

Fire Science

Fire Science

Associate of Applied Science Degree
Sioux City Campus

Program Overview and Opportunities

The Fire Science 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 transcribed industry training toward the diploma. Contact the program advisor for details.

Employment opportunities are predicted to grow by 12 percent between 2006 and 2016. The median earnings of a firefighter in 2006 was \$41,190. The median annual earnings of a first-line supervisor in 2006 was \$62,900. (Occupational Outlook Handbook. Bureau of Labor Statistics 2006-2007.)

To be accepted into the program, students must achieve the following scores on the Computerized Placement Test: 80 percent Reading; 86 percent Sentence Structure; 56 percent Arithmetic or 38 percent Elementary Algebra.



Fire Science Curriculum

Course #	Title	Credits
FIR 213	Principles of Emergency Services	3
FIR 127	Fire Behavior and Combustion	3
FIR 214	Legal Aspects of Emergency Services	3
CSC 110	Introduction to Computers	3
ENG 105	Composition I	3
FIR 145	Strategy and Tactics	3
FIR 200	Occupational Safety and Health in Emergency Services	3
FIR 152	Fire Protection Systems	3
FIR 124	Building Construction	3
PEA 148	Physical Fitness	2
SPC 122	Interpersonal Communication	3
FIR 140	Firefighter I – Unit 1	2
FIR 141	Firefighter II – Unit 2	2
EMS 217	Emergency Medical Technician	7
SOC/PSY	Sociology/Psychology Elective	3
MAT 772	Applied Math ((3) OR	
MAT 121	College Algebra (4)	3 or 4
FIR 130	Fundamentals of Fire Prevention	3
FIR 184	Hazardous Materials Technician	3
Electives	Fire Science Electives (see below)	10
Program Total:		65
Electives	Fire Administration I	3
FIR 226	Fire Investigation I (First Responders)	3
FIR 235	Fire Investigation II (Investigators)	3
FIR 236	Fire Investigation II (Investigators)	3
FIR 149	Fire Protection Hydraulics and Water Supply	3
FIR 180	Chemistry of Hazardous Materials	3
FIR 949	Special Topics: can be used as electives	Variable

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 ebsens@witcc.edu

Fire Science

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Diploma
Sioux City Campus



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 ebsens@witcc.edu

Fire Science Diploma Curriculum

Course #	Title	Credits
Diploma Option		
<i>Complete two semesters</i>		
FIR 213	Principles of Emergency Services	3
FIR 127	Fire Behavior and Combustion	3
FIR 214	Legal Aspects of Emergency Services	3
CSC 110	Introduction to Computers	3
ENG 105	Composition I	3
FIR 145	Strategy and Tactics	3
FIR 200	Occupational Safety and Health in Emergency Services	3
FIR 152	Fire Protection Systems	3
FIR 124	Building Construction	3
PEA 148	Physical Fitness	2
SPC 122	Interpersonal Communication	3
Diploma Program Total		32

To be accepted into the program, students must achieve the following scores on the Computerized Placement Test:
80 percent Reading; 86 percent Sentence Structure;
56 percent Arithmetic or 38 percent Elementary Algebra.

Fire Science

Certificate
Sioux City Campus

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.
Please see an advisor to ensure correct course sequence.

Program Advisor

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Fire Science Certificate Curriculum

Course #	Title	Credits
Certificate Option		
<i>Complete a minimum of 6 courses from the following categories</i>		
FIR 213	Principles of Emergency Services	3
FIR 127	Fire Behavior and Combustion	3
FIR 214	Legal Aspects of Emergency Services	3
FIR 145	Strategy and Tactics	3
FIR 200	Occupational Safety and Health in Emergency Services	3
FIR 152	Fire Protection Systems	3
FIR 124	Building Construction	3
FIR 140	Firefighter I – Unit 1	2
FIR 141	Firefighter II – Unit 2	2
FIR 130	Fundamentals of Fire Prevention	3
FIR 184	Hazardous Materials Technician	3
FIR 226	Fire Administration I	3
FIR 235	Fire Investigation I (First Responders)	3
FIR 236	Fire Investigation II (Investigators)	3
FIR 149	Fire Protection Hydraulics and Water Supply	3
FIR 180	Chemistry of Hazardous Materials	3

To be accepted into the program, students must achieve the following scores on the Computerized Placement Test:
80 percent Reading; 86 percent Sentence Structure;
56 percent Arithmetic or 38 percent Elementary Algebra.