

# MANUFACTURING TECHNOLOGY, ASSOCIATE IN APPLIED SCIENCE DEGREE

NMC Code 584

The Manufacturing Technology program is designed to provide a multi-disciplined technical background in fields for which NMC does not offer a specific program. For instance, students interested in pursuing careers in advanced manufacturing or welding may enroll in the Manufacturing Technology program and design a model schedule that emphasizes their major area of interest. This program has the flexibility to match the student's interest with the skills necessary for job entry.

Students, with assistance from an advisor, will select a major area of technical emphasis. These technical courses plus supporting courses from other disciplines comprise the Manufacturing Technology program requirements.

Each student's proposed Manufacturing Technology program must be approved by a committee consisting of the appropriate department head, the academic chair, and the registrar.

## Requirements

### Major Requirements

Course	Title	Credits
<b>General Education Requirements</b>		
ENG 111	English Composition	4
Select one of the following:		3-4
BUS 231	Professional Communications	
ENG 112	English Composition <sup>1</sup>	
ENG 220	Technical Writing	
Any Group 1 Humanities course		3
Math Competency <sup>2</sup>		
Any Group 1 Science lecture/lab course		4
Any Group 1 Social Science course		3
<b>Occupational Specialty Requirements</b>		
Complete the Occupational Specialty Requirements		39
<b>Electives</b>		
Select any courses from Group 1 and/or Group 2		4-9
<b>Total Credits</b>		<b>60-66</b>

<sup>1</sup> Students intending to transfer to another college or university should take ENG 112 English Composition.

<sup>2</sup> Placement into MTH 111 Intermediate Algebra *or* higher, *or* completion of MTH 23 Beginning Algebra

### Occupational Specialty Requirements

Course	Title	Credits
DD 101	Print Reading and Sketching	3
DD 110	Basic Metallurgy	3
DD 160	Tolerancing and GD&T	3
DD 170	CADD/Computer Modeling	4
MFG 203	Manuf/Engineering Processes	3

MFG 104	Fluid Power	3
MFG 111	Math for Manufacturing	3
MFG 113	Machining I	3
MFG 114	Machining II	3
MFG 217	CNC Operations - Lathe	4
MFG 219	CNC Mill Operations	4
MFG 290	Manufacturing Tech Internship	3

**Total Credits 39**

## Course Sequence Guide

Course	Title	Credits
<b>Year 1</b>		
<b>Fall</b>		
Occupational Specialty Requirements		18
<b>Credits</b>		<b>18</b>
<b>Spring</b>		
Occupational Specialty Requirements		18
<b>Credits</b>		<b>18</b>
<b>Year 2</b>		
<b>Fall</b>		
ENG 111	English Composition	4
MTH 23	Beginning Algebra	4
Humanities: Any Group 1 course		3
Social Sciences: Any Group 1 course		3
<b>Credits</b>		<b>14</b>
<b>Spring</b>		
Select one of the following:		3-4
ENG 112	English Composition	
ENG 220	Technical Writing	
BUS 231	Professional Communications	
Science: Any Group 1 course with a lab		4
Electives: Any Group 1 and/or Group 2		4
Occupational Specialty Requirements		3
<b>Credits</b>		<b>14-15</b>
<b>Total Credits</b>		<b>64-65</b>

**Note:** Occupational Specialty Requirements are listed below. However, other Technical elective courses may be substituted by an academic advisor to fulfill the Occupational Specialty requirements.

The responsibility for determining the transferability of this degree and courses to another institution is the sole responsibility of the student.

### Occupational Specialty Requirements

Course	Title	Credits
DD 101	Print Reading and Sketching	3
DD 110	Basic Metallurgy	3
DD 160	Tolerancing and GD&T	3
DD 170	CADD/Computer Modeling	4
MFG 203	Manuf/Engineering Processes	3
MFG 104	Fluid Power	3
MFG 111	Math for Manufacturing	3
MFG 113	Machining I	3

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MFG 114	Machining II	3
MFG 217	CNC Operations - Lathe	4
MFG 219	CNC Mill Operations	4
MFG 290	Manufacturing Tech Internship	3
<b>Total Credits</b>		<b>39</b>