

# MANUFACTURING TECHNOLOGY, A.A.S.

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. The **Manufacturing Technology degree** requires 65 credits in program requirements, program electives and general education in the courses listed below.

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

## Degree Requirements

Field of Study Code: MANUF.AAS

Code	Title	Credits
<b>Program Requirements</b>		
MANUF 1101	Industrial Design/CAD	3
MANUF 1104	Technical Mechanics	2
MANUF 1110	Metrology	3
MANUF 1151	Machine Shop I	3
MANUF 1153	Advanced Machine Processes	3
MANUF 1180	Quality Control	3
MANUF 2251	Computer Numerical Control (CNC)	3
ELECT 1100	Electricity and Electronics Fundamentals	3
ELECT 1141	Digital Fundamentals	3
WELD 1100	Welding I	3
<b>Program Electives</b>		
Select 16 credits from the following: <sup>1</sup>		16
MANUF 1121	Physical Metallurgy	
MANUF 2201	Geometric Dimensioning and Tolerancing	
MANUF 2202	Solid Modeling and Design	
ELMEC 1171	Introduction to Robotic Technology	
WELD 1112	Oxy-Fuel, Welding, Plasma Cutting and Brazing	
WELD 1122	Shielded Arc Welding (SMAW)	
WELD 1132	Metal Inert Gas (MIG) Carbon Steel Welding	
WELD 1142	Gas Tungsten Arc (TIG)	
<b>General Education</b>		
Select 20 credits <sup>1</sup>		20
Communications: Written (3 credits)		
Communications: Oral (3 credits)		
Physical/Life Sciences (3-5 credits)		
Mathematics (3-5 credits, 1000 level or above)		

Humanities (3 credits)

Social & Behavioral Sciences (3 credits)

**Total Credits**

**65**

<sup>1</sup> In addition to the courses listed above.

## General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (<https://catalog.cod.edu/associate-degree-programs/associate-applied-science-degree/>).