

Mechanical Engineering

Mechanical Engineering Technology

Associate of Applied Science Degree
Sioux City Campus

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.)

Mechanical Engineering Technology Curriculum

Course #	Title	Credits
EGT 400	PLTW-Intro to Engineering Design	3
EGT 410	PLTW-Principles of Engineering	3
EGT 420	PLTW-Digital Electronics	3
CSC 110	Intro to Computers	3
MAT 772	Applied Math	3
DRF 113	Fundamentals of Technical Drafting	3
DRF 150	Mechanical Drafting Fundamentals	4
MFG 141	Geometric Dimensioning & Tolerances	2
EGT 118	Continuous Quality Management	2
MFG 206	Manufacturing Processes I	3
PEC, PEA, or PEH	General Education Elective	2
DRF 170	Machine Design Drafting	3
CAD 170	Intro to CAD: ProDesktop	2
MFG 207	Manufacturing Processes II	3
MAT 777	Applied Algebra/Trigonometry	3
EGT 128	Statics	3
EGT 123	Strength of Materials	3
EGT 141	Fluid Power	3
COM 753	Technical Communications OR English/Speech General Education Elective	3
MFG 542	Machine Design	3
EGT 132	Kinematics	4
EGT 150	Electrical Control of Fluid Power	3
MFG 423	Jig and Fixture Design	4
PSY 102	Human and Work Relations OR Social/Behavioral Science Gen. Ed. Elective	3
Program Total		69

Program Advisors

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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.