

MANUFACTURING TECHNOLOGY, CERTIFICATE

The Manufacturing Technology program provides training in a wide variety of skill areas of product manufacturing and services. This certificate provides a foundation for the four degree options in the program: Automated Manufacturing Systems, Drafting/Design, Manufacturing Technology and Manufacturing Engineering Technology.

For more information about Manufacturing Technology, please visit the program page (<http://www.cod.edu/manufacturing/>).

Certificate Requirements

Field of Study Code: MANUF.CER

Code	Title	Credits
Program Requirements		
MANUF 1101	Industrial Design/CAD	3
MANUF 1104	Technical Mechanics	2
MANUF 1110	Metrology	3
MANUF 1121	Physical Metallurgy	3
MANUF 1151	Machine Shop I	3
MANUF 1153	Advanced Machine Processes	3
MANUF 1180	Quality Control	3
MATH 1115	Technical Mathematics I	3
or WELD 1100	Welding I	
ELECT 1100	Electricity and Electronics Fundamentals	3
ELMEC 1141	Hydraulics and Pneumatics	3
Program Electives		
Select six credits from the following: ¹		6
MANUF 2201	Geometric Dimensioning and Tolerancing	
ELMEC 1171	Introduction to Robotic Technology	
MANUF 1102	Basic Robotics Fabrication	
MANUF 2201	Geometric Dimensioning and Tolerancing	
MANUF 2251	Computer Numerical Control (CNC)	
MANUF 2253	Computer-Aided Manufacturing (CAM)	
WELD 1122	Shielded Arc Welding (SMAW)	
WELD 1132	Metal Inert Gas (MIG) Carbon Steel Welding	
WELD 1142	Gas Tungsten Arc (TIG)	
Total Credits		35

¹ In addition to the courses listed above.

This page lists programs related to one another.

- Automated Manufacturing Systems, A.A.S. (<https://catalog.cod.edu/programs-study/manufacturing-technology/automated-manufacturing-systems-aas/>)
- Automated Manufacturing Systems, Certificate (<https://catalog.cod.edu/programs-study/manufacturing-technology/automated-manufacturing-systems-certificate/>)
- CNC Operations, Certificate (<https://catalog.cod.edu/programs-study/manufacturing-technology/cnc-operations-certificate/>)

- Computer-Aided Design, Certificate (<https://catalog.cod.edu/programs-study/manufacturing-technology/computer-aided-design-certificate/>)
- Drafting/Design, Certificate (<https://catalog.cod.edu/programs-study/manufacturing-technology/draftingdesign-certificate/>)
- Manufacturing Engineering Technology, A.A.S. (<https://catalog.cod.edu/programs-study/manufacturing-technology/manufacturing-engineering-technology-aas/>)
- Manufacturing Skills Standards, Certificate (<https://catalog.cod.edu/programs-study/manufacturing-technology/manufacturing-skills-standards-certificate/>)
- Manufacturing Technology Drafting/Design, A.A.S. (<https://catalog.cod.edu/programs-study/manufacturing-technology/manufacturing-technology-drafting-design-aas/>)
- Manufacturing Technology, A.A.S. (<https://catalog.cod.edu/programs-study/manufacturing-technology/manufacturing-technology-aas/>)
- Mold Making, Certificate (<https://catalog.cod.edu/programs-study/manufacturing-technology/mold-making-certificate/>)
- Tool and Die Making, Certificate (<https://catalog.cod.edu/programs-study/manufacturing-technology/tool-die-making-certificate/>)