

# COMPUTER-AIDED DESIGN, CERTIFICATE

The Manufacturing Technology program provides training in a wide variety of skill areas of product manufacturing and services. The four degree options in the program are Automated Manufacturing Systems, Drafting/Design, Manufacturing Technology and Manufacturing Engineering Technology. Automated Manufacturing is designed to prepare the student for careers in computer-aided manufacturing, robotics and numerical control. Drafting/Design prepares the student for careers in the drafting and computer-aided design areas. Manufacturing Technology provides the student with a broad background in the areas of machining, drafting and fluid systems so as to prepare them for entry level positions as machine operators, machine maintenance personnel and quality control personnel. The Manufacturing Engineering Technology degree prepares students for entry-level engineering technician positions in manufacturing. This certificate requires 24 credits in the courses listed below.

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

## Certificate Requirements

Field of Study Code: MANUF.CER.CAD

Code	Title	Credits
<b>Program Requirements</b>		
MANUF 1101	Industrial Design/CAD	3
MANUF 2202	Solid Modeling and Design	3
MANUF 2203	Manufacturing Processes and Design	3
MANUF 2206	Mechanical Computr-Aided Drafting/Design	3
MANUF 2207	Tool Design	3
MANUF 2208	Mechanical Design Portfolio	3
<b>Program Electives</b>		
Select six credits from the following: <sup>1</sup>		6
MANUF 1110	Metrology	
MANUF 1121	Physical Metallurgy	
MANUF 2201	Geometric Dimensioning and Tolerancing	
MANUF 2280	Industrial Safety	
MANUF 2281	Cost Analysis	
ELECT 1100	Electricity and Electronics Fundamentals	
ELMEC 1141	Hydraulics and Pneumatics	
<b>Total Credits</b>		<b>24</b>

<sup>1</sup> 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/>)

- 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/>)
- Manufacturing Technology, Certificate (<https://catalog.cod.edu/programs-study/manufacturing-technology/manufacturing-technology-certificate/>)
- 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/>)