



## MANUFACTURING TECHNOLOGY

### • Associate of Applied Science

#### About The Program

The Manufacturing Technology program provides instruction that allows students to become familiar with and use the tools, materials, and processes needed in the manufacturing phase of industry. Students are also exposed to occupations in the manufacturing field. Program courses cover structure of industry, elements of manufacturing, mass production and automation, primary metals industry, casting metal, forging and forming metal, measuring and layout (English and/or metric), machining and finishing metal, fastening and finishing metal, cutting and shaping, assembling and finishing, and opportunities in manufacturing. Each unit includes specific objectives, student competencies and related student activities.

#### Career Potential

- Tool Analyst
- Engineering Technician
- Quality Control Specialist
- Sales and Marketing Engineer

#### Admission Requirements

Students are admitted to the program each semester. Students must have Program approval, a completed application, and other required information submitted by the due date. If there are openings after the application deadline, remaining openings will be filled on a "first-come" basis.

Individuals interested in the Manufacturing Technology program are required to fulfill the following requirements:

- College admission requirements.
- Declare their intent to enter the Manufacturing Technology program on the WCCCD Admission Application or change their intent within the admission office.
- Course placement requirements based on COMPASS test results.
- Students must complete the Program Admission Application during the semester they are enrolled in MAN 100 (Shop Equipment and Tools).
- Students must complete all core course work with a grade of "C" or better to meet graduation requirements.

### Associate of Applied Science Degree Requirements

#### SEMESTER I

MAN 100	Shop Equipment & Tools	3
NC 111	Numerical Control Concepts	3
DRT 101	Blueprint Reading	3
ENG 119	English I	3
MAT 121	Technical Mathematics I	3
<b>TOTAL CREDITS</b>		<b>15</b>

#### SEMESTER II

MAN 110	Manufacturing Process I	3
CAD 101	Introduction to CAD	4
DRT 102	Fundamentals of Mechanical Drawing	4
MAT 122	Technical Mathematics II	3
NC 222	CNC Machining & Programming I	3
<b>TOTAL CREDITS</b>		<b>17</b>

#### SEMESTER III

DRT 115	Geometric Dimensioning Tolerancing	2
MCT 202	Introductions to Robotics	3
MCT 208	Programmable Logic Controllers	3
NC 231	CNC Turning Center Operation and Graphics I	3
ENG 134	Technical Communications	3
<b>TOTAL CREDITS</b>		<b>14</b>

#### SEMESTER IV

MAN 120	Survey of Material Science	3
MAN 200	Quality & Inspection	3
MAN 210	Nontraditional Manufacturing	3
LS 204	Occupational Health & Safety	3
PS 101	Introduction to Political Science	3
	Humanities (Elective)	3
- OR -		
	Social Science (Elective)	3
<b>TOTAL CREDITS</b>		<b>18</b>

#### PROGRAM TOTAL CREDITS 64

\* Program totals may not include prerequisite work.

#### District Office

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Detroit, MI 48226

General Information Number:  
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Career Program Hotline:  
1-800-300-2118

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