

# MANUFACTURING APPRENTICESHIP, CERTIFICATE OF ACHIEVEMENT (LEVEL II)

NMC Code 078

Apprenticeships combine work, on-the-job training, and classroom instruction to prepare workers for high-skilled careers. As a recognized related technical instruction (RTI) provider, NMC supports the educational courses and training components of a registered apprenticeship. This certificate is designed to credential a student in a US Department of Labor Registered Apprenticeship. The courses required are developed in partnership with the employer to meet the training needs and associated national standards of the occupation. Students will need to meet with the Experiential Learning Program Coordinator to determine eligibility and complete additional apprenticeship registration requirements.

## Requirements certificate requirements

Manufacturing Apprentice Certificate (Level II) Requirements:

1. Student is a DOL registered apprentice
2. Complete the Occupational Specialty courses as listed for the apprenticeship
3. Certificate is earned upon completion of any combination of the Occupational Specialty Requirements to equal 30 credits

### 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 104	Fluid Power	3
MFG 106	Fluid Power Certification <sup>1</sup>	2
MFG 111	Math for Manufacturing	3
MFG 113	Machining I	3
MFG 114	Machining II	3
MFG 203	Manuf/Engineering Processes	3
MFG 217	CNC Operations - Lathe	4
MFG 219	CNC Mill Operations	4
MFG 290	Manufacturing Tech Internship	3
ELE 101	Introduction to Electrical I	3
ELE 107	Introduction to Electrical II	3
EET 102	Intro to Engineering Tech	2
EET 103	Electrical Studies I	3
EET 161	Fundamentals of Light & Lasers	4
EET 204	Electrical Studies II	3
EET 221	Industrial Controls	3

EET 232	Programmable Logic Controllers	3
EET 233	PLC Applications I	3
EET 234	PLC Applications II	3
WPT 111	Welding Theory I	3
WPT 112	Welding Lab I	4
WPT 113	Welding Theory II	3
WPT 114	Welding Lab II	4
WPT 161	Welding Qualification Prep	3
WPT 211	Welding Fabrication I	3
WPT 212	Welding Fabrication II	3
WPT 213	Weld Quality Testing	3
WPT 260	Intro to Welding Automation	3

<sup>1</sup> MFG 106 Fluid Power Certification prepares and tests students for the IFPS Connector and Conductor Certification.

*\*Additional courses may be added based on input from the employer*

## Course Sequence Guide

Course	Title	Credits
<b>Year 1</b>		
<b>Fall</b>		
Occupational Specialty Course		3-4
Occupational Specialty Course		3-4
<b>Credits</b>		<b>6-8</b>
<b>Spring</b>		
Occupational Specialty Course		3-4
Occupational Specialty Course		3-4
<b>Credits</b>		<b>6-8</b>
<b>Year 2</b>		
<b>Fall</b>		
Occupational Specialty Course		3-4
Occupational Specialty Course		3-4
<b>Credits</b>		<b>6-8</b>
<b>Spring</b>		
Occupational Specialty Course		3-4
Occupational Specialty Course		3-4
<b>Credits</b>		<b>6-8</b>
<b>Year 3</b>		
<b>Fall</b>		
Occupational Specialty Course		3-4
Occupational Specialty Course		3-4
<b>Credits</b>		<b>6-8</b>
<b>Total Credits</b>		<b>30-40</b>

**Note:** This sample model schedule varies by course offerings, work schedule, etc.