designing a completed project from the foundation to a building rendering using the Revit software. Prerequisite: CAD-199

**CHM – Chemistry**

**CHM-102 Introduction to Biofuels Chemistry**
This course is an introduction to basic processes chemistry as it applies to the renewable fuels industry. Understanding renewable fuels chemical processes is important for maintaining quality control in the manufacture of biodiesel and ethanol. This course presents the chemistry involved in the production of biodiesel and ethanol including the chemical reaction processes, product and waste gas laws. The course also teaches proper laboratory safety procedures as well as proper interpretation and implementation of chemical regulations.

**CHM-122 Introduction to General Chemistry I**
This is a combined lecture and lab course that covers the basics of inorganic chemistry: atomic structure, compounds and bonds, chemical equations and stoichiometry, states of matter, solutions, acids and bases, redox and nuclear chemistry. Prerequisite: MAT-102 or appropriate CPT scores; Fall, Spring, Summer

**CHM-166 General Chemistry I**
This is a combined lecture and lab course that covers the principles of atomic and molecular structure, chemical bonding, periodicity, nomenclature, equations and stoichiometry, physical states of matter and energy transfer processes and nuclear chemistry. It is strongly recommended. Prerequisites: high school Algebra II or MAT-121, high school Chemistry or CHM-122; Fall, Summer

**CHM-176 General Chemistry II**
This combined lecture and lab course is a continuation of Chemistry I. Topics include solutions and colligative properties, acids and bases, equilibrium, thermodynamics, kinetics, redox reactions and electrochemistry, nuclear chemistry and systematic descriptive chemistry of metals and nonmetals. Prerequisite: CHM-166, MAT-121; Spring

**CHM-261 Organic Chemistry I**
This is a combined lecture and lab course that covers the theory and practice of organic chemistry with an emphasis on the chemistry of functional groups. Topics include nomenclature, stereoisomerism, chemical bonding, reaction mechanisms, the characterization of hydrocarbons, alkyl halides and alcohols. Laboratory work stresses development of appropriate organic chemistry separation, isolation and synthetic techniques. Prerequisite: CHM-176; Fall

**CHM-271 Organic Chemistry II**
This is a combined lecture and lab course that is a continuation of Organic Chemistry I. Topics covered include ethers, aldehydes, ketones, carboxylic acids and their derivatives, amines and biologically important fats, proteins, and carbohydrates. The course emphasizes qualitative organic analyses and spectroscopic methods. Prerequisite: CHM-261; Spring

**CIN – Cinematography**

**CIN-101 Introduction to Filmmaking**
This course introduces students to the world of independent filmmaking including the history of independent film, how independent films are organized, the processes of filmmaking from scripting to production, postproduction and promotions, and the basic equipment and software tools of filmmaking. Students produce their own short films using basic video technologies and post them to an online platform for viewing and critique. Fall

**CIN-102 Introduction to Screenwriting**
This course combines an overview of screenwriting genres with a hands-on understanding of screenplay structure. Students review and analyze several famous films through their screenplays, breaking them down into genres and developing loglines and treatments for these movies. They create their own concept for a screenplay, and write a logline, treatment, and outline for that screenplay, as well as dialogue for at least one pivotal scene. Summer
CIN-105 Filmmaking Tools & Software
This course provides students with hands on experience working with professional filmmaking software to complete a feature length film project. The course takes the students through the editing process, sound mixing, color correction, output formats, marketing, and promotion. At the end of the semester students are required to integrate the various software tools by producing a short video clip that is edited with proper sound mix and titling as well as preparing marketing designs for their film. Prior experience with Mac OS is recommended. Corequisite: GRA-100; Fall

CIN-108 Filmmaker Forum I
This course introduces students to the art of film and telling their story by experiencing other filmmakers and their films through viewings, guest lectures, and interactive media. Students learn how to develop an original story, address the challenges of developing a great script, identify various film styles, genres and experimental techniques, as well as take a focused look at contemporary independent film trends. In addition, selected individual student films and team project films, emanating from the program, are viewed and critiqued. Spring

CIN-109 Filmmaker Forum II
This course introduces students to the art of film and telling their story by experiencing other filmmakers and their films through viewings, guest lectures, and interactive media. Students learn how to develop an original story, address the challenges of developing a great script, identify various film styles, genres and experimental techniques, as well as take a focused look at contemporary independent film trends. In addition, selected individual student films and team project films, emanating from the program, are viewed and critiqued. This course is a continuation of CIN 108 and mastery of concepts and advanced skills is expected. Prerequisite: CIN-108; Spring

CIN-110 Student Film Festival I
This course offers students the opportunity to work together to create and promote their own film festival overseen by program faculty. Students learn how to screen the best short films of the semester and feature film projects. They organize and produce promotional materials using professional tools and software. Students learn how to develop, schedule, and promote their film festival. Prerequisite: CIN-120; Spring

CIN-111 Student Film Festival II
This course offers students the opportunity to work together to create and promote their own film festival overseen by program faculty. Students learn how to screen the best short films of the semester and feature film projects. Students organize and produce promotional materials using professional tools and software. Students learn how to develop, schedule, and promote their film festival. This course is a continuation of CIN-112 and mastery of competencies and advanced leadership skills are expected. Prerequisite: CIN-112

CIN-115 Global Independent Cinema
This course is an exploration of the independent cinema movement around the world over the last thirty years. It provides a foundation for potential independent film majors, and provides insight and understanding for future film-goers. Spring

CIN-120 Individual Film Project I
This course allows students to produce a short film appropriate to their professional, educational or personal goals, using basic camera and editing techniques, with a basic level of difficulty. The focus is story building and cinematography. Corequisite: CIN-105, CIN-101, ELE-101, CIN-151; Fall

CIN-121 Individual Film Project II
This course allows students to produce a short film appropriate to their professional, educational or personal goals, using intermediate lighting, camera and editing techniques. This course builds on the skills demonstrated in CIN-120 Individual Film Project I. Prerequisite: CIN-120, ELE-101; Spring

CIN-122 Individual Film Project III
This course allows students to produce a short film appropriate to their professional, educational or personal goals, using advanced lighting, camera and editing techniques. This course builds on the skills demonstrated in CIN-120 Individual Film Project I. Prerequisite: CIN-122, ELE-101

CIN-123 Individual Film Project IV
This course allows students to produce a short film appropriate to their professional, educational or personal goals, using advanced lighting, camera and editing techniques. This course builds on the skills demonstrated in CIN-122 Individual Film Project III. Prerequisite: CIN-122, ELE-101

CIN-130 Lighting & Set Design: Team Film I
This course introduces students to all aspects of lighting and set design in motion picture production. Topics to be covered include lighting types and styles, and indoor and outdoor lighting through a series of exercises and projects. Topics include sets on location and sets in a studio. Corequisite: CIN-140, CIN-105, CIN-101, ELE-101

CIN-132 Optical/Digital Special Effects Team Film 3
This course introduces students to motion picture special effects. Topics include practical effects, optical effects and digital effects. Techniques include green screen, lighting for effect, miniatures and props. Prerequisite: CIN-131; Corequisite: CIN-142

CIN-140 Feature Film I
This course introduces students to all aspects of motion picture production. Topics to be covered include crew positions & their responsibilities, budgeting, scripting, location scouting, the cast, production logistics, legalities, union and non-union productions and teamwork in production. Students apprentice on production crew. Corequisite: CIN-105, CIN-101, ELE-101, CIN-151; Fall

CIN-141 Feature Film II
This course introduces students to the art of editing motion pictures and other post production processes. The editor’s role in completing a film project, as well as other post-production personnel, is examined. Topics include editing to tell the story, sound enhancements, color correction techniques, digital mastering, marketing graphics, and distribution strategies. Students apprentice on a post-production crew. Prerequisite: CIN-140; Corequisite: CIN-152; Spring

CIN-142 Feature Film III
This course acquaints the students with the postproduction process. Topics include logging and transferring into a non-linear editing system, editing and editing styles, assembling a visual story, using special effects, problem solving, music and sound effects, marketing and distribution. Prerequisite: CIN-141; Fall

CIN-143 Feature Film IV
This course provides the students the opportunity to apply the skills and knowledge from prior learning in the Independent Film program. Students explore and analyze topics within the discipline of Independent Film to meet their individually defined goals with approval of the instructor. They also complete a short film appropriate to their professional, educational or personal goals. The course concludes with a public exhibition of the students’ work at the school or local film festival. Instructor consent required. Prerequisite: CIN-142; Spring

CIN-151 Storytelling: Team I
This course exposes students to the art of storytelling in cinematography by producing a short film that focuses on a compelling story. Students gain hands-on experience in the film development process while being mentored by professionals. Topics specific to the course include camera operation, lighting, sound production, set design and location, and editing through iMovie. Student films are created to be shown at the Student Film Festival. Corequisite: CIN-140, CIN-105, CIN-101, ELE-101; Fall

CIN-152 Documentaries: Team II
This course requires students to work in teams to develop and produce a short multi-sequenced documentary that focuses on a social issue, political or economic condition. Students gain hands-on experience in the film development process while being mentored by professionals. Topics specific to the course include interviewing techniques, usage of historical and original footage, and editing through Final Cut Pro. Student films are created to be shown at the Student Film Festival. Prerequisite: CIN-151; Corequisite: CIN-141; Spring

CIS – Computer Programming

CIS-121 Intro to Programming Logic
Provides students with a basic understanding of developing program, including their logic and design, BASIC programming language, and HTML and Java script.

CIS-126 Intro to Programming Logic W/Language
A combined lecture and lab course that gives students an introduction to understanding logic fundamentals needed to program business applications. Students are also introduced to flowcharting or pseudo-code techniques and begin designing and developing computer programs using a programming language.
CIS-162  C++  4  
This course is the first of a two-semester series, which introduces the general characteristics of C++. Students, through practice, will learn to write code, execute, debug, explore the immense documentation and implement strategies. Fall

CIS-163  Animation Project  2  
This course is the culminating course for the Dynamic & Visual Effects Animation certificate or Character Animation certificate. Students review and demonstrate understanding of core animation concepts. Students finish the course with a portfolio quality final animation asset. Prerequisite: CIS-378, CIS-377

CIS-165  Advanced C++  4  
This is the second course of a two-semester series and introduces some of the advanced features of C++. Students, through practice, learn how to search, sort and analyze data efficiently. Prerequisite: CIS-162, Spring, Summer

CIS-171  Java  3  
This is a comprehensive JAVA programming course that introduces students to object-oriented programming concepts along with the JAVA syntax to implement them. JAVA applications are introduced prior to applets, so the student has more thorough understanding of the concepts used in object-oriented programming. Fall, Spring, Summer

CIS-175  Java II  3  
This second course in Java is a comprehensive Java programming course which introduces students to advanced object-oriented programming concepts along with the Java syntax to implement them. Java applications are introduced prior to applets, providing the student a more thorough understanding of the concepts used in object-oriented programming. Topics emphasized are graphical user interfaces, wrapper classes, exception handling techniques, applets, recursion, polymorphism, inheritance and working with databases in Java. Prerequisite: CIS-171; Fall

CIS-207  Fundamentals of Web Programming  3  
This is a combined lecture/lab course that provides coverage of HTML and XHTML, Cascade Style Sheets and client side scripting to design Web sites. Topics covered include using tables, forms, multimedia clips and client side scripting. Spring

CIS-208  Intro to Client-Side Scripting  2  
This is a combined lecture and lab course introducing students to client-side scripting. In this class, students will employ a current-side scripting language to create robust form validators, basic web tools, and simple games. This course will also introduce students to the document object model (DOM). Prerequisite: CIS-205

CIS-215  Server Side Web Programming  3  
This combined lecture and lab course will introduce students to a server-side scripting language to create form handlers and mailer applications, build basic document management systems and create server-based support pages for custom web applications. Students will also learn about methods for persisting client information and error handling. Prerequisite: CIS-207; Fall

CIS-229  Web Strategies  3  
This is a combined lecture and lab course that provides students with web strategies and techniques to enable Web sites to be easily searchable, findable and accessible to a wide variety of audiences. It will introduce web standards, accessibility, search engine optimization and contemporary technologies like Ajax, APIs, Flash and Microformats. At the end of the course the students will be able to implement the best practices to get web content in front of as many viewers as possible. Prerequisite: CIS-207; Spring

CIS-240  Dynamic HTML  3  
This course is a continuation of client-side scripting and introduces students to Dynamic HTML. They will continue learning about the DOM (Document Object Model) while building very sophisticated HTML GUI’s (Graphical User Interfaces). Students will also gain experience creating lightweight DHTML components such as progress bars, drop-down menus, custom list boxes, scroll bars, and drag/drop objects. Prerequisite: CIS-208

CIS-245  Extensible Stylesheet Language  3  
This course introduces student to XML (Extensible Markup Language) document transformation using advanced xPath and XSL (Extensible Stylesheet Language). Students in this course will also learn how to transform XML documents to other XML documents or HTML. They will also learn about XML styles and XML document management systems. Prerequisite: CIS-225

CIS-333  Data Base and SQL  4  
This is a combined lecture and lab course that provides instruction and experience in programming with relational database access. It references and/or uses data base software. Prerequisite: CIS-509, CIS-126; Fall

CIS-345  Data Base Design  2  
This course introduces students to the concepts associated with relational database design. In this class, students will use data modeling to produce an efficient and maintainable database design. Students will also become familiar with entity relationship diagrams and data normalization. Spring

CIS-373  Intro to Game Audio  3  
This course is an overview of video game audio development including interactive sound effects, sound manipulation, music, and dialog. Students work with audio production tools and are introduced to the game audio pipeline. Sound libraries, audio design document, file management, industry mixing techniques, sequencing, studio and field sound recording, and other key elements of the professional game audio development cycle are also covered. Spring

CIS-374  Sound Design for Games  3  
This course introduces game audio production and implementation including relevant roles within the game industry and typical production schedules. Students develop audio for a game and continue their exploration of sound design via sound effect creation and sonic manipulation for interactive environments as well as sound editing, sound bytes, and voice editing. Prerequisite: CIS-373; Summer

CIS-375  Music and Composition for Games  3  
This course introduces the fundamentals of developing music for interactive video games. Students learn basic compositional techniques, digital audio editing and mixing, and sequencing music for a game. The course also covers game audio production workflow, digital music development issues, sound engines, middleware, technical constraints, and the studio techniques used to create interactive game music. Students learn how to ‘tell a story’ using digital music to build an immersive gaming experience. Prerequisite: CIS-373, MUS-102; Fall

CIS-376  Anatomy for Digital Artists  2  
This course introduces core aspects of human and animal anatomy for digital artists. It covers the essential aspects of anatomy required to be a successful artist in video games, visual effects, animation, and other CG fields. Fall

CIS-377  Character Animation  3  
This course is a key component of video game, simulation, and other CG animation development. Students acquire an understanding of skinning, rigging, kinematics, blend shapes, walk cycles, and other core character animation concepts. The focus of this course is to utilize essential animation concepts to create believable character animation. Prerequisite: CIS-376, CIS-391; Spring

CIS-378  Dynamic & Visual Effects  3  
This course introduces students to dynamic and visual effects animation for video games and other computer graphics applications. Particle effects, fluid dynamics, and other special effects animation are heavily used in the video game and computer graphics industry. Prerequisite: CIS-391; Spring

CIS-379  Visual Effects & Compositing  3  
This course introduces students to motion capture, green screen technology, matchmoving, and compositing techniques. Prerequisite: CIS-378; Spring

CIS-381  Intro to 3D Modeling & Topology  1  
This course introduces students to the fundamentals of 3D modeling and topology which are essential for learning more advanced concepts such as UV mapping, texturing, animation, and other areas of digital graphics. Concepts covered include interactive components of modeling, modeling basics, topology, importing, exporting, rendering, scale, and perspective. The course emphasizes application of planning, reference, good topology, and mesh cleanup. Fall

CIS-383  Digital Comp & Graphics I  2  
This course is an introduction to digital composition and the graphics pipeline used in the CG industry. This course is the first in a series focusing on manipulation of digital images, preparing textures, digital painting,
software integration, composition and compositing, and CG pipeline procedures such as efficient work flow, image editing and compositing, and operating under time restrictions. Fall

**CIS-384 Digital Composition & Graphics II**  
This course is an introduction to advanced digital composition and graphics pipeline procedures used in the CG industry. This course is a continuation of CIS 383 Digital Composition & Graphics Pipeline I and focuses on advanced digital image manipulation such as layering and masking, applying textures, texture painting, lighting effects, advanced composition and compositing, and CG pipeline procedures including team development. Prerequisite: CIS-383; Spring

**CIS-386 Game Design 101**  
This course introduces game design theory, history of gaming, types of games, gaming platforms, and major game components. It serves as an introduction to each course in the program. Fall

**CIS-387 Game Development Process**  
This course addresses the process of game development: prototyping, preproduction, production, testing, release, and post-mortem. Students will study design cycle, waterfall method, and SDP method. They will also define game design documents and analyze games. Fall

**CIS-388 Creative Writing for Games**  
This course presents creative writing techniques used to aid in the development of games. Key elements include brainstorming techniques, storyboarding, principles of storytelling, plot, conflict, character development, camera angles, and camera moves. Prerequisite: COM-753; Spring

**CIS-389 Level Design I**  
This course introduces the art of game and level design. A combination of theory and hands-on application is used to teach the skills needed to build levels for many different types of games. The layout, look, and feel of levels are the main focus of this course. Prerequisite: CIS-387; Spring

**CIS-390 Level Design II**  
This course applies the theory of level layout from Level Design I and adds the scripting aspects in order to create puzzles, interactive objects, and triggers. Students will debug the scripts and address level design issues. By the end of the course students will create a playable level. Prerequisite: CIS-389, CIS-392; Fall

**CIS-391 Animation for Games**  
This course introduces students to 2D and 3D computer animation, basic animation principles, and application of animation concepts by creating basic Flash and Maya animation scenes. The focus of this course is utilizing key animation concepts to design, create, document, and debug a basic game using Flash. Instructor consent required. Prerequisite: CIS-387, CIS-388; Fall

**CIS-392 Interface Design for Games**  
This course provides an overview of the user interfaces (UI) - the good, the bad and the ugly. Students will explore what makes a good interface, what makes a bad interface, and techniques on how to create user interfaces, the look, and interactions. Topics include cross platform interface, platform differences, transparency, and standard UI practices. Prerequisite: CIS-387, CIS-383; Spring

**CIS-393 Intro to 3-D Gaming Art**  
This course introduces industry standard 3-D software development tools, including Maya, 3DS Max and ZBrush. 3-D software plays a significant role in game development, movie animation and graphics and related fields. Understanding how such software is used and how to use it is vital for a career involving computer graphics. Prerequisite: ART-371; Fall

**CIS-394 Introduction to Game Programming**  
This course provides information regarding the many types of game engines, their uses, and the difference between commercial and open source game engines. Game development is also addressed. Corequisite: CIS-165; Fall

**CIS-395 Game Engines**  
This course provides information regarding the many types of game engines, their uses, and the difference between commercial and open source game engines. Game development is also addressed. Prerequisite: CIS-387; Fall

**CIS-396 Game Development Team**  
This course illustrates the various design teams and their roles during the game development process. Students will experience key industry roles, including game designer, artist, programmer, tester and project manager. This course is offered concurrently with CIS 398 Game Final Submission in order for students to collaborate with their teams as they design and build a prototype video game. Spring

**CIS-397 Physics for Game Design**  
This course explores the relevance and application of physics in video games. Students examine the basic concepts of physics and how it relates to video games and physics engines. Prerequisite: CIS-387, CIS-395; Spring

**CIS-398 Game Final Submission**  
This course is the culmination of Video Game Design program coursework. Students are assigned to teams to design and build a small game based on an instructor-approved topic. Each team will also present the design document and the final submission. This course is offered concurrently with CIS 396 Game Development Team in order for students to collaborate with their teams on the project. Each student is responsible for being the lead designer for their final game submission project. Corequisite: CIS-396; Spring

**CIS-402 Cobol**  
A combined lecture and lab course. Provides the student with the basic concepts of the COBOL language including perform statements and sequential file handling techniques. Prerequisite: CIS-126; Corequisite: CIS-593

**CIS-412 Cobol II**  
Follows Intro to COBOL and covers more advanced file handling techniques including VSAM KSDS file creation, retrieval and update. Introduces table handling. Prerequisite: CIS-402

**CIS-509 System Analysis and Design**  
This course introduces students to life-cycle methodologies, process-oriented design, data flow analysis, interface design, object-oriented design, and database design. This class will enable students to consider a problem, select an appropriate design methodology, and design a solution system along with documentation for the problem.

**CIS-521 RPG**  
A combined lecture and lab course. Provides instruction in the fixed logic cycle of the language including five different coding sheets. Includes calculations, card format, tape and disk file processing, control breaks, matching records, and table processing. Prerequisite: CIS-403

**CIS-591 Mainframe Operations**  
Introduces the student to computer concepts and facilities with an emphasis on the IBM S390 architecture. The student is also taught the properties of the Multiple Virtual Storage (MVS) operating system, the Time Sharing Option (TSO) system commands, the Job Control Language (JCL) used to process BATCH jobs, and the Job Entry Subsystem (JES) 2 commands which are used to control the output from the S390 environment.

**CIS-606 Visual Basic. NET I**  
This is a combined lecture and lab course that introduces Windows programming using Microsoft’s .NET framework. Students will write introductory level programs involving variables, assignment, input and output using graphical user interface (GUI), calculations, repetition and selection between alternatives using the .NET environment. Fall, Spring, Summer

**CIS-607 Visual Basic. NET II**  
This course is a continuation of Visual Basic.NET I. In this course, students learn more about advanced database programming, reporting, web programming, multilayer applications, user controls and developing applications for mobile devices using Visual Basic. NET. They also build on the concepts of problem solving and design techniques of object oriented programming. Prerequisite: CIS-606

**CIS-770 Advanced Technologies**  
This is a combined lecture and lab capstone course in which many of the ideas and skills learned in other courses are utilized by the students. It provides students with the skills needed to analyze and design an entire Information System in a cooperative team environment. Students will also learn and use advanced tools and technologies in data processing and reporting. Prerequisite: CIS-607, CIS-413

**CIS-811 Emerging Technologies Seminar**  
This course introduces students to more advanced e-Commerce programming issues, such as credit card validation algorithms, pay-point incorporation into storefronts, trusted source digital certificates, and data encryption. Students will also consider personal digital wallets and purchase flows.
CIS-932 Internship 3
This course provides on-the-job Information Technology training in an organization that will give the student intern an opportunity to utilize the skills and education acquired in the computer programming curriculum. The supervision of job tasks is by an industry professional and coordinated by the college instructor. Prerequisites: Successful completion of required program courses for first, second and third semesters or instructor’s consent.

CIS-933 Internship in Video Game Design 2
This course provides on-the-job experience on campus or in the video game design community giving the student experience and practical application of the competencies learned in the Video Game Design programs. The internship is coordinated by the college instructor and supervised by an industry professional at the work site. Prerequisite: Permission of instructor, 2.0 cumulative GPA and a C (2.0) or better in core courses as defined by the program advisor.

CIS-936 Occupational Experience 1
This course provides the opportunity to apply acquired skills in a computer programming field. Projects and performance evaluation will be coordinated between the instructor and cooperating agency. Prerequisites: Successful completion of all first year courses.

CLS – Cultural Studies

CLS-157 The Latinos Experience in the Midwest 1
This course provides an overview of the geographical, historical, political, economic, transnational and cultural forces that have shaped Latinos living in the United States. With each of these items a distinct connection is made between Latino and Midwestern cultures. Spring

CLS-201 Cultural Perspectives 1
This course provides an overview of the customs, language and arts of a specified culture. The unique structure of this course offers students the opportunity not only to study the culture in a classroom setting, but also to experience it first-hand through a travel component. Students will incur significant additional costs for travel. These costs will be detailed by the instructor no later than the first day of class. This course may be repeated for credit. Spring/Summer

CLS-202 Cultural Perspectives 2
This course combines the overview of the customs, language and arts of a specified culture with an in-depth study of one aspect of the culture being explored. The unique structure of this course offers students the opportunity not only to study the culture and particular aspect in a classroom setting, but also to experience it first-hand through a travel component. Students will incur significant additional costs for travel. These costs will be detailed by the instructor no later than the first day of class. This course may be repeated for credit. Spring/Summer

CLS-203 Cultural Perspectives 3
This course provides a culminating experience for students with an overview, in-depth study and capstone project of a specified culture. The unique structure of this course offers students the opportunity not only to study the customs, language and arts of the culture in a classroom setting, but also to experience it first-hand through a travel component. Students will incur significant additional costs for travel. These costs will be detailed by the instructor no later than the first day of class. This course may be repeated for credit. Spring/Summer

CLS-212 Diversity 3
This course utilizes an interdisciplinary and intersectional approach to studying gender, race, class, sexuality and other issues of diversity. The curriculum highlights the duality of oppression and privilege and the ways in which race, gender, class and sexuality shape daily life. Special focus is on learning how to demonstrate course concepts as social action. Social justice is practiced as students become educated in these concepts of diversity and engage in diversity conscious social action. Fall, Spring, Summer

COM – Communication

COM-723 Workplace Communications 3
This course is a study of the principles and processes of written and oral communication as applied to occupational and personal use through practical reading, writing and speaking assignments. Fall, Spring, Summer

COM-753 Technical Communications 3
This course covers written and oral communication as it applies to various occupational areas. It emphasizes technical report writing, including preparation, organization, audience and the effective use of format, supplements and visuals. Fall, Spring, Summer

CON – Construction

CON-132 Footings and Foundations 3
This course emphasizes site layout, footings, wall foundations, and flat concrete work. Topics include estimating and reading blueprints as well as hands-on experience in footings and poured walls. A field project to provide practical experience is included. Prerequisite: CON-136; Spring

CON-136 Intro to Construction Shop 1
This course is a prerequisite to all credit carpentry classes and is a lecture course that serves as an introduction into Carpentry or Construction classes. Content covers personal safety, tool safety, tool maintenance, and hand and power tool identification and proper use. Fall, Spring

Updated 5/21/13

CON-204 Basic Framing Techniques 4
This course offers a background in woods, fasteners and materials, and introduces blueprint reading. Beginning rafter construction and roof framing and finishing is also covered. It is a combined lecture and lab course and includes hands-on experience in the framing of exterior and interior walls, doors and window openings, and interior walls. Prerequisite: CON-136; Fall

CON-209 Introduction to Drywall 1
This is a combined lecture and lab course that introduces the student to the basics of hanging and tapping drywall and its uses in residential construction. It will also provide students the necessary knowledge and skills to insulate a structure. Prerequisite: CON-136; Spring

CON-216 Advanced Framing and Roofing 6
This course is a combined lecture and lab course that further explores framing of exterior and interior walls, and door and window openings. It provides framing training for the advanced carpenter as well as training to receive the 10-hour OSHA safety card. Strong emphasis is in rafter construction, and roof framing and finishes. The course also explores steel framing in the residential and light commercial setting. Prerequisite: CON-136, CON-204; Fall

CON-234 Concrete Specialties 3
This course is a combined lecture and lab course. Uses a basic knowledge of concrete gained in Footings and Foundations, CON 132, to further explore advanced and innovative ways of using concrete in the construction industry. The course also allows for the ACI, (American Concrete Institute), concrete certification Prerequisite: CON-136, CON-132; Spring

CON-258 Wall Coverings and Coatings 1.5
This is a combined lecture and lab course that exposes students to all types of coatings and wall coverings. Topics to be studied include paints, stains, sealers, varnishes and wallpaper. Prerequisite: CON-136; Spring

CON-259 Floor Coverings and Coatings 1.5
This is a combined lecture and lab course that introduces students to the various kinds of floor coverings such as: wood strip floors, ceramic tile floors, and laminate floors. The course also discusses vinyl sheet flooring, tile, and carpet. Prerequisite: CON-136; Spring

CON-365 Advanced Drywall 1.5
This is a combined lecture and lab course that further enhances students’ ability to finish drywall and apply other interior wall and ceiling finishes. It provides students with the necessary knowledge and skills to finish drywall to a smooth surface and apply a variety of textures. Students will also learn alternate methods of wall and ceiling finishing such as paneling and suspended ceilings. Prerequisite: CON-136, CON-209; Spring

CON-366 Exterior Finishing 4
In this course students will study different types of material for exterior finishing such as wood, steel, aluminum, vinyl, EIFS, and brick. There will also be an in-depth look at windows and exterior doors for residential and commercial construction. Included in this class is estimating materials, plan reading and the study of deck building. Prerequisite: CON-136; Fall

800.352.4649 or www.witcc.edu 175 Western Iowa Tech Community College 2013-2014 Catalog

Updated 5/21/13
This course is designed to acquaint the student with the field of criminology, practical examination of the use of force and various police arrest/restraint hand-to-hand and ground fighting techniques and vehicle extractions. A defense, falls and strikes, tactical officer survival techniques, takedowns, and attackers. Also covered are handgun disarming, knife defense, shotgun and printing photographs for evidence, records, court proceedings and evidence and criminal records. The course includes taking, developing and universally accepted methods of collecting and maintaining crime scene identification (mugging). Prerequisite: CRJ-133; Fall, Spring

### CRJ - Criminal Justice

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRJ-101</td>
<td>CRJ-101 Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CRJ-110</td>
<td>CRJ-110 Patrol Procedures</td>
<td>3</td>
</tr>
<tr>
<td>CRJ-113</td>
<td>CRJ-113 Field Strategies</td>
<td>3</td>
</tr>
<tr>
<td>CRJ-120</td>
<td>CRJ-120 Introduction to Corrections</td>
<td>3</td>
</tr>
<tr>
<td>CRJ-131</td>
<td>CRJ-131 Criminal Law and Procedure</td>
<td>3</td>
</tr>
<tr>
<td>CRJ-133</td>
<td>CRJ-133 Constitutional Criminal Procedure</td>
<td>3</td>
</tr>
<tr>
<td>CRJ-140</td>
<td>CRJ-140 Criminal Investigation</td>
<td>1</td>
</tr>
<tr>
<td>CRJ-144</td>
<td>CRJ-144 Police Photography</td>
<td>2</td>
</tr>
<tr>
<td>CRJ-150</td>
<td>CRJ-150 Defensive Tactics</td>
<td>1</td>
</tr>
<tr>
<td>CRJ-200</td>
<td>CRJ-200 Criminology</td>
<td>3</td>
</tr>
<tr>
<td>CRJ-201</td>
<td>CRJ-201 Juvenile Delinquency</td>
<td>3</td>
</tr>
<tr>
<td>CRJ-210</td>
<td>CRJ-210 Law Enforcement Management</td>
<td>3</td>
</tr>
<tr>
<td>CRJ-217</td>
<td>CRJ-217 Selective Drug Enforcement</td>
<td>2</td>
</tr>
<tr>
<td>CRJ-220</td>
<td>CRJ-220 Community-Based Corrections</td>
<td>3</td>
</tr>
<tr>
<td>CRJ-221</td>
<td>CRJ-221 Probation and Parole</td>
<td>3</td>
</tr>
<tr>
<td>CRJ-223</td>
<td>CRJ-223 Correctional Administration</td>
<td>3</td>
</tr>
<tr>
<td>CRJ-224</td>
<td>CRJ-224 Correctional Institutions</td>
<td>3</td>
</tr>
<tr>
<td>CRJ-231</td>
<td>CRJ-231 Traffic Law</td>
<td>3</td>
</tr>
<tr>
<td>CRJ-241</td>
<td>CRJ-241 Applied Criminalistics</td>
<td>2</td>
</tr>
<tr>
<td>CRJ-243</td>
<td>CRJ-243 Traffic Collision Investigation</td>
<td>2</td>
</tr>
<tr>
<td>CRJ-253</td>
<td>CRJ-253 Basic Firearms</td>
<td>3</td>
</tr>
</tbody>
</table>

This course involves topics of study to include training and organization of all law enforcement agencies, field and staff organization and separation of duties, budgeting, special and technical divisions and their responsibilities. Prerequisite: CRJ-100; Spring

This course is an introduction to probation and parole, its philosophy, procedures and institutions. Aftercare and post release problems are also studied. Prerequisite: CRJ-120; Spring

This course examines abuse of controlled substances and the legal sanctions against possession, manufacture, use and sale. It covers the preliminary identification of controlled substances and users as well as the short- and long-term effects of drug use. Discussion of enforcement techniques such as selective enforcement and clandestine operations is included. Prerequisite: CRJ-100, CRJ-101, CRJ-133, CRJ-201, CRJ-210, CRJ-262; Fall

This course is an in-depth study of the police uniformed patrol division. Theories and concepts are explored and supplemented with real world experiences of working officers. The course provides an understanding of the patrol function and appreciation of the total environment within which a modern patrol officer must function. Fall, Spring, Summer

This course covers the ethical standards and codes of professional behavior for police officers and others placed in positions of public trust. The course includes use of force, gratuities, intra- and inter-agency conduct, integrity, ethical necessity of due process and on-duty and off-duty conduct. Fall, Spring

This course is designed to acquaint the student with the field of criminology, which is the study of crime and its causal explanations. The topics to be covered include the criminal and his/her role in society; police and courts, and their effects upon criminal behavior; and rehabilitation and punishment as they affect criminal behavior. Fall, Spring

This course is designed for the second year Police Science student. The course covers the ethical standards and codes of professional behavior for police officers and others placed in positions of public trust. The course includes use of force, gratuities, intra- and inter-agency conduct, integrity, ethical necessity of due process and on-duty and off-duty conduct. Fall, Spring

This course involves topics of study to include training and organization of all law enforcement agencies, field and staff organization and separation of duties, budgeting, special and technical divisions and their responsibilities. Prerequisite: CRJ-100; Spring

A discussion of the importance of community treatment programs for juveniles and adult offenders. The principles and philosophy of community treatment are explained as well as the nature of the community treatment agent’s work. Major issues and trends in the field are examined. Prerequisite: CRJ-120; Spring

This course is an in-depth study of the police uniformed patrol division. Theories and concepts are explored and supplemented with real world experiences of working officers. The course provides an understanding of the patrol function and appreciation of the total environment within which a modern patrol officer must function. Fall, Spring, Summer

This course covers handgun and shotgun nomenclature, range safety, determination of proof of causation. Prerequisite: CRJ-133; Spring

This course involves topics of study to include training and organization of all law enforcement agencies, field and staff organization and separation of duties, budgeting, special and technical divisions and their responsibilities. Prerequisite: CRJ-100; Spring

This course covers handgun and shotgun nomenclature, range safety, determination of proof of causation. Prerequisite: CRJ-133; Spring

This course studies the history of law enforcement and respective agencies and the basic theories of the criminal behavior as well as law enforcement terminology and technology. It emphasizes the duties and responsibilities of the law enforcement officer to the individual and society as a whole and explores and defines techniques, technical terms, and basic procedures. Fall, Spring, Summer
CRJ-255 Advanced Firearms 3
This course covers semi-automatic pistol proficiency training, combat marksmanship and completion of a tactical combat semi-automatic pistol course leading to certification. Prerequisite: CRJ-253; Spring

CRJ-257 Physical Fitness and Conditioning 1
This rigorous course builds on prior fitness knowledge as well as physical conditioning. A fitness exam is conducted and an advanced personal exercise and nutrition program is developed to meet each student’s needs. Students’ fitness levels are being monitored throughout the course. Prerequisite: PEA-148, CRJ-100; Fall

CRJ-261 Medical–Legal Death Investigation 3
This course deals with the death investigative process from the position of the investigating police officer. Emphasis is placed on the determination of the manner, cause, and mechanism of death by relying on the interpretation of wound and injury artifacts. The information gathered by the officer during this investigative process is then utilized as evidence in a legal forum. This course is designed for the student who has completed the first year of Police Science or has some background in crime scene investigations. Spring

CRJ-262 Fingerprint Technology 2
This course is an in-depth study of the most widely utilized and accepted investigator’s tools in fingerprint technology. Theories and concepts are explored, as are actual hands-on assignments. The course provides the student with the information required to be able to develop fingerprints by chemical and mechanical methods. The course also involves the recognition, identification and classification of the various fingerprint patterns. This course is designed for the first year, second semester, police science student. Prerequisite: CRJ-140; Spring

CRJ-280 Police Science Practicum I 2
This course provides the student with instructional and practical applications in the areas of securing arrested persons, handcuffing procedures, and use of force in regard to arrest. The student is required to have knowledge of the police shotgun and demonstrate competency in its operation. During the course the student prepares letters of introduction and inquiry and becomes involved in a mock oral board interview. Prerequisite: CRJ-100, CRJ-113, CRJ-133, CRJ-140, CRJ-201, CRJ-150, CRJ-101; Fall

CRJ-281 Police Science Practicum II 2
This course provides the student with the means to gain experience by using and demonstrating learned proficiencies in various simulated situations because the law enforcement profession is essentially a problem-solving profession requiring that individual officers access learned information and to correctly apply techniques in varied situations. This course requires the student to apply learned techniques and knowledge during the class to solve problems in areas such as performing building searches, domestic disputes, car crashes, deadly force threat evaluation and response. This course also requires the student show proficiency in conducting misdemeanor and felony traffic stops. Prerequisite: CRJ-280, CRJ-253; Spring

CRJ-310 ILEA Basic Shortcourse 15
This course is designed to meet the certification requirements for Iowa Law Enforcement Officers. The curriculum is established by Iowa Code 80B according to the Iowa Law Enforcement Academy Administrative Rules as outlined in 501-3.6 (80B). If the rules change, then the course will change to reflect the most current requirements. Students must be graduates of a two- or four-year program in Police Science or Criminal Justice and must already be hired by a law enforcement agency or sponsored by an agency. Fall, Spring

CRR – Collision Repair and Refinish

CRR-102 Sheet Metal Welding 3
A combined lecture and lab course. Gives a working knowledge of oxyacetylene and MIG welding procedures. Demonstrates all types of welds used in the trade and develops required skills in students through practice. Fall

CRR-202 Plastic Repair 3
A combined lecture and lab course. Provides the student with the knowledge necessary to identify and repair the various plastic and fiberglass panels used in modern vehicle construction. Spring

CRR-323 Sheet Metal Fundamentals 3
A combined lecture and lab course. Provides the student with the basic theory of metal straightening, tool skills, auto body nomenclature, and the materials with which he/she will work. Gives practice in roughing, shaping, sheet metal fabrication, metal finishing, and the use of body fillers on automotive body panels. Fall

CRR-403 Exterior Body Construction 3
A combined lecture and lab course. Students will study methods of adjusting and aligning bumpers, lamps, and exterior body panels. Emphasis will be placed on the fit of fenders, doors, hoods, deck lids, grills, and the servicing of hinges and latches. Fall

CRR-411 Interior Body Construction 3
A combined lecture and lab course. Students will study the servicing of steering columns, dash assemblies, headliners, seats, seatbelts, interior trim, and door hardware. The removal and installation of automotive glass and trim will be practiced. Fall

CRR-504 Frame and Unibody Damage Analysis 4
A combined lecture and lab course that studies frame and unibody construction, design and damage analysis. The course covers the proper use of alignment tools, frame gauges and types of hook-ups used to do repairs. The use of frame straightening equipment (Chief EZ Liner II - Chief Velocity Electronic Measuring System - Collette Repair Bench) will be demonstrated and put into practice. The student will become familiar with suspension systems and wheel alignment terminology. Training will include suspension parts that are commonly damaged in a collision. Emphasis is on how a misaligned body structure can affect alignment. Spring

CRR-533 Structural Repair 3
A combined lecture and lab course. Removal, replacement, and accepted sectioning procedures of inner structural panels using MIG welding techniques will be covered. Proper application of anti-corrosion materials to hidden boxed areas will be used. Corequisite: CRR-594; Spring

CRR-551 Integral Body Repair 3
A combined lecture and lab course. Designed to identify and demonstrate removal and replacement procedures of outer integral body panels using accepted welding techniques. Sectioning and corrosion protection of repaired areas will be shown. Prerequisite: CRR-402, CRR-323, CRR-413; Spring

CRR-655 Advanced Collision Repair 5
A combined lecture and lab course. Industry production experience is gained in repairing collision damaged vehicles to pre-accident specifications. Auto collision industry standards and procedures will be followed as guidelines for acceptable repairs. Prerequisite: CRR-533, CRR-551; Spring

CRR-671 Electricity 1
Designed to cover basic electricity and how it relates to the automobile. Topics to be covered are basic electrical circuitry, wiring schematics, test equipment usage, wiring loom repair. Spring

CRR-742 Estimating Theory 2
Provides the student with the knowledge necessary to write estimates on damaged vehicles. Covers collision estimating guides and the proper format in writing estimates. Introduces interpersonal and financial management techniques and reviews customer relations and communication with insurance and body shop personnel. Spring

CRR-805 Refinishing I 4
A combined lecture and lab course. Provides the student with knowledge to analyze paint problems and their remedies. Automobiles will be prepared for complete panel refinishing and overall vehicle refinishing. Refinishing will be performed following paint manufacturers recommendations. Prerequisite: CRR-811; Fall

CRR-811 Surface Preparation 4
A combined lecture and lab course. Introduces the basic procedures of surface preparation for refinishing. Demonstrates techniques used in cleaning, sanding, and use of power tools and paint equipment. Designed to put into practice the use of abrasives, undercoats, solvents and basecoat/clearcoat topcoats. Covers techniques of color sanding and polishing. Fall

CRR-834 Refinishing II 4
A combined lecture and lab course. Emphasizes spot painting, blending, and color matching as well as the study and use of basecoat/clearcoat paint systems. Skills will be developed in the use of finesse sanding and polishing. Prerequisite: CRR-805; Fall

800.352.4649 or www.witcc.edu  177  Western Iowa Tech Community College 2013-2014 Catalog
Advanced Refinishing 4
A combined lecture and lab course. Automotive refinishing shop production skills are gained by refining paint damaged automobiles to pre-damaged condition. Paint manufactures recommendations and refinishing shop standards will be used to repair the vehicle to customer satisfaction. Prerequisite: CRR-874; Spring

CSC – Computer Science

Introduction to Computers 3
Provides a fundamental understanding of computers and familiarizes students with the interaction of computer hardware and software. Emphasis is on the application of microcomputers and hands-on use of software applications, including operating systems, word processing, spreadsheets, databases, presentation software, and file management. Students should plan on some lab time outside of class for homework. Keyboarding/typing skills highly recommended. Fall, Spring, Summer

Computer Science 4
The first in a two-semester sequence of courses that introduces a student to the discipline of computing using a modern programming language. Through extensive practice in coding, debugging, testing, and documentation, students gain exposure to development of problem-solving strategies, algorithm design, and top-down design principles. Fall

Data Structures 4
This is the second in a two-semester sequence of introductory computing courses. This course introduces a student to advanced features of a modern programming language. Topics emphasized are data structures, recursion, data abstraction, and sort/search algorithm analysis. Prerequisite: CSC-142; Spring

DAN – Dance

Dance Technique and Fundamentals 1
This course provides students with an entry-level understanding of various dance forms, their history, and the basic physical principles common to all forms of dance. It is intended for both pre-majors and non-majors. Fall, Spring

DEA – Dental Assistant

Professional Orientation 1
This course provides an introduction to the dental health team, the profession, ethics and jurisprudence, and professional development. Recognition of patient needs and team building skills are emphasized. Instructor consent is required. Fall

Dental Anatomy 2
This course provides an introduction to body function and structures; head and neck anatomy, oral embryology, histology and tooth morphology; and related oral pathology as it applies to Dental Assisting. Instructor consent required. Fall, Spring

Dental Therapeutics 3
This course provides an introduction to pharmacology, nutrition, preventive dentistry concepts, oral diagnosis, and dental/medical emergencies. Background knowledge needed to meet patient needs and identification of related oral pathology is emphasized. Instructor consent required. Corequisite: DEA-256; Fall

Dental Radiography 4
This lecture and laboratory course provides an introduction to principles related to dental radiography. Students learn skill development in intra- and extra-oral radiographic imaging and a variety of processing techniques. Instructor consent is required. Prerequisite: DEA-508; Corequisite: DEA-613; Spring

Dental Materials 4
This lecture and lab course provides basic principles related to physical and chemical composition, characteristics, and function of dental materials. Students learn skill development in manipulation of materials and individualized laboratory procedures utilized in the dental office. An emphasis on safety, infection control, and quality assessment is included. Instructor consent is required. Corequisite: DEA-256, DEA-508; Fall

Fundamentals of Dental Assisting 7
This lecture, lab and clinical course provides an introduction to the dental office, instrumentation, equipment, basic intraoral skills development, and operative dentistry procedures. Hazard management and infection control strategies are emphasized. Application of learned skills is provided through a general dentistry clinical experience. Instructor consent is required. Corequisite: DEA-256, DEA-270, DEA-405, DEA-101; Fall

Dental Assisting Specialties 6
This lecture, lab, and clinical course provides concepts related to the dental specialties and advances intraoral skills development. Application of learned skills is provided through a variety of general and specialty clinical experiences. Instructor consent is required. Prerequisite: DEA-508; Corequisite: DEA-303, DEA-701; Spring

Dental Office Procedures 1
This lecture course provides an introduction to dental office procedures, bookkeeping systems, third-party payment plans, appointment control, and communications. Interaction between business and clinical dentistry is emphasized. Instructor consent is required. Corequisite: DEA-101, DEA-256, DEA-270; Spring

Limited Dental Radiography 2
This lecture and lab course is designed to assist actively employed dental assistants in meeting academic eligibility requirements for dental radiography qualification. Students enrolled must be actively employed as a dental assistant. Instructor consent required. As Needed/As per request

RDA Expanded Functions I 2
This course provides theoretical concepts and skills to expand the dental assistant’s scope of practice to include occlusal registration, gingival retraction, final impression, and provisional restorations. Instructor consent is required. Fall

RDA Expanded Functions II 1
This course provides theoretical concepts and skills to expand the dental assistant’s scope of practice to include application of cavity liners, desensitizing agents, bonding systems, placement and removal of dry socket medication, placement of periodontal dressing, and testing pulp vitality. Instructor consent is required. Spring

RDA Nitrous Oxide Monitoring 1
This course is designed to provide the theoretical concepts and skills associated with monitoring of nitrous oxide and oxygen sedation. Course content provides the student with awareness of the indications and contraindications for nitrous oxide and oxygen sedation use, a working knowledge of the equipment, understanding of the procedure for administering nitrous oxide and oxygen sedation, and prepares the student to monitor nitrous oxide and oxygen sedation. Instructor consent required. Fall, Spring, Summer

DRA – Film and Theatre

Introduction to Theatre 3
A theatre appreciation course designed to provide the student with a critical means to evaluate representative examples of dramatic art; to understand the history and art of the theatre, including dramatic literature, technical theatre, production process; and to understand that art in the context of human behavior and endeavor. Fall, Spring, Summer

American Film 3
This course demonstrates the full impact of Hollywood filmmaking as an art form, economic force, and cultural indicator. It explores the deeper meaning of American movies—the hidden messages of genres, the social and psychological effects of Hollywood film style, and the mutual influence of society and popular culture. Fall

Acting I 3
This course introduces the study and theory of the fundamentals of the actor’s art as a means of improving self-expression and communication. Students focus on relaxation and physical awareness, and on developing their imagination, concentration, and characterization skills, through improvisation and other exercises. Voice production and physical techniques are also emphasized. Fall, Spring

Acting II 3
A combined lecture and lab course. A continuation of DRA 130 with emphasis on script analysis and interpretation, development of character, acting style and techniques and of scene study. Prerequisite: DRA-130; Fall, Spring

Rehearsal and Performance 2
This course provides a vehicle for students to participate in a major play production. Students will audition for various positions within a selected production(s). Participation may include acting roles, set design and
construction, lighting and sound design, property management, and performance support. This course may be repeated up to a total of four credits. Fall, Spring

DRA-947 Practicum 1
A credit course offered for practical application of classroom theory in acting or stagecraft; may be taken by participants in a theatrical production scheduled for public performance. One to three credits will be given depending on the extent of participation and degree of responsibility. The course may be repeated for a maximum of six credits.

DRF – Drafting

DRF-113 Fundamentals of Technical Drafting 3
This is a beginning course for students with little or no previous experience in drafting. This course covers the essential concepts necessary for a fundamental understanding application of technical drawing. The topics include lettering and instrument linework techniques, orthographic projection principles, and basic multiview drawing techniques. Fall

DRF-150 Mechanical Drafting Fundamentals 4
This course is related to mechanical drafting and places an emphasis on section views, auxiliary views, and pictorial drawing techniques. Students study conventional dimensioning and tolerancing. The principles learned in the prerequisite course are utilized along with the newly acquired knowledge to prepare simple production, detail and assembly drawings. Prerequisite: DRF-113; Spring

DRF-161 Descriptive Geometry I 3
This course is concerned with the analysis of space relationships and solution of three-dimensional problems through application of principles of orthographic or multiview projection. Emphasis will be placed on the study of lines, points and space relationships. Prerequisite: DRF-113, DRF-150 or ARC-113

DRF-170 Machine Design Drafting 3
This course utilizes the principles learned in the prerequisite courses along with newly acquired knowledge to prepare the student for basic machine drafting using common materials such as fasteners, bearings and gears. The student will learn to prepare complete and accurate production drawing and assembly drawings. Prerequisite: MFG-208

ECE – Early Childhood Education

ECE-103 Intro to Early Childhood Education 3
This course gives students a historical and philosophical foundation of the field of early childhood education. It includes an overview of assessment and evidence-based practices. The course also addresses the influences of family-centered practice, inclusion, culture, and language. Students explore early childhood careers.

ECE-106 Child Development Associates Standards 1
This course develops and prepares students for the Infant/Toddler, Preschool or Family Child Care Child Development Associate (CDA) assessment and verification visit. Students review and complete professional certificates and develop a professional resource file in accordance with CDA requirements. Students also practice oral interviewing and test-taking skills. Program Coordinator permission required.

ECE-112 Portfolio I 1
This course guides students’ development of a professional early childhood education portfolio showcasing their knowledge, skills and dispositions in alignment with the NAEYC Standards for Professional Preparation of Students at the Associate Degree level. Fall, Spring

ECE-113 Portfolio Development II 1
This course guides students’ completion and presentation of a professional early childhood education portfolio showcasing their knowledge, skills and dispositions in alignment with the NAEYC Standards for Professional Preparation of Students at the Associate Degree level. This course must be taken in the final semester of the Early Childhood program. Students are required to have a current background check on file before the first class meeting. Program coordinator permission required. Prerequisite: ECE-112, ECE-262

ECE-133 Child Health, Safety and Nutrition 3
This course focuses on evidence-based concepts in the fields of health, safety and nutrition and their relationship to the growth and development of the young child ages birth to eight. It blends current theory with problem solving, practical applications and assessments. Course content includes collaboration with families and assesses the role of culture, language and ability on health, safety and nutrition decisions in early childhood settings.

ECE-158 Early Childhood Curriculum I 3
This course focuses on the development, implementation and assessment of appropriate environments and curricula for young children ages three through eight years old. Students prepare to utilize evidence-based, developmentally appropriate practices in the context of children’s family, culture, language and abilities. Emphasis is on understanding children’s developmental stages and developing appropriate learning opportunities, interactions and environments to support each child in the following areas: dramatic play, art, music, fine and gross motor play.

ECE-159 Early Childhood Curriculum II 3
This course focuses on the development, implementation and assessment of appropriate environments and curricula for young children ages three through eight years old. Students prepare to utilize evidence-based, developmentally appropriate practices in the context of children’s family, culture, language and abilities. Emphasis is on understanding children’s developmental stages and developing appropriate learning opportunities, interactions and environments to support each child in the following areas: emergent literacy, math, science, technology and social studies Prerequisite: ECE-158

ECE-170 Child Growth and Development 3
This course reviews typical and atypical development of children from conception to adolescence in all developmental domains. It examines interactions among child, family, and society within a variety of community and cultural contexts and how each impacts the developing child. This course also addresses theories and evidence-based practices associated with understanding and supporting young children. Prerequisite: ECE-215; Fall, Spring, Summer

ECE-215 Home, School, and Community Relations 3
This course focuses on current understanding of supporting children and families in relation to home, school and community contexts. Emphasis is on building respectful, culturally sensitive relationships with families, utilizing community resources and working with diverse families. Students are required to have a current background check on file before the first class meeting. Program coordinator permission required. Prerequisite: ECE-103, ECE-170

ECE-221 Infant/Toddler Care and Education 3
This course focuses on care, education and assessment of children from birth to thirty-six months. It prepares students to utilize developmentally appropriate, evidence-based practices, including responsive caregiving, routines as curriculum, collaborative relationships with culturally, linguistically, and ability-diverse children and families and a focus on the whole child in inclusive settings.

ECE-241 Early Childhood Education Lab 2
This course provides students the opportunity to observe and interact with children in all three early childhood age divisions: birth to 36 months, 3 to 5 years, and 5 to 8 years in a variety of settings. Students also examine their professional dispositions and career expectations and continue to develop a professional portfolio. For successful completion of this course, students must have on file a high school diploma or GED. Students are required to have a current background check on file before the first class meeting. Program Coordinator permission required. Prerequisite: ECE-112, ECE-158

ECE-243 Early Childhood Guidance 3
This course focuses on developmentally appropriate, evidence-based approaches and positive guidance strategies for supporting the development of each child. It emphasizes supportive interactions and developmentally appropriate environments as well as the use of assessment to analyze and guide behaviors. Students study the impact of family and each child’s culture, language and ability on child guidance.

ECE-246 Observation and Assessment 4
This course focuses on using observational techniques for assessment and guidance purposes. Students learn to consider children’s diverse culture, language and abilities when using assessment measures. Students are required to have a current background check on file before the first class meeting. Program Coordinator permission required. Prerequisite: ECE-243, ECE-241

ECE-262 Early Childhood Field Experience 3
This course provides a supervised experience in selected early childhood settings serving children age’s birth through eight. It includes integration
of theory and developmentally appropriate, evidence-based practice and provides an understanding of working with culturally, linguistically, and ability-diverse young children and families. Emphasis is placed on professional relationships and behavior, appropriate adult-child interactions, basic curriculum planning, and program routines. Students are required to have a current background check on file before the first class meeting. Program Coordinator permission required. In EDM-241 must have a grade of "C" (2.00) or better. Prerequisite: ECE-133, ECE-159, ECE-221, ECE-243, ECE-241

ECE-287 Exceptional Learner 3
This course is the study of special education and the talented and gifted, which includes foundations of exceptionalities, assessment procedures, and program planning and curriculum adaptation for young children. Students are required to have a current background check on file before the first class meeting. Prerequisite: ECE-170

ECE-296 Administration of Child Care Services 5
This course explores the development and administration of a high quality and effective child care center. Topics include development of child care program, budgets, funding, and marketing as well as licensing, enrollment, facilities, and staff. Students participate in lecture and on the job training experiences that apply theory to practical application. Students are required to have a current background check on file before the first class meeting. Program coordinator permission and a grade of “C” (2.0) or better in ECE-262 required. Prerequisite: ECE-295

ECN – Economics

ECN-120 Principles of Macroeconomics 3
This course addresses the essential concern of macroeconomics; understanding and improving the performance of the economy as a whole by studying topics such as the effect of fiscal policy and monetary policy on inflation, unemployment and economic growth in a global economy. Fall, Spring, Summer

ECN-130 Principles of Microeconomics 3
This course provides tools to analyze the choices made by households, firms and governments, and how these choices affect various domestic market structures and international markets. Fall, Spring, Summer

EDM – Emergency & Disaster Management

EDM-110 Principles of Emergency Management 3
This course presents the theories, principles, and approaches to emergency management to include the current FEMA all-hazards approach. The philosophy of Emergency Management will be discussed with the four fundamental steps which include mitigation, preparedness, response, and recovery. Terminology and definitions used in emergency and disaster management will be defined. The role, duties, and importance of the Emergency Manager will be discussed. Fall/Spring Rotation

EDM-111 Developing Emergency Management Skills 3
This course develops leadership and organizational skills in a variety of disciplines for Emergency Management. The components covered are planning, organizing, coordinating, and controlling. Fall/Spring Rotation

EDM-112 Emergency Planning 3
This course defines the fundamentals necessary for writing a multi-hazard plan, and the coordination needed for complete hazard analysis planning. Students are required to identify local hazards with emphasis on assessment, equipment, collateral and mutual aid support agreements, and methods for testing and updating plans.

EDM-120 Special Populations in Disaster 3
This course examines and focuses on demographics, specific needs, and issues that have risen due to lack of planning for these special needs populations in post-disaster settings. This course also examines a number of CBO’s (Community Based Organizations) or VOAID (Volunteer Organizations Active in Disaster) established to assist these special populations.

EDM-121 Emergency/Disaster Response & Recovery 3
This course examines the necessary components required for disaster response and recovery. Topics include the basics of emergency management systems, ICS (Incident Command System), NIMS (National Incident Management System), HEICS (Hospital Emergency Incident Command System), HICS (Hazardous Inventory Control System), command and control, utilization of plans, knowledge of EOC (Emergency Operations Centers), and the implementation of mutual aid. Fall/Spring Rotation

EDM-122 Incident Mgmt Systems and Eoc 3
This course provides a basic understanding of Incident Management Systems and the template to enable all government, private-sector, and nongovernmental organizations to work together during domestic incidents. It provides the student with an in-depth knowledge of the IGS (Incident Management System), ICS (Incident Command System), NIMS (National Incident Management System), terminology, players, and management philosophy. Fall/Spring Rotation

EDM-123 Exercise Planning 3
This course is designed to introduce the fundamentals of exercise planning and the benefits derived from simulating disasters and conducting exercises. Emphasis will be placed on the three main types of realism based exercises: tabletop, functional, full-scale. Fall/Spring Rotation

EDM-210 Comm and Public Relations for Emerg Mgmt 3
This course provides several different concepts of communication skills for the emergency manager. Effective communication skills among the public sector and other emergency personnel will be addressed. Fall/Spring Rotation

EDM-211 Hazard Mitigation 3
This course provides an understanding of mitigation and the four main components: organizing resources, assessing risks, developing a mitigation plan, and the implementation of the plan and monitoring the process. Fall/Spring Rotation

EDM-212 Practicum I 3
This course provides students an opportunity to apply the skills from prior learning in a lab setting. Topics covered include safe and proper use of equipment, gathering information required for hazard analysis planning, reviewing actual response plans and writing an all-hazards response plan. Fall/Spring Rotation

EDM-220 Hazardous Materials Planning and Mgmt 3
This course provides a basic understanding of hazardous materials. Topics included are recognition, identification and knowledge of the materials that emergency managers may be confronted with in a hazardous material incident. Fall/Spring Rotation

EDM-221 Homeland Security and Emergency Mgmt 3
This course provides an understanding of terrorism and the risks associated with it. The course covers the effects of terrorism, includes weapons of mass destruction and compares how their consequences are both similar to and different from other types of natural and technological disasters. Fall/Spring Rotation

EDM-222 Practicum II 3
This course is a lab course where the students will be given an opportunity to apply the skills from prior learning. This will include researching and gathering information for exercise design and planning. Students will participate in the actual planning, designing and building an exercise based on researched information. The student will also be required to research hazard mitigation and write a hazard mitigation plan. Fall/Spring Rotation

EDM-224 Practicum III 2
This course is a capstone lab course where the students will be given an opportunity to apply the skills learned in the program to prepare them for employment. During this course, the student will apply the lessons learned from Practicum II and will actually conduct a critical incident exercise, evaluate the exercise, write and after actions report and develop a corrective action plan. Prerequisite: EDM-222; Fall/Spring Rotation

EDU – Education

EDU-120 Communication, Ethics & Confidentiality 2
Participants will develop skills and strategies to enhance communication and examine situations where professionalism, ethical standards, and confidentiality will guide the correct course of action when working with colleagues, students, parents, and others. This course is intended for para-educator certification. Fall, Spring, Summer

EDU-121 Behavior Improvement 2
Participants will gain knowledge, skills and strategies to assist, support and maintain the positive social, emotional and behavioral development of children. This course is intended for paraeducator certification. Fall, Spring, Summer
EDU-122  Roles and Responsibilities  2
Participants will develop skills and strategies to assist, support and maintain safe environments, educational activities, team interventions, and technology integration when working with colleagues, students, parents, and others. This course is intended for paraeducator certification. Fall, Spring, Summer

EDU-210  Foundations of Education  3
This course is an introduction to professional education providing a historical and philosophical background from which the student can examine his or her own commitment to education. Challenges and issues in education today will be discussed in the context of school organization, funding, curriculum, professionalism, legal issues, and effective teacher characteristics. Fall, Spring, Summer

EDU-218  Initial Field Experience  2
This course is designed to provide pre-service teachers with PreK-12 classroom experiences in order to observe how schools function: the role and responsibilities of teachers, interactions between students and teachers, and to increase students' understanding of the teacher-learning process. Students enrolled in this class will have the initiative to facilitate and participate in reflective discussion and journal activities for educational topics. Prerequisite: EDU-210; Spring

EDU-220  Human Relations for the Classroom Teacher  3
This course includes interpersonal and intergroup relations and contributes to the development of sensitivity to and the understanding of the values, beliefs, lifestyles and attitudes of individuals and the diverse groups found in a pluralistic society and within current education settings. This course is a required component of Iowa Teacher Licensure. Fall, Summer

EDU-240  Educational Psychology  3
Applies the principles of psychology to classroom contexts. Topics include child/adolescent development, learning, motivation, instructional techniques, and assessment/evaluation. Fall, Spring, Summer

EDU-245  Exceptional Learner  3
This course provides an overview of special education regulations, policies and programs in educational settings. K-12 pre-service teachers learn the history of special education law, including IDEA and as it applies to NCLB, characteristics of the 8 categories of disability per federal and state regulations, characteristics of talent and gifted programs, and basic component of an IEP. This course is a required component for students seeking K-12 teacher state licensure. Spring

EDU-252  Technology Theory for Teachers  1
This course prepares pre-service teachers to implement a variety of digital tools, and internet resources available for classroom use. Emphasis is given to the evaluation and effective use of technology including LCD projectors, ELMOs, Smartboards & Promethean boards and other forms of technology; ethical issues including social media use, and technology as a component of universally designed curriculum. It is recommended that pre-service teachers register for EDU-253 Tech. Lab for Teachers. Fall, Summer

EDU-253  Technology Lab for Teachers  1
This course provides teachers hands-on experience working with and implementing a variety of technology for their classroom. Emphasis is on developing basic proficiency in evaluating internet resources, and the correct use of LCD projectors, ELMOs, Smartboards and/or Promethean boards and other current technology. This course meets INTASC Standards 1, 4 and 6. Fall, Summer

EGT – Engineering Technology

EGT-108  Principles of Engineering  3
This course helps students understand the field of engineering and engineering technology. By exploring various technology systems and manufacturing processes, students learn how engineers and technicians use math, science, and technology. The course also includes concerns about social and political consequences of technological change.

EGT-118  Continuous Quality Management  2
This is an introductory course which will lead the student into the world of "quality" and the quality process. Students will learn new ways to make decisions based on pertinent data gained through the use of many new tools. Students will be encouraged to use the tools and information they receive in everyday life as well as in their future careers. Spring

EGT-123  Strength of Materials  3
Studies the relationships between external forces acting on solid bodies and the internal responses generated by these forces. Utilizes the principles learned in the prerequisite course along with the newly acquired knowledge to provide a beginning understanding of the basic laws and principles involved in both the design and investigation of machine and structural strength and fitness. Prerequisite: EGT-128; Fall

EGT-128  Statics  3
This course provides the student with a working knowledge of forces and the effects of forces acting on rigid bodies at rest. There is an emphasis on practical industrial applications throughout the course. Prerequisite: MAT-777; Fall

EGT-132  Kinematics  4
This course is a study of the motion of machine members without consideration of the forces and stresses caused by the motion. Graphical methods are used extensively in the solution of motion analysis problems. Various linkages, gears, cams, cam layouts and velocity diagrams will be included. Prerequisite: DRF-113, MAT-777; Spring

EGT-141  Fluid Power  3
This course is designed for the student with little or no knowledge of fluid power. The subject matter consists of hydraulic and pneumatic technology. Study is made of the basic principles, components of fluid power and basic design of typical industrial application. Fall

EGT-142  Fluid Power I  2
A study is made of the basic principles and components of hydraulics and pneumatics through lecture and laboratory experiences. Fall, Spring, Summer

EGT-143  Fluid Power II  2
This is a continuation of Fluid Power I. Emphasis is on the use of the knowledge gained previously toward the setting up and troubleshooting of typical industrial applications. Fall, Spring, Summer

EGT-150  Electrical Control of Fluid Power  3
This course is designed to teach electrical control of machines with fluid power components. The subject matter introduces the student to electromechanical relay control and advances toward programmable logic control systems. Study is made of the basic components of non-servo control systems and applies this knowledge toward the designing and setup of typical industrial applications. Prerequisite: EGT-141 or EGT-142; Spring

EGT-153  Fluid Power  3
This course is designed for the student with little or no knowledge of fluid power. The subject matter consists of hydraulic and pneumatic technology. Study is made of the basic principles, components of fluid power and basic design of typical industrial application. Fall

EGT-155  Fluid Power II  3
This is a continuation of Fluid Power I. Emphasis is on the use of the knowledge gained previously toward the setting up and troubleshooting of typical industrial applications. Fall, Spring, Summer

EGT-193  Introduction to Engineering Design  3
This foundational course uses a design development process while enriching problem-solving skills. The course helps students create and analyze models using engineering technologies and software.

EGT-202  Digital Electronics  3
This foundational course teaches applied logic through work with electronic circuitry, which students also construct and test for functionality. Prerequisite: EGT-108, EGT-193

EGT-400  PLTW Introduction to Engineering Design  3
This course is an introduction to the elements of Engineering Design. Students will learn the history of design, design process, sketching and visualization, geometric relationships, and modeling. Elements of manufacturing production, marketing, analysis, and quality control will also be studied. Students will also learn presentation techniques and develop a portfolio.

EGT-410  PLTW Principles of Engineering  3
This course helps students understand the field of engineering and engineering technology. By exploring various technology systems and manufacturing processes, students learn how engineers and technicians use math, science, and technology. The course also includes concerns about social and political consequences of technological change. Fall

EGT-416  Civil Engineering and Architecture  3
This is a combined lecture and lab course. Study of Engineering and Architecture. Exploring various systems of engineering and architecture.

EGT-420  PLTW - Digital Electronics  3
This is a combined lecture and lab course which studies the numbering systems used in digital circuits, including Boolean algebra. This will include circuits such as basic gates, counters, shift registers, and memories as they apply to communications and computer systems. Fall
**ELE – Electrical Technology**

**ELE-101  Industrial Safety** 1  
This course covers mechanical, chemical, environmental and electrical aspects of safety. The role of OSHA in the workplace is presented, along with forms such as Material Safety Data Sheets and the use of Personal Protective Equipment. Fall  

**ELE-112  Basic Electrical Theory** 3  
This course will introduce the students to the fundamentals of electricity. Electrical topics will include AC and DC theory, Ohm’s Law, Electrical Circuits, Electrical Power Generation, Motors, and Transformers. This course emphasizes electrical safety as students will work with energized circuits. Fall  

**ELE-132  Introduction to Wiring** 3  
A combined lecture and lab course. Designed to instruct the student in Safety, Electrical Ethics, and Labor History. Also to introduce the student to the materials, hand tools, power tools, and the installation requirements of the National Electrical Codes. Prerequisite: ELE-112; Fall  

**ELE-135  Installation of Wiring Systems** 4  
This course is designed to reinforce the concepts and methods learned in the theory, blueprint reading, and wiring courses by applying them in an actual residential or small commercial construction project. It affords the student the opportunity to apply the learned skills in a “real world” situation. Spring  

**ELE-157  Advanced Commercial Wiring** 4  
A combined lecture and lab course. Designed to familiarize the student with materials, blueprints, National Electrical Code requirements and wiring methods in commercial installations. Prerequisite: ELE-132; Corequisite: ELE-184; Fall, Spring  

**ELE-176  Basic Electrical Concepts** 1.5  
This course will introduce students to the fundamentals of electricity. Electrical topics will include AC and DC theory, Ohm’s Law, Electrical Circuits, Electrical Power Generation, Motors, and Transformers. This course emphasizes electrical safety as students work with energized circuits.  

**ELE-184  Field Installed Commercial Sys** 3  
A combined lecture and lab course. Designed as an opportunity for the student to develop and apply the skills earned in previous courses in a “hands on”, “real world” setting. Prerequisite: ELE-112, ELE-135; Corequisite: ELE-157, ELE-192; Summer  

**ELE-185  Field Installed Adv Comm Sys** 4  
A combined lecture and lab course. Designed to give the student the opportunity to apply and refine, in ‘hands on’ setting, the skills developed in previous courses. Prerequisite: ELE-112, ELE-184; Corequisite: ELE-197; Spring  

**ELE-192  Principles of Motors/Transformers** 3  
A combined lecture and lab course. Designed to introduce the student to the principles of D.C. and A.C. motors and their connection and application. Studies transformers, including single and three phase connection for various voltages and applications. Spring  

**ELE-195  Motor Control** 3  
This is a combined lecture and lab course designed to acquaint the student with the symbols, diagrams, equipment and methods used in the design and application of motor control circuits. Prerequisite: ELE-112; Corequisite: ELE-192; Spring  

**ELE-197  Advanced Motor Control** 3  
This is a combined lecture and lab course designed to familiarize the student with the circuits and components found in automated control systems. The use of solid state components and programmable controllers will be studied. Prerequisite: ELE-195, ELE-112; Corequisite: ELE-185; Fall  

**ELE-222  Supervisory Control & Data Acquisition** 3  
This course discusses concepts related to acquiring data to monitor and control automated equipment. (SCADA). Prerequisite: ELE-112, WTT-214  

**ELE-224  Electric Code, Safety & Grounding Fund** 1  
This course introduces students to the purpose and use of the National Fire Protection Association (NFPA) National Electric Code (NEC), its history, and development with emphasis on proper grounding techniques in relation to the wind turbine industry. It also addresses electrical safety work requirements as outlined in the NFPA Electrical Safety Standards. Fall  

---  

**ELT – Electronics**

**ELT-102  Blueprint Reading** 2  
This course is designed to give meaning to the lines and symbols found on a set of blueprints. Uses inanimate objects and familiar construction shapes or orthogonal and isometric drawings to teach the understanding of shapes, sizes and dimensions. Studies building terms and construction features of the carpentry, masonry, electrical, mechanical and plumbing trades. Fall, Spring, Summer  

**ELT-110  Electronics** 2  
This course introduces students to the basics of electronics, component measurement, electronic circuits and electronic maintenance. It covers the basics of electronics including Ohm’s Law, schematics, test equipment, troubleshooting, electronic component identification and logic functions. Students will learn to calculate all aspects of an electronic circuit and operate test equipment for troubleshooting. Fall, Spring, Summer  

**ELT-117  Electronics in Medicine** 3  
This is a combined lecture and lab course and is a continuation of Introduction to Biomedical Electronics with a more in-depth study of the circuits involved. The course introduces new circuits and applies previously studied circuits to medical uses. Patient safety is stressed throughout the course. Prerequisite: ELT-550, ELT-410, ELT-310, NET-123 or NET-212  

**ELT-118  Programmable Controllers** 2  
This course is designed to provide the student with an introduction to fundamentals of PLCs including programming, inputs and outputs, communications and advanced programming, as well as troubleshooting. Fall, Spring, Summer  

**ELT-150  Basic Electrical Theory** 2  
This course is designed to introduce the student to the theory of electricity, Ohm’s Law and basic circuits. AC/DC theory, applied DC fundamentals, industrial electricity and wiring are also covered. Fall, Spring, Summer  

**ELT-154  Industrial Electronics** 3  
This course explores industrial applications of semiconductor and digital circuits. Students will be introduced to ladder diagrams, programmable logic controllers, and embedded micro controllers. Basic theory and characteristics of common motor types will be examined. Prerequisite: ELT-150, or ELE-112, or ELT-382; Fall, Spring  

**ELT-195  Basic Motor Control** 3  
This is a combined lecture and lab course designed to acquaint the student with the symbols, diagrams, equipment and methods used in the design and application of motor control circuits. Spring  

**ELT-208  Motor Control** 2  
This course is designed to introduce the student to the principles of DC and AC motors and their connection and application. A working knowledge of transformers, including single and three phase connection to various voltages and applications, is given. Fall, Spring, Summer  

**ELT-226  PLC Fundamentals** 1.5  
This course is designed to provide students with an introduction to the fundamentals of Programmable Logic Controllers (PLCs) including how they are used in manufacturing and assembly processes, basic PLC programming procedures, intermediate PLC functions and data handling functions. Students learn how to program, operate, install, and interface SLC-500 programmable controllers in various applications.  

**ELT-230  PLC Applications** 3  
This course introduces students to advanced PLC programming techniques. Applied laboratory and projects utilizing PLC’s are examined. Prerequisite: ELT-250; Spring  

**ELT-250  Programmable Logic Controllers** 3  
This course is a combined lecture and laboratory class. This class introduces uses of PLCs, programming PLCs via ladder diagrams, wiring PLCs to sensors and controllers. Spring  

**ELT-382  Electronics Circuit Analysis** 3  
This course is a combined lecture and lab course that provides in-depth analysis of DC and AC circuits. Spring  

**ELT-402  Introduction to Communication Systems** 3  
This course introduces students to AM and FM communication systems with a more in-depth study of the circuits involved. The course introduces new circuits and applies previously studied circuits to medical uses. Patient safety is stressed throughout the course. Prerequisite: ELT-550, ELT-410, ELT-310, NET-123 or NET-212
ELT-404 Advanced Communications
This is a combined lecture and lab course designed to teach a system concept using PBX, key system, multiplexing, telephony communication using both local and wide area networks, functionality of Radio Frequency Identification (RFID) products, and current communications practices, licenses, and regulations. The course provides the opportunity for students to achieve national licenses through testing. Prerequisite: ELT-402; Spring

ELT-431 Telephone/Data Circuits
This course is designed to teach basic telephone and data circuits associated with telecommunications systems; examines the older and newer circuits used to switch, modulate, and carry voice and data information; includes hands-on telephone projects and classroom exercises. Spring

ELT-490 Microwave/Lightwave Systems
This is a combined lecture and lab course that addresses microwave, systems operation measurement and applications. Laboratory time gives students practical experience in the use of hardware to transfer information over microwave transmission facilities. Prerequisite: ELT-402; Spring

ELT-545 Computer-Aided Circuit Analysis
This is a combined lecture and lab course. It stresses student analysis of JFET, MOSFET, bipolar and unjunction transistor circuits using various computer programs such as MICROCAP and PSPICE. It will analyze the high- and low-frequency response of amplifier and filter circuits, DC Q point analysis, and transient analysis. Prerequisite: ELT-560; Spring

ELT-560 Electronics Circuit Analysis
This is a combined lecture and lab course which provides an in-depth study of advanced semiconductor applications. Prerequisite: ELT-382; Spring

ELT-680 Guitar & Amplifier Electronics
This lab/lecture course prepares students to maintain, setup and make routine repairs to electric guitars and amplifiers. Neck, bridge and pickups on solid and hollow body guitars is explored as well as controls, wiring, connectors and speakers of amplifiers. No previous electronics or musical experience required. Instructors consent required.

ELT-690 Technology Integration I
This is a combined lecture and lab course which will expose students to fundamentals regarding structured wiring needed for the installation and integration of the following automated sub-systems: Computer Networks, Home Security, Audio/Video, Cable/Satellite, Broadband and Telecommunications.

ELT-691 Technology Integration II
This is a combined lecture and lab course, which will expose students to the installation and integration of the following automated sub-systems: Computer Networks, Home Security, Audio/Video, Lighting, and Telecommunications. The course provides an opportunity for theoretical design and hands on applications of 'smart home' technologies.

ELT-692 Digital Home Tech Integration+
This course is a combined lecture and lab course, which exposes students to the cabling infrastructure used in a whole home integrated network. Students also gain experience in the installation and integration of the following automated sub-systems: Computer Networks, Home Security, Audio/Video, Lighting, and Telecommunications. The course provides an opportunity for theoretical design and hands-on applications of Smart Home Technologies. Fall Updated 5/2/13

ELT-740 Industrial Safety Electrical Systems
This course covers electrical safety procedures as well as safety as it relates to power generation, lock out/tag out and safe use of powered hand tools. Fall, Spring, Summer

ELT-780 Electromechanical Control Systems
This course is designed to provide the student with an introduction to control schematics, electrical lockout, energy management, responsive controls, electronic controls and design and troubleshooting. Fall, Spring, Summer

ELT-856 Communication Projects
The students apply the knowledge and skills they have acquired in Communication Systems Technology in the design, development, and testing of an electronic communication system. Students select or are assigned a project of interest to them which meets departmental approval. Prerequisite: ELT-402; Spring

ELT-891 Communication Licenses
This course studies current communications practices, licenses, and regulations. Students are provided the opportunity to achieve national licenses through testing. Prerequisite: ELT-402; Spring

EMS – Emergency Medical Services

EMS-114 Emergency Medical Responder
This course emphasizes the development of student skills in emergency medical care procedures. Topics include life threatening emergencies, injuries to various body parts, techniques of moving patients, CPR-BLS, and the safety and well-being of the Emergency Medical Responder. Successful completion of course requirements allows students to write national certification examination. AHA BLS Healthcare Provider CPR is provided during this course. Fall, Spring, Summer

EMS-217 Emergency Medical Technician
This course is designed for individuals who anticipate working with an ambulance service, hospital emergency department, fire department, police department, mining operation, or in other occupational fields where medical emergencies are common. Course content includes but is not limited to an overview of anatomy and physiology; medical terminology; patient assessment; basic life support in relation to cardiac arrest, trauma, and other medical emergencies. Instruction in light extrication of the injured is additionally covered. This course also provides the student an opportunity to apply cognitive knowledge and psychomotor skills in a supervised clinical or field setting. Students must be 17 years of age at time of enrollment, have current AHA HCP provider card, and State approved Mandatory Reporter for Adult and Child. Instructor consent required. Prerequisites: CPCR-I-1033, CNJUR-I-1030; Fall, Spring, Summer

EMS-312 Advanced Emergency Medical Technician
This course will provide the student with roles and responsibilities of the EMS provider including injury prevention and infections disease; an overview of human systems; pharmacology; venous access; airway management; training for management of medical and trauma emergencies; special considerations of the obstetric, neonatal, pediatric, and geriatric patients; and a focus on assessment-based management. This course will also provide the student the opportunity to apply past and current cognitive knowledge and psychomotor skills in a supervised clinical or field setting. Student must have current Iowa EMT certification, AHA HCP card, and State approved Mandatory Adult and Child Reporter. Instructor consent required. Prerequisite: EMS-217, CPCR-I-1033; Spring

EMS-540 NSC Paramedic I
This course informs students of the EMS provider’s roles and responsibilities. Students will learn the importance of personal wellness in EMS including injury and infectious disease prevention. The course also provides an overview of human systems, pharmacology, venous access, advanced airway management, patient assessment, and trauma management. Pre-requisites: High School Diploma or GED, Current Iowa EMT-Basic certification, and current AHA Health Care Provider certification/card. Permission of instructor required. Corequisite: EMS-541, EMS-810, EMS-820; Fall

EMS-541 Clinical I
This course will provide clinical atmosphere for performance of psychomotor skills as described by the National Highway Traffic Safety Administration, National Standard Paramedic Curriculum. Permission of instructor required. Prerequisite: EMS-810, EMS-820; Corequisite: EMS-540; Fall

EMS-545 NSC Paramedic II
The course provides the student with the information and skills for management of medical emergencies and pediatric emergencies. It also includes assessment-based management and all components of ambulance operations. Permission of instructor required. Prerequisite: EMS-540, EMS-541; Corequisite: EMS-825, EMS-546, EMS-815; Spring

EMS-546 Clinical II
This course will provide clinical atmosphere for performance of psychomotor skills as described by the National Highway Traffic Safety Administration, National Standard Paramedic Curriculum. Permission of instructor required. Prerequisite: EMS-540, EMS-541; Corequisite: EMS-545, EMS-825, EMS-815; Spring

EMS-810 Advanced Cardiac Life Support
This course addresses the use of equipment and techniques for establishing and maintaining effective ventilation and circulation, electrocardiographic...
monitoring and dysrhythmia recognition, intravenous access, employment of pharmacological and electrical therapeutic modalities. This course meets American Heart Association standards. Permission of instructor required. Fall

EMS-815 Advanced Pediatric Life Support 1
This course is designed for individuals who provide care for the pediatric patient. The course instructs students in the assessment and management of pediatric patients requiring advanced life support according to the American Heart Association standards. Permission of instructor required. Spring

EMS-820 Prehospital Trauma Life Support 1
This course is designed for individuals who must initially evaluate and stabilize the trauma patient. It is intended to teach the skills necessary for rapid assessment, resuscitation, packaging and transport: stressing those conditions which require immediate transport. Permission of instructor required. Fall

EMS-825 Advanced Medical Life Support 1
This course will provide the student with an integrated approach to the care of the patient with common medical complaints or presentation. The course moves from initial complaint-based assessment of the patient to field diagnosis and management of immediately treatable underlying illness. Permission of instructor required. Spring

ENG – English Composition

ENG-010 Fundamentals of English 3
This course is a review of basic sentence structure, including grammar, spelling, and punctuation. Prerequisite: Assessment and advising. Credit for this class does not apply to graduation requirements. Fall, Spring, Summer

ENG-020 Fundamentals of Writing 3
This course is a review of basic paragraph construction, including planning, developing, and revising paragraphs. Credit for this class does not apply to graduation requirements. Prerequisite: assessment and advising. Fall, Spring, Summer

ENG-105 Composition I 3
This course is an exploration of writing as a process with attention to audience, purpose and patterns of exposition. Pre-requisite: Assessment and advising. Fall, Spring, Summer

ENG-106 Composition II 3
A continuation of ENG 105 with emphasis on developing more complex, sophisticated forms of exposition. Includes a research paper requiring library research, documentation, and bibliography. Fall, Spring, Summer

ENG-150 Fundamentals of English Grammar 3
An overview of grammatical structure and functions that includes study of parts of speech, sentence types, sentence analysis, punctuation, spelling, capitalization and usage. This is not a developmental English composition or ESL course. Fall

ENG-221 Creative Writing 3
An introduction to imaginative writing, offering instruction and extensive practice in writing fiction, poetry, and drama. Student writing is discussed in a workshop setting. Fall/Spring

ENV – Environmental Science

ENV-111 Environmental Science 4
A combined lecture and lab course. Environmental concerns: ecosystems, pollution, population, extinction, ethics, energy, food, conservation, and future interrelationships among these concerns. Fall, Spring, Summer

ESI – Intensive ESL

ESI-001 Intensive ESL Grammar I 2
This is a content-based intensive level 1 grammar course for non-native English speakers. It introduces grammar patterns, present and past tense of regular and irregular verbs and modals. The course provides practical information about grammatical structures including nouns, articles and comparisons. This course is designed to be taken concurrently with Level I Reading, Writing, and Listening/Speaking classes as part of the Intensive ELL program. Prerequisite: Assessment by WITCC ESL program. Corequisite: ESI-005, ESI-008, ESI-013; Fall, Spring, Summer

ESI-005 Intensive ESL Reading I 2
This entry-level intensive reading course is designed for non-native English speakers. Students begin the acquisition of basic reading strategies including guessing meaning from context, identifying the main topic/idea, reading in phrases, finding details and using the dictionary. This course is designed to be taken concurrently with Level I Grammar, Writing, and Listening/Speaking as part of the Intensive ELL program. Prerequisite: Assessment by WITCC ESL program. Corequisite: ESI-001, ESI-008, ESI-013; Fall, Spring, Summer

ESI-008 Intensive ESL Writing I 2
This entry-level intensive writing course is designed for non-native English speakers. Students acquire basic writing skills at sentence level with correct capitalization, punctuation, spelling and beginning grammar structures. This course is designed to be taken concurrently with Level I Grammar, Reading, and Writing as part of the Intensive ELL program. Prerequisite: Assessment by WITCC ESL program. Corequisite: ESI-001, ESI-013, ESI-005; Fall, Spring, Summer

ESI-013 Intensive ESL Listening/Speaking I 2
This entry level intensive listening/speaking course is designed for non-native English speakers. Students practice listening and speaking in formal and informal conversations, interviews, and announcements and recorded messages. Practice in pronunciations and reductions, stress and intonation are included. This course is designed to be taken concurrently with Level I Grammar, Reading, and Writing as part of the Intensive ELL program. Prerequisite: Assessment by WITCC ESL program. Corequisite: ESI-001, ESI-005, ESI-008; Fall, Spring, Summer

ESI-020 Intensive ESL Grammar II 2
This level 2 intensive grammar course is designed for non-native English speakers. Emphasis is placed on practicing structure in eight basic verb tenses, modals, infinitives, gerunds and other structures. Students will develop skills for making comparisons and for expression of ideas, opinions and feelings. This course is designed to be taken concurrently with Level 2 Reading, Writing, and Listening/Speaking as a part of the Intensive ELL program. Prerequisite: Achievement level 2 on WITCC ESL assessment. Corequisite: ESI-026, ESI-031, ESI-036; Fall, Spring, Summer

ESI-026 Intensive ESL Reading II 2
This level 2 intensive reading course is designed for non-native English speakers. Students continue acquisition of reading strategies including guessing meaning from context, identifying the main idea, skimming, scanning, summarizing, identifying parts of speech and recognizing paraphrases. This course is designed to be taken concurrently with Level 2 Grammar, Writing, and Listening/Speaking as a part of the Intensive ELL program. Prerequisite: Achievement level 2 on the WITCC ESL assessment. Corequisite: ESI-020, ESI-031, ESI-036; Fall, Spring, Summer

ESI-031 Intensive ESL Writing II 2
This level 2 intensive writing course is designed for non-native English speakers. Students use the writing process to explore and organize ideas at the paragraph level, expand vocabulary, edit for spelling, grammar and word usage. This course is designed to be taken concurrently with Level 2 Reading, Grammar and Listening/Speaking as part of the Intensive ELL program. Prerequisite: Achievement Level 2 on the WITCC ESL assessment. Corequisite: ESI-020, ESI-026, ESI-036; Fall, Spring, Summer

ESI-036 Intensive ESL Lis/Speaking II 2
This level 2 intensive listening/speaking course is designed for non-native English speakers. Students focus on listening strategies, such as making predictions, taking notes and drawing inferences. Students continue production of English sound system and conversations about familiar topics through simulation of real life situations to help develop fluency and problem solving strategies. Prerequisite: Achieve level 2 on the WITCC ESL Battery. Corequisite: ESI-020, ESI-026, ESI-036; Fall, Spring, Summer

ESI-046 Intensive ESL Grammar III 2
This content-based intensive grammar 3 course is for non-native English speakers to develop fluency in usage of basic grammatical structures. Students focus on phrase, clause and sentence level structures and related connectors. Expanded use of passive voice and introduction of conditional structures is included. This course is designed to be taken concurrently with Level III Reading, Writing and Listening/Speaking as part of the Intensive ELL program. Prerequisite: Achieve level 3 on WITCC ESL assessment. Corequisite: ESI-051, ESI-056, ESI-061; Fall, Spring, Summer

ESI-051 Intensive ESL Reading III 2
This level 3 intensive reading course is designed for non-native English speakers. Students develop reading skills including distinguishing general
and specific ideas, identifying topics and topic sentences, skimming and scanning, distinguishing facts from theories and facts from opinions, and literal and figurative meanings. This course is designed to be taken concurrently with Level 3 Grammar, Writing, and Listening/Speaking as part of Intensive ELL program. Prerequisite: Achieve level 3 on WITCC ESL assessment. Corequisite: ESI-046, ESI-056, ESI-061; Fall, Spring, Summer

**ESI-056 Intensive ESL Writing III**
This level 3 intensive writing course is designed for non-native English speakers. The course teaches students through the writing process by providing a wide variety of activities to help master skills necessary for academic writing. This course is designed to be taken concurrently with Level 3 Grammar, Reading, and Listening/Speaking as a part of Intensive ELL Program. Prerequisite: Achieve level 3 on WITCC ESL assessment. Corequisite: ESI-046, ESI-051, ESI-061; Fall, Spring, Summer

**ESI-061 Intensive ESL Listening/Speaking III**
This Level 3 intensive listening/speaking course is designed for non-native English speakers. It includes strong emphasis on comprehension of oral language as spoken by native English speakers. Students continue to practice pronunciation, stress, intonation and rhythm of speech to reduce native accents. Emphasis in developing skills in idiomatic expressions, negotiation, reducing miscommunication, and using various levels of directness is provided. Prerequisite: Achieve level 3 on WITCC ESL battery. Corequisite: ESI-046, ESI-051, ESI-056; Fall, Spring, Summer

**ESI-071 Intensive ESL Grammar IV**
This intensive level 4 grammar course is designed for non-native English speakers. Through developmental instruction and multiple practice opportunities students further develop their grammar skills, working towards college level proficiency. This course is designed to be taken concurrently with Level IV Reading, Writing and Listening/Speaking as part of the Intensive ELL program. Prerequisite: Achieve level 4 on WITCC ESL assessment. Corequisite: ESI-081, ESI-085, ESI-089; Fall, Spring, Summer

**ESI-081 Intensive ESL Reading IV**
This Level 4 reading course is designed for non-native English speakers. Students develop higher order comprehension skills. Emphasis in utilizing strategies and skills to increase reading speed and building vocabulary is provided. Reading a variety of academic passages is incorporated in this course. This course is designed to be taken concurrently with Level IV Writing, Grammar and Speech/Learning as part of the Intensive ELL program. Prerequisite: Achieve level 4 on WITCC ESL assessment. Corequisite: ESI-071, ESI-085, ESI-089; Fall, Spring, Summer

**ESI-085 Intensive ESL Writing IV**
This level 4 intensive writing course is designed for non-native English speakers. Students learn the skills necessary to produce written work required in college level programs. Multiple strategies will be learned including outlining, summarizing, revising and rewriting a composition to encourage independent writing. This course is designed to be taken concurrently with Level IV Reading, Grammar and Listening/Speaking as part of the Intensive ELL program. Prerequisite: Achieve level 4 on WITCC ESL assessment. Corequisite: ESI-071, ESI-081, ESI-089; Fall, Spring, Summer

**ESI-089 Intensive ESL Listening/Speaking IV**
This level 4 listening/speaking course is designed for non-native English speakers. Students use multiple strategies to expand vocabulary and further develop listening and speaking skills. Numerous opportunities to practice college level study skills including note taking and discussion participation are integral components of this course. This course is designed to be taken concurrently with Level IV Reading, Grammar and Writing as part of the Intensive ELL program. Prerequisite: Achieve level 4 on WITCC ESL assessment. Corequisite: ESI-071, ESI-081, ESI-085; Fall, Spring, Summer

**FIN – Finance**

**FIN-121 Personal Finance**
This course is an overview of personal financial planning with emphasis in the areas of personal money management, budgeting, taxes, investments, and risk. This course also covers the process of buying/leasing autos, and purchasing a home. Students are introduced to issues relating to credit management and insurance products as well. Fall, Spring, Summer

**FIN-130 Principles of Finance**
This course builds on basic knowledge in the areas of accounting and economics. Emphasis is placed on financial analysis and planning as well as working capital management. Prerequisite: ACC-132; Fall, Spring, Summer

**FIN-975 Service Learning**
This course integrates service in the community with practical application of the competencies learned in program coursework. It involves a coordinated effort among the student, WITCC faculty member, and a work supervisor in a non-profit community organization that will meet identified community needs and advance the students' understanding of course related content. Permission of instructor and 2.0 cumulative GPA and a C (2.0) or better in core courses as defined by the program advisor is required. Spring

**FIR – Fire Science**

**FIR-124 Bldg Construction for Fire Protection**
This course provides the components of building construction that relate to fire and life safety. The focus of this course is on firefighter safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations and operating at emergencies. Prerequisite: FIR-213; Spring

**FIR-127 Fire Behavior and Combustion**
This course explores the theories and fundamentals of how and why fires spread, start, and how they are controlled. Fall

**FIR-130 Fire Prevention**
This course provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationships of fire prevention with built-in fire protection systems, fire investigation, and fire and life-safety education. Spring

**FIR-140 Fire Fighter I**
This course provides basic fire training relating to the NFPA 1001 standard for Fire Fighter Professional Qualifications. It reflects the most current standards as adopted by the Fire Service Training Bureau and can prepare students to take the written Fire Fighter One exam and the Practical Skills Performance exam. Fall

**FIR-141 Fire Fighter II**
This course provides basic fire training relating to the NFPA 1001 standard for Fire Fighter Professional Qualifications. It reflects the most current standards as adopted by the Fire Service Training Bureau and can prepare students to take the written Fire Fighter Two exam and the Practical Skills Performance exam. Prerequisite: All Fire Fighter II candidates must be certified Fire Fighter I prior to entering the Fire Fighter II certification process. All Iowa Fire Fighter I certifications issued by the Fire Service Institute meet this requirement. Those seeking reciprocity should direct their questions to the Fire Service Institute. Prerequisite: FIR-140; Fall

**FIR-145 Strategy and Tactics**
This course provides an in-depth analysis of the principles of fire control through utilization of personnel, equipment, and/or confinement operations on the fireground. Prerequisite: FIR-213; Spring

**FIR-149 Fire Protection Hydraulics/Water Supply**
This course provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and to solve water supply problems. Prerequisites: Recommended High School Algebra or Equivalent. Spring

**FIR-152 Fire Protection Systems**
This course provides information relating to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers. Prerequisite: FIR-127, FIR-213; Spring

**FIR-180 Hazardous Materials Chemistry I**
This course provides basic fire chemistry relating to the categories of hazardous materials including problems of recognition, reactivity, and health encountered by firefighters. This course is not designed to be a transfer level chemistry course nor a substitute. Spring

**FIR-184 Hazardous Materials Technician**
This course will prepare emergency response team members to: perform advanced control, containment, and/or confinement operations; understand hazard and risk assessment techniques; identify materials using field response plan; understand the various roles within the incident command system; identify, select, and use specialized chemical protective clothing; and perform decontamination activities on personnel equipment. Spring
FIR-200  OSHA for the Fire Service  3
This course introduces the basic concepts of occupational health and safety as it relates to emergency service organizations. Topics include risk evaluation and control procedures for fire stations, training sites, emergency vehicles, and emergency situations involving fire, EMS, hazardous materials, and technical rescue. Upon completion of this course, students should be able to establish and manage a safety program in an emergency service organization. Spring

FIR-213  Principles of Emergency Svcs  3
This course provides an overview of fire protection including: career opportunities in fire protection and related fields; philosophy and history of fire protection/service; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; an introduction to fire protection systems; and an introduction to fire strategy and tactics. Fall

FIR-214  Legal Aspects of the Emergency Services  3
This course introduces the Federal, State, and local laws that regulate emergency services, national standards influencing emergency services, standard of care, tort, liability, and a review of relevant court cases. Fall

FIR-226  Fire Administration I  3
This course introduces the student to the organization and management of a fire department and the relationship of government agencies to the fire service. The course emphasis is on fire service leadership from the perspective of the company officer. Spring

FIR-235  Fire Investigation I  3
This course is intended to provide the student with the fundamentals and technical knowledge needed for proper fire scene interpretations, including recognizing and conducting origin and cause, preservation of evidence and documentation, scene security; motives of the fire setter; and types of fire causes. Prerequisite: FIR-124, FIR-127, FIR-213; Spring

FIR-236  Fire Investigation II  3
This course is intended to provide the student with advanced technical knowledge on rule of law, fire scene analysis, fire behavior, evidence collection and preservation, scene documentation, case preparation and testifying. Prerequisite: FIR-235; Spring

FLF – Foreign Language: French

FLF-141  Elementary French I  4
For beginners; not recommended for students who have had two or more years of high school French. Introduction to French language and culture through development of reading, writing, listening, and speaking skills. Fall, Spring

FLF-142  Elementary French II  4
This course is a continuation of FLF-141 and introduces French language and culture through development of reading, writing, listening, and speaking skills. It emphasizes pronunciation, vocabulary, and basic grammar. Prerequisite: FLF-141; Fall, Spring

FLF-231  Intermediate French I  3
This course provides a thorough review of essential French grammar. Students further develop their reading, writing, listening and speaking skills through extensive speaking and writing situations and reading of French literature. Prerequisite: FLF-142; Fall

FLF-232  Intermediate French II  3
This course is a continuation of FLF-231. Students will further develop their reading, writing, listening and speaking skills through extensive speaking and writing situations and reading of French literature. Prerequisite: FLF-231; Spring

FLG – Foreign Language: German

FLG-141  Elementary German I  4
Introduction to German language and culture through development of reading, writing, listening, and speaking skills. Not recommended for students who have had two or more years of high school German. Prerequisite: Understanding/knowledge of English grammar. Fall

FLG-142  Elementary German II  4
A continuation of FLG-141. Prerequisite: FLG-141; Spring

FLG-231  Intermediate German I  3
This course provides a thorough review of essential German grammar. Students will further develop their reading, writing, listening and speaking skills through extensive speaking and writing situations and reading of German literature. Prerequisite: FLG-142; Fall

FLG-232  Intermediate German II  3
This course is a continuation of FLG-231. Students will further develop their reading, writing, listening and speaking skills through extensive speaking and writing situations and reading of German literature. Prerequisite: FLG-231; Spring

FLS – Foreign Language: Spanish

FLS-100  Spanish Professionals: Law Enforcement  1
This course is designed to prepare students with maintainable skills to learn and to speak Spanish with a limited and targeted proficiency. Utilizing interrogatory methods students will learn to speak and ask questions in Spanish in order to obtain limited information needed for Law Enforcement. Students will develop a limited reading, writing, listening, and speaking proficiency. Content-specific training and assessment techniques will be presented. Spring

FLS-101  Spanish for Professionals: Health Care  1
This course is designed to prepare students with maintainable skills to learn and to speak Spanish with a limited and targeted proficiency. Utilizing interrogatory methods students will learn to speak and ask questions in Spanish in order to obtain limited information needed for the Health Care profession. Students will develop a limited reading, writing, listening, and speaking proficiency. Content-specific training and assessment techniques will be presented. Fall, Summer

FLS-102  Spanish for Professionals: Business  1
This course is designed to prepare students with maintainable skills to learn and to speak Spanish with a limited and targeted proficiency. Utilizing interrogatory methods students will learn to speak and ask questions in Spanish in order to obtain limited information needed for the Business profession. Students will develop a limited reading, writing, listening, and speaking proficiency. Content-specific training and assessment techniques will be presented. Fall, Spring

FLS-103  Spanish for Professionals: Education  1
This course is designed to prepare students with maintainable skills to learn and to speak Spanish with a limited and targeted proficiency. Utilizing interrogatory methods students will learn to speak and ask questions in Spanish in order to obtain limited information needed for the Educational profession. Students will develop a limited reading, writing, listening, and speaking proficiency. Content-specific training and assessment techniques will be presented. Fall, Spring

FLS-141  Elementary Spanish I  4
Introduces Spanish language and culture through development of reading, writing, listening, and speaking skills. Emphasizes pronunciation, vocabulary, and basic grammar, reading, and writing.

FLS-142  Elementary Spanish II  4
A continuation of FLS-141. Prerequisite: FLS-141

FLS-181  Spanish for Heritage Speaker I  4
This course addresses the needs of Latino students who are able to communicate in Spanish but need to develop their reading, writing and speaking skills in a more accelerated environment than a traditional Spanish course. It will provide students the grammatical tools they need to write effectively with respect to proper syntax, verb choice, accentuation rules and spelling. Students will learn to apply these rules to their speaking skills and identify them in listening skills. Instructor’s consent required.

FLS-231  Intermediate Spanish I  3
Thorough review of essential Spanish grammar. Further develops reading, writing, listening, and speaking skills through extensive speaking and writing situations and reading of Spanish literature. Prerequisite: FLS-142; Fall, Spring, Summer

FLS-232  Intermediate Spanish II  3
This course is a continuation of FLS-231. Prerequisite: FLS-231; Fall, Spring, Summer

FLS-281  Spanish for Heritage Speaker II  4
This course is a continuation of FLS-181 and is intended to address the needs of Latino students who can communicate in Spanish but need to further
develop their reading, writing and speaking skills in a more accelerated environment than a traditional Spanish course. It provides further practice of writing and speaking. This course further develops the Spanish speaker’s skills in intermediate reading and writing through a series of more extensive readings, grammar drills and directed compositions and continues the study of more formal Spanish. Instructor’s consent required.

**GEO – Geography**

**GEO-121 World Regional Geography** 3
This course is a geographic survey of nations and continents with an emphasis on important physical characteristics of the major regions of the world. Attention is devoted to demographic, economic, political, and cultural development and the consequent contemporary relationship with each other. Fall, Spring, Summer

**GEO-917 Experimental Course:** 1
This pilot course is under the supervision of a faculty member and approved by the division chair. This course may not duplicate any course already in the catalog. Students earn credit based upon the agreed upon credit and contact hours. Instructor permission required.

**GEO-949 Special Topics** 1
This course offers a specialized study or project under the supervision of a faculty member and approved by the division chair. It may not duplicate any course already in the catalog. Students earn credit based upon the agreed upon credit and contact hours. Instructor permission required.

**GRA – Graphic Communications**

**GRA-100 Mac OS** 1
Introduction to the Apple® Macintosh operating system. Topics covered will include Mac OS interface, logging in as a user, customizing your workspace, connecting to a server, creating, naming and saving folders, burning CDs, introduction to iLife, and identifying hardware. Fall

**GRA-117 Preflight and Print Processes** 2
This course provides insight into the graphic production cycle and is designed for students who have previous knowledge of design software. It will enable them to apply previous knowledge to complete a printing project. Focus will be on the skills and techniques needed to preflight a job and the communication and steps necessary to produce a design job to be printed on a press. Prerequisite: GRA-136, GRA-144, GRA-126; Spring

**GRA-126 Illustrator I** 2
This course is an introduction to the Adobe® Illustrator software used to create computer graphics in print and web design and publishing. Students will examine the software interface, drawing with shape tools and the Bezier pen tool, using brushes, and importing digital images to use as drawing templates. Fall

**GRA-130 Illustrator II** 1
This is an advanced study of Adobe® Illustrator vector drawing program for print and web design. An emphasis will be on drawing complex objects using masks, gradient meshes, blends and envelopes. The course will explore special techniques for precise drawing and production skills. Prerequisite: GRA-126; Fall

**GRA-136 InDesign I** 2
This course is an introduction to the Adobe® InDesign software used to create page layouts used in print/web design and publishing. It will include a study of the software interface, typography, and combination of text with digital images to create professional layouts. Fall

**GRA-138 InDesign II** 1
This course introduces the intermediate level of the Adobe® InDesign software, building on previously learned skills and introducing new techniques. Students will work with paragraph/character styles, organizing multiple page documents with master pages, and special effects for type and graphics. Prerequisite: GRA-136; Spring

**GRA-143 Photoshop I** 2
This course is an introduction to the Adobe® Photoshop software package. This course is the first in a series focusing on the software used to manipulate images used for digital and printed media. Topics include introduction to the software interface, tools, palettes, selections, layers, basic retouching techniques, basic realistic editing techniques, and introduction to collage and importing images from scanners and digital cameras. Fall, Spring

**GRA-146 Photoshop II** 1
This course is the second in a series covering the Adobe® Photoshop software. Topics include automation techniques, speed, resolution, format and corrective filters. Prerequisite: GRA-143; Spring

**GRA-147 Photoshop III** 1
This course provides students with advanced techniques in common digital photography problems, color correcting, retouching and sharpening critical areas of a photo using Adobe® Photoshop. Prerequisite: GRA-146; Fall

**GRA-149 Photoshop for Creatives** 2
This course introduces the use of advanced special effects techniques. It approaches Adobe® Photoshop as an art form, used to create visually complex images rich in layered tonality, and to apply these techniques to one’s own art images. Prerequisite: GRA-144; Fall

**GRA-155 Fireworks** 2
This course introduces the student to the digital software Adobe® Fireworks used to visually create and assemble Web sites. Students will utilize vector and raster based software to create various illustrations and designs to integrate into Web site design. Spring

**GRA-163 Flash** 2
This is an introductory course in Adobe® Flash, animation software for web pages. It explores the three types of animation: shape tweens, motion tweens, and frame by frame animation. Students will examine the interface, concentrating on the timeline, importing graphics, and a cursory look at components and ActionScript needed for web page interactivity. Fall

**GRA-167 Multimedia** 2
An introduction to the development of still graphics, animation, video, and audio for interactive media use. Emphasis is on developing an awareness of the impact of multimedia in design and the selection of the right media and technology for the content and purpose of the project. Prerequisite: GRA-144, GRA-252; Fall

**GRA-170 Graphic Design I** 2
This course is the first in a series that serves as an introduction to the principles of design, typogrgaphy, and idea generation. Students will explore print and web-publishing processes. Fall, Spring

**GRA-171 Graphic Design II** 2
This course is a continuation of Graphic Design I with an emphasis on idea generation, presentation, and interpreting client needs. Prerequisite: GRA-170; Spring

**GRA-173 Typography** 3
This course introduces the student to the history and principles of good typographic design, including traditional rules that govern typographic usage, how to select an appropriate typeface, and apply type expressively to enhance all forms of communication that depend on the printed word, including web design, publication design and advertising design. Prerequisite: GRA-172, GRA-136; Spring

**GRA-189 Informational Design** 2
This course addresses the skills and techniques for planning, tracking, controlling and monitoring design projects along with usability issues for web design. Students receive a practical approach to project management. Prerequisite: GRA-252; Corequisite: CIS-207; Spring

**GRA-202 Portfolio I** 3
This is a lab course designed to produce a portfolio through a series of projects and demonstrations. Students will learn to critique and revise projects to create portfolio-quality designed work. Prerequisite: GRA-126, GRA-136, GRA-144, GRA-252; Spring

**GRA-203 Portfolio II** 3
This is the second lab course designed to produce a portfolio through a series of projects, demonstrations and critiques. Emphasis will be on meeting deadlines, proofreading, maintaining document consistencies and interpreting client needs. Students will strive to produce a versatile and unique portfolio. Prerequisite: GRA-203, GRA-138, GRA-146; Fall

**GRA-204 Portfolio III** 3
A third lab course designed to produce a portfolio through a series of projects, demonstrations, and critiques. Students will produce, arrange, and present a versatile and unique portfolio to prepare them for entering the graphic design profession. Prerequisite: GRA-203, GRA-147, GRA-130; Spring

800.352.4649 or www.witcc.edu 187 Western Iowa Tech Community College 2013-2014 Catalog
GRA-211  Web Studio I  3
This is a lab-based course designed to simulate the experiences of a Web Designer through a series of projects and demonstrations. Students learn to critique and revise projects to create portfolio-quality designed work. Prerequisite: GRA-153, GRA-143, CIS-207, GRA-252; Corequisite: GRA-155, GRA-207; Spring

GRA-213  Web Studio II  3
This course is a continuation of Web Studio I. It is a lab-based course designed to simulate the experiences of a Web Design Department through a series of projects, demonstrations, and field trips. Emphasis is on meeting deadlines, interpreting client needs and producing sites to accommodate the proofing and publishing process. Prerequisite: GRA-211, GRA-243; Corequisite: GRA-167, GRA-163; Fall

GRA-215  Web Studio III  3
This is the third of a production course series designed to produce a portfolio through a series of projects, demonstrations and critiques. Students will produce, arrange and present a versatile and unique portfolio to prepare them for entering the web design profession. Prerequisite: GRA-213; Spring

GRA-243  Color for Creatives  1
This course offers a study of contemporary color theory and use. Fundamental studio experiences along with a historical perspective will provide insight and understanding to the intrinsic power of color in design. Spring

GRA-245  Creativity for Designers  2
This course is designed for students in the digital arts to find inspiration, ideas and strategies to ignite their design ingenuity to turn visual communication into memorable graphic design. Focus is on idea generation, developing ideas, cultivating the interests that spark creativity and finding new sources of inspiration. Prerequisite: GRA-171, GRA-146; Spring

GRA-246  Design Concepts and Trends  3
This course enables the student to discover not just what makes great advertising design, but how to make it great. It includes brainstorming for concepts, managing ideas, applying a variety of tactics to develop strong ad concepts, and presenting and selling ideas to a client or potential employer. Students also study trends in the design industry that affect the way ads are developed, created and delivered. Prerequisite: GRA-173 (with a minimum of a 2.0); Fall

GRA-252  Dreamweaver I  2
Introduction to the Adobe® Dreamweaver software package. Topics include planning a Web site, defining a root folder, adding links, forms, text, frames and graphics to a web page. Students will create a basic Web site and upload it to a server. Fall

GRA-261  Acrobat  1
This course will provide the essential skills of digital document construction using Adobe® Acrobat. Students will learn the skills needed to create a variety of interactive digital documents in the Adobe Portable Document Format. Prerequisite: GRA-138; Spring

GRA-286  Creative Media  3
Advertising and brand promotion theory as it applies to a graphic designer in the business of creativity. Topics include the process and planning for successful advertising and promotion, selecting the appropriate media, and creative theories for advertising and integrated brand promotion. Fall

GRA-287  Design Industry Practices  1
This course will provide the design student with a foundation of the standard business practices and ethical considerations of working as a designer. It will also focus on types of employment opportunities and the business practices including copyright, ethics, estimating, contracts and bidding standards. Spring

GRA-300  Interactive Portfolio  2
This is an intermediate course using Adobe® Flash. Students will build an interactive version of their student portfolio, from concept to final package. Students will study dynamic text, control sound, import video and the ActionScript programming to complete the interactivity. Prerequisite: GRA-163, CIS-207; Spring

GRA-304  Photoshop for PC  2
This course, taught using PCs, is an introduction to the Adobe® Photoshop software package. This course in the first in a series focusing on the software used to manipulate images used for digital, video, and print media. Topics include introduction to the software interface, tools, palettes, selections, layers, basic retouching techniques, basic realistic editing techniques, and introduction to collage and importing images from scanners and digital cameras.

GRA-305  Photoshop II for PC  2
This course, taught using PCs, is the second in a series covering the Adobe® Photoshop software package. Topics include automation techniques, speed, resolution, format and corrective filters. It will also introduce the Photoshop companion software Adobe® imageReady to prepare images for the web.

GRA-932  Internship  3
This course offers on-the-job training in an industrial setting using graphic or web design techniques. It allows students to gain experience and professional contacts in the industry and utilize their skills as graphic or web designers to create professional design work. Supervision of job tasks is through an industry professional and coordinated by the college instructor. Prerequisites: Successful completion of required program courses for first, second, and third semesters. Spring

HCR – Heating and Air Conditioning

HCR-112  Heating Fundamentals  3
This course covers fundamental principles and skills for all common heating systems. This course is a combined lecture and lab course and includes discussions and demonstrations in heating fundamentals. Safety is greatly emphasized as students are working with actual voltages, and working equipment. Corequisite: ELE-112; Fall

HCR-120  Gas Heating  3
This course is a combined lecture and lab course that covers various types of residential and commercial gas and electric heating systems. Studies include equipment sizing, installation, set up and repair. Students work with trainers and live equipment in the lab setting. Corequisite: ELE-112; Fall

HCR-125  Oil and Hydronic Heating  3
This course is a combined lecture and lab course studying the theory and applications in electrical resistance and oil and hydronic heating systems as they relate to residential and commercial heat loss requirements. Studies include installation, troubleshooting wiring and control circuits. Corequisite: ELE-112; Fall

HCR-140  Heat Pumps  3
This course is a combined lecture and lab course introducing reverse cycle heating and the components and controls of this popular heat source. This course covers auxiliary heat, C.O.P. installation and maintenance of air-to-air and ground source systems, and includes system wiring and electrical troubleshooting. Corequisite: ELE-112; Spring

HCR-205  Air Conditioning Principles  3
This course is a combined lecture and lab course which deals with the fundamentals of residential air conditioning systems. Emphasizes system components, types of refrigerants, principles of heat transfer, and diagnosis and repair of various systems used in the air conditioning industry. Studies relationship to temperature and pressure variance including psychometric comparison as applied to commercial and residential air conditioning. Corequisite: ELE-112; Spring

HCR-240  Troubleshooting Air Conditioning Systems  3
This course allows students to acquire an understanding of proper service methods, analysis, and repair of a system by means of pressure, temperature and electrical readings. Students use pressure gauges, thermometers, ammeters, voltmeters, watt meters, and ohmmeters to diagnose faults in common refrigeration and air conditioning systems. Students practice skills on working equipment with the use of factory and hand drawn schematic wiring diagrams. Corequisite: ELE-112; Summer

HCR-305  Fundamentals of Refrigeration  3
This course is a combined lecture and lab course covering the theory and laws governing refrigeration, the operation of refrigeration systems, heat transfer, components, and test equipment. It also covers the different soldering and braze methods and materials used in refrigeration service. Emphasis is on the recovery, recycling and charging methods used. Corequisite: ELE-112; Spring

HCR-410  Electrical Applications I  3
This course is a combined lecture and lab course. It is a continuation of basic electricity that includes wiring diagrams, theories of electrical operation,
and fundamentals of magnets, component design and basic electronics. Corequisite: ELE-112; Spring

HCR-430 Electric Motors and Controls 3
This course is a combined lecture and lab course that presents the theory and operation of all motors and controls found in air conditioning, heating, and refrigeration systems. The course includes design, wiring, troubleshooting, and replacement. Corequisite: ELE-112; Fall

HCR-715 Blueprint Reading 1
This course is designed to give meaning to the lines and symbols found on a set of blueprints. It uses inanimate objects and familiar construction shapes or orthographic and isometric drawings to teach the understanding of shapes, sizes and dimensions. Studies include building terms and construction features of the carpentry, masonry, electrical, mechanical and plumbing trades. Summer

HCR-850 HVACR Shop Practices 4
This course is a combined lecture and lab course that teaches completing service tickets and repair bills, dispatching repair technicians, ordering parts, and verifying prices. This course also covers maintaining tool room equipment and troubleshooting techniques on HVACR equipment. Corequisite: ELE-112; Summer

HIS – History

HIS-110 Western Civilization: Ancient to Early 3
Traces the Western tradition from the earliest times through the Modern sixteenth century. Emphasizes the process of change and the dynamics and interrelationships of events of the major societies, governance, and cultures of the Ancient, Medieval, and Renaissance. Fall, Spring, Summer

HIS-111 Western Civilization: Early Mod to Present 3
Surveys Western history from the age of European exploration to the present. Fall, Spring, Summer

HIS-151 U.S. History to 1877 3
An introduction to the basic people, issues, movements, and events which shaped the American experience from the Pre-Columbian times through the Civil War and Reconstruction. Fall, Spring, Summer

HIS-152 U.S. History Since 1877 3
Surveys the basic forces and events that shaped American life from the Reconstruction era to the present. Fall, Spring, Summer

HIS-201 Iowa History 3
This course provides a broad survey of Iowa cultural history from the early Native American cultures through today. Topics covered range from pioneer farming through modern agriculture and include immigration trends, social changes, political trends, and Iowans involved in national and international events. Fall, Spring

HIS-211 Modern Asian History 3
Surveys the historical, geographical and economic context of the development of the Pacific Basin region: Northeast Asia (China, Japan, Korea, Russia, and the Far East), Southeast Asia (Laos, Kampuchea, Vietnam, Thailand, Myanmar, and India). Examines issues such as modernity versus traditional; the conflict between east and west, political authority and economic growth; the United States in the Pacific, and cultural differences. Fall, Spring, Summer

HIS-251 U.S. History 1945 to Present 3
An investigation of the rise of the United States after World War II to the modern country of the present. Topics will include aftermath of WWII, nuclear power, the Cold War, Vietnam, diplomacy, presidential power, and family life. Fall, Spring, Summer

HIS-253 American Indian History & Culture 3
This course surveys Native American history and culture in what is now the United States from pre-Columbian times up to the present. Topics include: pre-Columbian America; Spanish, English and French invasions; Native Americans and the colonial period; Native American Removal; Native American and American expansion in the Far West; the reservation system; allotment, and federal Native American education; the Native American New Deal; termination; relocation; and the growth of urban Native America; and Native American militancy, cultural accommodation and revitalization, and the ongoing struggle for sovereignty. This course challenges students to learn about cultural and historical perspectives often unfamiliar to non-Native Americans and to discern the Native American point of view for better understanding of the full perspective of Native American history and culture. Fall

HIS-268 U.S. At War: Vietnam War, Am Exp in Viet 3
A survey of the 2,000-year history of Vietnam, the French Indochina War and U.S. involvement, the military role, the view from those who participated and discussion of the consequences of American participation in the Asian conflict. The conflict will be viewed within the context of the Cold War and explore the events, attitudes and political scene leading up to the U.S. commitment in Southeast Asia. Exploration of the anti-Vietnam War movement will also take place. Fall, Spring, Summer

HIT – Health Information Technology

HIT-244 Basic CPT Coding 3
This course provides training in using the CPT (Current Procedural Terminology) coding system to report medical procedures information. Students will assign CPT codes to surgical operations and procedures. Prerequisite: HSC-144; Corequisite: MAP-123

HIT-245 Basic ICD-9-CM Coding 3
This course provides instruction and training in the ICD-9-CM coding system. Students will assign ICD-9-CM codes to medical diagnoses and procedures. Prerequisite: HSC-114; Corequisite: MAP-123

HIT-248 Essentials of Medical Coding 2
This course provides a basic overview and understanding of the usage of ICD-9 and CPT coding and how they are reported in medical practices. Students understand the logic behind the usage of ICD-9 and CPT. Students assign codes to case studies for a better understanding of how ICD-9, CPT, modifiers, and HCPCS work together for insurance payment and compliance regulations.

HIT-284 Auditing of Evaluation & Management codes 1
This course provides training on how to conduct an evaluation and management (E/M) audit for physician practices. Students simulate auditing and evaluating a physician’s documentation to make sure the physician has fulfilled the requirements of either the 1995 or 1997 documentation guidelines per the AMA and CMS. Corequisite: HIT-244

HIT-301 Electronic Health Records 3
This course provides students the opportunity to create, collect, manage, retrieve, access medical records using an electronic records system. Students will use software to create/edit patient demographic and provider files used in an ambulatory care setting. Corequisite: HSC-114, CSC-110, BIO-163

HIT-313 Medical Office Computer Applications 1
This course provides the medical administrative student with “hands-on” experience in the use of a computerized, medical office, practice management system. The student will create, retrieve and edit patient demographic and doctor and financial files, enter CPT and ICD-9-CM (procedures and diagnoses) codes, enter charges for services, post insurance reimbursement and cash payments, make adjustments and refunds on accounts, generate insurance claims forms, schedule and change appointments and run and analyze practice management reports. Corequisite: MAP-141

HSC – Health Science

HSC-105 Intro to Health Occupations 1
Designed to provide information on career options for individuals who are interested in pursuing a career in the health care industry. Students are given opportunities for career exploration through research and projects. Topics include: health care delivery systems, legal and ethical issues, health promotion, wellness, and characteristics of health care workers. Corequisite: HSC-245, BCA-115

HSC-109 Health Careers & Teams 3
This course is designed to provide information on career options for individuals who are interested in pursuing a career in the healthcare industry. It includes the study of team dynamics and communication techniques necessary to work and succeed in the healthcare field. Students are given opportunities for career exploration through research and projects utilizing the internet and library databases. It also provides instruction in browsing the internet, using e-mail, and other computer literacy tools necessary for taking online courses and for careers in the healthcare industry.

HSC-111 Issues in Health and Society 3
This course presents an overview of current issues, concepts, and theories in health. It provides students with well-developed, carefully considered,
and sharply opposed points of view on issues in health and society. This course provides both an overview of areas of conflict in health as well as ways of looking at the conflicts. The purpose of this course is to introduce a number of contemporary topics in order to illustrate how controversies are viewed from a healthcare perspective.

HSC-114 Medical Terminology 3
This course presents medical terminology as the language of medicine. It also studies spelling, pronunciation and usage, emphasis on word analysis and construction of definitions.

HSC-122 English/Spanish Medical Terminology 3
This course presents medical terminology as a language of medicine in both English and Spanish. Correct pronunciation, spelling, definition, word translation, and usage covered. Prerequisite: ESL at level C. Test scores on Comprehensive Adult Student Assessment System (CASAS) test at or above 220 (Scaled Score).

HSC-123 Transcultural Concepts in Health/Illness 1
This course will explore perception of health and illness among consumers and health care providers. Topics will include cultural assessment, health practices of different cultures, conflicts in health care and strategies to request and provide culturally sensitive care.

HSC-127 Kinesiology 8
This course is designed to give the student a basic understanding of normal human body movement as related to skeletal, articular, and muscular systems. Anatomical palpations, human gait analysis, selected clinical testing, and basic biomechanical principles are also included. Corequisite: BIO-174; Spring

HSC-138 Clinical Calculations in Healthcare 2
Designed to provide the knowledge base for the student to understand and correctly perform a variety of clinical calculations used for medication administration in healthcare.

HSC-143 Pharmacology 3
This course provides the student with a framework of knowledge to help recognize drug names and drug classes; understand drug actions and the rational for treatment; discern between sound- alike drugs; understand why side effects, allergic effects, and other effects of drugs occur; and address various current healthcare issues relating to pharmacology and drugs.

HSC-148 Medication Aide 3
This course is designed to prepare students to safely administer nonparenteral medications in nursing facilities and related areas. Students will receive on-the-job training. Prerequisites: Employed a minimum of six months in a sponsoring facility. If employed in a long-term-care facility, have a current standing on the Iowa Direct Care Workers Registry.

HSC-154 Basic ECG Interpretation 3
This Basic Arrhythmia Interpretation course provides students with an understanding of rhythm strip interpretation and the significance of the rhythm strip as it relates to patient care. Training in 12 lead ECG interpretation is also included, offering students an understanding of a client’s heart rhythm as a whole.

HSC-165 Health Occ Clinical Requirements 1
This course provides health occupation students the opportunity to complete required pre-clinical training and documentation prior to clinical rotation.

HSC-170 Health Care Interaction 2
This course is designed to give the student an overview of the various influences on communication, the diversity in society, interactions occurring in the workplace and ethics. Various communication skills including conflict resolution and assertiveness skills, written documentation, values clarification and moral development are discussed.

HSC-173 Nurse Aide Theory 3
Course is designed to provide the student with the fundamentals of patient care in the health care environment. Students will learn basic anatomy, physiology, medical terminology, meeting human needs, safety measures, infection control, and physical care. Corequisite: HSC-174

HSC-174 Nurse Aide Clinical 1
Course expands the students’ knowledge of tasks, assessments and observations of patients in the health care environment. Students will develop technical skills specific to complex needs of the patient. Corequisite: HSC-173

HSC-178 Advanced Nurse Aide 4
This course is designed as an optional additional unit of instruction to be given either in conjunction with or following the approved 75 hour Nurse Aide course. The 75 hour Nurse Aide course meets the OBRA (Nursing Home Reform) requirements for nurse aides who work in long term care. This additional material provides the learner with content emphasizing the knowledge, attitude and skills necessary for providing patient care in the acute setting. Prerequisite: Successful completion of the 75 hour Nurse Aide Course HSC-173 and HSC-174 or documentation by a transcript or certificate of completion of an approved nurse aide course. Prerequisite: HSC-173, HSC-174

HSC-188 Direct Support Professional 3
This course is designed to provide information on safely providing care to individuals with neurological impairments that limit their cognitive and motor skills. Participants will learn skills in therapeutic communication, proper body mechanics, nutrition, behavior modification, and preventative and restorative care. Participants will also be certified in Heartsaver First Aid, and medication manager. A certificate of completion will also be awarded for completing Child and Dependant Adult Abuse training. High School Diploma or GED, Class D Drivers License, Health Screening, and Drug Screen required. Instructor consent required.

HSC-198 Dental Terminology 2
This lecture course provides an introduction to dental terminology related to patient care, documentation, and the business aspect of dentistry.

HSC-218 Clinical Pathology for Allied Health 3
This course is an introduction to a variety of medical and surgical conditions which include etiology, symptoms, diagnostic procedures, and treatment. Where appropriate basic pharmacology and effects will be included. Application of therapy according to diagnosis will be discussed. Prerequisites: HSC-114 or BIO-169 or BIO-163

HSC-245 Team Building 1
Involves the study of team dynamics and communication techniques necessary to promote effective, collaborative team outcomes. Topics include: communication, delegated responsibilities, goal setting, coaching, conflict resolution, and roles of the team members.

HSC-255 Physical Assessment of Adults 3
This course expands the health care professional’s knowledge and skills related to the principles and concepts of performing physical assessment of the adult client structured by body systems.

HSC-260 Laboratory and Diagnostic Testing 3
A three semester hour course involving interactive lecture. Prepares the student to correctly assess, interpret, and implement patient care regarding common laboratory and diagnostic studies.

HSC-265 Clinical Neurology 2
This course is designed to give students a basic understanding of the central nervous system, peripheral nervous system, and autonomic nervous system in regard to anatomy, neuro-development, and function. It will be the groundwork for understanding clinical neuropahtologies, therapeutic analysis, and programming planning. Prerequisite: BIO-174; Fall

HSC-270 Clinical Exercise Testing 3
A combined lecture and lab course. Provides student with an in-depth understanding of exercise testing. Includes principles of pretest clinical evaluation, physical fitness testing and interpretation, specific indications, applications, protocols, measurements, supervision, and interpretation of clinical exercise testing. Overview of exercise prescription. Corequisite: BIO-169; Fall

HSC-272 Certified Personal Trainer 3
This is a combined lecture and lab course. Involves the student in a variety of specific training practices for health fitness. Prerequisites: BIO-169, BIO-151, HSC-270; Corequisite: BIO-174; Spring

HSC-932 Certified Personal Trainer Internship 1
This course provides practical experience in the field of personal training under the direct supervision of a certified personal trainer. The certified personal trainer will provide feedback and evaluation of the student. Instructor consent required. Corequisite: HSC-272; Spring
HUM – Humanities

HUM-101 Introduction to the Humanities 3
Explores the influence of philosophy, literature, drama, and the fine arts upon ancient and modern cultures, including the impact of other cultures upon America’s approach to living. Fall, Spring

HUM-220 Mythology 3
Provides an understanding of the role of mythology in human history throughout the world. The relationships among myth, religion, and culture are explored. Fall, Spring

IND – Industrial Technology

IND-111 Industrial Safety Mechanical Systems 1
This course covers the aspects of hand, power tool, and machine guarding safety procedures. Lockout/Tagout is also covered for all energy sources. Fall, Spring, Summer

IND-141 Power Transmission 2
This course is designed to provide skills working on and troubleshooting industrial drive systems, including clutches, brakes and industrial bearings. A section on machinery lubrication is also included. Fall, Spring, Summer

IND-163 OSHA & Plant Safety 2
This course relates OSHA as it applies to employers & employees engaged in a variety of businesses. Students will learn how OSHA applies to employers and employees in such varied fields as manufacturing, construction, agriculture as well as renewable fuel processing plants.

IND-164 Introduction to Instrumentation 1.5
This course explores and defines instrumentation as it relates to production and distribution of ethanol and biofuels in the renewable fuels industry. Manual and automatic control techniques are studied as they relate to liquid flow and control. Various components associated with instrumentation processes including controllers, gauges, meters, and valves are also studied.

IND-165 Plant Automation 2
This course informs students how energy is managed through the use of plant/building automation systems. The concepts which are utilized by these systems are studied and identified. Students compare and contrast different types of control strategies and equipment utilized in achieving a more cost efficient building complex. They learn how different systems function and how they communicate vital information.

IND-180 Industrial Heating & Cooling 2
This course is designed to provide knowledge and skills working on and troubleshooting heating, ventilating, air handling and refrigeration systems, as well as familiarization with boiler controls. An additional section on steam traps is included. Fall, Spring, Summer

INT – Interior Design

INT-105 Interior Design Fundamentals 3
This course presents the fundamentals of interior design: space planning and human factors, the design process and phases, and graphic standards. Emphasis is on the application of the elements and principles of design in completed projects. The introduction of color-rendering methods provides techniques used in presentations for the interior designer. This course explores Interior Design as a career through research, field trips and the use of guest speakers. Prerequisite: INT-145; Spring

INT-112 Architectural/Interior Design History 3
This course outlines the history of architecture, interior design, and decorative arts from pre-historic times to the present. The major periods, movements and trends are presented along with relevant cultural influences that shape the world of design. The course also examines the role of significant architects, interior designers and artists throughout history. Fall

INT-114 Interior Design Materials and Finishes 3
This course examines the use of materials and finishes in interiors. Wall, ceiling, floor, fireplaces, cabinetry, countertop and millwork as well as architectural detailing are elements in which applied finishes are specified by the interior designer. The course also examines manufacturing, fabrication, and installation methods as well as non-traditional and sustainable finishes and/or applications. Fall

INT-122 Design Theory 3
This course demonstrates the use of the elements of design--line, shape, color, form, space, mass, texture, pattern and light, and their application in the principles of design--scale, proportion, balance, rhythm, emphasis, and harmony. Works in architecture, interior, graphic, industrial and landscape design, as well as those of art and nature are studied and critiqued. Student projects further emphasize these core concepts. Fall

INT-136 Lighting 3
This course examines the categories of lighting sources and their characteristics. Lighting terminology, electrical symbols and types of luminaries are identified. The lighting design process is outlined, and projects include developing a lighting plan and fixture schedule. The effect of lighting on color is demonstrated, as well as its significance with regard to human health and behavior. Prerequisite: INT-145; Fall

INT-145 Visual Communications I 3
This course utilizes hands-on skills in which design is communicated graphically through two dimensional drawing techniques. A variety of projects provide practice in drafting, sketching, lettering and instrument line techniques. Knowledge of graphic standards, space planning concepts and human factors are incorporated into a completed project where measurements are taken and a dimensioned, correctly-scaled drawing is produced. This course provides the methodology to create sections, elevations and reflected ceiling plans. The ability to interpret demolition, site, plumbing, and mechanical plans is emphasized. Fall

INT-150 Visual Communications II 3
This is a skills course in which design is communicated through computer-aided drafting. A continuation of Visual Communications I, this course introduces three-dimensional drawing. Lab time provides hands-on assistance in gaining proficiency. The final project encompasses all components of this course as well as color rendering, ultimately creating portfolio material for students. An oral presentation is a critical element of the final project. Prerequisite: INT-145, CAD-172; Fall

INT-160 Studio I 3
This course presents interior design problem-solving strategies in a variety of residential spaces, applying design analysis techniques, space planning concepts and graphic communication methods. Projects involve small and large-scale environments. Elements of finished projects include written design concept, programming analysis, floor and furniture plans, elevations, materials and furnishings specifications and schedules, electrical plan and schedule, color boards, budget and proposal documents and oral presentation. Student projects from this course contribute to their portfolio development. Instructor permission required. Fall

INT-165 Studio II 3
This course presents sophomore level interior design problem-solving strategies in a variety of contract spaces, applying design analysis techniques, space planning concepts and graphic communication methods. Projects involve small and large-scale contract environments. Elements of finished projects include written design concept, programming analysis, floor and furniture plans, elevations, materials and furnishings specifications and schedules, electrical plans and schedules, color boards, budget and proposal documents and oral presentation. Three dimensional, CAD and color rendering methods are implemented. Student projects from this course contribute to their portfolio development. Permission of instructor required. Spring

INT-233 Residential Architecture/Construction 3
This course provides the student with a primary knowledge of a building project. Emphasis is on light frame construction, materials and methods. This course includes analysis of building systems components, phases of construction, finishing methods, architectural details and acoustic design. Observation through field trips to job sites and manufacturers provides hands-on learning experience. Spring

INT-300 Textiles for Interior Design 3
This course examines the history of textiles used in interiors. The study of natural and man-made fibers along with their properties and characteristics provides the information necessary to specify the appropriate textiles in their proper application. This course provides analysis of woven and non-woven fabric construction as well as dying, printing, and finishing processes. Lastly, production methods and their environmental impact along with testing methods and flammability standards complete the in-depth study of textiles. Spring

INT-340 Compliance in Health, Safety and Welfare 3
This course examines environmental/sustainability issues and methods in interior design. Barrier free design, ergonomics, fire safety, codes and regulations and conservation techniques are included. Students research professional liability and ethics in the interior design profession as well...
as career options in specialty areas of interior design. Also covered in this course are resume and portfolio development, as well as interview preparation. Permission of instructor required. Spring

**JOU – Journalism**

**JOU-120** Beginning Newswriting  
This course is a study of the impact of the mass media, focusing on journalistic style as related to advertising and feature writing for radio, television, magazines, and newspapers. Fall

**JOU-123** Intermediate Newswriting  
The course is further study and practice of journalistic writing as applied to specialized reporting and public affairs reporting. Prerequisite: JOU-120; Spring

**LIT – Literature**

**LIT-101** Introduction to Literature  
An introduction to the study of short fiction, poetry, and drama. Fall, Spring. Prerequisite: ENG-105; Summer

**LIT-105** Children's Literature  
This course is a survey of children's literature suitable for elementary education. Focus is on the review and selection of materials as well as delivery techniques. Also emphasized is the role of literature in the child's total development. Fall, Spring

**LIT-110** American Literature to Mid-1800s  
This course is a survey of American literature from its beginnings through the Civil War, providing a wide selection of readings and their relevance for early America. Prerequisite: ENG-105, LIT-101; Fall, Spring

**LIT-111** American Literature Since Mid-1800's  
A survey of American literature from the Reconstruction era to the present. Prerequisite: ENG-105, LIT-101; Fall, Spring

**LIT-120** American Novel  
This course is an overview of the American Novel, but is by no means a chronological history of American novelists. Emphasis in this course's content and student discussion is to evaluate a particular author's style and approach to plotline and characterization to develop a central theme.

**LIT-124** American Poetry  
A study of the works, lives, and times of 20th-century American poets. Prerequisite: ENG-105 or LIT-101; Fall, Spring

**LIT-133** Minority Voices in U.S. Literature  
An introduction to writers from American minority groups, considered in the social and cultural contexts of the various groups. Includes discussing and writing about relevant issues. Prerequisite: ENG-105; Fall, Spring

**LIT-140** British Literature I  
A survey of British literature from its beginnings through the Restoration and Eighteenth Century, considered in the social and intellectual contexts of the periods. Prerequisite: ENG-105, LIT-101; Fall, Spring

**LIT-141** British Literature II  
A survey of British literature from the Romantic Period to the present, considered in the social and intellectual contexts of the periods. Prerequisite: ENG-105, LIT-101; Fall, Spring

**LIT-150** World Literature I  
This course is a survey of writers of the Western world from the ancient Greeks through the Early Modern Period, considered in the social and intellectual contexts of the periods. Prerequisite: ENG-105, LIT-101; Fall, Spring

**LIT-151** World Literature II  
A survey of writers of the Western world from the 18th century to the present, considered in the social and intellectual contexts of the periods. Prerequisite: ENG-105, LIT-101; Fall, Spring

**LIT-159** Women and Literature  
This course is an introduction to works by and about women, viewed in the social and cultural contexts of their times. It includes discussing and writing about relevant issues. Prerequisite: ENG-105; Fall, Spring

**LIT-193** Intermediate Newswriting  
The course is further study and practice of journalistic writing as applied to specialized reporting and public affairs reporting. Prerequisite: JOU-120; Spring

**LIT-195** Children's Literature  
This course is a survey of children's literature suitable for elementary education. Focus is on the review and selection of materials as well as delivery techniques. Also emphasized is the role of literature in the child's total development. Fall, Spring

**LIT-199** American Literature to Mid-1800s  
This course is a survey of American literature from its beginnings through the Civil War, providing a wide selection of readings and their relevance for early America. Prerequisite: ENG-105, LIT-101; Fall, Spring

**LIT-201** American Literature Since Mid-1800's  
A survey of American literature from the Reconstruction era to the present. Prerequisite: ENG-105, LIT-101; Fall, Spring

**LIT-202** American Novel  
This course is an overview of the American Novel, but is by no means a chronological history of American novelists. Emphasis in this course's content and student discussion is to evaluate a particular author's style and approach to plotline and characterization to develop a central theme.

**LIT-204** American Poetry  
A study of the works, lives, and times of 20th-century American poets. Prerequisite: ENG-105 or LIT-101; Fall, Spring

**LIT-207** Minority Voices in U.S. Literature  
An introduction to writers from American minority groups, considered in the social and cultural contexts of the various groups. Includes discussing and writing about relevant issues. Prerequisite: ENG-105; Fall, Spring

**LIT-208** British Literature I  
A survey of British literature from its beginnings through the Restoration and Eighteenth Century, considered in the social and intellectual contexts of the periods. Prerequisite: ENG-105, LIT-101; Fall, Spring

**LIT-209** British Literature II  
A survey of British literature from the Romantic Period to the present, considered in the social and intellectual contexts of the periods. Prerequisite: ENG-105, LIT-101; Fall, Spring

**LIT-210** World Literature I  
This course is a survey of writers of the Western world from the ancient Greeks through the Early Modern Period, considered in the social and intellectual contexts of the periods. Prerequisite: ENG-105, LIT-101; Fall, Spring

**LIT-211** World Literature II  
A survey of writers of the Western world from the 18th century to the present, considered in the social and intellectual contexts of the periods. Prerequisite: ENG-105, LIT-101; Fall, Spring

**LIT-212** The Short Story  
An introduction to the study of short stories. Includes analysis of fiction elements such as title, plot, characters, setting, and style. Prerequisite: ENG-105, LIT-101; Fall, Spring

**LIT-213** Contemporary Literature  
An introduction to literature of the last three decades, studied in a social and cultural context. Prerequisite: ENG-105; Spring

**LIT-141** Medical Insurance  
This course introduces the major types of medical insurance coverage and reimbursement. This course also emphasizes insurance terminology, procedural and diagnostic coding, and preparation of insurance claims. It includes maintenance of reimbursement and claims records.

**LIT-142** Medical Laboratory Techniques  
This course introduces a variety of the laboratory techniques required of a medical assistant working in a physician's practice. Prerequisite: BIO-163, MAP-333

**LIT-143** Fundamentals of Medical Assisting I  
Fundamentals of Medical Assisting I introduces students to the clinical aspects of the physician's practice. It emphasizes the clinical competencies required to assess the patient and assist the physician.

**LIT-144** Fundamentals of Medical Assisting II  
This course expands upon the general competencies in Fundamentals of Medical Assisting I and is more specific to specialty procedures within a physician's practice. Prerequisite: MAP-333, BIO-163

**LIT-145** Medical Assisting Review  
This course involves interactive review. It is designed to integrate and review medical assisting practice within the approved scope of practice for medical assistants and review strategies in preparation for the medical assisting certification examination.

**LIT-146** Medical Law and Ethics  
This course introduces principles of medical law, medical ethics, and bioethics. It will emphasize the function of law and ethical issues as it applies to the medical environment.

**LIT-147** Medical Assistant Externship  
This is an unpaid, on-site externship experience in a medical facility during which students will apply competencies learned in Fundamentals of Medical Assisting I and II. Prerequisite: MAP-333, BIO-163, Permission of advisor; 2.0 cumulative GPA and a C (2.0) or better in core courses as defined by the program advisor.

**LIT-148** Math Foundations I  
This course covers whole numbers, fractions, decimals, and percents. MAT 021 covers the first half of the topics contained in Basic Math, MAT 041. It is designed for students who would benefit from having more time to master basic math concepts. Credit for this class does not apply to graduation requirements. Fall

**LIT-149** Math Foundations II  
This course covers measurements, geometry, signed numbers, and algebra. MAT 022 covers the second half of the topics contained in Basic Math, MAT 041. It is designed for students who would benefit from having more time to master basic math concepts. Credit for this class does not apply to graduation requirements. Prerequisite: MAT-021, Spring
MAT-041 Basic Math
This course covers fractions, decimals, ratios, rates, proportions, percents, measurement, tables, graphs, data interpretation, algebraic equations in one variable, and solving word problems. Credit for this class does not apply to graduation requirements. Fall, Spring, Summer

MAT-063 Elementary Algebra
This course is designed to provide students with an introduction to basic algebra. The topics covered include signed numbers, exponents, algebraic expressions, polynomials, roots and radicals, factoring, linear equations and inequalities, systems of equations, graphing, and applications. Appropriate CPT score on math assessment or prerequisite course. Credit for this class does not apply to graduation requirements. Prerequisite: MAT-041; Fall, Spring, Summer

MAT-102 Intermediate Algebra
This course is applicable only to students who have basic knowledge of algebra. Reinforcement of topics from elementary algebra stressing problem solving, drills, conclusions obtained from graphs and other data, and a substantial expansion of radical equations. New topics are variations, exponential functions and logarithms, and quadratic equations. Appropriate CPT score on math assessment or prerequisite course required. Prerequisite: MAT-063; Fall, Spring, Summer

MAT-111 Math for Liberal Arts
This course provides a broad mathematical knowledge to calculate, analyze, and solve day-to-day problems. Topics include number theory and the real number system, algebra, graph and data interpretation, calculator usage, mathematical reasoning process, problem solving techniques, probability and statistics, calculator usage, mathematical reasoning process, problem solving techniques, and historical notes. Appropriate CPT score on math assessment or prerequisite course required. Prerequisite: MAT-102; Fall, Spring, Summer

MAT-117 Math for Elementary Teachers
This course examines underlying concepts and connections in elementary school mathematics. Topics include the number systems, mental computation and estimation, sets, geometry, measurement, algebra, probability, statistics, calculator usage, mathematical reasoning process, problem solving techniques, and historical notes. Appropriate CPT score on math assessment or prerequisite course. Prerequisite: MAT-102; Fall, Spring, Summer

MAT-121 College Algebra
This course addresses linear functions and inequalities, quadratics, conics, polynomials and rational functions, exponential and logarithmic functions, linear systems, matrices and determinants. Additional topics may include sequences, series, permutations, combinations, and probability. Appropriate CPT score on math assessment or prerequisite course required. Prerequisite: MAT-102; Fall, Spring, Summer

MAT-129 Precalculus
This is an intensive course in College Algebra and Trigonometry. Topics include functions and their graphs, exponential and logarithmic functions, trigonometric identities and equations, sequences and series, limits, mathematical induction, the binomial theorem, permutations and combinations, probability, and applications. Graphing, calculator and computer are used throughout. Appropriate CPT score on math assessment or prerequisite course required. Prerequisite: MAT-121; Fall, Spring, Summer

MAT-130 Trigonometry
This course is designed for students anticipating taking calculus and/or physics. The course includes right angle trigonometry, oblique trigonometry, trigonometric identities and equations, graphing, complex numbers, exponential and logarithmic functions, and applications of all topics. Appropriate CPT score on math assessment or prerequisite course required. Prerequisite: MAT-121; Fall, Spring, Summer

MAT-141 Finite Mathematics
This course includes systems of linear equations, linear programming, matrices, counting techniques, mathematics of finance, permutations, combinations, probability, and descriptive statistics. Content is especially suited for business students. Appropriate CPT score on math assessment or prerequisite course required. Prerequisite: MAT-102; Fall, Spring, Summer

MAT-149 Linear Algebra
This course is a study of equations, matrix operations, vector spaces, linear transformations and eigenvectors. An emphasis is placed on theory and application. Prerequisite: MAT-201 or MAT-211; Spring

MAT-156 Statistics
This course is designed to provide the student with a foundation in statistical concepts and procedures. The emphasis is on descriptive statistics, probability, binomial and normal distributions, elementary sampling theory, hypothesis testing, and linear regression. Prerequisite: MAT-121, MAT-110 or MAT-141; Fall, Spring, Summer

MAT-157 Statistics
This course addresses theory, techniques, and applications of statistical analysis; descriptive statistics, probability, sampling, estimation, test of hypotheses, ANOVA, linear regression, and nonparametric procedures. Computer skills and use is needed throughout. Appropriate CPT score on math assessment or prerequisite course required. Prerequisite: MAT-121, MAT-110 or MAT-141; Fall, Spring, Summer

MAT-201 Applied Calculus
This course is a study of functions, limits, continuity, differentiation, and integration. Emphasis is on theory and applications throughout. The course is designed to satisfy the Calculus requirement for most non-math and non-engineering major students. Prerequisite: MAT-121; Fall, Summer

MAT-211 Calculus I
This course is a review of analytic geometry and vector valued functions; a study of limits, continuity, differentiation, and integration with emphasis on theory, applications, and computer use throughout the course. Appropriate CPT score on math assessment or prerequisite course required. Prerequisite: MAT-130 or MAT-129; Fall, Spring, Summer

MAT-217 Calculus II
A continued study of integration along with a study of transcendental functions, numerical methods, indefinite form, improper integration sequences and series, conics, and polar coordinates. Emphasis on theory, applications, and computer use throughout. Prerequisite: MAT-211; Fall, Spring

MAT-219 Calculus III
A study of vector algebra and derivatives in two and three dimensions, parametric equations, partial derivatives, three-dimensional graphing, multiple integration, line integrals and Green's Theorem. Emphasis on theory, applications, and computer use throughout. Prerequisite: MAT-217; Summer

MAT-227 Differential Equations With Laplace
A study of solution methods for ordinary differential equations including first order equations, linear equations, and constant coefficient equations. Using Laplace transforms and series solutions to ordinary differential equations. Discussing the eigen value methods for systems of first order linear equations. An introduction to stability and phase plane analysis. Prerequisite: MAT-217; Fall

MAT-711 Business and Financial Math
A combined lecture and lab course. Develops the mathematical skills used in personal and business operations. Topics include arithmetic operations, measurement, and introductory statistics. Covers banking, payroll, interest, discounts, retail merchandising, and depreciation. This course does not fulfill general education requirements.

MAT-772 Applied Math
This course covers all fundamental arithmetic concepts and more routine algebraic operations. Arithmetic concepts are fractions, percentages, graphing, decimals, ratios, word problems, metrics, areas, and volumes. Algebraic work includes solving simpler equations, proportions, and formula rearrangement. Appropriate CPT score on math assessment or prerequisite course required. Prerequisite: MAT-041; Fall, Spring, Summer

MAT-775 Applied Algebra/Geometry
This course covers the application of the algebraic concepts of linear equations, formulas, applied industrial problems, and quadratics to geometric investigations of relationships, properties, and measurements of solids, surfaces, lines and angles. Prerequisite: MAT-041; Spring

MAT-777 Applied Algebra/Trigonometry
This course is designed to provide students an introduction to basic algebraic and trigonometry. Topics include geometric solids, factoring, linear and quadratic equations, logarithms, systems of equations, and right angle trigonometry. Career applications of these concepts are included. Prerequisite: MAT-772; Summer
MGT – Manufacturing

MFG-141 Geometric Dimensioning and Tolerancing 2
This course introduces geometric dimensioning and tolerancing, an element of engineering drawing that includes the geometry, critical functional relationships, and tolerances allowed for the proper function of a part. Prerequisite: DRF-150; Fall

MFG-179 Intro to Machining and Fabrication 3
This course introduces students to the basic operations of a machine lathe, mill, drill press and cutting equipment. An understanding of safe and proper setup and operations is the primary emphasis of the lab experience. Prerequisite: MOT-108; Spring

MFG-206 Manufacturing Processes I 3
This course is intended to provide basic knowledge and background covering manufacturing systems, properties and production of metals, basic machine tool elements and basic machining processes. An understanding of safety when working with machine operations will be emphasized. Corequisite: DRF-150; Spring

MFG-207 Manufacturing Processes II 3
Students will learn the various properties of materials as well as the operations and principles of (CAM) computer-aided manufacturing. This course is a continuation of Manufacturing Processes I. Prerequisite: MFG-206; Summer

MFG-249 Fundamentals of Engine Lathe Operations 2
This course is a continuation of Basic Machine Theory. The main course of study is dedicated to the engine lathe and its many uses. Computer based and hands-on training is provided in: Turning, Facing, Boring, Threading, Knurling, Cutting tool selection, Tool grinding and other operations performed on an engine lathe in producing parts to complete a project.

MFG-269 Basic Machine Tools 2
This course is designed to provide the student with a basic understanding of the tools and machines commonly used in a machine shop or manufacturing environment. Computer based and hands-on training will be provided in: safety, hand tools, measuring tools, milling, grinding, drilling and sawing operations while producing parts that will be used to complete a project.

MFG-301 Introduction to CNC 2
This course is designed to provide the student with a basic understanding of NC/CNC codes commonly used in a machine shop. Computer based and hands-on training is provided to give the student the ability to write code as well as perform CNC machine setup and operation while producing various related projects. Prerequisite: MFG-249, MFG-269

MFG-322 Introduction to Cad/Cam 3
This course is an introduction to computer-aided drafting and computer aided manufacturing. The student will learn basic CAD/CAM software commands and processes and progress to specific command sequence operations related to manufacturing.

MFG-423 Jig and Fixtures 4
This course will provide students with an understanding of the fundamentals of designing and constructing of special tools. Topics include drill and assembly jigs, and mill fixtures. Prerequisite: DRF-170, MAT-777; Spring

MFG-520 Predictive Maintenance 2
This course is designed to provide knowledge and skills working in the area of preventive and predictive maintenance. Subjects to be covered include vibration analysis, thermography, machinery oil analysis, ultrasonics and vibration of induction motors. Fall, Spring, Summer

MFG-542 Machine Design 3
This course utilizes the principles learned in the prerequisite courses along with newly acquired knowledge to prepare the student for basic machine design using common materials such as fasteners, bearings and gears. The student will have the knowledge to prepare complete and accurate mechanical drive assemblies. The design process is explored and cost estimating is introduced. Prerequisite: DRF-170, MAT-777; Fall

MKT – Marketing

MKT-110 Principles of Marketing 3
Consumer and organizational buying behavior, targeting market opportunities developing and managing new products, marketing channels, logistics, and strategic market planning and implementation are covered. This course examines marketing from the consumers’ and organizational perspective. Fall, Spring

MKT-125 Applied Marketing 3
This course is the pivotal point of students’ academic preparation as Marketers and is designed to expose the complexities of real world marketing as well as integrate all key marketing concepts. The course provides students with a systematic approach for making marketing decisions. It gives students practice in the analysis, design, implementation, and control of marketing strategies. This course applies marketing concepts, principles, strategies and methods Prerequisite: MKT-110; Spring
MKT-140 Principles of Selling 3
This course presents a fundamental, skills-based approach to selling and relationship building. Emphasis is on learning effective interpersonal communication skills in all areas of the sales process through skill-building activities. This course examines entry-level sales careers in retailing, wholesaling, services and industrial selling as well as the legal and ethical issues of organizations which affect salespeople. Spring

MKT-150 Principles of Advertising 3
This course covers the functions of advertising, advertising objectives, targeting the advertising to the identified consumer, designing the complete campaign strategy, budgeting the campaign, selecting the media, scheduling the campaign, and writing headlines and copy. MKT-110 recommended prior to this course. Fall

MKT-160 Principles of Retailing 3
This course gives students a basic understanding of merchandising, retail formats, retail locations, fashion merchandising, merchandise resources, productivity, merchandise accounting, inventory valuation, pricing, planning sales, inventory, purchase terms, store layout and merchandise presentation will be covered. Fall

MMS – Mass Media Studies

MMS-101 Mass Media 3
A survey course that examines the American media forms including journalism, broadcast, public relations and advertising as well as the world wide web. It is designed for a better understanding of the different forms of Mass Media, how they work and how they impact society. Fall, Spring

MMS-105 Audio Production 3
This course covers audio production for both radio and video field including discussion and demonstration of audio board operation, announcing, creating and producing audio scripts, and use of digital audio software. Lab exercises will develop audio production skills, discipline, and structure. Prerequisite: MMS-132; Fall

MMS-130 Video Field Production 3
This course is a comprehensive hands-on study of single-camera video production in the field for both indoor and outdoor settings including planning, writing, shooting, and editing video productions. It will cover the technical and aesthetic aspects of operating the video camera, lights, sound equipment, and non-linear computer editing systems. Prerequisite: MMS-132; Spring

MMS-132 Writing for the Mass Media 3
A comprehensive study of the different forms of writing that encompass the fields of journalism, broadcast, public relations, advertising and electronic media sources. Spring

MMS-265 Mass Communications Law 3
This course is designed to introduce and examine the basic legal aspects in the field of media production, with focus on freedom of speech, censorship, the First Amendment, indecency, privacy, obscenity, and copyright. Spring

MMS-932 Internship 2
This course allows the student to have on-the-job training while under the supervision and direction of a media industry professional. This industry professional will provide evaluation and feedback of the student’s skills. The course must be approved by the college instructor and a contract between the employer and the student must be signed.

MMS-941 Practicum 2
This experience is designed to allow the student to work, generally on campus, in a faculty supervised activity with well-defined outcomes resulting in the applied learning of theory. Such activities may include public relations, journalism, newswriting and editing, broadcasting, audio and video production. This will be a coordinated effort between the student, faculty members, and the work supervisor involving evaluations and assessment. Prerequisite: Instructor permission.

MOT – Motorcycle Technology

MOT-103 Motorcycle/Pwrsports Licensing & Inspect 1
This course prepares students for state-recognized motorcycle licensing and vehicle registration procedures. It includes proper procedures for inspecting motorcycles and ATV’s following first time assembly and machine setup and special concerns when inspecting motorcycles involved in accidents. Students learn the basics of before and after repair inspection procedures, proper documentation methods and how to identify personal licensing requirements for operating motorcycles on roads, highways and parks. Prerequisite: MOT-108; Fall

MOT-105 Fundamentals of Small Engines 2
This course provides students with a fundamental understanding of the operation, maintenance and repair of small gas engines. Students focus on engine theory and diagnostics of the entire system application. Prerequisite: MOT-108; Fall

MOT-107 Air-Cooled V-Twin Engines 2
This course provides students with a fundamental understanding of the history, design, construction and repair of Air-Cooled V-Twin Engines. Students focus on engine theory and diagnostics of the entire system application. Air-Cooling and Lubrication Systems theory of operation, construction and design are introduced. Disassembly and assembly on an Air-Cooled V-Twin engine will be demonstrated and practiced by students. Students will be exposed to multiple manufactures of V-Twin engines. Prerequisite: MOT-108; Fall

MOT-108 Powersports Shop Safety 2
This course is an introductory course that provides students shop skills including tool identification and proper usage, precision measuring, fastener handling, use of power tools and lifts, and related shop equipment. Fastener type, size and identification as well as common repair methods will be introduced. Safety concerns of running powersports vehicles on work benches and Dynamometers are demonstrated and practiced. Students become familiar with shop manuals, all OSHA safety guidelines and EPA regulations related to working in a Motorcycle/Powersports repair business. Fall

MOT-123 Wheels and Tires 2
This course introduces students to the wide variety of wheels and tires used on motorcycles and ATVs. Students are expected to identify flaws in wheels and tires. Tire repair and replacement are demonstrated and performed by the student. Safe operation of mounting and balancing equipment is emphasized. Prerequisite: MOT-104; Spring

MOT-126 Fuel and Ignition Systems 4
This course provides students with an overview of the entire fuel and electrical system essential in the operation of a motorcycle/ATV engine. Students identify components common to most engine carburetors and ignition systems. Common electrical component and fuel system failures are emphasized to introduce students to basic diagnostics. Prerequisite: MOT-108, MOT-133; Spring

MOT-127 Suspension & Brakes Systems 4
This course allows students to become proficient in maintaining and repairing motorcycle/ATV suspension and brake systems. Students learn to align, adjust and repair suspension systems and repair or replace brake pads and drums. Prerequisite: MOT-108; Spring

MOT-128 Motorcycle Engines 2 & 4 Stroke Theory 2
This course presents the basic operation of 2 & 4 stroke engines with an emphasis on identification and functionality of 2 & 4 stroke engine components and how these components are interrelated as well as various designs of 2-stroke and 4-stroke engine construction. Students learn proper service manual usage, how to research parts, and utilize other resource materials for locating manufacture specifications. In addition, students learn cooling and lubrication systems theory of operation, construction and design is introduced. Prerequisite: MOT-104; Corequisite: MOT-129; Fall

MOT-129 Motorcycle Engines 2 & 4 Stroke Lab 2
This course prepares students to disassemble, inspect, and reassemble 2 & 4 stroke engines. Students learn proper parts storage, inspection, and diagnosis during disassembly as well as making precision measurements. Lab experience also includes more in-depth, hands on experience of the timing, torque procedures and sealing methods used during re-assembly of 2 & 4 stroke engines, lubrication and cooling systems removal, and installation and inspection procedures. Prerequisite: MOT-128, MOT-108; Fall

MOT-130 Engine Overhaul / Repair 3
This course focuses on the overhaul and repair of the mechanical system of the engine. Lab activities include the diagnosis and repair or replacement of worn components. Students are introduced to specialty tools used for engine overhauling. Testing equipment and procedures are utilized to identify engine faults or potential failures related to carburetors, valves, compression and cylinders. Prerequisite: MOT-108, MOT-128, MOT-129; Spring
MOT-132 Motorcycle & ATV Electrical Sys Diagnos 2
This course allows students to continue improving their diagnostics and repair skills on Motorcycle/ATV electrical systems. Students locate and repair electrical related problems. Computer diagnostics and specialty test equipment are introduced. Prerequisite: MOT-201; Spring

MOT-133 Motorcycle Electrical Systems 3
This course introduces students to the basics of electricity used on motorcycles and ATVs, including an understanding of electrical components related to these machines. Students learn to use test equipment and read and perform basic diagnosis using an electrical schematic. Prerequisite: MOT-108; Spring

MOT-137 Transmissions and Drive Systems I 2
This course focuses on the fundamentals of most Metric transmission and drive systems contained in a common engine case. Students learn the theory of manual and automatic drive systems and transmissions in motorcycles and ATV’s. Student learning includes maintenance, repair, replacement and adjustment of clutches, primary and final drive components and systems. Automatic and manual transmissions will be disassembled, inspected and reassembled. Prerequisite: MOT-129, MOT-108; Fall

MOT-138 Transmissions & Drive Systems II 2
This course is a continuation of manual and automatic drive systems and transmissions and ATV’s. V-Twin and ATV transmissions and clutches will also be introduced. Students further develop their skills in inspecting, diagnosing and repairing drive systems and transmissions. Labs include the student becoming familiar with the variations and differences of individual makes of motorcycles and ATVs. Prerequisite: MOT-137; Fall

MOT-204 ATV & UTV Powersports Vehicles 4
This course allows student to become proficient in maintaining and repairing All-Terrain Vehicles (ATV) and Utility Terrain Vehicles (UTV) systems. Students learn to align, adjust and repair suspension, engine configurations, chassis designs, drive and steering systems. Industry application and safety is also introduced. Prerequisite: MOT-108; Fall

MOT-205 Advanced Diagnostics & Troubleshooting 3
This course allows student to continue improving their diagnostic and repair skills on Motorcycle/ATV vehicles. Students perform problem solving diagnostics that effect overall machine performance and handling. Procedures for verifying customer complaints will be demonstrated and practiced. Computer diagnostics and use of specialty test equipment is introduced. Dynamometer analysis will also be introduced. Prerequisite: MOT-108, MOT-128, MOT-133; Fall

MOT-212 Motorcycle & ATV Tune Up Maintenance 3
This course allows students to combine electrical and mechanical skills they have learned to mix the required service and maintenance schedules demanded by the manufacturers. Students perform tune-ups and service procedures related to maintaining the entire motorcycle or ATVs engine, electrical system, and fuel system. Chassis, wheels and brake system maintenance requirements will also be performed. Prerequisite: MOT-108, MOT-128, MOT-133; Fall

MOT-255 Performance Engine Tuning 2
This course allows students to discover specialized engine performance for engines related to high-performance or competition machines. An understanding of safe engine modifications and limitations is emphasized. Prerequisite: MOT-108; Spring

MOT-259 Shop Management 2
This course introduces students to the essential elements of managing a motorcycle/ATV business including inventory, ordering, scheduling, customer service, safety and basic accounting practices that are specifically related to the motorcycle powersports industry. Hiring, managing and time tracking of employee performance will also be covered. Spring

MOT-947 Practicum 1
In this course students gain on-the-job experience and practical application of the competencies studied in the Motorcycle/Powersports Technology course work. It involves a coordinated effort between the student, Western Iowa Tech Community College faculty members, and the work supervisor in the business, for these experimental activities. Students are required to complete a minimum of hours as specified per credit hour at a motorcycle/ powersports business. Completion of the first year of the Western Iowa Tech Motorcycle/Powersports Technology Program and instructor consent is required. Summer

MUA – Applied Music

MUA-101 Applied Voice
This course offers private voice lessons for singers with a variety of vocal background and experience. It includes the study of vocal fundamentals, survey of solo vocal literature, and preparation for performance of solo vocal literature. Fall, Spring, Summer

MUA-102 Applied Voice II
This course offers private voice lessons for singers with a variety of vocal background and experience. It includes the study of vocal fundamentals, survey of solo vocal literature, and preparation for performance of solo vocal literature. Instructor permission is required. Prerequisite: MUA-101; Fall, Spring, Summer

MUA-103 Applied Voice III
This course offers private voice lessons for singers with a variety of vocal background and experience. It includes the study of vocal fundamentals, survey of solo vocal literature, and preparation for performance of solo vocal literature. Instructor permission is required. Prerequisite: MUA-102; Fall, Spring, Summer

MUA-119 Class Piano
This course entails class piano lessons for music majors to prepare students for the piano proficiency test, including the study of fundamental keyboard techniques, scales, chord progressions, and accompaniment styles. Also includes study of skills necessary to accompany students and play choral scores. This course may be repeated for credit. Instructor permission is required. Summer

MUA-120 Applied Piano
This course offers private piano lessons for musicians with varied background and experience. It includes the study of keyboard fundamentals, survey of solo piano literature, and preparation for performance of solo piano literature. For music majors, the course also includes the study of skills necessary to accompany students and play choral scores. This course may be repeated for credit. Instructor permission is required. Fall, Spring, Summer

MUA-124 Applied Guitar
This course offers private lessons in guitar for musicians with varied background and experience. It includes the study of guitar fundamentals, survey of solo guitar literature, and preparation for performance of solo guitar literature. This course may be repeated for credit. Instructor permission is required. Fall, Spring, Summer

MUA-126 Applied Strings
This course offers private lessons in strings for musicians with varied background and experience. It includes the study of string fundamentals, survey of solo string literature, and preparation for performance of solo string literature. This course may be repeated for credit. Instructor permission is required. Spring, Summer

MUA-143 Applied Brass
This course offers private lessons in brass for musicians with varied background and experience. It includes the study of brass fundamentals, survey of solo brass literature, and preparation for performance of solo brass literature. This course may be repeated for credit. Instructor permission is required. Fall, Spring

MUA-170 Applied Woodwind
This course offers private lessons in woodwinds for musicians with varied background and experience. It includes the study of woodwind fundamentals, survey of solo woodwind literature, and preparation for performance of solo woodwind literature. This course may be repeated for credit. Instructor permission is required. Fall, Spring

MUA-180 Applied Percussion
This course offers private lessons in percussion for musicians with varied background and experience. It includes the study of percussion fundamentals, survey of solo percussion literature, and preparation for performance of solo percussion literature. This course may be repeated for credit. Instructor permission is required. Fall, Spring

MUA-201 Applied Voice IV
This course offers private voice lessons for singers with a variety of vocal background and experience. It includes the study of vocal fundamentals, survey of solo vocal literature, and preparation for performance of solo vocal literature. Instructor permission is required. Prerequisite: MUA-103; Fall, Spring, Summer
This course prepares students to write musical sentences, chords, songs, and singing of melodies containing intervals up to an octave. Accidentals are larger intervals, compound meter, II-V-I chord progressions, and sight-sing progressions and to sight-sing basic melodies. This class introduces rhythms, melodies and chord progressions. Sight-singing skills are strengthened through study of voice leading, different types of harmonic construction, composition and transposition. It is intended for students with strong interest but limited background in music theory. Prerequisite: MUA-119; Spring

MUS – General Music

MUS-100 Music Appreciation 3
A general course designed to make the student more aware of musical form, media, genres, musical periods, and the essential role of music in life and culture. Emphasizes the development of tools for intelligent listening and appreciation. Fall, Spring, Summer

MUS-102 Music Fundamentals 3
This course introduces the basic materials of music, including musical notation, melody, harmony, rhythm, major and minor scales and keys, chord construction, composition and transposition. It is intended for students with strong interest but limited background in music theory. Corequisite: MUS-125; Fall

MUS-115 Music Theory I 2
The course introduces the basic materials of music, including musical notation and the basic elements of music including melody, harmony, rhythm, texture, keys, major and minor scale structures, chord construction, and composition. This class is intended for students with strong interest but limited background in music theory. Corequisite: MUS-125; Fall

MUS-116 Music Theory II 2
This class is a continuation of Music Theory I which includes the knowledge base of notation, melody, harmony, rhythm, scales, keys, texture and chord construction. This course expands that base to include music composition and analysis. The program of study also includes melodic counterpoint and harmonic construction, with an emphasis in building student understanding of musical form. This class is intended for students with a strong interest and background in music theory. Prerequisite: MUS-115; Corequisite: MUS-126; Spring

MUS-117 Music Theory III 2
The class builds upon concepts mastered in Theory I and II. Compositional skills are strengthened through study of voice leading, different types of motion, common chord progressions, chord resolutions and simple counterpoint. Students will analyze standard compositional forms of different historical periods and will utilize them in their own compositions. This class is intended for students with strong music theory background. Prerequisite: MUS-116; Corequisite: MUS-225; Fall

MUS-125 Ear Training/Sight Singing 2
This course develops the ability to recognize and notate simple intervals, rhythms, melodies and chord progressions. Sight-singing skills are strengthened using the sol-feggio method. Basic piano keyboard skills are acquired. Music majors must take this course in conjunction with MUS-115. Fall

MUS-126 Ear Training/Sight Singing II 2
This course is a continuation of MUS-125 which has developed the student's ability to recognize and notate simple intervals, rhythms, melodies and chord progressions and to sight-sing basic melodies. This class introduces larger intervals, compound meter, II-V-I chord progressions, and sight-singing of melodies containing intervals up to an octave. Accidentals are introduced in sight-singing. Prerequisite: MUS-125; Corequisite: MUS-116; Spring

MUS-128 Music Notation 2
This course prepares students to write musical sentences, chords, songs, and lyrics utilizing composition software. Students orchestrate music for a variety of different instruments, as well as choral and orchestral scores. This course introduces industry standards for music publishing. Spring

MUS-138 Jazz Choir 3
Jazz Choir provides students with a vehicle for learning about the American jazz heritage through rehearsal and performance. The course includes study and preparation of a variety of jazz literature, listening to professional jazz singers and instrumentalists, study of improvisation and jazz solo style, and performance synthesizing the literature and techniques studied. Audition required. This course may be repeated for credit. Corequisite: MUS-140; Fall, Spring

MUS-140 Concert Choir 3
This course is designed for singers with a variety of vocal experience and backgrounds. It includes rehearsal and performance of music of diverse styles, textures, musical periods, and genres. Performances will occur on the WITCC campus and throughout the Siouxland community. Fall, Spring

MUS-141 Concert Choir II 3
This course is designed for singers with a variety of vocal experience and backgrounds. It includes rehearsal and performance of music of diverse styles, textures, musical periods, and genres. Performances will occur on the WITCC campus and throughout the Siouxland community. Prerequisite: MUS-141; Fall, Spring

MUS-189 Jazz Combo 3
This course provides the opportunity for jazz instrumentalists to study and perform the art of jazz in a small-ensemble setting. The course content includes learning standard jazz combo literature and improvisation techniques. Jazz combos will be selected through audition, and prior experience on a band instrument commonly used in jazz is needed. This course may be repeated for credit. Fall, Spring

MUS-199 Music History 3
This course provides historical background necessary to apply progressively theoretical aspects of music. Included in this course are music elements such as form, media, genre, style, characteristics of various musical time frames, and the essential role of music in life and culture. Prerequisite: MUS-115

MUS-202 World Music 3
This course provides students with the opportunity to study the music of diverse non-Western cultures. The course relates the music of a region to its history and cultural identity. Designed for the general student as well as music majors, the course will use a hands-on approach to explore the basic elements of global music and the ways that music impacts the culture and traditions of a country.

MUS-205 Jazz History and Appreciation 3
Study of the elements and history of jazz music with concentration on critical listening skills. Includes a review of jazz history, styles, genres, form and content, schools of composers/performers and social and historical events of the past and present that influence music selections. This course is designed for the general college student and is not highly technical. Fall, Spring, Summer

MUS-215 Music Theory IV 4
This course continues to build upon the knowledge developed in Theory III. The course utilizes elements of music which include: musical notation, melody, harmony, rhythm, texture, keys, major and minor scales, structures, modes, chord construction, composition, and transposition. All elements will be related to relevant historical periods. Students will strengthen knowledge of musical techniques and concepts as they appear in each of the historical eras: Medieval, Renaissance, Baroque, Classical, Romantic, 20th Century and Jazz and Modern Music. This class is intended for students with strong music theory background. Prerequisite: MUS-117; Corequisite: MUS-226; Spring

MUS-225 Ear Training/Sight Singing III 2
This course is a continuation of Ear Training and Sight Singing I and II. Transcription of melodies will progress from one- and two-part dictations to 4-part harmonic dictation. Aural recognition of common chord progressions will be developed, as well as four-part sight-singing in various

800.352.4649 or www.witcc.edu 197 Western Iowa Tech Community College 2013-2014 Catalog
compositional styles. Rhythmic dictation will stress cut-time, compound meters, and asymmetrical meters. Sol-feggio studies will expand to include reading choral octavos in syllables. Prerequisite: MUS-126, Corequisite: MUS-117, Fall

MUS-226 Ear Training/Sight Singing IV 3 This course is a continuation of Ear Training and Sight Singing I, II and III. Harmonic dictation will expand from three-chord sequences to seven chords. Aural recognition of more complex chord progressions will be developed, as well as independent four-part sight-singing in compositional styles which include accidentals and mixed meters. Excerpts from standard literature will be incorporated into both dictation and sight-singing. Rhythmic dictation will expand to include mixed meters. Students will lead sol-feggio study exercises, including modes. Students will choose a recording to transcribe in all aspects. Prerequisite: MUS-225, Corequisite: MUS-215, Spring

MUS-240 Concert Choir IV 1 This course is designed for singers with a variety of vocal experience and backgrounds. It includes rehearsal and performance of music of diverse styles, textures, musical periods, and genres. Performances will occur on the WITCC campus and throughout the Siouxland community. Prerequisite: MUS-142; Fall, Spring

MUS-241 Concert Choir V 1 This course is designed for singers with a variety of vocal experience and backgrounds. It includes rehearsal and performance of music of diverse styles, textures, musical periods, and genres. Performances will occur on the WITCC campus and throughout the Siouxland community. Prerequisite: MUS-240; Fall, Spring

MUS-242 Concert Choir VI 1 This course is designed for singers with a variety of vocal experience and backgrounds. It includes rehearsal and performance of music of diverse styles, textures, musical periods, and genres. Performances will occur on the WITCC campus and throughout the Siouxland community. Prerequisite: MUS-241; Fall, Spring

MUS-267 Pro Tools 3 This course focuses on the skills needed to function within the digital audio workstation environment at a basic level. The goal of this course is to help learners start working on their own projects in computer recording. Students should have a familiarity with basic computer skills and musical knowledge to be successful in this course. Spring

MUS-282 Sound Theory 3 This course addresses the fundamentals of sound, and its production, control, transmission, and reception. Students develop critical listening skills and analytical abilities to engage in effective audio manipulation. Students identify, measure, and manipulate sound and frequencies, and apply sound damping techniques. Fall

MUS-283 Audio Principles 3 This course examines the history, theory and techniques of audio production. Students learn the fundamentals of how to capture, edit, mix and master audio using a variety of analog and digital principles and equipment. Fall

MUS-285 Audio Production and Equipment I 3 This course includes the theory and application of analog audio production and signal flow, including analog tape editing and recording techniques. It addresses effective sound reinforcement, achieved through the use of microphones, mixers, signal processing, power amps, and speakers. Students are introduced to the audio components and equipment and given practical applications in analog production and sound system operation. Prerequisite: ELE-101, MUS-283, MUS-282; Spring

MUS-287 Audio Production & Equipment 3 This course is a continuation of MUS 285 Audio Production & Equipment I and introduces advanced signal processing techniques, digital delays and modulation effects, equalizers, and reverb in the context of building a professional mix. Students utilize applications of digital audio recording and editing, emphasizing mixing techniques of Pro Tools systems. Prerequisite: MUS-267, MUS-285; Fall

MUS-288 Topics in the Modern Music Industry 2 This course provides the opportunity for students to examine diverse issues such as copyright, publishing, hearing loss, digital downloads, internet music culture, the Volume War, the analog vs. digital debate, the importance of sound quality in audio productions, the future of music/audio production and more, as they relate to the average listener/consumer, musicians, and audio professionals alike. Spring

MUS-289 System Assembly & Maintenance 3 This course reviews basic electronics and sound principles as well as set-up and signal flow of consoles, calibration, and operation of recording equipment. Topics include studio layout and signal routing, equipment interface, grounding and maintenance. Students are provided hands-on application of systems assembly and maintenance as well as situational experience in troubleshooting techniques. Instructor consent required. Fall

MUS-299 Sound Systems on Location I 2 This course requires students to attend specific venues in order to observe and learn about the world of audio, studio productions, live events, current music technologies and music production as they are implemented for music, film, television, and interactive media. Instructor consent required. Prerequisite: ELE-101; Fall, Spring

MUS-300 Sound Systems on Location II 2 This course requires students to attend specific venues in order to observe and learn about the world of audio, studio productions, live events, current music technologies and music production as they are implemented for music, film, television, and interactive media. Prerequisite: MUS-299; Fall

MUS-301 Live Sound Production 3 This course prepares students for live sound production. Through instruction and remote live recording session experience outside of the traditional recording studio, students learn and apply the fundamentals of running remote multi-track recording sessions in indoor and outdoor venues. Techniques to be covered include stage set-ups, stylistically dependent instrument and vocal setups, microphone choice and placement, speaker construction and power-matching of sound reinforcement equipment, tracking a remote recording session, dealing with weather and other remote location concerns, mixing while multi-track recording, session protocol, and communication and client relations skills. Instructor consent required. Prerequisite: MUS-285; Spring

MUS-302 Sound Production in Mass Communication 3 This course addresses the fundamentals of architectural acoustics and introduces students to the most current types and usages of multimedia as they relate to audio production. Emphasis is placed on the application of recording techniques and equipment in varied modes of communication such as wired and wireless applications, and audio and video conferencing. Students learn to adapt to a variety of acoustical settings and venues, and demonstrate intuitive and creative use of professional skills and tools used in the entertainment, educational, and professional world. Prerequisite: MUS-267, MUS-285; Fall

MUS-917 Experimental Course 1 This pilot course is under the supervision of a faculty member and approved by the division chair. This course may not duplicate any course already in the catalog. Students earn credit based upon the agreed upon credit and contact hours. Instructor permission required.

MUS-932 Internship 3 This course provides on-the-job experience on campus or in the industry, giving the student experience and practical application of the competencies learned in the degree program. The internship is coordinated by the college instructor and supervised by an industry professional at the work site. Prerequisite: Permission of instructor, 2.0 cumulative GPA and a C (2.0) or better in core courses as defined by the program advisor.

MUS-947 Practicum 2 This course is designed to allow students to job shadow and/or work in a faculty supervised activity with well-defined expectations, activities and outcomes, applying the knowledge and skills gained in the program of study. This is a coordinated effort between the student, faculty members, and the work supervisor involving evaluations and assessment. Instructor permission required.

NET – Computer Networking

NET-123 Computer Hardware Basics 4 This is a combined lecture and lab course that familiarizes students with computer structures and concepts as they pertain to the electronics field. Fall, Spring, Summer

NET-132 Operating Systems Software Basics 3 This course provides students the information and skills application needed to install, manage, and troubleshoot major operating systems. These
systems include but are not limited to: DOS, Windows 9X, Macintosh OS, Windows NT Workstation, and Linux. In addition, students learn network connectivity with the operating systems. Fall, Spring

**NET-143 Essentials of Networking 3**

Presents an overview of networking systems; describes necessary basics of installing and maintaining a local area network; and helps prepare students for the Microsoft certification exam 70-058. Spring

**NET-155 Introduction to Wireless Networks 3**

This course provides a hands-on guide to planning, designing, installing and configuring wireless LANs that prepares students for the Certified Wireless Network Administrator (CWNA) certification. The text used offers thorough coverage of wireless networking with extensive, step-by-step coverage of IEEE 802.11b/g/n implementation, design, security, and troubleshooting. Material is reinforced with hands-on projects at the end of each chapter from two of the principal wireless LAN vendors, Cisco and Linksys. Prerequisite: NET-161, NET-162; Spring, Summer

**NET-161 IT Essentials I: PC Hardware & Software 4**

This course covers the fundamentals of computer hardware and software. Fundamentals covered include computer technology, networking, security and communication skills. This is a combined lecture and lab course designed for students seeking career-oriented, entry-level hardware and software positions. This course also prepares students for the CompTIA A+ certification exams. Fall, Spring

**NET-162 IT Essential II: Adv PC Hard & Software 3**

This course covers advanced computer hardware and software concepts and builds on the fundamental skills covered in NET 161 IT Essentials I with more comprehensive labs and troubleshooting scenarios. It is a combined lecture and lab course designed for students seeking career-oriented, entry-level hardware and software positions. This course also prepares students for the CompTIA A+ certification exams. Prerequisite: NET-161; Fall, Spring

**NET-216 Cisco CCNA Security 3**

This course equips students with the knowledge and skills needed to prepare for entry-level security specialists careers. This course is a hands-on, career-oriented e-learning solution that emphasizes practical experience. It is a blended curriculum with both online and classroom learning. CCNA Security aims to develop an in-depth understanding of network security principles as well as the tools and configurations required to secure a network. Prerequisite: NET-220; Spring

**NET-217 CCNA Exploration Network Fundamentals 3**

This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. Network Fundamentals is the first of 4 semester courses necessary for CCNA (Cisco Certification Network Association) certification. It uses the OSI and TCP layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. It introduces the principles and structure of IP addressing and the fundamentals of Ethernet concepts, protocols, and operations to provide a foundation for the curriculum. Labs use a model internet to allow students to analyze real data without affecting production networks. Packet Tracer (PT) activities help students analyze protocol and network operation and build small networks in a simulated environment. At the end of the course, students build simple LAN topologies by applying basic principles of cabling; performing basic configurations of network devices, including routers and switches; and implementing IP addressing schemes. Corequisite: NET-123; Fall, Spring

**NET-218 CCNA Exploration Routing Concepts 3**

This CCNA (Cisco Certification Network Association) course describes the architecture, components, and operation of routers, and explains the principles of routing and routing protocols. Students analyze, configure, verify, and troubleshoot the primary routing protocols RIPv1, RIPv2, EIGRP, and OSPF. By the end of this course, students will be able to recognize and correct common routing issues and problems. The students are prepared through a basic procedural lab and then presented with basic configuration, implementation, and troubleshooting labs. Packet Tracer (PT) activities reinforce new concepts, and allow students to model and analyze routing processes that may be difficult to visualize or understand. Prerequisite: NET-217; Spring

**NET-219 CCNA Exploration Switching and Wireless 3**

This CCNA (Cisco Certification Network Association) course provides a comprehensive, theoretical, and practical approach to learning the technologies and protocols needed to design and implement a converged switched network. Students learn about the hierarchical network design model and how to select devices for each layer. The course explains how to configure a switch for basic functionality and how to implement Virtual LANs, VTP and InterVLAN routing in a converged network. The different implementations of Spanning Tree Protocol in a converged network are presented and students develop the knowledge and skills necessary to implement a WLAN in a small-to-medium network. Prerequisite: NET-218; Spring, Summer

**NET-220 CCNA Exploration Assessing the WAN 3**

This course presents the WAN technologies and network services required by converged applications in enterprise networks. The course uses the Cisco Network Architecture to introduce integrated network services and explains how to select the appropriate devices and technologies to meet network requirements. Students learn how to implement and configure common data link protocols and how to apply WAN security concepts, principles of traffic, access control, and addressing services. Finally, students learn how to detect, troubleshoot, and correct common enterprise network implementation issues. After successfully completing the four CCNA Exploration courses, students are qualified to take the Cisco Certified Network Associate Exam (CCNA). Prerequisite: NET-217, NET-218, NET-219; Fall

**NET-423 Securing a Linux Environment I 3**

This course introduces basic Unix/Linux commands and usage. It focuses on securely installing and operating in a command/shell environment in Linux. Students learn how to secure the basic operating system, secure connections to the hosts and test the overall security of the Linux box. Prerequisite: NET-162; Spring

**NET-424 Securing a Linux Environment II 3**

This course takes the concepts and knowledge learned in Securing a Linux Environment I and applies them to common applications run on Unix/Linux operating systems. It focuses on identifying the many risks of running Linux hosts applications and methods to minimize those risks. Students learn how to test the overall security of these applications and apply proper security measures. Prerequisite: NET-423; Fall

**NET-501 Basic Linux Operating System 3**

This course provides the student with instruction and hands-on practice in the basics of Linux system administration in a network environment. The laboratory systems will enable students to practice with multiple Linux systems in a virtual environment. This is the second of two courses that will help the student prepare for the Linux + professional certification exam. Prerequisite: NET-501; Fall

**NET-502 Advanced Linux Operating System 3**

This course will provide the student with instruction and hands-on practice in the basics of Linux system administration in a network environment. The laboratory systems will enable students to practice with multiple Linux systems in a virtual environment. This is the second of two courses that will help the student prepare for the Linux + professional certification exam. Prerequisite: NET-502; Fall

**NET-520 Microsoft Workstation-MCTS 3**

This course provides instruction and hands-on practice in the skills required to install and maintain the Microsoft Windows current operating system in a domain network environment. The laboratory system enables students to practice hands-on in a virtual domain network environment with rapid recovery capabilities. Installation, configurations, local users and groups, network connectivity, security, application configuration, system performance optimization, troubleshooting, and mobile computing are covered from a very task oriented perspective. This course helps prepare the student for the current certification exam for current Windows operating system configuration. Prerequisite: NET-162; Spring

**NET-536 Microsoft Exchange MCTS 3**

This course provides students with instruction and hands-on practice in the skills required to install and configure Microsoft’s current Exchange Server. The laboratory systems enable students to learn by doing in live virtual environments. This course helps prepare students for the current MCTS certification exam. Prerequisite: NET-547; Spring

**NET-540 Microsoft Srv Active Directory MCTS 3**

This course provides students with instruction and hands-on learning in the skills required to install and configure Microsoft’s Server current Active Directory Domain Services, the comprehensive environment for centralized Microsoft systems control. The laboratory systems enable students to practice in live domain environments. Installation of computers, users, groups, organizational units and access controls via group policy are covered from a very task oriented perspective. This course helps prepare students for the current certification exam, Windows Active Directory Configuration. Prerequisite: NET-520; Fall
NET-542 MS Server Network Infrastructure MCTS
This course provides students with instruction and hands-on learning in computer networks. Skills and techniques include securing webserver, web application and databases. Students also learn techniques to protect Macintosh, Linux and mobile devices. The course incorporates a lab component in which students practice skills designed to secure operating systems and mobile devices and prevent attacks. Prerequisite: NET-624; Corequisite: NET-846; Spring

NET-543 MS Srv Application Infrastructure MCTS
This course provides students with instruction and hands-on practice in the skills required to install and configure current Microsoft’s Server in an optimized networking environment. The laboratory systems enable students to practice with multiple servers that are operating in live virtual network environments. Students are instructed from a task-oriented perspective to install and configure the server and key server network functions including DHCP, DNS, RRAS, security protocols, and File and Print services. This course helps prepare students for the current Microsoft Certified Technology Specialist exam. Prerequisite: NET-520; Spring

NET-547 Microsoft Server Enterprise Admin
This course is principally a design and planning course. It addresses students’ needs for skills to design the best solutions that meet business and organizational needs. Students use design and analysis tools to plan appropriate changes to networks. Students use design and implement application services and access management components. They plan and implement strategies for migrating, upgrading, and restructuring domains and forests. The laboratory systems enable students to test their design problem solutions with multiple servers operating in live virtual network environments. This course helps prepare students for the current Microsoft Certified Information Technology Professional exam. Prerequisite: NET-540, NET-542, NET-543; Fall

NET-612 Fundamentals of Network Security
This course is a combined lab and lecture course designed to provide students with a fundamental understanding of network security principles and implementation. Students learn about authentication, types of attacks and malicious code, threats and countermeasures for e-mail, web applications, remote access, file and print services, intrusion detection systems, firewalls, physical security concepts, security policies, disaster recovery, and computer forensics. Students have a variety of hands-on and case project assignments that reinforce the concepts you read in each chapter. Corequisite: NET-123, NET-132; Fall

NET-616 NET VMware VCP
This course equips students with the knowledge, skills, and abilities to build and run a VMware vSphere environment. It focuses on the installation and configuration of VMware ESX/ESXi hosts and VMware vCenter Server and on the management of ESX/ESXi hosts and virtual machines with vCenter Server. The course prepares students to achieve the status of VMware Certified Professional. The course is based on VMware’s VCP certification and as such when VMware changes their VCP certification this course will change to reflect the most current certification requirements. Prerequisite: NET-547, NET-219; Spring

NET-617 Implementing Sec Policies and Procedures
This course is based on the International Organization of Standardization’s Code of Practice for Information Security Management. It uses real world examples and cases to instruct the student on creating a working security policy, maintain regulatory compliance, and protect information and information systems. Prerequisite: NET-612; Spring

NET-624 Offensive Security I
This course enables students to use penetration-testing tools and techniques that ethical hackers and security testers utilize to protect computer networks. Skills and techniques include footprinting, social engineering, port scanning, enumeration, and cryptography. The course incorporates a lab component in which students practice skills designed to secure network connections and prevent attacks. Prerequisite: NET-423; Fall

NET-625 Offensive Security II
This course enables students to use penetration-testing tools and techniques that ethical hackers and security testers utilize to protect computer networks. Skills and techniques include securing webserver, web application and databases. Students also learn techniques to protect Macintosh, Linux and mobile devices. The course incorporates a lab component in which students practice skills designed to secure operating systems and mobile devices and prevent attacks. Prerequisite: NET-624; Corequisite: NET-846; Spring

NET-633 Computer Forensic Fundamentals
This course provides a complete overview of computer forensics from investigation and crime scene investigation, seizure of data, determining the fingerprints of the crime, and tracking down the criminals. The course focuses on the process and procedural aspects of investigation and aid students in the use of the tools and the implementation of the procedures that are demonstrated in the Forensics and Investigation course. Prerequisite: NET-612; Fall

NET-636 Digital Crime and Computer Law
Cyber Crime Law focuses specifically on various types of computer crimes and threats to private networks. This course will entail discussions of general crimes such as Denial of Service attacks, Web site defacement, digital espionage, cyber crimes involving minors, and fraud, as well as specific laws, statutes and cases. Fall

NET-638 Network Firewalls and VPNs
This course focuses on the installation, setup and configuration of current firewall and VPN appliances along with the management tools. The course focuses on how to securely setup and configure a firewall and VPN network and network defenses. Prerequisite: NET-218; Spring

NET-730 Computer Forensics and Investigations
This course is a combined lecture and lab class that provides students with a comprehensive understanding of computer forensics, investigation tools and techniques. Students learn what computer forensics and investigation is as a profession and they gain an understanding of the overall investigative process as well as how to set up an investigator’s office and laboratory. Students learn about the computer forensic hardware and software tools available. Students also learn the importance of digital evidence controls and how to process crime and incident scenes as well as be introduced to data acquisition, computer forensic analysis, e-mail investigations, and image file recovery. The course provides a range of laboratory and hands-on assignments for students. Prerequisite: NET-161 NET-162; Fall

NET-846 Cyber Crime Projects
This course enables students to use the complete set of skills they have learned in the courses that comprise the Cyber Security and Digital Crime program. By completing a computer forensics project and secure network/VPN project, students are able to demonstrate the ability to create and implement policies and procedures, monitor an active network, check vulnerabilities to attacks, assess and react to incoming attacks, conduct a digital investigation, create reports and defend their findings. Prerequisite: NET-730; Corequisite: NET-625; Spring

PEA – Physical Education Activities

PEA-110 Badminton I
This course is designed to give the student a basic understanding of the skills and knowledge necessary for the enjoyment of badminton as a vigorous lifetime activity.

PEA-115 Billiards I
This course is an activity course designed to provide instruction in beginning pocket billiards as a lifelong recreational sport. Beginning billiard skills, rules, regulations and courtesies will be covered as well as stance, grip, stroke, aiming, and follow through.

PEA-117 Bowling I
This course is an activity course that provides instruction in beginning bowling skills, rules and regulations, and courtesies. This course has emphasis on the basic approach, delivery, follow through, and scoring.

PEA-124 Cross-Country Skiing I
This course is an activity course that provides instruction in equipment, technique, appropriate terrain and conditions, and safe practice.

PEA-132 Fishing I
This course is an activity course that provides instruction in equipment, line tying, casting, types of bait, and safe practice.

Western Iowa Tech Community College 2013-2014 Catalog
800.352.4649 or www.witcc.edu
PEA-134 Golf I
This course is an activity course that provides instruction in beginning skills, rules and regulations, equipment and supplies, safety factors, plus courtesies. This course includes basic swing along with chipping and putting. Spring, Summer

PEA-138 Lifeguard Training I
This course teaches the duties and responsibilities of lifeguards to prevent and respond to aquatic emergencies and procedures in a professional manner. Participants may become certified as an American Red Cross Lifeguard upon successful completion of the American Red Cross Lifeguard exam. This course includes training in CPR, First Aid, Oxygen Administration, and Preventing Disease Transmission. Participants must be able to perform Red Cross skill standards.

PEA-142 Physical Conditioning-Fitness Center I
This course is designed for individuals interested in improving total fitness via an aerobic and weight based conditioning program. The course will include an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. Weight training equipment, bicycle ergometers, treadmills, stair machines, and other aerobic equipment will be used to elicit improvements in physical fitness. Fall, Spring

PEA-148 Physical Fitness I
This course builds fitness knowledge and fitness level through individualized program on exercise machines. An exercise program will be developed to meet each student’s need and the fitness level will be monitored throughout the course. Fall, Spring, Summer

PEA-164 Swimming I
This course is an activity course that provides the fundamental knowledge of swimming techniques and overcoming the fear of the water. Instruction in breath control, basic strokes, plus elementary diving and water safety skills will be provided.

PEA-174 Tennis I
This course is an activity course that provides instruction in the basic techniques and fundamental skills of tennis such as basic strokes (forehand, backhand, and serve), playing strategy, terminology, scoring, and rules.

PEA-176 Volleyball I
This course is an activity course that provides instruction in volleyball and the various skills necessary to participate in this life long sport.

PEA-181 Water Safety Instruction I
This course will qualify individuals for serving as a water safety instructor. It will help ensure participants' health and safety and will provide information and skill development sessions necessary to conduct and teach swimming and water safety courses. Participants must successfully complete a pre-course skills test and written examination to meet Red Cross standards. Minimum age is 16 years.

PEC – Coaching Officiating

PEC-110 Coaching Ethics, Techniques and Theory
This course studies the theory and techniques of coaching the interscholastic athlete and the interscholastic team, as well as the related responsibilities, duties, and problems. This is one of four courses leading to the coaching authorization issued by the Iowa Department of Education as a head coach or assistant coach of any interscholastic athletic activity. Completion of this course after July 2000 fulfills the Iowa State coaching endorsement ethics requirement. Fall, Spring, Summer

PEC-115 Athletic Development and Human Growth
This course introduces concepts in sports psychology for elementary school age children and adolescents. Physical, psychological, and social growth is examined as they relate to physical activity and competitive athletics. This is one of four courses leading to the coaching authorization issued by the Iowa Department of Education as a head coach or assistant coach of any interscholastic athletic activity. Fall, Spring, Summer

PEC-120 Body Structure and Function
This course is an introduction to the physiological processes and anatomical features of the human body which are related to and affected by physical activity and training. This is one of the four courses leading to the coaching authorization issued by the Iowa Department of Education as a head coach or assistant coach of any interscholastic athletic activities. Fall, Spring, Summer

PEC-126 Athletic Injury Prevention
This course introduces conditioning programs and training methods that tend to prevent athletic injuries. This course provides basic skills in injury procedures, while providing practical experience in taping techniques. This is one of four courses leading to the coaching authorization issued by the Iowa Department of Education as a head coach or assistant coach of any interscholastic athletic activity. Fall, Spring, Summer

PEC-170 Sports Officiating: Basketball
This course teaches methods, material and techniques of officiating basketball as a team sport including rules of the game and the court mechanics. It also provides opportunity to become a licensed official in Iowa for this sport.

PEC-173 Sports Officiating: Softball, Baseball
This course teaches methods, material and techniques of officiating softball and baseball as a team sport including rules of the game and court mechanics. This course provides opportunity to become a licensed official in Iowa for this sport.

PEC-174 Sports Officiating: Soccer
This course teaches methods, material and techniques of officiating soccer as a team sport including rules of the game and court mechanics. This course provides opportunity to become a licensed official in Iowa for this sport.

PEC-176 Lacrosse Officiating
This course teaches methods, material and techniques of officiating lacrosse as a team sport including rules of the game and field mechanics. This course provides opportunity to become a licensed official in Iowa for this sport.

PEC-177 Football Officiating
This course teaches methods, material and techniques of officiating football as a team sport including rules of the game and field mechanics. This course provides opportunity to become a licensed official in Iowa for this sport.

PEC-178 Volleyball Officiating
This course teaches methods, material and techniques of officiating volleyball as a team sport including rules of the game and court mechanics. This course provides opportunity to become a licensed official in Iowa for this sport.

PEH – General Physical Education and Health

PEH-102 Health
This course is a study of contemporary knowledge concerning attitudes and practices, which promote and maintain the present and future health of the individual and community. This course emphasizes the prevention of disease and a positive health attitude. Focuses on such topics as stress, physical fitness, nutrition, drugs, chronic conditions and sexually transmitted diseases. Fall Updated 5/21/13

PEH-162 Introduction to Physical Education
This course examines the foundations (historical, philosophical, psychological, physiological, and sociological) of physical education, health education and recreation, and their relationship. This course explores professional career opportunities, personal qualifications, and professional organizations and publications. Fall

PHI – Philosophy

PHI-101 Introduction to Philosophy
This course introduces a broad spectrum of philosophical questions and perspectives, with an emphasis on the systematic questioning of basic assumptions about reality, knowledge, meaning, and values. Fall, Spring, Summer

PHI-105 Introduction to Ethics
This course introduces fundamental theories of moral behavior and examines important concepts and arguments used in moral reasoning, and apply ethical theories to contemporary personal and social issues. Fall, Spring, Summer

PHI-111 Basic Reasoning
This course introduces the art of thinking as applied to critical evaluation of information, the construction and evaluation of deductive and inductive arguments, and the rational and persuasive defense of ideas. Fall, Spring, Summer
PHR – Pharmacy Tech

PHR-105 Introduction to Pharmacy Technician 3
This course is designed to provide the student with basic knowledge about community and institutional pharmacy practice. Topics include: Orientation to Technician duties, Medical Terminology, Introduction to Institutional Pharmacy Practice, Introduction to Community/Ambulatory Pharmacy Practice and Pharmacy Calculations. Person taking this course should have basic reading comprehension skills and high school algebra.

PHR-120 Pharmacology for Pharmacy Technician 3
This course is designed to introduce the student to the basic concept of pharmacology as well as the biological factors affecting the actions of drugs for each pharmacological classification. This course is designed for the pharmacy technician and is the second of three courses in the Pharmacy Technician Certificate program. The course is also appropriate to update the knowledge of other health care professionals who participate in the delivery of medications in a variety of settings. Prerequisite: PHR-105

PHR-947 Pharmacy Technician Practicum 1
This course provides the student with the opportunity to learn the clinical skills required to function as a Pharmacy Technician. Students will also have the opportunity to demonstrate clinical applications of skills and to assume the role of the Pharmacy Technician. They will then apply and practice these skills in the institutional and/or retail pharmacy setting under the direct supervision of a pharmacist. Prerequisite: PHR-105; Corequisite: PHR-120

PHS – Physical Science

PHS-120 Exploring Physical Science 4
A combined lecture and lab class. Topics covered come from physics, astronomy, chemistry, geology and meteorology. While this course will be focused primarily on skills elementary education majors need, anyone who wants a more conceptual and hands-on approach to science will be welcome in the class. There are no prerequisites. Fall, Spring, Summer

PHS-151 Introduction to Astronomy 3
A survey of astronomy. Topics include the solar system (sun, planets, and moons), stars, galaxies, cosmology, and history of astronomy. Observational laboratory included. Fall, Spring

PHS-166 Meteorology Weather & Climate 4
This combined lecture and lab class is designed to introduce students to meteorological concepts. Emphasis is placed on the characteristics and composition of the atmosphere, weather observation, atmospheric stability and circulation, atmospheric storms, climatology, and meteorological applications. Students should have well developed basic mathematical skills.

PHT – Commercial Photography

PHT-103 Print Presentation Techniques 3
This course emphasizes fundamental print finishing methods used in professional photography. Students experience corrective artwork and finishing methods used to enhance a photograph’s overall presentation. Instructor consent is required. Fall

PHT-104 Introduction to Lighting 3
This course focuses on the elements of lighting, exposure, shadows, artificial and natural lighting as it pertains to photography. Students learn to use a variety of lighting techniques to enhance studio portrait photography. Corequisite: ART-186; Fall

PHT-107 Digital Darkroom 2
This course is designed to provide students with a working understanding of electronic images, digital software, and digital workflow. Emphasis is on how to handle image workflow to produce a professional photographic print from digital files and finishing methods used to enhance a photograph’s overall appearance. Corequisite: ART-186; Fall

PHT-202 Basic Portraiture 3
This course presents an overview of the professional portrait field. Instruction includes studio equipment and basic lighting patterns utilizing natural light and studio lighting. Traditional posing and essential elements that ensure client satisfaction are emphasized. Prerequisite: ART-186, PHT-104; Spring

PHT-204 Basic Commercial Photography 3
This course presents an overview of a profession in commercial still photography. Photographic techniques, professional expectations, types of assignments, working conditions, types of photography tools used, studio procedures, and equipment requirements will be discussed. Simple commercial techniques will be applied in realistic assignments. Prerequisite: ART-186, PHT-104; Spring

PHT-207 Advanced Digital Darkroom 3
This course is designed to expand students’ understanding of digital software, digital manipulation, and digital workflow. Advanced techniques for manipulation and conversions are taught. Asset management procedures are stressed. Instructor consent is required. Fall

PHT-208 Basic Photojournalism 3
This combined lecture/lab course focuses on photojournalism as a profession and leads to publishable photographs through practical assignments. Students investigate techniques and working styles of distinguished photojournalists. Corequisite: ART-186; Fall

PHT-214 Advanced Lighting 3
This course builds on the introductory lighting class. Exploration of the elements of lighting, exposure, shadows, artificial and natural lighting as it pertains to photography are continued. Students learn to use a variety of lighting techniques to enhance their photography. A portfolio presentation is required upon completion. Instructor consent required. Prerequisite: ART-186, PHT-104, PHT-204; Fall

PHT-230 Advanced Portrait Photography 3
This course is designed to assist the student in learning advanced portrait techniques and the business procedures needed to start and maintain a portrait studio. The course creates an awareness of the work environment the student will enter as an assistant. This course builds on the skills learned in Basic Portraiture and will include various portrait assignments in the studio, outdoors and on location. A portfolio presentation is required upon completion of the class. Instructor permission required. Prerequisite: ART-186, PHT-104, PHT-202; Spring

PHT-236 Advanced Commercial Photography 3
Advanced commercial photography builds on the skills learned in Basic Commercial Photography. Students study studio and location commercial photography techniques with an emphasis on advertising photography. Studio operation procedures related to pricing, work flow, and scheduling are presented. A portfolio presentation is required upon completion. Instructor consent required. Prerequisite: ART-186, PHT-104, PHT-204; Spring

PHT-239 Advanced Photojournalism 3
This course prepares students for future employment with newspapers and/or magazines. Students learn layout, cutline writing and photo editing work. Portfolio presentation is required upon completion. Instructor permission is required. Fall, Spring

PHT-243 Wedding Photography 3
This course presents an overview of the professional wedding field. The lessons will include instruction on equipment, lighting and posing utilized for photographing a wedding. The class also covers marketing, sales techniques and the day-to-day business procedures needed by the photographer to be successful in the wedding field. Instructor permission required. Prerequisite: ART-186, PHT-104; Spring

PHT-298 Photography Capstone Experience 2
This course is designed to provide students with the opportunity to apply the skills and knowledge from prior learning in the Professional Photography program. Students explore and analyze topics within the discipline of professional photography to meet their individually defined goals with approval of the instructor. They also assemble and present a body of work in a portfolio of images appropriate to their professional, educational or personal goals. The course concludes with a public exhibition of the students’ work. Instructor consent required. Spring

PHT-947 Photography Practicum 1
This course is designed to allow the student to work, generally on campus, in a faculty supervised activity with well-defined expectations, activities and outcomes, applying the knowledge and skills from prior learning. This will be a coordinated effort between the student, faculty member(s), and the work supervisor involving evaluations and assessment. This course may be repeated for credit. Prerequisite: Instructor consent required. Spring
**PHY – Physics**

**PHY-106 Survey of Physics** 4

A combined lecture and lab course focusing on physics applications. During the course of the semester, students will be introduced to various topics in mechanics (especially forces), thermodynamics, wave motion, properties of matter, and modern physics. Students will learn about light, sound, and how to build simple optical instruments. Additional topics in nuclear physics will be covered. Prerequisite: MAT-102.

**PHY-162 College Physics I** 4

A combined lecture and lab course. Forces acting on bodies and their relationship to friction, motion, momentum, work, and energy in the field of mechanics; fluid mechanics, wave motion, and sound. Prerequisite: MAT-121; Fall

**PHY-172 College Physics II** 4

A combined lecture and lab course. A continuation of Physics I; optics, electricity and magnetism, heat and thermodynamics, quantum physics, relativity, nuclear and particle physics. Prerequisite: PHY-162; Spring

**PHY-212 Classical Physics I** 5

A combined lecture and lab course. Vectors, kinematics, Newton’s laws, linear and angular momentum, gravitation, energy, simple harmonic motion, wave motion, fluid mechanics, heat, and thermodynamics. Laboratory included. Corequisites: MAT-211; Fall

**PHY-222 Classical Physics II** 5

A combined lecture and lab course. Continuation of Calculus Physics I; wave motion, sound, electricity, magnetism, optics, and introduction to modern physics. Prerequisite: PHY-212; Spring

**PNN – Practical Nursing**

**PNN-624 Nursing I** 9

This is a combined course that includes: classroom, lab, and clinical. Nursing I provides an overview of the nursing program at Western Iowa Tech Community College and the role of the individual as a student, introducing the student to the practical nurse’s role in the health care environment. Concepts of health, illness, and environment as they relate to nursing practice are discussed. Students are introduced to the principles of communication, elements of the nursing process, and roles of caregiver, manager, and member of profession. Emphasis is placed on predictable needs of the client utilizing Gordon’s Functional Health Patterns within the nursing process. Critical thinking is inherent in the nursing process and incorporated throughout the course. Prerequisites for hybrid online section: proof that all required support courses for the PN Program have been completed. Advisor permission required. Corequisites: SDV-108, BIO-151, BIO-169, PSY-111; Fall, Spring

**PNN-625 Nursing II** 9

This is a combined course that includes: classroom, lab, clinical, and preceptorship. Nursing II prepares the student to safely manage the care of clients throughout the life span by assuming the practical nurse role of caregiver, manager, and member of profession. Concepts of health, illness, and environment as they relate to nursing practice are discussed. Emphasis is placed on predictable needs of the client utilizing Gordon’s Functional Health Patterns within the nursing process. Critical thinking is inherent in the nursing process and incorporated throughout the course. Clinical preceptorship provides an opportunity for students to mentor with a licensed practical nurse (LPN). Students will practice clinical and leadership skills necessary to successfully transition into the role of an entry-level LPN. Focus is placed on the enhancement of leadership and collaboration skills, organization, supervision, delegation, prioritization, and management of multiple clients in a long term care setting. Advisor permission required. Corequisites: BIO-174, PSY-121; Fall, Spring

**PNN-805 Practical Nursing Principles and Concepts Review** 2

A two-semester hours course involving interactive review. This course is designed to integrate and review nursing care for clients within the scope of practical nursing education, and review strategies in taking NCLEX-PN examination. Fall, Spring

**PNN-835 LPN Supervising in Health Care Facilities** 2

This course is designed to provide the student with the leadership skills necessary to perform as a supervisor in long term health care. This course meets all objectives and requirements of the Iowa Board of Nursing for the LPN Supervisor training which is mandatory for LPN’s who are working as supervisors in the long term care setting. Prerequisite: Must be a licensed practical nurse. Fall, Spring, Summer

**PNN-851 IV Therapy: Concepts & Techniques** 2

This course is designed to provide the theoretical concepts and skills associated with intravenous therapy. The areas of discussion include anatomy and physiology, infection control, methods of infusion, care and maintenance, necessary equipment and assembly, venipuncture skills, and potential complications. Successful completion of the classroom and clinical components by the licensed practical nurse (LPN) meets the Iowa Board of Nursing requirements for the LPN to perform procedures related to the expanded scope of practice for intravenous therapy. This course is also appropriate as an intravenous therapy refresher course for registered nurses and allied health professionals. Prerequisites for the LPN: 1) Hold a current unrestricted Iowa license as an LPN; 2) Documentation of 2080 hours of practice as an LPN; 3) Employed in a licensed hospital, a licensed skilled nursing facility or a certified end-stage renal dialysis unit whose policies allows the LPN to perform procedures related to expanded scope of IV therapy; and 4) Achieve a score of 90% on the state LPN IV math pre-test.

**PNN-853 IV Therapy: Concepts & Techniques** 3

This course is designed to provide the theoretical concepts and skills associated with intravenous therapy to LPNs working in a licensed hospital, licensed skilled nursing facility or a certified end-stage renal dialysis unit whose policies allows the LPN to perform procedures related to expanded scope of IV therapy; and 4) Achieve a score of 90% on the state LPN IV math pre-test. Successful completion of the classroom and clinical components by the licensed practical nurse (LPN) meets the Iowa Board of Nursing requirements for the LPN to perform procedures related to the expanded scope of practice for intravenous therapy. The course is also appropriate as an intravenous therapy refresher course for registered nurses and allied health professionals.

**POL – Political Science**

**POL-111 American National Government** 3

An introduction to the American system of government, including the U.S. Constitution. Basic philosophies, general principles of federalism, civil liberties, public opinion, political parties and interest groups, the electoral process, and the structure and function of national government will be covered. Fall, Spring, Summer

**POL-112 American State and Local Government** 3

An analysis of American politics and government at the state, local, and municipal level. Historical developments and operations, the political economy, and cross-comparisons of various state and local governments, with special emphasis on Iowa, will be covered. Fall, Spring, Summer

**POL-121 International Relations** 3

An introduction to the study of foreign policies, diplomacy, economics, security, and organizations. Current problems in international relations will be addressed. Fall, Spring

**POL-125 Comparative Government and Politics** 3

A comparison of the governments and politics of major world powers. Specific attention will be paid to political culture, parties, electoral process, and executive, legislative, and judicial systems. Fall, Spring

**POL-151 Constitutional Rights** 3

An introductory-level political science course on constitutional rights and public policy designed to prepare students for a variety of subsequent courses in political science and American government. Examines such issues as capital punishment, affirmative action, abortion, executive privilege, and national security vs. freedom of the press. Fall, Spring

**POL-201 The U.S. Constitution** 3

Focuses on the historical evolution of the U.S. Constitution with emphasis on its antecedents, interpretation, and change. Topics include a study of the Constitution’s historical background and its basic features, a study of the seven articles and twenty-six amendments, and an examination of current topics. Fall, Spring
PRL – Paralegal

PRL-101 Paralegal Studies Orientation 3
This course will introduce students to the paralegal profession and the basic ethical principles which control those working in the law. An examination of the legal system, with emphasis on Iowa court structure, is included. Students will be introduced to the law library, become familiar with sources of legal authority, legal analysis and writing as well as the specific functions and duties of the paralegal within the law. Prerequisite: Required CPT score. Fall

PRL-112 Legal Research and Writing I 3
This course provides an intensive introduction to legal research tools and techniques, including retrieval of case and statutory authority, use of encyclopedias, legal periodicals, treatises and other secondary authority, proper case citation form, and the drafting of internal and external documents. Students examine cases, memos, memoranda, and other written materials. This course will increase skills in process writing, writing fundamentals, and proofreading. Students will also develop skills in writing legal correspondence as well as analytical writing, i.e. briefing cases, legal memoranda, persuasive writing, drafting pleadings, motions, legal briefs, and drafting discovery documents. Prerequisite: PRL-281, ENG-106; Fall

PRL-113 Legal Research and Writing II 3
This course is a continuation of Legal Research and Writing I and is intended to familiarize students with the problems and procedures in legal research and writing. This course covers advanced topics in legal research and writing. Topics include more complex legal issues and assignments involving preparation of legal memos, briefs, and other documents as well as the advanced use of electronic research methods. Prerequisite: PRL-101, ENG-105, ENG-106, PRL-112; Spring

PRL-118 Computerized Legal Research 1
This course is designed to help students more efficiently research applicable statutes and case law via electronic database providers such as Lexis and Westlaw as well as explore secondary sources like legal encyclopedias and law reviews in an online environment. Additionally, the student will learn how to validate the authority of a case or statute. Prerequisite: PRL-112; Spring

PRL-131 Torts and Litigation I 3
This course introduces basic areas of law dealing with civil wrongs, with coverage of intentional torts, negligence, malpractice, defamation, joint and vicarious liability, auto insurance, and workers’ compensation. It also defines basic principles of assisting the law office with matters concerning jurisdiction, venue, preparing basic pleadings, discovery documents, pretrial and post-judgment motions, managing the case file, attending to service of process, and assisting in the courtroom. Prerequisite: PRL-101; Fall

PRL-161 Family Law 3
This course emphasizes substantive law and provides an overview of common procedures related to domestic relations law, including the formation and dissolution of marriage, marital property, child custody and support and related matters. In addition, students will receive instruction regarding skills needed in client interviewing, organization of financial records, answering of interrogatories and request for production of documents and ethical guidelines to which a paralegal should adhere. Prerequisite: PRL-101; Spring, Summer

PRL-190 Criminal Procedure 2
This course examines the fundamentals of substantive criminal law and procedures unique to criminal cases, including an examination of the practical aspects of prosecution and defense, the constitutional rights of the accused, plea bargaining and the unique aspects of a criminal trial. It also examines criminal law concepts and various types of crimes. Students learn about procedure, including but not limited to the rights of crime victims, the law of arrest, interrogation, confessions and constitutional rights as they pertain to a criminal defendant, sanctions and sentencing. Prerequisite: PRL-101, PRL-281; Spring

PRL-191 Criminal Procedure 3
This course examines the fundamentals of substantive criminal law and procedures unique to criminal cases, including an examination of the practical aspects of prosecution and defense, the constitutional rights of the accused, plea bargaining and the unique aspects of a criminal trial. It also examines criminal law concepts and various types of crimes. Students learn about procedure, including, but not limited to, the rights of crime victims, the law of arrest, interrogation, confessions and constitutional rights as they pertain to a criminal defendant, sanctions and sentencing. Prerequisite: PRL-101, PRL-281; Spring

PRL-281 Legal Ethics 2
This course covers legal ethics with an emphasis on how the rules affect legal assistants. Students learn about the regulation of the legal profession including the rules of conduct that govern both attorneys and legal assistants. Topics include the meaning and importance of the unauthorized practice of law, the attorney-client privilege and its related work product doctrine, confidentiality, the rules governing conflicts of interest and other topics ethical in nature. Law office management is also addressed. Prerequisite: PRL-101; Spring

PRL-932 Paralegal Internship 3
This second year Capstone course integrates the application of all course work in the paralegal program. Students use critical thinking and analytical skills developed throughout the program to analyze facts, synthesize information and perform legal work under the direction and supervision of an attorney (or supervisor) and faculty advisor. Students may assist in preparing exhibits and evidence, obtaining information from clients, preparing for pretrial conferences or case settlement meetings, drafting contracts or other agreements, performing legal research and creating internal and external legal memoranda. Prerequisite: Successful completion of required program courses for first and second year and instructor’s consent. 2.0 cumulative GPA and a C (2.0) or better in core courses as defined by the program advisor.

PSY – Psychology

PSY-102 Human & Work Relations 3
This course provides an introduction and overview of human relations skills with an emphasis on practical application. Attention is given to individual and group dynamics with a focus on feelings and attitudes in relation to family, work and day-to-day experiences. Fall, Spring, Summer

PSY-111 Introduction to Psychology 3
This course provides an overview of the study of human behavior with emphasis in the areas of biological mechanisms, development, sensation, learning and memory, motivation, therapy and social influence. The course stresses the impact of both theoretical perspectives and experimental evidence on the formulation of human behavior. Psychological theories and principles are utilized to explain and predict behavior. Fall, Spring, Summer

PSY-121 Developmental Psychology 3
Examines the process of human development, covering the life span of the individual. Includes integration of the basic concepts and principles of physical, cognitive, social, and psychosocial development. Topic areas include: genetics, prenatal development, infancy, childhood, adolescence, adulthood, and death. Prerequisite: PSY-111; Fall, Spring, Summer

PSY-171 Health Psychology 3
This course is designed to give health care students and professionals a better understanding of the psychological aspects of illness, hospitalization and lifestyle choices as they affect health. Some of the topics the course addresses are: the effects of stress on illness, lifestyle choices that can enhance health, how health services are used and misused, the patient-practitioner relationship, and introduction to how hospitals have evolved, and the emotional adjustments to chronic illness and hospitalization. Prerequisite: PSY-111; Fall, Spring, Summer

PSY-211 Psychology of Adjustment 3
A systematic study of life-span development. Individual differences in behavior as well as cultural norms are considered in relation to heredity and environment. Prerequisite: PSY-111; Spring, Summer

PSY-222 Child Psychology 3
Analysis of psychological development of the child in relation to the biological, physical, and social antecedent conditions from prenatal to adolescent stages. Emphasis on contemporary theories of child psychology, including: physical growth and development, personality and social learning, cognition and perception, and language development. Prerequisite: PSY-111; Fall, Spring, Summer

PSY-224 Adolescent Psychology 3
This course explores the rapid physical, social, emotional, and cognitive changes of adolescents. Students distinguish myths about adolescence from research findings and examine the importance of cultural and historical factors in this crucial transition from childhood to adulthood. Prerequisite: PSY-111; Fall, Spring, Summer

PSY-241 Abnormal Psychology 3
Introduction to theories of psychopathology and behavioral changes associated with abnormal behavior. Emphasis on ethical issues of diagnosis

Western Iowa Tech Community College 2013-2014 Catalog 204 800.352.4649 or www.witcc.edu
and treatment, and major diagnostic categories such as schizophrenia, organic brain disorders, and personality disorders. Prerequisite: PSY-111; Fall, Spring, Summer

PSY-248 Counseling Theory 3 This course provides students the opportunity to survey a broad range of systemic theories used in counseling. Areas of focus include systems theory, the history of family counseling, family development and family/couple theories of counseling. Implications regarding diversity and sociocultural influences are highlighted concurrent with each theory. Prerequisite: PSY-241; Fall

PSY-251 Social Psychology 3 Effects of others on the individual in such areas as self-concept, aggression, altruism, conformity, attitudes, sex roles, liking and attraction. Covers group dynamics and leadership, theories of social behavior and research methods. Prerequisite: PSY-111; Fall, Winter, Spring, Summer

PSY-261 Human Sexuality 3 Focuses on normal sexual development, human sexual responses, and common sexual problems. It provides factual information on human sexuality and raises practical questions about behavior. It also helps students examine and evaluate their views and values concerning sexual behavior. Prerequisite: PSY-111

PSY-295 Co-Occurring Addictive & Mental Disorder 3 This course considers prevention topics, such as harm reduction, the war on drugs and legalization. Practical content includes assessment, intervention methods and treatment outcome evaluation with an emphasis on the empirical literature. A wide variety of clinical methods and issues are reviewed and evaluated. Examples include: the validity of self-reports; motivational interventions; relapse prevention; tolerance; physical dependence; self-help groups; natural recoveries (i.e., without formal treatments); and cost-effective and efficient approaches to treatment. Prerequisite: PSY-241, PSY-248; Fall, Spring

PSY-932 Internship 1 This course provides on-the-job experience and practical application of the theories and concepts studied in Chemical Dependency/Co-Occurring counseling course work. It involves a coordinated effort between the student, Western Iowa Tech Community College faculty members and a work supervisor at the agency site. Students will be required to complete a minimum of 64 hours at an approved work site. Corequisite: PSY-295

PTA – Physical Therapist Assistant

PTA-104 Introduction to Physical Therapy 1 This course is designed to give the student an overview of the profession of Physical Therapy. The basic concepts of the function of a Physical Therapist and a Physical Therapist Assistant as a member of the health care team will be examined and discussed. This is a hybrid course with live meetings and online assignments.

PTA-130 Activities of Daily Living 4 This is a combined lecture and lab course. It introduces principles and techniques of client/patient handling and activities of daily living. It provides students with understanding of activities of daily living training including bed mobility, transfer, gait, locomotion, developmental activity, dressing, bathing, eating, and toileting. It includes assistive/adaptive devices and equipment training, body mechanics training, diagnosis measures, and basic clinic safety. Corequisite: HSC-170, HSC-114

PTA-170 Physical Therapy Science I 5 This course provides the physical therapist assistant student in introduction to assessment and measurement and documentation skills, (data collection, therapeutic exercise, patient interaction, pain perception, cultural diversity, confidentiality, joint replacements, orthopedic skills, athletic training, professional literature, and home health. Students participate in implementing a plan of care including discharge planning and home programs. Prerequisite: PTA-130, PTA-104; Corequisite: HSC-127, HSC-218

PTA-189 Physical Agents 3 Course involves didactic and clinical teaching in the areas of thermal agents and electrotherapy. It includes hydrotherapy and related procedures such as massage and wound care. Corequisite: PTA-270, PTA-260

PTA-260 Management of Clinical Services 3 Course is designed to introduce the student to the principles of management and administration of physical therapy services. Cooperative learning will focus on levels of authority and responsibility, time management, supervisory process, performance evaluations, policies and procedures, fiscal considerations, and quality assurance. The course also includes service learning. Corequisite: PTA-270, PTA-189

PTA-270 Physical Therapy Science II 5 A combined lecture and lab course. Provides the physical therapist assistant student a progression of Physical Therapy Science I in the specialized areas of neurologic rehabilitation, pediatrics, orthopedics/prosthetics, cardiopulmonary, wellness, work conditioning, burns, women's health, geriatrics, and professional literature. Prerequisite: PTA-170; Corequisite: PTA-189, PTA-260, HSC-265; Fall

PTA-441 PTA Clinical Affiliation I & Seminar 3 This is the initial full-time clinical experience under the direct supervision of a physical therapist or physical therapist assistant at an affiliating physical therapy center. Following the clinical, students participate in a seminar. Prerequisite: PTA-270, Spring

PTA-442 PTA Clinical Affiliation II and Seminar 4 This is the second of three full time clinical experiences under the direct supervision of a physical therapist or physical therapist assistant. Following the clinical, students participate in a seminar. Prerequisite: PTA-441; Spring

PTA-443 PTA Clinical Affiliation III & Seminar 5 This course is the third in a series of three full-time clinical experiences under the direct supervision of a physical therapist or physical therapist assistant. Following the clinical, students participate in a seminar. Prerequisite: PTA-442; Spring

RDG – Reading

RDG-038 College Prep Reading I 3 This course is designed for students who need to improve reading skills. The emphasis is on phonics, vocabulary development, and basic comprehension skills particularly in recognizing main ideas and supporting details. Prerequisite: The approval of WITCC’s official placement test(s). Credit for this class does not apply to graduation requirements. Fall, Spring, Summer

RDG-039 College Prep Reading II 3 This course is designed for students who need to develop reading and reasoning skills for college work. The emphasis is on strengthening comprehension and vocabulary through appropriate reading strategies. Prerequisite: The approval of WITCC’s official placement test(s). Credit for this class does not apply to graduation requirements. Fall, Spring, Summer

REL – Religion

REL-101 Survey of World Religions 3 This course explores the world view, doctrines, and practices of the following major religions: Tribal, Hindu, Buddhist, Confucian/Taoist, Jewish, Christian, Muslim, and New Age. It examines themes such as view of the world, views of God, condition of humankind, requirements for a moral life, etc. Fall, Spring

REL-150 Introduction to the Bible 3 This course introduces the practice of the contextual method of reading a text, as applied to the biblical materials. It asks: What kind of material is this? Who wrote it? To whom were they writing in their own time? What were they trying to say to the people in that situation? The course is not devotional or applicational, but literary and historical. Fall, Spring, Summer

SDV – Student Development

SDV-030 Basic College Skills 6 This combined lecture and lab developmental course will assist students in obtaining skills critical to reaching their career objectives. Topics include career development, memory development, text book reading, note-taking and test-taking strategies. Emphasis will be placed on transferable life skills such as personal responsibility, goal setting, health, team/ community building, and interpersonal skills. Credit for this class does not apply to graduation requirements.
SDV-108 The College Experience
The course introduces students to the College's expectations, environment, and resources so that students may become more competent participants in the learning process.

SDV-114 Strategies for Academic Success
Students gain skills and knowledge necessary to reach educational objectives. Topics include career development, decision-making, memory development, reading and note-taking techniques, test-taking skills, time management, and stress management. Students also develop their communication skills. Each student will exit with a career development plan. Fall, Spring, Summer

SDV-153 Pre-Employment Strategies
This course is designed to prepare students for a competitive job market. Elements include self-analysis of abilities and goals, job inquiry and research, resume and portfolio preparation, job application and follow-up letters, job application forms, interviewing techniques, and projecting into the future workplace. College Typing I or Keyboarding is suggested but not required. Fall, Spring, Summer

SER – Sustainable Energy Resources

SER-110 Basic Renewable Fuels
This course explores and defines renewable fuel sources, production and distribution. Students will learn the basics of conventional and cellulosic ethanol production. Plant equipment and operations and chemical plant controls and instrumentation are introduced, as well as regulations and environmental aspects of biodiesel.

SER-113 Blue Print Reading for Energy Techs
This course is designed to give meaning to the lines and symbols found on a set of blueprints. Individual working in an energy producing field rely on drawings and prints to build and repair energy producing objects and structures. Students will learn to read and interpret what an architect or an engineer is trying to convey on a set of blueprints. Upon completion of this course an individual will recognize and understand the application of lines, symbology and building terms as they apply to the electrical, mechanical, hydraulic, and maintenance trades.

SMM – Social Media & Marketing

SMM-101 Social Media Explored
This course explores the history and future of social media in relation to marketing, branding and community building. Course content includes discussion of audience engagement, political and social activism, media, advertising and marketing. Current social media tools are used within this course to enhance understanding of the course material.

SOC – Sociology

SOC-110 Introduction to Sociology
This course is a survey of the fundamental concepts used in the study of human social interaction with an emphasis on group aspects of social behavior. Subject areas include research methods, theory, culture and social structure, socialization, groups and formal organizations, deviance and social control, stratification, race and ethnicity (including whiteness), major social institutions, and social change. Fall, Spring, Summer

SOC-115 Social Problems
This course is a study of selected problems of modern society, primarily in the United States, their nature, development, social causes and alternative solutions. It includes such topic areas as racial and sexual discrimination, urban and rural problems, crime and delinquency, family and generational problems, health and medical care, social deviance, substance abuse and such global problems as population, world hunger and international conflict. This course is required component for USD and BCU Social Work transfer programs and the Addictions Counseling Associates Degree program. Fall, Spring, Summer

SOC-120 Marriage and Family
This course examines the family as a basic institution. Special focus is given to the marital life cycle: courtship, dating, marriage, the childbearing years, parent-child relationships and marriage during the middle and older years. This course examines the implication of marital dissolution and the family, as they exist under modern social conditions. Focus is given to contemporary variations of the family commonly referred to as intimate relationships (co-habitation, hooking up and gay marriage). This course is a required component for USD, BCU and BVU Social Work transfer programs and the WITCC Addictions Counseling Associate of Arts degree. Fall, Spring, Summer

SOC-160 Introduction to Social Work
This conceptual and theoretical framework presented in this course provides students the tools to practice social work in a variety of settings. The format of this class provides a combination of classic theory, new research and applied experience. This course is required for transfer to Briar Cliff University and University of South Dakota in social work. Fall, Spring, Summer

SOC-180 Social Work Interactional Skills
This course focuses on students gaining an understanding and beginning mastery of interpersonal and interactional helping skills utilized by social workers in practice. The organization of the course and the learning methods used focus on both didactic and experiential learning. The content of the course is taught through lecture, discussion and interactional laboratory sessions in which the students learn through individual and group exercises, role play and activity experiences. This course is required for social work students transferring to USD and for WITCC's Addictions Counseling program. Spring

SOC-200 Minority Group Relations
This course acquaints the student with the sociological approach to understanding issues facing diverse populations. This course provides insight into barriers faced by race and ethnic groups and ways in which these barriers are navigated. The study of race and ethnicity includes a comprehensive examination of whiteness as a race, and the privilege of whiteness nationally and globally. Issues of race and ethnicity are presented through a global lens, primarily through theories of Diasporas. Completion of SOC-110, Introduction to Sociology, is recommended. This course is required of social work students transferring to BCU, BVU and for WITCC Addictions Counseling students. Fall, Spring, Summer

SOC-210 Men, Women and Society
This interdisciplinary course is designed for first or second year students to explore men's and women's experiences in American society and the role that ideas about sexual differences have played in shaping those experiences. Areas of inquiry will include, but are not limited to, the following: the construction of gender roles and sexuality; the relationship between gender and other social, political, and legal structures and institutions; and the interplay of gender with race, class, and ethnicity in cultural perceptions and expectations of both men and women. This course will strive to assist students in formulating questions about gender as it relates to their on-going work in various disciplines across the curriculum. Fall, Spring, Summer

SOC-212 Diversity
This course utilizes an interdisciplinary and intersectional approach to studying gender, race, class, sexuality and other issues of diversity. The curriculum highlights the duality of oppression and privilege and the ways in which race, gender, class and sexuality shape daily life. Special focus is on learning how to demonstrate course concepts as social action. Social justice is practiced as students become educated in these concepts of diversity and engage in diversity conscious social action. Fall, Spring, Summer

SOC-220 Sociology of Aging
This course helps the student be informed on national and global issues of aging. Because of expanded life expectancy, aging is an extended developmental stage with multi-faceted and sometimes conflicting social expectations. This course examines ways in which adults navigate this complex developmental stage. This course is interdisciplinary and includes perspectives from sociology, psychology, social work, anthropology, biology, health science and history. Fall, Spring, Summer

SOC-247 Chemical Dependency & Society
This course is a study of the basic concepts of chemical dependency and society. Emphasis is placed on understanding chemical dependency by examining the socio-cultural patterns of dependency at the micro, mezzo and macro levels. This course also explores the relationship between chemical dependency, behavioral compulsion and mental health as influenced by societal factors. Focus is on understanding the etiology, treatment, prevention, family dynamics, community response and societal contributors of chemical dependency and addiction. Prerequisite: SOC-110; Spring
SOC-250 Sociology of Deviance 3
This course consists of theoretical analysis of the relation of deviant group behavior and subcultures/countercultures to community standards of conventional behavior as expressed in laws and norms. Analysis of social control settings and mechanisms and the relationship between social deviance and social control efforts at both the micro and macro levels are emphasized. This course is a required component for USB and BCU Social Work transfer programs and WITCC’s Addictions Counseling Associate Degree program. Fall, Spring

SOC-932 Internship 1
This course provides students with on the job experience and practical application of the theories and concepts studied in Addictions counseling course work. It involves a coordinated effort among the student, Western Iowa Tech Community College faculty members and a work supervisor at an agency site. Students are required to complete a minimum of 64 hours at an approved work site for this course. These hours are only a part of the total 1000 hours necessary for full certification and must have completed PSY-248 Counseling Theory and SOC-247 Chemical Dependency & Society with a grade of C (2.00) or higher in order to enroll in each course. Instructor permission required.

SPC – Speech

SPC-112 Public Speaking 3
The course combines theory of speech communication with public speech performance skills. Emphasis is on speech delivery, preparation, organization, support, and audience analysis. Practice of skills is through presentation and exercise. Fall, Spring, Summer

SPC-122 Interpersonal Communication 3
This course teaches principles of effective communication in one-to-one relationships and in small groups. It focuses on communication theory, listening, self-concept, language, perception, and nonverbal communication. Fall, Spring, Summer

SUR – Surgical Technology

SUR-123 Patient Care Concepts 2
This course is an introduction to the roles and responsibilities of the surgical team when delivering peri-operative patient care and surgical services. Patients’ needs are addressed in addition to patient identification, review of the chart, documentation, surgical positioning, skin preparation, urinary catheterization, specimen care, wound classification, vital signs, hemodynamics, monitoring and discharge planning. Students learn appropriate responses to legal, ethical and moral issues, as well as emergency situations. Instructor consent required. Spring, Fall

SUR-127 Introduction to Surgical Technology 3
This course provides an in-depth introduction of the role and responsibilities of the surgical technologist, an integral health care professional in the delivery of peri-operative patient care and surgical services. Introduction to Surgical Technology includes characteristics of the profession, interpersonal relationships, information resources and communication skills. The course correlates the impact of microbiology in relationship to the practice of sterile technique and infection control in the operative setting. Students are introduced to medical terminology, dissection, decontamination and sterilization, aseptic technique, scrubbing, gown and gloving, surgical instruments, equipment and supplies. Instructor consent required. Fall, Spring

SUR-203 Surgical Techniques 8
This combined lecture, lab and clinical course teaches students to prepare the patient, operating room, instruments, equipment and supplies, and perform the daily functions of a surgical technologist in the operating room. Students incorporate safety, sterile technique, and the duties of a surgical technologist during a surgical procedure following OSHA standards. Instruction also covers various surgical procedures; surgical anatomy and pathology; and instruments, supplies and equipment. The supervised clinical practice provides for correlation of theory to practice and development of skills. Instructor consent required. Fall

SUR-228 Surgical Procedures I 3
This course focuses on surgical procedures in the specialty areas of Orthopedics, Plastic Reconstructive and Oral Maxillofacial. Topics include terminology, surgical pathology and the responsibility of the surgical technologist. This course utilizes lecture and supervised clinical practice which provides correlation of theory to practice and development of skills. Instructor consent required. Prerequisite: SUR-127, SUR-123, SUR-203; Spring

SUR-229 Surgical Procedures II 3
This course focuses on surgical procedures in the specialty areas of Neurosurgery, Thoracic, Vascular, and Cardiac surgery. Topics include terminology, surgical pathology, and the responsibility of the surgical technologist. Included is review of all surgical technology curriculum in preparation for national board certification. Instructor consent required. Prerequisite: SUR-228; Spring

SUR-420 Pharmacology for Surgical Technologist 2
This course introduces the fundamental principles for the clinical use of medication in the surgical setting. Emphasis is placed on the role and responsibility of the surgical technologist related to medication, emphasizing the classifications of commonly used medication in surgery, a review of basic mathematics, a thorough knowledge of the systems of measurement, and conversion and application of skills to perform dosage calculation. Emphasis is placed on the role and responsibility of the surgical technologist related to medication, emphasizing the classifications of commonly used medication in surgery. This review of basic mathematics, a thorough knowledge of the systems of measurement, and conversion and application of skills to perform dosage calculation. Emphasis is placed on how the surgical technologist works in conjunction with the pharmacy, the anesthesiologist, and the surgical team when delivering peri-operative patient care and surgical services. Prerequisite: SUR-228; Spring

SUR-525 Surgical Preceptorship 3
This course provides surgical technology students clinical experiences for the application of basic knowledge and skills learned throughout the surgical procedures curriculum. Emphasis is placed on functioning as part of a surgical team, professional interactions with a mentor and demonstrating preparedness for entry level employment. Instructor consent required. Prerequisite: SUR-228; Spring

WEL – Welding

WEL-111 Welding Blueprint Reading 3
A combined lecture and lab course. Presents the use of blueprints for transfer of ideas and information. Covers how to read blueprints with special emphasis on welding blueprints, including lines, views, material descriptions, welding layouts, welding symbols and terms. Emphasizes application of concepts. Prerequisite: MAT-772; Fall, Spring, Summer

WEL-120 Oxy Fuel Welding and Cutting 2
A combined lecture and lab course. Presents basic fundamentals, the operation of equipment, and safety practices. Includes fusion welding and brazing on light gauge metals, cutting on heavy and light gauge metals, and welding of small diameter pipe. Fall, Spring, Summer

WEL-147 ARC Welding Intro (SMAW) 3
This is the first of two courses designed for students to prepare for the AWS Certification. A combined lecture and lab course. Studies safety, heat settings, polarity, and the proper selection of electrodes in the arc welding process. Covers welding on carbon steel plate using visual and destructive methods of determining weld quality to AWS Standards. Prerequisite: WEL-148

WEL-148 ARC Welding Intermediate (SMAW) 3
This is the second of two courses designed for students to prepare for the AWS Certification. A combined lecture and lab course. Studies safety, heat settings, polarity, penetration welding, horizontal and vertical welding, and the proper selection of electrodes in the arc welding process. Covers welding on carbon steel plate using visual and destructive methods of determining weld quality to AWS Standards. Prerequisite: WEL-147

WEL-161 Arc Welding I (SMAW) 6
A combined lecture and lab course. Studies safety, heat settings, polarity, and the proper selection of electrodes in the arc welding process. Covers welding on carbon steel plate using visual and destructive methods of determining weld quality to AWS Standards. Fall, Spring, Summer

WEL-164 Arc Welding II (SMAW) 4
A combined lecture and lab course. Discusses welding codes, distortion, and welding inspection. Provides lab experience in full penetration, horizontal, vertical, and overhead position welds. Exposes student welding with a variety of welding electrodes. Prerequisite: WEL-161; Fall, Spring, Summer

WEL-186 GMAW 4
A combined lecture and lab course. Presents the Gas Metal Arc welding (MIG) process used extensively by industry. Emphasizes hands-on application, metal transfer concepts, GMAW equipment, welding procedures, out of position welding, and safety. Fall, Spring, Summer

WEL-191 Gas Tungsten Arc Welding 3
A combined lecture and lab course. Presents Tungsten Inert Gas (TIG) welding process. Studies equipment use, welding procedures, position welding, welding of common metals and safety precautions. Covers welding in all positions on ferrous and nonferrous metals, and small diameter pipe. Prerequisite: WEL-120; Fall, Spring, Summer
WEL-208 Intro to Fabrication 2
A combined lecture and lab course. An individualized course for developing skills needed in a manufacturing atmosphere such as tool usage, layout methods and material estimation. Provides students the opportunity for plate welding certification. Prerequisite: Assessment and advising. Fall, Spring, Summer

WEL-312 Pipe Welding/GTAW & SMAW 7
A combined lecture and lab course. Covers Pipe Welding in the 5G-6G position. Prerequisite: WEL-164, WEL-191; Fall, Spring, Summer

WEL-330 Welding Fundamentals 1
This course is designed for the student who needs basic welding skills. The four welding processes covered are: Shielded Metal Arc Welding (SMAW or stick), Oxy-Acetylene Welding, Gas Metal Arc Welding (MIG), and Gas Tungsten Arc Welding (TIG). Topics include: safety, setup of equipment, electrode selection, metal transfer, shielding gases, welding distortion control, and the welding of ferrous and nonferrous metals. Lab experience will provide for skill development in these areas. Fall, Spring, Summer

WEL-331 Welding Fundamentals 2
This course is designed for the student who needs basic welding skills. The four welding processes covered are: Shielded Metal Arc Welding (SMAW or stick), Oxy-Acetylene Welding, Gas Metal Arc Welding (MIG), and Gas Tungsten Arc Welding (TIG). Topics include: safety, setup of equipment, electrode selection, metal transfer, shielding gases, welding distortion control, and the welding of ferrous and nonferrous metals. Lab experience will provide for skill development in these areas. Fall, Spring, Summer

WEL-338 Welding Fundamentals 3
This course is designed for the student who needs basic welding skills. The four welding processes covered are: Shielded Metal Arc Welding (SMAW or stick), Oxy-Acetylene Welding, Gas Metal Arc Welding (MIG), and Gas Tungsten Arc Welding (TIG). Topics include: safety, setup of equipment, electrode selection, metal transfer, shielding gases, welding distortion control, and the welding of ferrous and nonferrous metals. Lab experience will provide for skill development in these areas. Fall, Spring, Summer

WEL-700 Robotic Welding 4
A combination lecture and lab course that introduces the student to robots and the application of robotics to the welding industry. Topics of learning include the safety of robotics in industrial application, basic robot programming, the interfacing of the welding power source to the robot and basic weldment fixtureing for the robotic welding process. Students will operate an industrial robotic welding system, using computer and teach pendant modes. Prerequisite: WEL-186; Fall, Spring, Summer

WTT – Wind Energy and Turbine Tech

WTT-103 Introduction to Wind Energy 3
This course will expose students to the many facets of the wind industry. It will cover the history and development of the wind industry, terminology, turbine application, environmental and economic issues, the future of the wind industry, and other related topics. Fall

WTT-131 Wind Turbine Mechanical Systems 2
This course allows students to explore the variety of mechanical systems associated with generating electricity using wind power. Topics include gearboxes, yaw systems, shaft alignment and proper work documentation. Spring

WTT-139 Wind Turbine Maintenance Fundamentals 3
This course provides students with an overview of how wind turbines and their subsystems operate and the types of maintenance required. Students are introduced to established wind industry project standards for the maintenance of wind turbines.

WTT-147 Gauging and Measurement 2
This course provides students an understanding of linear measurement, English/Metric conversion, and how to read and record surface dimensions. Students learn how to accurately use measuring and inspection instruments. Spring

WTT-149 Wind Tech Safety Standards and Procedure 3
This course introduces students to established wind industry project standards for Occupation Health and Safety. Students learn proper techniques and safety standards required for ascending and descending a turbine and identify safety issues or hazards related to climbing.

WTT-151 Wind Turbine System Operations 4
This course covers the operation of the major subsystems in a utility scale wind turbine. Topics include operation maintenance and control of the subsystems, commissioning and decommissioning procedures, and emergency procedures. Prerequisite: WTT-103, ELT-154; Fall

WTT-153 Wind Turbine System Troubleshooting 4
This course gives students a virtual toolbox of tools to assist in the diagnosis and repair of utility scale wind turbine generators. Students are exposed to a number of specialty instruments and testing methods. Prerequisite: WTT-103, ELT-154, WTT-151; Spring

WTT-201 Wind Turbine Site Construction & Location 1
This course will expose students to the various aspects of wind turbine site construction. Students will be engaged in discussions regarding the use of cranes, rigging, tower assembly, and logistics necessary in the construction and commissioning of a wind turbine power production site. Prerequisite: WTT-144; Summer

WTT-204 Wind Turbine Siting 4
This course provides students the opportunity to learn the techniques, methodology, and concepts used to develop proper siting of wind energy projects around the world. Students develop a potential wind site by collecting wind data, assessing potential sites and identifying potential concerns with the sites and ways to address those concerns. Instructor consent required.

WTT-214 Networking and Computer Technology 3
This course provides foundational training in computer and local area networking utilized in wind turbine technology. Troubleshooting minor hardware problems, installing hardware, system configuration, and running diagnostics will be covered. Spring

WTT-225 Data Acquisition and Assessment 4
This course introduces students to wind resource data collection and analysis for use in the development of wind powered generation of electricity. Students also discover how to assess power production of individual wind turbines. Instructor consent is required.

WTT-932 Wind Turbine Internship 4
This course provides students the job experience and practical application of the competencies studied in the Wind Technology course work. It involves a coordinated effort between the student, Western Iowa Tech Community College faculty members, and the work supervisor in the business for these experimental activities. Students are required to complete a minimum of 256 hours at a wind turbine or mechanical/electrical maintenance site or facility. Permission of the instructor is required. Prerequisite: WTT-144 WTT-115; Summer
Western Iowa Tech Community College Campuses

Sioux City Campus
4647 Stone Avenue
PO. Box 5199
Sioux City, IA
51102-5199
(712) 274-6400

Cedar Rapids Campus
3400 13th Avenue
Cedar Rapids, IA
52403-0910
(319) 283-0200

Cherokee Campus
& Conference Center
200 Victory Drive
Cherokee, IA
51012-0845
(712) 225-0238

Denison Campus
11 North 35th Street
Denison, IA
51442-7564
(712) 263-3419

Le Mars Center
940 Lincoln Street SW
Le Mars, IA
51031-0043
(712) 546-7338

Mapleton Center
38491 Hwy. 175 N
Mapleton, IA
51034-7006
(712) 882-2401

Beltway Center
3415 Highway 75 North
Sioux City, IA
51105
(712) 274-6449

800.352.4649 or www.witcc.edu

209 Western Iowa Tech Community College 2013-2014 Catalog
Board and President

Dr. Robert Rasmus
Board President
District III

Russell Wray
Board Vice President
District VIII

Neal Adler
District I

Michael Hunter
District II

William Lyle
District IV

Deborah Cook
District V

Eldon Schroder
District VI

Curt Grigg
District VII

Derrick Franck
District IX
### Faculty and Administration

<table>
<thead>
<tr>
<th>Name</th>
<th>Program/Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derek Albert</td>
<td>ABE/GED/ELL</td>
</tr>
<tr>
<td>Dr. Juline Albert</td>
<td>Administration</td>
</tr>
<tr>
<td>Peter Albright</td>
<td>Computer Networking</td>
</tr>
<tr>
<td>Julie Anderson</td>
<td>Student Services</td>
</tr>
<tr>
<td>Heather Badar</td>
<td>Nursing</td>
</tr>
<tr>
<td>Dirk Bak</td>
<td>Motorcycle/Powersports Technology</td>
</tr>
<tr>
<td>Barbara Baker</td>
<td>ABE/GED/ELL</td>
</tr>
<tr>
<td>Ron Barnes</td>
<td>Police Science</td>
</tr>
<tr>
<td>Tawnya Beermann</td>
<td>Admissions</td>
</tr>
<tr>
<td>Anthony Bell</td>
<td>Air Conditioning, Heating, and Refrigeration</td>
</tr>
<tr>
<td>William Berens</td>
<td>Welding</td>
</tr>
<tr>
<td>Kendra Bergenske</td>
<td>Speech</td>
</tr>
<tr>
<td>Jan Bingen</td>
<td>Computer Networking/Information Systems</td>
</tr>
<tr>
<td>LeAnn Blankenburg</td>
<td>Information Technology</td>
</tr>
<tr>
<td>Lily Bonilla</td>
<td>TRIO Student Support Services/Student Success Center</td>
</tr>
<tr>
<td>Brenda S. Bradley</td>
<td>Human Resources</td>
</tr>
<tr>
<td>Kevin Brady</td>
<td>Information Technology</td>
</tr>
<tr>
<td>Christina Brandon</td>
<td>Educational Talent Search and Upward Bound</td>
</tr>
<tr>
<td>Dr. Rhonda Briggs</td>
<td>Psychology</td>
</tr>
<tr>
<td>Donna Brooks</td>
<td>Marketing and Publications</td>
</tr>
<tr>
<td>Lana Brown</td>
<td>Graphic Design</td>
</tr>
<tr>
<td>Michael D. Brown</td>
<td>Student Activities</td>
</tr>
<tr>
<td>Steve Brown</td>
<td>Information Technology</td>
</tr>
<tr>
<td>Janice Bunton</td>
<td>ABE/GED/ELL</td>
</tr>
<tr>
<td>Mary Chwirka</td>
<td>EMS</td>
</tr>
<tr>
<td>Colleen Clifford</td>
<td>Admissions</td>
</tr>
<tr>
<td>Sandra Colter</td>
<td>TRiO/Student Support Services</td>
</tr>
<tr>
<td>Shane Conley</td>
<td>Motorcycle/Powersports Technology</td>
</tr>
<tr>
<td>Robert Creasey</td>
<td>Psychology</td>
</tr>
<tr>
<td>LaDonna Crilly</td>
<td>EMS</td>
</tr>
<tr>
<td>Donnin Custer</td>
<td>Electronic Engineering Technology</td>
</tr>
<tr>
<td>Sima Dabir</td>
<td>Mathematics</td>
</tr>
<tr>
<td>William Darwin, Jr.</td>
<td>Music</td>
</tr>
<tr>
<td>Nancy Davis</td>
<td>ABE/GED/ELL</td>
</tr>
<tr>
<td>Fran Dejong</td>
<td>Admissions</td>
</tr>
<tr>
<td>Mara Dekat</td>
<td>Residence Life</td>
</tr>
<tr>
<td>Luke Demarest</td>
<td>Information Technology</td>
</tr>
<tr>
<td>Ashley Diediker</td>
<td>Business Operations</td>
</tr>
</tbody>
</table>

800.352.4649 or www.witcc.edu
Marcia Donkersloot  ABE/GED/ELL
Specialist. BS, Northwestern College.

Donald Dorn  Police Science
Instructor. AAS, Western Iowa Tech Community College; BS, MS, Bellevue University. Industry Experience, 10 years.

Eddie Dunn  Distance Learning
Director. BA, University of South Dakota; MS, Southwest Minnesota State University.

Don Duzik  Financial Aid
Director. BA, Briar Cliff University.

Sharon Dykshoorn  Library Services
Manager: AA, Northeast Tech; BA, Wayne State College; MS, Emporia State University.

Donna Eberly  Nursing
Instructor. Diploma, St. Joe School of Nursing; BSN, Briar Cliff University; MS, University of Phoenix. Industry Experience, 14 years.

Steven W. Ebsen  Public Services
Division Chair and The Security Institute Director. BS, University of South Dakota. Industry Experience, 12 years.

Carolyn Ellwanger  College Development
Executive Director. AA, Western Iowa Tech Community College; BS, Bellevue University.

Kelli Engel  Nursing
Instructor. Diploma, RN, St. Luke’s School of Nursing; BSN, Creighton University; MSN, Nebraska Methodist College. Industry Experience, 9 years.

Dr. Leslie Erickson  English
Instructor. BA, MA, University of South Dakota; PhD, University of Nebraska–Lincoln.

Shawn Fick  Job Training Partners
Assistant Director. BA, MA, University of South Dakota.

Curt Fiechtner  Safety and Security
Supervisor. BS, Northern State University.

Michelle Fiechtner  Enrollment Services
Disability Services Coordinator. BS, MS, Northern State University.

Kelli Flack  Nursing
Instructor. Diploma, ADN, Western Iowa Tech Community College; BSN, Briar Cliff University; MSN, University of Phoenix; Industry Experience, 16 years.

Jo Rognes Fokken  JTP/Promise Jobs
Program Coordinator. BA, Luther College.

James P. Frost  Information Technology
Systems Administrator. AAS, Western Iowa Tech Community College; BS, Westmar College.

Joseph Funck  Physical Plant
Custodial/Grounds Supervisor. AAS, Western Iowa Tech Community College.

Deb Gifford  Psychology
Instructor. BS, Morningside College; MED, University of South Dakota.

Janet Gill  Enrollment Services
Dean. BA, Morningside College; MBA, Wayne State College. CFA.

Andrew Gingerich  Independent Filmmaking
Instructor. BA, Minneapolis College of Art Design.

Blanca Gomez  ABE/GED/ELL
Specialist. AA, Western Iowa Tech Community College

Gretchen Gondek  KWIT-KOJI

General Manager. BA, Central College; MA, University of South Dakota.

Susan Grau  Recruitment
Admissions Representative and Career & Industry Recruitment Specialist. BS, Bellevue University.

Kari Hadden  Business/Office Support
Instructor. BS, Morningside College; MS Emporia State University.

Christopher Hall  External Relations
Grants Coordinator: BA, Grinnell College.

Kelly Hannah  Nursing
Instructor. BSN, Briar Cliff University; MS, University of South Dakota; MSN, South Dakota State University. Industry Experience, 20 years.

Cyndi Hanson  Human Resources
Staff Development Director. BA, Briar Cliff University; MS, Drake University, SPHR.

Rosemary Hanson  Interior Design
Instructor. BS, University of Nebraska–Omaha.

Tim Hardyk  Auto Collision Repair Technology
Instructor. Diploma, Western Iowa Tech Community College. Industry Experience, 10 years.

Diane Hargens  Instruction
Associate Dean of Instruction. AA, Western Iowa Tech Community College; BA, Buena Vista University; MBA, Bellevue University.

Corliss A. Hassler  College Effectiveness
Director. BA, MBA, Wayne State College.

Dr. Frank Heffner  Video Game Design
Instructor. BS, Morningside College; MA, EdD, University of South Dakota.

John Heiden  Auto Collision Repair Technology
Instructor. AAS, Western Iowa Tech Community College. Industry Experience, 15 years.

Shauna Heiden  ABE/GED/ELL
Specialist. AA, Des Moines Area Community College; BA Morningside College

Thomas Helzer  Mechanical Engineering Technology
Instructor. AAS, Central Nebraska Technical College; Industry Experience, 13 years.

Emma Hewitt  Marketing and Publications
Director. BA, Creighton University; MS, Rutgers University.

Beatrice Houston  Spanish
Instructor. BA, Briar Cliff University; MA, Morningside College.

Dr. Barbara-Anne Huculak  Physical Therapist Assistant
Instructor. BS, University of Western Ontario; MA, EdD, University of South Dakota.

Amy Hueser  Corporate College
Coordinator. BA, Wayne State College; MA, University of Northern Iowa.

Kyle Hueser  Physical Plant and College Safety
Director. BS, Wayne State College.

Dar Raye Hunwardsen  Corporate College
Project Manager. Certificate, Western Iowa Tech Community College; BS, Bellevue University; MED, Iowa State University.

Wendy Ivarson  Student Support Services
Educational Coordinator. BA, Northwestern College, MA, University of South Dakota.

Pamela Ives  Admissions
Admissions Representative. BS, New Mexico State University.
Theresa M. Jackson  
Instructor. BS, MA, University of South Dakota.

Troy A. Jasman  
Administration  
Vice President of Finance and Administrative Services and Chief Financial Officer. BS, Morningside College; CPA; MBA, Bellevue University.

John Jorstad  
Biological Science  
Instructor. BS, Mount Marty College. MA, University of South Dakota.

Katy Karrer  
Recruitment  
Career Academy Representative. BA, College of Saint Benedict.

Merlyn Kothol  
Financial Aid  
Assistant Director. RCW Certification, Northeast Tech Community College; BS, University of South Dakota; MBA, Wayne State College.

Laura Kellner  
Recruitment Specialist. BS, Iowa State University.

Amber Kilburn  
Recruitment Specialist. BA, Morningside College; MLS, Wayne State University.

Mitzi Kirwan  
Administrative Office Management  
Instructor. BA, Briar Cliff University; MA, University of South Dakota. Industry Experience: 10 years.

Sara Klatt  
TRiO—Student Support Services  
Director, Cherokee and Denison. MA, University of South Dakota.

Lisa Knecht  
Mathematics  
Instructor. BS, MA, University of South Dakota.

George Koetters  
Electrical Engineering  
Instructor. Industry Experience, 26 years.

Bill Koontz  
Corporate College  
Project Manager. AA, Western Iowa Tech Community College; BA, MA, Bellevue University.

John Kraemer  
Automotive Technology  
Instructor. AAS, Northeast Technical Community College. Industry Experience, 17 years.

Jackie L. Krueger  
Dental Assisting  
Instructor. CDA, RDA; Diploma, Western Iowa Tech Community College.

Caroline Kurtenbach  
Student Support Services  
Student Services Specialist. BA, University of Iowa; MA, University of South Dakota.

Chad Lake  
Corporate College  
Industry Outreach Specialist.

Matthew Laposky  
Information Technology  
MIS Software/Data Specialist. AAS, Western Iowa Tech Community College.

Angela Lawson  
Economic Development  
Director. RN, St. Joseph Mercy School of Nursing; BA, Buena Vista University; MS, University of South Dakota.

Charles R. LeMaster  
Library Services  
Librarian. BA, Morningside College; MLS, Western Michigan University.

Helen M. Lewis  
English  
Instructor. BA, Wilkes College; MA, University of Maryland.

Rosanne Lienhard  
Paralegal/Human Resources  
Instructor. BA, Morningside College; JD, University of Iowa College of Law.

Mike Logan  
Information Technology  
Dean. BA, Briar Cliff University.

Sandra Marnell  
Information Technology  
Network Specialist. AA, Western Iowa Tech Community College.

Matthew Mayfield  
Talent Search  
Educational Coordinator. BA and BS, Morningside College.

Jennifer McCune  
Accounting Specialist  
Instructor: AA, Western Iowa Tech Community College; BSBA, University of Nebraska at Omaha; MBA, University of South Dakota; CPA; Industry Experience, 10 years.

Gabriella McDermott  
Nursing  
Instructor. Diploma, Western Iowa Tech Community College. BSN, Briar Cliff University; MSN, University of Phoenix. Industry Experience, 10 years.

David McDonald  
Electronic Engineering Technology  
Instructor. AAS, Western Iowa Tech Community College. Industry Experience, 13 years.

Susan McDonald  
Biological Science  
Instructor. BS, MA, University of South Dakota.

Shawn McKenna  
Corporate College  
Safety Specialist, AAS Western Iowa Tech Community College.

Michael Meister  
Information Technology  
Educational Technologist. BA, Iowa State University.

Linda Mercer  
Physical Therapist Assistant  
Instructor. BS, Northwestern College; MPT, University of Iowa.

Karilee Meyer  
Educational Talent Search  
Outreach Coordinator. BS, University of North Florida; MA, Drake University.

Joni Miller  
Dental Assisting  
Instructor. CDA, RDA, EFDA, BS; Diploma, Iowa Western Community College; BS, Bellevue University; Industry Experience, 25 years.

Darin Moeller  
Arts and Sciences  
Division Chair. AA, Iowa-Lakes Community College; BA, University of Northern Iowa; MED, Iowa State University.

Monti Molzen  
Information Technology  
Network Engineer. BS, Dakota State University.

Carmen Monk  
Medical Assistant  
Instructor. BS, Wayne State; AAMA; Industry Experience, 15 years.

Dr. Jill Moravek  
Sociology  
Instructor. BA, Morningside College; MS, PhD, Iowa State University.

Sandra Mueller  
Management Specialist  
Instructor. BS, Wayne State College; MSAS, University of South Dakota.

Carol Muhs  
Admissions  
Admissions Representative. AA, Clinton Community College; BS, Bellevue University.

Deborah Muller  
Health Services  
Assistant Division Chair. Diploma, Moline School of Nursing; BS, Briar Cliff University; Family Nurse Practitioner (FNP); MS, Clarkson College. Industry Experience, 30 years.

Dr. Terry Murrell  
Administrative  
President. BS, University of Nebraska–Kearney; MPA, University of Louisville; PhD, University of Nebraska–Lincoln.

Erin Neldeberg  
Nursing  
Instructor. BSN, MSN, Indiana Wesleyan University; Industry Experience, 6 years.

Julie Nelsen  
Overlook Cafe  
Food Service Supervisor
Aimee Nelson
Assistant Director. BS, Morningside College.

Cynthia Nelson
Manager. BA, Briar Cliff University

John “Perry” Nelson
Industrial Recruitment Specialist, Commercial Driver’s License. AA, DeVry Institute of Technology; BS, Bellevue University.

Renee Nemitz
Instructor. CST, RN, AAS, Western Iowa Tech Community College. Industry Experience, 7 years.

Katherine Newell
Assistant Director. BA, Briar Cliff University.

David Nitzschke
Instructor. BA, Loras College; MA, University of South Dakota

Michael Northrup
Instructor. BA, Peru State College; MA, University of South Dakota

Mike Oberg
Network Specialist. AA, Western Iowa Tech Community College.

Barbara O’Byrne
Instructor. CDA, RDA, EFDA, BS, Diploma, Western Iowa Tech Community College.

Angela O’Dell
Food Service Supervisor

Dr. Frank O’Neill
Biology Instructor. BS, Dr. of Chiropractic; Northwestern Health Sciences University, Minnesota.

Larry Obermeyer
Institutional Research and Resource Development Director. AAS, Western Iowa Tech Community College; BS, Bellevue University; MA, University of Nebraska–Omaha.

Wendy Oh
Marketing and Publications Webmaster.

Holly Olson
Educational Coordinator. MS, University of Nebraska at Omaha.

Maziar Ouliaeinia
Mathematics Instructor. BS, MA, Isfahan University of Technology; MA, Purdue University.

Belia Padilla
Recruitment Specialist.

Jason Palsma
Admissions Representative. AAS, Western Iowa Tech Community College; BS, Bellevue University.

Manoj Patil
Chemistry Instructor. BS, Karnataka University; MS, Texas A&M.

Kathy Pierce
Dental Assisting Instructor. CDA, RDA, EFDA, BS, Diploma, Western Iowa Tech Community College; BS, Bellevue University. Industry Experience, 25 years.

Chad Plante
Wind Energy Instructor. Industry Experience 5 years, BS, Bemidji State University.

Gary Powell
Police Science Instructor. AAS, Western Iowa Tech Community College; BS, Bellevue University. Industry Experience, 12 years.

Keith Price
Computer Networking Instructor. MCSE, MCP, A+, and Network + Certifications. Industry Experience, 11 years.

Rose Pride
Specialist. BA, University of Northern Iowa.

Carol Ratcliff
Instructor. BA, University of Northern Iowa. Industry Experience, 16 years.

Todd Rausch
Small Business Development Center Director. MA, University of Phoenix.

Tabitha Rees
ABE/GED/ELL Specialist. MA, University of Colorado at Denver.

Martin Reimer
Corporate College Dean. BA, Central College; MBA, Thunderbird School of Global Management.

Ben Ricklefs
Auto Collision Repair Technology Instructor. Diploma, AS, Western Iowa Tech Community College. Industry Experience, 9 years.

Michael Rohlena
Fine Arts Division Chair. BA, Cornell College. MFA, University of South Dakota;

Dr. Gregory Romig
Biology Instructor. BS, University of Pittsburgh at Johnstown; MS, University of Maine; DA, University of North Dakota.

Dr. Renee Romig
Biology Instructor. BS, Buena Vista University; PhD, University of Nebraska Medical Center.

Randy Ross
EMS Coordinator, Emergency Medical Services. AAS, Western Iowa Tech Community College; BA, Thomas Edison State College.

Tom Rozmiarek
Welding Instructor. BS, University of Nebraska at Lincoln. Industry Experience, 10 years.

LuAnne Ruba
Bookstore Manager. Diploma, Western Iowa Tech Community College.

Shane Sampson

Mark Schmedinghoff
Band Instrument Repair Instructor. BM, University of North Texas. Industry Experience, 10 years.

Laurie Schweitzberger
Economic Development Specialist. BS, University of South Dakota.

Patrice Scott
ABE/GED/ELL Specialist. AA, Western Iowa Tech Community College; BA University of South Dakota.

Fred Scoville
Corporate College Renewable Energy Training Specialist. BS, Warren National University; BS, University of Nebraska; MS, Bellevue University.

Dennis Semple
KWIT-KOJI Radio Station Engineer. Diploma, Western Iowa Tech Community College.

Kathy Singsank
Nursing Instructor. BSN, University of Iowa; MSN, Nebraska Methodist College. Industry Experience, 14 years.

Yvette Sitzmann
Job Training Partners Coordinator, College Now. BA, Briar Cliff University.

Maria Slaughter
Recruitment Specialist. BS, Bellevue University.

Brian D. Smith
Business Operations Director of Accounting. BA, University of Northern Iowa. CPA.

Rexann Smith
Medical Assistant Instructor. LPN, Western Iowa Tech Community College; RN, St. Joseph School of Nursing; BS, Morningside College; MSN, Liberty University. Industry Experience, 28 years.
Steve Smith  
Operations Manager. BS, University of South Dakota.

Ryan Sporrer  
Information Systems Security  
Instructor. Information Systems Security. Diploma, AAS, Western Iowa Tech Community College

Dr. Gloria M. Stewart  
Health Services  
Division Chair; RN, BA, Augustana College; MSN, Clarkson College; AA, MA, EdD, University of South Dakota.

Karl Stoddren  
Corporate College  
Coordinator.

Dr. Julie H. Stoik  
Administration/JTP  
Dean of External Relations and Director of Job Training Partners. BA, University of Iowa; MA, University of South Dakota; PhD, Colorado State University.

Rita Strom  
Student Support Services  
Educational Coordinator. AA, Western Iowa Tech Community College; BS, Bellevue University.

Greg Strong  
Career and Technical Education  
Division Chair. BS, University of South Dakota; BA, Wayne State College.

Darla Struck  
Instruction  
Director of Cherokee Campus and Northern Service Area. BA, Dordt College; MS, Iowa State University.

Terry Sudrla  
Paramedic Specialist  
Instructor. Paramedic and EMT-Intermediate, Western Iowa Tech Community College; BS, MA, University of South Dakota.

Tricia Sutherland  
Administration  
Dean of Students. BS, MS, Northeastern University, Boston.

Brandy TenHulzen  
External Relations  
Alumni/Volunteer Coordinator. BS, University of South Dakota.

Jessica Thompson  
Nursing  
Instructor. Diploma, St. Luke’s School of Nursing; BSN, Briar Cliff University. MSN, Nebraska Methodist College; Industry Experience, 7 years.

Matt Thomsen  
Recruitment  
Recruitment Coordinator. BS, Colorado State University; MS, University of South Dakota.

Rod Tondreau  
Biology  
Instructor. BS, Briar Cliff University; MS, University of Iowa.

Alana Tweet  
Job Training Partners  
Job Specialist. Diploma and AAS, Western Iowa Tech Community College; BS, Bellevue University.

Fiona Valentine  
Marketing and Publications  
Public Relations Coordinator and Program Coordinator. BS, Manchester University, England; MPhil., Durham University, England.

Lora VanderZwaag  
Admissions  
Registrar. BA, Northwestern College; MS, University of South Dakota.

Erin Volk  
Institutional Research  
Research/Data Specialist. PhD, State University of New York at Albany

Lori Vonheeder  
Bookstore  
Supervisor. BS, Nebraska Wesleyan University.

Steve Warnstad  
Corporate College  
Coordinator, MA, Temple University.

Jennifer Weber  
Early Childhood Education  
Program Coordinator. BA, Briar Cliff University; MAEd, University of Phoenix.

Steele Welcher  
Residence Life  
Manager. BA, Morningside College; JD, University of South Dakota Law School.

Allen “Bob” Welte  
EMS  
Coordinator; Emergency Medical Services.

Roger Wenzel  
Corporate College  
Coordinator. AAS, Western Iowa Tech Community College; BS, Bellevue University.

James H. Wiederspan  
Mechanical Engineering Technology  
Instructor. BS, University of Nebraska; Industry Experience, 9 years.

Bob Wilcke  
Carpentry  
Instructor. AA, Western Iowa Tech Community College. Industry Experience, 21 years.

Lynnel Wilcke  
Web Design  
Instructor. AAS, Western Iowa Tech Community College; BS, Bellevue University.

Carmen Wilson  
Corporate College  
Coordinator. BS, South Dakota State University. MA, Iowa State University.

Lex Woodbury  
Philosophy  
Instructor. BA, University of California; MA, Fuller Theological Seminary.

Pam Woolridge  
ABE/GED/ELL  
Program Coordinator. BS, University of South Dakota.

Beth Wulf  
English  
Instructor. BA, Briar Cliff University; MA, University of South Dakota.

Dr. Terry Yi  
Global Education  
Director, DC Life Chiropractic College of the West.

Donald Young  
Corporate College  
Program Coordinator–Nursing, Allied Health, and Long Term Care. RN, BSN, Arizona State University.

Cindy V. Zortman  
Business  
Division Chair. BA, Wayne State College; MED, Iowa State University.
Support Staff

Angerman, Debra.................. Accounting Specialist
Backer, Roseanne............... Bookstore Clerk
Baldwin, Elisha.................. Custodian
Becker, Rey ..................... Food Service
Benoit, Danielle ................. Administrative Assistant–External Relations
Blackman, Becky ................. Administrative Assistant–Denison
Bolles, Lesley .................... Accounting Clerk
Bomgaars, Mary ................. Receptionist–Le Mars
Boothby, Gigi .................... Secretary–Cherokee
Bowman, Kristy .................. Help Desk Technician
Boyd, Terri ...................... Print Shop Supervisor
Bradley, Jeff ..................... Custodian–Denison
Brincks, Nicholas ............... KWIT-KOJI Announcer
Bremer, Monica ................. Secretary–Instruction
Burroughs, David ............... Lead Maintenance Engineer
Clark, Lori ....................... Secretary–Physical Plant
Conley, Jennifer ................. Administrative Assistant–Dean of Students
Corey, Robert ................... Security Officer
Craig, Michael .................. Security Officer
Criddle, Kevin .................. Security Officer
Daugherty, Mary Beth .......... ABE Classroom Aide
DeBoer, Mary .................... Receptionist–Le Mars
DeRoche, Debra ................ Administrative Assistant–Instruction
Ferris, Rick ..................... KWIT-KOJI Announcer
Gibbs, Michael ................ Maintenance Engineer
Gondek, Russell ................. Accounting Specialist
Griffith, Scott .................. Maintenance Engineer
Gutierrez, Jodi .................. Secretary–Corporate College
Hammers, Ed ..................... Custodian
Hammers, Shirley ............... Payroll Specialist
Hankens, Connie ................. Secretary–Cherokee
Harris, Jennifer ................. Secretary–Cherokee
Herrmann, Kevin ............... Custodian–Cherokee
Hill, Ron ......................... Security Officer
Hilts, Teresa ..................... Secretary–Institutional Research
Hoffman, Jerry .................. Painter
Holbrook, Jennifer ............. Accounting Clerk/Specialist
Holman, Margaret .............. KWIT-KOJI Account Executive
Horlyk, Earl ..................... KWIT-KOJI Announcer
Howland, Steve ................. Custodian–Mapleton
Huffman, Rachelle .............. Help Desk Technician
Huggenberger, Jessica ........ Desktop Publishing Specialist
Jaacks, Jered .................. Microcomputer Technician
Jenkins, Joan .................... Administrative Assistant–Testing Center
Johnson-Mathiason, Amy .... Secretary–Enrollment Services
Jongma, Mary .................. Secretary–Talent Search
Kayl, Scott ...................... Custodian
Knight, Lori ..................... Administrative Assistant–JTP
Koehlmoo, Robert .............. Custodian–Cherokee
Konz, Lynn ...................... Admissions Clerk
Kraayenbrink, Duane .......... KWIT-KOJI Announcer and News Editor
Kramer, Susie .................. Administrative Assistant–Recruiting Center
Lammers, Carrie ................. Administrative Assistant–Testing Center
Lewallen, Donna ............... Secretary–Cherokee
Lewis, Paulette ................. Receptionist–Le Mars
Lewis, Penny .................... Secretary–Student Support Services
Lesia, Stephanie ............... Student Accounts Specialist
Limoges, Pamela ............... Financial Aid Clerk
Linares, Rosie .................. Human Resources Specialist
Lopez-Gonzalez, Wendy .... Administrative Assistant–Info Tech
Lozano, Sandra ................ Help Desk Technician
McGinnis, Nancy .............. Maintenance Engineer
McLarty, Debra ................. Accounting Clerk
Meisner, Jerry .................. Security Officer
Meza, Vicky .................... Accounting Clerk
Miller, Wanda ................. Library Technician
Moreland, Jacob ............... KWIT-KOJI Announcer/Arts Producer
Morgan, Patty ................. Custodian–Denison
Munger, Mark ................. KWIT-KOJI Announcer
Murphy, Coleen ............... Accounting Specialist
Navrkal, Linda ................ Shipping and Receiving Clerk
Neddermeyer, Robin .......... Secretary–Student Support Svcs–Denison
Nelson, Katie .................. Security Officer
Nelson, Nicole ................. Administrative Assistant–ABE/GED
Nguyen, Hieu ................. Custodian
Niehaus, Nathan ............... Security Officer
Olesen, Carolyn ............... Administrative Assistant–Testing Center
Olsen, Rod ....................... Custodian
Peterson, Lee .................. Parts Clerk
Petty, Theresa ................. Assistant to the President
Plendl, Jackie ................. Human Resources Specialist
Ploen, Patricia ................. JTP Accounting Specialist
Quihonez, Isaac ............... KWIT-KOJI Announcer
Rabb, Phyllis .................. Food Service
Rasmussen, Donna ............ Receptionist–Le Mars
Rouse, Ben ..................... Help Desk Technician
Rowe, Kathleen ............... Bookstore Clerk
Rowedder, Lola ................. Registration Clerk–Denison
Saucedo, Ruth ................. Administrative Assistant–Testing Center
Sanford, Jerry ................. Custodian
Schorg, Mary Beth ............ Grants/Contract Monitor
Scott, Josie .................... Secretary–Admissions
Silbernagel, Allen .......... Maintenance Engineer
Smith, Kurt .................. Microcomputer Technician
Smith, Matthew ............... Help Desk Technician
Smutzler, Denna .............. Human Resources Specialist
Sprenger, Louis III .......... Maintenance Engineer
Still, Echo ...................... Administrative Assistant–Corporate College
Thompson, Mindy ............. KWIT-KOJI Clerical Assistant
Tierney, Sandi ................ Accounting Specialist
Tope, Matt ..................... Custodian
Tracey, Roger ................ Groundskeeper
Ulven, Clark .................. Custodian
Wallace, Michelle .......... Registration Clerk
Wankum, Misty ................. Admin. Assistant–VP of Instruction and
Warner, Chuck ................ Security Officer
Welte, Judy ................... Accounting Clerk
Wright, Brenda ............... Administrative Assistant–Instruction
Wright, Darin .................. Security Officer
Advisory Committees

Accounting/Accounting Specialist
Holly Brisnemah........................................Beef Products Inc.
John Fleckenstein....................................Farmers Cooperative Company
Jim Hopkins........................................Morningside College
Donna Houck.........................................Citic of North Sioux City, SD
Troy Jasman...........................................Western Iowa Tech Community College
Randy Kramer........................................Kramer & Associates
Ryan Preston..........................................Sabre Communications
Timothy Terveer....................................Kramer & Associates
Jeremy Uhler.........................................King, Reinsch, Prosser & Co., L.L.P.

Administrative Assistant – Medical/Medical Assistant
Rita Collins...........................................St. Luke’s Health System
Susan Hall.............................................St. Luke’s Health System
Peggy Hanner........................................Cardiovascular Associates, PC
Troy Hedlund..........................................Sioux City Fire Department
Debbie Hudson.....................................Siouxland Community Health Center
Dianne Kellen........................................Family Healthcare Northside
Jenna Kellen..........................................Family Health Care
Patty Limoges.......................................Mercy Medical Clinic
Melanie Loutsch.....................................St. Luke’s Medical Center
Amy McGill...........................................Mid Scribe
Angie Moffatt........................................Pulmonary Associates
Melanie Olsen........................................McGraw Center
Renee Reenes........................................Family Health Care
Melisa Schager......................................Family Health Care of Siouxland
Beth Wede............................................Dr. Rodney Dean

Administrative Office Management
Amy Coghlan.........................................Northwest Area Education Agency
Dar Raye Hunwardsen..............................Western Iowa Tech Community College
Kristi Lehman.........................................Wells’ Dairy, Inc.
Maggie Loutsch, CPS/CAP........................Tyson Foods, Inc.
Christine Shinall....................................Aventure Staffing & Professional Services, LLC
Mark Sterk, CFP President.........................Stark Financial Services, Inc.
Nancy Watson, CPS/CAP........................Event & Project Management, LLC

Agriculture Technology
Mark Bohner..........................................Northwest District Farm Bureau
Krista Jochum.........................................Farm Credit Service of America
Steve Merritt.........................................Siouxland Animal Hospital
Brett Oetken..........................................Le Mars High School
Bryan Stocking......................................Woodbury County FSA
Carrie Thomas.......................................Tyson Fresh Meats
Dan Witten...........................................Westwood CSD

Air Conditioning, Heating, and Refrigeration
Greg Andersen......................................Simonsen Home Comfort Systems
Rich DeRoche.......................................DeRoche Service
Dennis DuFault......................................C.W. Suter Services
Rick Farrell..........................................Farrell’s Heating & Air Conditioning
Jerry McKnight.....................................Charleston, Inc.
Rick Mercer..........................................Thermo Refrigeration
Darwin Olson........................................McCormick District
Dave Peterson.......................................Peterson Air Conditioning & Heating
Don Rogers...........................................C.W. Suter Services
Peter Sieben........................................Kalin’s Indoor Comfort
Charlie Striegel.....................................Dennis Supply
Jim Tobe.............................................C.W. Suter Services
Kevin Welty..........................................Tessier’s Inc.

Audio Engineering
Jerry Forbes..........................................Jerry’s Electronics
Tom Kingsbury......................................Kingsbury Electronic Systems
Rev. Russ Seastedt..................................Cool 99.5
Brain Newcomb.....................................Bill Julius

Auto Collision Repair Technology
Gary Biek............................................Tran Collision Repair, Inc.
Gary Bortscheller................................Bort Auto Body
Pat Bunt..............................................Pat’s Body Shop
Bill Harris...........................................C & J Body Shop
John Heiden........................................Vale Auto Center
Barry Kounkel.....................................Division Street Paint & Body
Don Kuhlmann.....................................Kuhlmann Collision Repair
Don Leedom..........................................Knoepfler Chevrolet
Gary Monroe.......................................Arnold Motor Supply
Ron Stephon.........................................Sioux Plating Company
Buddy Taylor.......................................Sioux Plating Company
Tuyen Tran...........................................Tran Collision Repair Inc.
George Tsiobanos................................Sioux Body Shop
Bill Witt.............................................Automotive Finishes

Automotive Technology
Randy Briggs.........................................Briggs’ Last Chance Garage
Rick Courcy..........................................Alignment Specialists
Jason DeRoos.........................................Condon Buick
Stuart Elkhoft.....................................Certified Auto Repair
Bill Knoepfler......................................Knoepfler Chevrolet
Dave Norby..........................................Knoepfler Chevrolet

Band Instrument Repair
Eric Haitz............................................Omaha Public Schools
Bill Matthews.....................................Executive Director, NAPBIRT
Allison Scull.....................................Sweeedge of Music of LA
Andy Smith.........................................Conn Selmer Inc.
Whitney Turner.....................................Ray’s Mid-Bell Music

Business/Marketing Management
Mark Charlson.....................................Federated Insurance
Hanna Cook.........................................Palmer Candy Products
Cody Delperdang...................................Great West Casualty Company
Myrah Favors.......................................State Farm Insurance
Chris Ferry...........................................IBC Insurance, LLC
..................................................Innovative Benefits Consultants, LLC
Jim Hettinger......................................Mozak’s Furniture
Jennifer Hocketter................................Marketing, College
Tom Jones...........................................Western Iowa Tech Community College
Cindy Marshall....................................Makota Marketing
Larry Obermeyer....................................Western Iowa Tech Community College
Deanna Penges....................................State of Iowa-Child Support Recovery Unit
Robin Petersen....................................Midwest Technology Products & Services
Richard Schulte....................................Karls
Jeff Vore............................................Timber Pointe Orthopedic Recovery Center
Kim Welch...........................................Eddie Bauer

Cherokee Campus
Joan Ballantyne....................................Delta Properties
Mark Buschklam................................Cherokee Area Economic Development
John Comstock....................................Cherokee Regional Medical Center
Don Eikmeier......................................Cherokee City Admin.
Early Childhood Education
Erika McWell.............................................Stella Sanford Child Dev. Center
JoAnn Gieselman ..............................................Boys and Girls Home of Nebraska
Jane Heider...........................................Mary Elizabeth Child Center
Beach Hsk.............................................Native American Child Care
Denise Lingscheit.................................Sioux City Community Schools
Rachael Ostermyer..............................Community Action Agency of Siouxland
Bethany Marcoe.....................................Marco Polo’s Playhouse
Matt Ohman........................................Siouxland Human Investment Partnership

Construction
Jim Boeshart.............................................Lite-Form Technologies
Charlie Harrington..................................Charlie Harrington Construction
Ben Kamp.............................................L&L Builders
Nick Karleski.........................................Earl Miller Construction
Mark Kachel...........................................Mark Kachel Construction
Cody Lenars.............................................Merrill, Iowa
Jeff MacFarlane.....................................Trinity Building Specialists
Nancy Narcisco......................................Sioux City Construction League
Tom Swenson..........................................Contractor (Retired)
Jimmy Towner......................................Sioux City, Iowa
Duane Vanderplas.......................................UBC

Denison Campus
Evan Blakley.............................................Chamber & Development Council
Bill Bruce...........................................Crawford County Memorial Hospital
Dane Dammen............................................Thermal Fab
Michael Dudding.......................................KDSN Radio
Elaine Gotto.............................................Mahoney & Gotto Co.
Kim Ingerslev........................................Professional Computer Systems (PCS)
Connie Jensen.........................................Amazing Energy, LLC
Michael Pardun.....................................Denison Community Schools
Steve Reitan.............................................Denison Job Corps
Scott Winey.............................................Bluespace Creative, Inc.
Gordon Wolf..........................................Denison Bulletin/Review

Dental Assisting
Paula Brown, C.D.A., R.D.A. .................................Dental Assistant
Tim DeStigter, R.D.S....................................Dentist
Shamayne Frank, D.D.S..................................Dentist
Jim Grabouski, D.D.S.....................................Dentist
Jennifer Hadley-Kupfer, R.D.A. ......................Dental Assistant
Richard Hettiger, D.D.S.................................Dentist
Diane Hicks, C.D.A., R.D.A., E.F.D.A. .................Dental Assistant
Daisy Joaquin-Caro, R.D.A..............................Dental Assistant
Charles (Chip) Kiple, D.D.S............................Dentist
Tod Knopik, D.D.S.....................................Dentist
Kelly Petzenhauser, C.D.A., R.D.A., E.F.D.A. ........Dental Assistant
Adrienne Valentine, C.D.A., R.D.A. ....................Dental Assistant

Electrician
Dick Barker.............................................City of Sioux City
Jason Bowman........................................IBEW LU 231
Jeff Eichmann........................................Metro Electric of Sioux City

Electronics
Bob Flanagan.............................................Pflanz Electronics
Jerry Forbes..........................................Forbes Electronics
Patrice Kissner...........................................A Tech
Tom Kingsbury...........................................KES Electronics
John Obermeyer......................................City of Sioux City
Duane Ott...........................................Mercy Medical Center

Emergency Medical Services
Jeff Anderson........................................Siouxland Paramedics
Tom Benzon, MD.......................................Mercy Medical Center
Gary Brown...........................................EMS Director of Disaster Services
Gary Carlson, MD....................................Midlands Clinic
Tom Chartier...........................................Volunteer Ambulance
Mary Chwirka, EMT-P.............................Mercy Medical Center
LaDonna Grilly.......................................Western Iowa Tech Community College
Joe Ferrill...........................................Iowa Dept. of Public Health–Bureau of EMS
John Garrel Jr., M.D.................................Burgess Health Center
Jeffrey O’Too, M.D..................................St. Luke’s Medical Center
Terry Stecker........................................Siouxland Paramedics

Fire Science
Gerald Bennett........................................Sioux City Fire Department
Tom Everett...........................................Sioux City Fire Department
Russ Grossman.......................................Fire Service Training Bureau
Dave Hutton.............................................185th Air National Guard
Greg Martin.............................................Rochester Fire Department
Kurt Maune...........................................Lawton Fire Department
Brian Thiele...........................................Sioux City Fire Department
Jerry Sailer...........................................Minnie Fire Department

Graphic Design
Nathan Anderson.......................................Bozell
Liz Croston.............................................Walls’ Blue Bunny
Sam Fleury............................................Columbia College
Jeff Gordon...........................................J.D. Gordon Creative Labs
Keith Jackson.........................................Wilson Trailer
Kasey Keeler..........................................Smash 3 Interactive
Rebecca Kemper.......................................Northern Auto Parts
James Krueger...........................................Clickrain, Inc
Pete Laskie.............................................J.D. Gordon Creative Labs
Jackie McManigal.....................................Tyson Fresh Meats
Jerome Muller............................................Comedy Productions
Chris Trude..............................................Avery Brothers Sign Company

Human Resources
Brenda Bradley......................................Western Iowa Tech Community College
Lynndi Henrich............................................Alorica
Kathy Leach...........................................Pronto Express
Joy Malone.............................................Great West Casualty Company
Deb Nelson.............................................Stream
Rachele Murphy.......................................Great West Casualty Company
Paula Petersen.........................................Sabre Communication
Independent Filmmaking

Maureen Carrigg ........................................ Wayne State College
Tom Case ....................................................... University of South Dakota
Brian Delizareaux ......................................... Los Angeles Filmmaker
George Lindblade ........................................ GR Lindblade & Co. Productions
Chris Mansfield ........................................... Woodland Media
Mike Maister ............................................... Database Administrator
Bruce Miller .................................................. Entertainment Editor, Sioux City Journal
Rick Mullin .................................................. Siouxland Institute of Film
Paul Seamon .................................................. North Park Assisted Living
Greg Wall ...................................................... Wall to Wall Productions

Interior Design

Beau Fey .........................................................PIJY
Melissa Flynn .................................................. FEH Architects
Craig Hainfield ............................................. Echo Lighting
Dena Hill ........................................................ Interior Design
Lisa Kalker ..................................................... PlaN Architecture
Hanna Koele .................................................. Newmann, Monson & Wictor
Michele Rosenboom ..................................... Interior Designer

Mechanical Engineering Technology

Mike Hittle ..................................................... Gomaco
Rod Ludwig .................................................... Midwest Industries
Tim Mahal ....................................................... Wilson Trailer Co.
Wes Petersen .................................................. Prince Manufacturing Corp.
Michael Potash ............................................. Sioux City Compressed Steel Co.
Don Vitto ........................................................ Valmont Industries, Inc.

Microcomputer Specialist

Randy Campbell ............................................. Morningside College
Lisa Felts ....................................................... WCIC – City of Sioux City
Doug Kuzier .................................................. Woodbury Central School
Mike Miller ..................................................... Corporate Trainer/PC Consultant
Tom Rohde ................................................... Wells’ Blue Bunny

Motorcycle/Powersports Technology

Dave Bak ......................................................... Bak BMW
Greg Chicoine ............................................... Champion Cycle Kawasaki
Tauge Foreman ............................................. Bob’s Bike Shop
Clay Jensen ................................................... Sioux City Powersports, Inc.
Dan Kleen ...................................................... Off Highway Road Association
Bob Oliva ....................................................... Midwest Honda Suzuki Kubota
Dustin Schmillen .......................................... Power Sports, Inc.
Brad Yoeger ................................................... Midwest Honda Suzuki Kubota

Networking

Doyle Massey .................................................. Sergeant Bluff, Iowa
John Pritchard ............................................. Catalyst Solutions
Jeff Syersma .................................................. Northwest AEA
Matt Tenhutzen ............................................ Williams and Company
Tom Widner .................................................. Prince Manufacturing Corporation

Nursing

Diane Arkind ................................................ Crawford County Memorial Hospital
June Delashment ........................................... Monona County Board of Health
Linda Drey ................................................... Siouxland District Health Dept.
Cindy Enright .............................................. St. Luke’s Regional Medical Center
Donna Galles ................................................ Mercy Homecare
Jo Hayes ....................................................... Horn Memorial Hospital
Nila Hayes ..................................................... Consumer
Joey Hoeffling ............................................. Morningside Care Center
Rhonda Keenan ........................................... St. Luke’s Regional Medical Center
Karen Matthey ............................................. Hospice of Siouxland
Gina Meyers .................................................. Siouxland Surgery Center

Teresa Muckey ................................................. Mercy Medical Center
Loretta Myers ................................................ Floyd Valley Hospital
Cherie Noteboom ......................................... Mercy Medical Center
Mary Jo Pfeifer ............................................ Denison Job Corps Center
Patty Sandman ............................................. Burgess Health Center
Judy Skoglund .............................................. Sunrise Manor
Claudette Staab ............................................ Heartland Care
Christy Syndergaard ..................................... Cherokee Regional Medical Center
Tracy Larsen ................................................... Mercy Medical Center

Paraeducator Assistant

Kelly Adams ................................................... Sergeant Bluff-Luton CSD
Cathy Bobier .................................................. Akron-Westfield CSD
Kim Burrack .................................................. Sioux City CSD
Dr. Kim Buryanek ........................................ Sioux City CSD
Denise Lingscheit ........................................ Sioux City CSD
Jennifer Murphy ........................................... Sergeant Bluff-Luton CSD
Beth Niehus .................................................. Sioux City CSD
Carolyn Smith .............................................. Northwest AEA

Paralegal/Legal Assistant

Steven Adreasen ........................................... State of Iowa
Barb Bielenberg ............................................ Retired
Rhonda Henning ......................................... Buckmeier and Daane Law Firm
Patrick Jennings ........................................... Woodbury County District Attorney
Richard Kallsen ............................................. Western Iowa Tech Community College
Emily Kucera ............................................... Heidman Law Firm
Barb Roche .................................................. Rhinehart Law Firm
Daniel Shuck .............................................. Shuck Law Firm

Pharmacy Technician

Jerry Ashenfelter, R.Ph. ..................................... Floyd Valley Hospital
Marla Franck, R.Ph. ......................................... Crawford County Hospital
Paul Horton .................................................. NMC Homecare
Paul Jensen .................................................. Kmart Pharmacy
Stacy Jensen, Tech .......................................... Sgt. Bluff, Iowa
Dave Liebsack ............................................. Mercy Medical Center
Cheryl McFarland ......................................... Horn Memorial Hospital
Lynn Nordsiden ............................................ Hy-Vee Drug Store
Teresa Orlando, Pharm.D. ................................... Dunes Pharmacy
Mary Peeling, Mgr. ........................................ Walgreen’s Pharmacy
Rob Rehal ..................................................... Greenville Pharmacy
Shane Schuster, Pharm.D. .................................. Hy-Vee Sioux City
Collette Turgeon, Tech ..................................... St. Luke’s Pharmacy

Photography

John Banasiak .............................................. University of South Dakota
Doug Burg .................................................... Burg Studios
Fritz Burow .................................................... Burrow Photography
Michael Crowley ........................................... Briar Cliff University
Mark Karner .................................................. Rock Solid, Inc.
Cory Knedler .............................................. University of South Dakota
George Lindblade ......................................... GR Lindblade & Co. Productions
Dolene Thompson ......................................... Morningside College

Physical Therapist Assistant

Tyson Dukes, P.T.A. ....................................... Spencer Hospital
Michelle Grady, P.T.A. ..................................... Holy Spirit
Mona Hanson, P.T. ........................................... Mercy Medical Center
John Jorstad .................................................. Western Iowa Tech Community College
Marie Neilsen, P.T.A. ..................................... Collette Turgeon, Tech
Jody Pickering, P.T.A. ....................................... Countryside Senior Living
Kevin Poss, P.T. ........................................ PT Specialists
Dr. Greg Romig ............................................. Western Iowa Tech Community College
Sandra Vanderloo, P.T.A. ................................... Brentwood Good Samaritan
Blake Wagner, P.T. ....................................... Community Rehab Physical Therapy, Sioux City
**Police Science Technology**

David Amick ....................................................... Retired, Woodbury County Sheriff
Rod Bradley ....................................................... Chief, Denison Police Department
Mike DeBruin ...................................................... Chief of Police, Hawarden
Stuart Dekkenga ..................................................... Le Mars Police Dept.
Mark Kennedy ...................................................... First Financial Bank USA
Troy Nelson ....................................................... Iowa Division of Criminal Investigation
Chad Peters ....................................................... Iowa Highway Patrol
Mark Prosser ....................................................... Storm Lake Police Dept.
Marti Reilly ....................................................... Sioux City Police Dept.
Mike Van Otterloo .................................................. Plymouth County Sheriff
Doug Weber ....................................................... Osceola County Sheriff
Doug Young ....................................................... Sioux City Police Dept.

**Social Media**

Nathan Anderson ......................................................... Bozell
Liz Croston ......................................................... Wells' Blue Bunny
Sam Fleury ......................................................... Columbia College
Jeff Gordon ......................................................... J.D. Gordon Creative Labs
Keith Jackson ....................................................... Wilson Trailer
Kasey Kelehar ...................................................... Smash 3 Interactive
Rebecca Kempers .................................................. Northern Auto Parts
James Krueger ....................................................... Clickrain, Inc
Pete Laskie ......................................................... J.D. Gordon Creative Labs
Jackie McManigal .................................................... Tyson Fresh Meats
Jerome Muller ..................................................... Comedy Productions
Chris Trudeau ....................................................... Avery Brothers Sign Company

**Surgical Technology**

Joni Betsworth, S.T., R.N. ..................................... Siouxland Surgery Center
Jill Considine ....................................................... Mercy Medical Center
Karen Craig ......................................................... Mercy Heart Center
Bridget Davis, B.S.N. .............................................. Mercy Medical Center
Terry Farewell .................................................... St. Luke's Regional Medical Center
Nila Hayes ......................................................... Consumer
Cathie Jacobson, R.N., O.R.S. ...... Pierce Street Same Day Surgery Center
Jenny Jolin, C.S.T. ..................................................... Mercy Medical Center
Sue Masuen ......................................................... Floyd Valley Hospital
Elaine Miller, C.S.T. ................................................ Consumer
Sally Moritz, C.S.T. ................................................... Mercy Medical Center
Amy Munchrath, R.N., O.R.S. ...... St. Luke's Regional Medical Center
Gina Myers, R.N., O.R.S. ........................................... Siouxland Surgery Center
Susanne Rosenbaum, C.S.T. .................................... Mercy Medical Center
Denise Stansbury ................................................... Siouxland Surgery Center
Dr. Volstedt ....................................................... Midlands Clinic

**Video Game Design**

Austin Anderson ....................................................... Best Buy
Jeff Busch ......................................................... West Corporation
Partick Cavanaugh .............................................. The Peter Kiewit Institute
Eric Diemer ......................................................... Independent Contractor
Richard Fleming .................................................... Johnson County Community College
Fred Gorham ....................................................... Artist
John Magill ...................................................... Iowa Western Community College
Joey Lynn Monaco ................................................ KPMG's eLearning
Riley Prigg ....................................................... Bellevue Community College in Seattle, WA
Christopher Roe ................................................ DeVry University – Addison County
Ben Vu .............................................................. SkyVu

**Web Design**

Nathan Anderson ......................................................... Bozell
Liz Croston ......................................................... Wells' Blue Bunny
Sam Fleury ......................................................... Columbia College
Jeff Gordon ......................................................... J.D. Gordon Creative Labs
Keith Jackson ....................................................... Wilson Trailer
Kasey Kelehar ...................................................... Smash 3 Interactive
Rebecca Kempers .................................................. Northern Auto Parts
James Krueger ....................................................... Clickrain, Inc
Pete Laskie ......................................................... J.D. Gordon Creative Labs
Jackie McManigal .................................................... Tyson Fresh Meats
Jerome Muller ..................................................... Comedy Productions
Chris Trudeau ....................................................... Avery Brothers Sign Company

**Welding**

Tom Anderson ....................................................... TriView Steel & Supply
Roger Braesch ..................................................... All Power
Greg Ebersole .................................................... Simonson Manufacturing
Joe Fleck ......................................................... Iron Workers Local No. 184
Michael Jordan ...................................................... Missouri Valley Steel Co.
Reynold McLeod ................................................ Meridian Mfg. Group
Louis Sager ....................................................... Sioux City Community Schools

**Wind Energy Technician**

Rich Crawford ...................................................... Midwest Wind Resources
Jason Erickson ................................................ Western Iowa Tech Community College
David Healy ....................................................... Mid-American Energy
James Palmer ...................................................... Malloy Electric
Donald Root ....................................................... Aes
Phil Sundblad ..................................................... Crosswind Energy LLC
Tom Trierweiler ................................................ Malloy Electric
Foundation Board

The College is fortunate to have another avenue of community support and involvement through the members of its Foundation Board. The Western Iowa Tech Community College Foundation is a non-profit philanthropic organization operated exclusively for charitable, scientific, and educational purposes.

The Foundation’s goal is to support the efforts of Western Iowa Tech Community College in providing broader educational opportunities and service to its students, alumni, faculty and staff. To that end, the Foundation will award scholarships and/or grants to students, faculty, and staff of the College.

The Foundation will also make contributions, grants, and gifts to Western Iowa Tech Community College or other tax exempt organizations associated with the College.

To enable it to pursue its goals, the Foundation will seek gifts, grants, and bequests from business, industry, alumni, and friends in the community.

Foundation Board Members

Rick Aadland .................................. Pioneer Bank
Jason Anderson ............................... Siouxland Investment Group
E.B. Baker ................................. C.W. Suter Services
Tasha Barker ................................. Argosy Casino
Greg Berentein ............................... Berenstein Law Firm
Deborah Cook ................................. Deborah J. Cook Law Firm
Dr. Robert Dunker (Honorary) ........ President Emeritus WITCC
Jane Gilbert ................................. Freelance Writer/Editor
Jeana Goosmann ............................... Goosmann Law Firm
Justin Gray .................................. Wells Fargo Bank
Mary Ellen Hartman ............................... Klinger Properties, Inc.
Clarence Hoffman ........................... Hoffman Agency
Dr. Robert Kiser (Honorary) .............. President Emeritus WITCC
Justin Meyer ................................. PLaN Architecture
Dr. Terry Murrell .............................. WITCC
Skip Perley ................................. TEC-Corp
Ginny Peterson ............................... Community Volunteer
James Rocklin ............................... Rocklin Manufacturing Co.
Lillyan Rodriquez ............................. United Real Estate Solutions
Mary Sterk .................................... Sterk Financial Services
Jon Winkel ................................. Long Lines
Index

Academic Advising................................................................. 14
Academic Awards .................................................................... 17
Academic Information ............................................................ 14
Academic Progress Standards ............................................... 16
Academic Renewal .................................................................. 16
Academic Review Procedure .................................................. 32
Academic Vision ..................................................................... 6
Accelerated Degrees .............................................................. 39
Accounting ........................................................................... 41
Accounting Specialist ............................................................ 40
A+ Certification ...................................................................... 40
A Checklist for Registration and Your Academic Success ........ 8
Addictions Counseling ......................................................... 43
Administrative Assistant–Medical ........................................... 44
Administrative Office Management ........................................ 45
Administrative Office Support ................................................. 49
Adult Basic Education (ABE)/General Educational Development (GED) Preparation .... 29
Adult Literacy ........................................................................ 29
Advanced Emergency Medical Technician ............................ 101
Advanced Welding .................................................................. 158
Advisory Committees ............................................................ 217
Agribusiness Technology ..................................................... 53
Agriculture ............................................................................ 55
Agriculture Management ....................................................... 54
Agriculture Transfer .............................................................. 52
Air Conditioning ................................................................. 58
Air Conditioning, Heating, and Refrigeration .......................... 57
Alternative Delivery Systems .................................................. 39
Appealing Tuition and Fee Charges ....................................... 10
Appeal of Financial Aid “Not Eligible” Status ......................... 12
Appeals .............................................................................. 35
Applicants or Students Who Refuse ....................................... 35
Reasonable Accommodation ................................................ 35
Application for Graduation .................................................... 22
Applying for Admission ........................................................ 8
Applying for Financial Aid ..................................................... 11
Art and Design ................................................................. 59
Assessment .......................................................................... 28
Assessment and Course Placement ....................................... 14
Associate of Applied Science (AAS) Degrees: ....................... 39
Associate of Applied Science Degree .................................... 21
Associate of Applied Science General Education Core ......... 21
Associate of Applied Science Requirements ......................... 21
Associate of Arts (AA) Degrees .............................................. 39
Associate of Arts Degree General Studies .............................. 18
Associate of Arts Degree Requirements ................................ 19
Associate of Arts Requirements ............................................. 18
Associate of Science Degree .................................................. 18
Associate of Science Degree Requirements ......................... 20
Associate of Science Requirements ....................................... 18
Attendance .......................................................................... 16
Audio Engineering Technician ............................................. 60
Audio Production Assistant ................................................. 61
Auditing a Course .............................................................. 16
Authority ............................................................................ 32
Auto Body Procedures ......................................................... 65
Auto Body Refinishing .......................................................... 63
Auto Body Structural Repair ................................................. 64
Auto Collision Repair Technology ....................................... 62
Auto Mechanics ................................................................. 67
Automotive Drive Train ........................................................ 68
Automotive Electrical .......................................................... 68
Automotive Technology ....................................................... 66
Band Instrument Repair ........................................................ 69
Biology .............................................................................. 70
Biomedical Electronics ........................................................ 94
Board and President ............................................................. 210
Bookkeeping and Office Support .......................................... 41
Book Return Policy .............................................................. 27
Brief History ........................................................................ 7
Business Administration ..................................................... 71
Business Management ........................................................ 72
Campus Bookstore ............................................................. 27
Career Cluster Program Index .............................................. 4
Career Services ................................................................. 27
Carpentry ............................................................................ 81
Certificate Requirements ..................................................... 22
Certificates .......................................................................... 22
Certificates Listing .............................................................. 38
(Certified) Personal Trainer ............................................... 118
Change of Major ............................................................... 118
Change in Registration ........................................................ 9
Chemistry .......................................................................... 78
Child Development ............................................................. 88
Cisco Certified Network Associate–CCNA ............................ 139
Coaching ............................................................................ 145
College Credit Programs .................................................... 37
College Experience Class ..................................................... 8
College History ................................................................. 7
College Policies .................................................................... 35
Computer Conduct ............................................................. 31
Computer Numerical Control (CNC) Operator ...................... 129
Concrete Specialties ............................................................ 83
Consequences of Withdrawal and Financial Aid .................... 11
Construction ....................................................................... 80
Cost Accounting ............................................................... 42
Counseling/Career Planning ................................................ 27
Course Listings ................................................................. 163
Course Numbers ............................................................... 162
Credit for Prior Learning ..................................................... 14
Criteria for Admission to Specific Programs ......................... 9
Western Iowa Tech Community College 2013-2014 Catalog

Student Code of Conduct .......................................................... 31
Student Financial Aid Policy and Program ................................. 11
Student Governance .................................................................. 30
Student Housing & Residence Life ............................................. 27
Student Insurance ...................................................................... 27
Student Organizations and Clubs .............................................. 27
Student Responsibility for Catalog Information .......................... 14
Student Senate .......................................................................... 27
Student Senate .......................................................................... 30
Student Services and Activities .................................................. 27
Student Services at Branch Campuses ....................................... 27
Student’s Rights and Responsibilities ......................................... 30
Supervision and Management in Health Care (LPN Supervisory) . . 116
Support Staff ............................................................................ 216
Surgical Technology .................................................................. 123
Surgical Technology .................................................................. 124
Table of Contents ....................................................................... 3
Technical Business Management ............................................... 75
Technical Emergency & Disaster Management .......................... 97
Technical Emergency & Disaster Management .......................... 99
Technical Studies ....................................................................... 154
Testing Center ........................................................................... 28
Test-Out Opportunities ................................................................ 26
Transcript Request Information .................................................. 15
Transfer Agreements/Colleges and Universities ......................... 22
Transfer Courses Listing ............................................................. 37
Transfer Information ................................................................. 27
Transfer Plan .............................................................................. 23
Transfer Students ....................................................................... 8
TRIO Student Support Services Program - Sioux City Campus ....... 29
Truck Driver Training ................................................................. 161
Types of Financial Aid ............................................................... 12
Unit of Credit ............................................................................. 15
Values and Guiding Principles .................................................... 5
Veterinary Assistant ................................................................... 56
Video Game Audio Production .................................................. 156
Video Game Design ................................................................... 155
Video Game Design Digital Character Animation ........................ 156
Video Game Design Dynamic & Visual Effects ............................ 157
Visual Design ............................................................................ 110
Vocational Rehabilitation Services ............................................. 29
Wall Framing and Roofing ......................................................... 83
Web Design ............................................................................... 109
Wind Energy ............................................................................. 160
WITCC Computer Lab .............................................................. 28
Withdrawal Policy ....................................................................... 10
Workforce Investment Act Services .......................................... 29

Policy of Nondiscrimination ........................................................ 35
Political Science .......................................................................... 149
Pre-Dental Hygiene ..................................................................... 112
Procedure for Repaying the U.S. Government ............................. 11
Professional Photography ............................................................ 142
Professional Photography Technician ......................................... 143
Program Cooperative 2+2 Agreements ....................................... 23
Program Transfer Agreements .................................................... 23
Psychology ................................................................................... 150
Qualified Welding ...................................................................... 158
Readmitting Students ............................................................... 8
Registration ................................................................................... 9
Registration Requirements .......................................................... 9
Release of Student Information .................................................. 36
Repeating a Course ...................................................................... 16
Request for Reasonable Accommodation .................................... 35
Requirements for Graduation ..................................................... 22
Residence Qualifications ............................................................ 10
Resolving Failing Grades ............................................................ 16
Respectful Exchange of Ideas and Information ............................ 32
Responsible Use of Services ....................................................... 31
Satisfactory Academic Progress Standards for Financial Aid Recipients ........................................... 11
Scholarships ............................................................................. 12
Scholastic Recognition ................................................................ 17
Scope of Potential Reasonable Accommodations ........................ 35
Sexual and Gender Harassment ................................................. 36
Smart Home Technology Specialist ........................................... 95
Smoke-Free and Tobacco-Free Campus ..................................... 36
Social Media Marketing .............................................................. 151
Social Work Cooperative 2+2 Programs ..................................... 152
Sociology ..................................................................................... 153
Special Programs ........................................................................ 29
Sports Medicine - Athletic Training .......................................... 121
Sports Medicine - General Studies .......................................... 122
State Programs .......................................................................... 12
Student Academic Responsibilities ............................................ 30
Student Activities ...................................................................... 27
Student Activities and Special Services ..................................... 27
Student Center ........................................................................... 27
Student Classification .................................................................. 15