

# WELDING TECHNOLOGY, ASSOCIATE IN APPLIED SCIENCE DEGREE

NMC Code 386

Welding is one of the foundations upon which our industrial world is built. The ability to form and join metals has been a critical need in our society for thousands of years and, with the rapid pace of technological advancement, is as in demand now as it ever was. Northwestern Michigan College is proud to offer three paths by which students will gain the competence and skill necessary to embark on a rewarding career in the welding world. Students will develop their skills through lecture and laboratory experiences in Gas Metal Arc Welding, Shielded Metal Arc Welding, Gas Tungsten Arc Welding, Flux Cored Arc Welding, Oxy-Fuel Processes, and Plasma Arc Cutting as well as additional skills that are in high demand for welding professionals. All programs incorporate industry recognized AWS Qualification testing. No prior experience needed.

## Requirements

### Major Requirements

Course	Title	Credits
<b>General Education Requirements</b>		
ENG 111	English Composition	4
ENG 112 or ENG 220	English Composition Technical Writing	3-4
Any Group 1 Humanities course		3
Math Competency <sup>1</sup>		3
PHY 105	Physics of the World Around Us	4
Any Group 1 Social Sciences course		3
<b>Occupational Specialty Requirements</b>		
DD 101	Print Reading and Sketching	3
DD 110	Basic Metallurgy	3
EET 103	Electrical Studies I	3
MFG 113	Machining I	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
<b>Total Credits</b>		<b>61-62</b>

## Course Sequence Guide

Course	Title	Credits
<b>Year 1</b>		
<b>Fall</b>		
ENG 111	English Composition	4
WPT 111	Welding Theory I (Fall only)	3
WPT 112	Welding Lab I (Fall only)	4
MFG 113	Machining I (Fall only)	3
EET 103	Electrical Studies I	3
<b>Credits</b>		<b>17</b>
<b>Spring</b>		
ENG 112 or ENG 220	English Composition or Technical Writing	3-4
MTH 122	Trigonometry	3
WPT 113	Welding Theory II (Spring only)	3
WPT 114	Welding Lab II (Spring only)	4
DD 101	Print Reading and Sketching	3
<b>Credits</b>		<b>16-17</b>
<b>Summer</b>		
WPT 161	Welding Qualification Prep (Summer only)	3
<b>Credits</b>		<b>3</b>
<b>Year 2</b>		
<b>Fall</b>		
Social Sciences: Any Group 1 course		3
PHY 105	Physics of the World Around Us	4
WPT 211	Welding Fabrication I (Fall only)	3
WPT 260	Intro to Welding Automation (Fall only)	3
<b>Credits</b>		<b>13</b>
<b>Spring</b>		
Humanities: Any Group 1 course		3
DD 110	Basic Metallurgy (Spring only)	3
WPT 212	Welding Fabrication II (Spring only)	3
WPT 213	Weld Quality Testing (Spring only)	3
<b>Credits</b>		<b>12</b>
<b>Total Credits</b>		<b>61-62</b>

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

<sup>1</sup> Placement into MTH 141 Calculus I or higher, or completion of MTH 122 Trigonometry with a 2.0 or higher