

# AUTOMATED MANUFACTURING SYSTEMS, 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 students 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 degree requires 66 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.AUTO

Code	Title	Credits
<b>Program Requirements</b>		
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 1180	Quality Control	3
MANUF 2202	Solid Modeling and Design	3
MANUF 2251	Computer Numerical Control (CNC)	3
MANUF 2253	Computer-Aided Manufacturing (CAM)	3
MANUF 2280	Industrial Safety	2
ELECT 1100	Electricity and Electronics Fundamentals	3
ELMEC 1141	Hydraulics and Pneumatics	3
ELMEC 1171	Introduction to Robotic Technology	3
ELMEC 1190	Intro to Programmable Logic Controllers	3
<b>Program Electives</b>		
Select six credits from the following: <sup>1</sup>		6
MANUF 1153	Advanced Machine Processes	
MANUF 1160	Technical Static & Strength of Material	
MANUF 2201	Geometric Dimensioning and Tolerancing	
MANUF 2203	Manufacturing Processes and Design	
MANUF 2206	Mechanical Computr-Aided Drafting/Design	
MANUF 2207	Tool Design	
MANUF 2271	Robotic Application	
<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 Science (3 credits)

**Total Credits** **66**

<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/>).