INDUSTRIAL MANUFACTURING TECHNOLOGY - COMPUTER-AIDED DESIGN MECHANICAL, CERTIFICATE (601)

About Our Program

This program is designed to prepare students to be a CAD technician in the manufacturing and/or engineering industries.

Nature of Work and Employment

Graduates of this program prepare clear, accurate, and detailed drawings from the rough sketches, specifications, and calculations of engineers and designers. These drawings are used for engineering and manufacturing purposes according to the specified dimensions. CAD/CAM technicians also use computer-controlled systems to assist industrial designers and engineers in designing products and carrying out automated processes.

Requirements

Code	Title	Hours
Required Courses		
Select one of the following:		3
BUSN 141	Business Communications [1]	
ENGL 121	Rhetoric and Composition I [1]	
COMM 101	Technical Communications [1]	
DRAF 105	Computer Aided Drafting I	3
DRAF 106	Drafting Fundamentals I [1]	3
DRAF 110	Print Reading and Inspection	2
DRAF 260	CAD-3D Solid Modeling [1]	4
MATH 111	Technical Math [1]	3
Technical Elective		3
Total Hours		**21**

[1] Course has a prerequisite. See course description.

Technical elective can be MTEC 151 Introduction to CNC Machining or with instructor consent MTEC 270 CNC Mill I, MTEC 285 Advanced CNC Machining, or OCED 290 Workplace Experience.

Program Outcomes

- Generate 2D drawings utilizing basic 2D CAD software.
- Generate 3D models and assemblies utilizing 3D-modeling software.
- Prepare clear, accurate and detailed drawings.
- Apply various types of dimensions and tolerances based on engineering requirements.

Program Contacts

Call Highland at 815-235-6121 for the following program contacts:

- Dr. Matt Magee, Dean of Agriculture, Business & Technology
- Aaron Sargent, Industrial Technology Faculty
- Vicki Schulz, Student Advisor/Transfer Coordinator

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