

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 |
|--|--|--------------|
| General Education Requirements | | |
| ENG 111 | English Composition | 4 |
| ENG 112 or ENG 220 | English Composition Technical Writing | 3-4 |
| Any Group 1 Humanities course | | 3 |
| Math Competency ¹ | | 3 |
| PHY 105 | Physics of the World Around Us | 4 |
| Any Group 1 Social Sciences course | | 3 |
| Occupational Specialty Requirements | | |
| DD 101 | Print Reading and Sketching (Fall only) | 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 (Summer only) | 3 |
| WPT 211 | Welding Fabrication I (Fall only) | 3 |
| WPT 212 | Welding Fabrication II (Spring only) | 3 |
| WPT 213 | Weld Quality Testing (Summer only) | 3 |
| WPT 260 | Intro to Welding Automation | 3 |
| Total Credits | | 61-62 |

¹ Placement into MTH 141 Calculus I or higher, or completion of MTH 122 Trigonometry with a 2.0 or higher.

Course Sequence Guide

| Course | Title | Credits |
|-------------------------------------|---|--------------|
| Year 1 | | |
| Fall | | |
| ENG 111 | English Composition | 4 |
| WPT 111 | Welding Theory I | 3 |
| WPT 112 | Welding Lab I | 4 |
| MFG 113 | Machining I (Fall only) | 3 |
| EET 103 | Electrical Studies I | 3 |
| Credits | | 17 |
| Spring | | |
| ENG 112 or ENG 220 | English Composition or Technical Writing | 3-4 |
| MTH 122 | Trigonometry | 3 |
| WPT 113 | Welding Theory II | 3 |
| WPT 114 | Welding Lab II | 4 |
| Credits | | 13-14 |
| Summer | | |
| WPT 161 | Welding Qualification Prep (Summer only) | 3 |
| Credits | | 3 |
| Year 2 | | |
| Fall | | |
| 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 |
| DD 101 | Print Reading and Sketching (Fall only) | 3 |
| Credits | | 16 |
| Spring | | |
| Humanities: Any Group 1 course | | 3 |
| DD 110 | Basic Metallurgy (Spring only) | 3 |
| WPT 212 | Welding Fabrication II (Spring only) | 3 |
| Credits | | 9 |
| Summer | | |
| WPT 213 | Weld Quality Testing (Summer Only) | 3 |
| Credits | | 3 |
| Total Credits | | 61-62 |

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