

**Welding**
**Certificate | 12 credits**

Campus: Mesabi Range, Eveleth

<b>FALL SEMESTER 2024 – 7 Credits</b>		<b>CREDITS</b>	<b>HOURS LEC/LAB</b>
WELD 1221	Introduction to Shielded Metal Arc Welding (SMAW)	1	1/0
WELD 1222	Basic Shielded Metal Arc Welding (SMAW) Skills	2	0/4
WELD 1223	Shielded Metal Arc Welding (SMAW) Low Hydrogen Skills	2	0/4
WELD 1231	Introduction to Thermal Cutting Processes	1	1/0
WELD 1255	Welding Mathematics	1	1/0
<b>SPRING SEMESTER 2025 – 5 Credits</b>			
WELD 1261	Gas Metal Arc Welding (GMAW) 1	1	.5/1
WELD 1262	Gas Metal Arc Welding (GMAW) 2	2	0/4
WELD 1281	Flux Core Arc Welding (FCAW) 1	2	0/4

**PROGRAM DESCRIPTION**

The Welding Certificate program provides students with welding and fabrication techniques.

**PROGRAM LEARNING OUTCOMES**

1. Build skills toward industry standards.
2. Build skills toward American Welding Society certifications.
3. Work as an effective and dependable team member as well as independently.
4. Demonstrate safe work habits that reflect concern and care for self, others, and the environment.
5. Develop the skills necessary to secure employment.

**ACCREDITATION**

The [American Welding Society \(AWS\)](#) was founded in 1919, as a nonprofit organization with a global mission to advance the science, technology and application of welding and allied joining and cutting processes, including brazing, soldering and thermal spraying. AWS strives to move the industry forward in both thought and action, as well as inspire new generations to see the exciting career opportunities available today.

**PROGRAM NOTES**

- The typical Welding Technology Program student applicant has had some experience with welding and cutting. However, students that have never welded before have successfully completed this program and have gone on to become certified welders.
- Differential tuition is assessed for the WELD courses.

**EMPLOYMENT OPPORTUNITIES**

Successful graduates have gone to work at USX MinnTac, Virginia, MN; ArcelorMittal Minorca Mine, Virginia, MN; L & M Radiator, Hibbing, MN; Electric Power Door, Hibbing, MN; Furin & Shea, Hibbing, MN; Yanmar, Grand Rapids, MN; Serco Loaders, Two Harbors Machine, Two Harbors, MN; Stanley/LaBounty, Two Harbors, MN; Savage Trailers, Angora, MN; Boilermakers Local Union; Millwrights Local Union, Virginia, MN; Ironworkers Local Union, Minneapolis, MN; and many places in the Minneapolis/St. Paul Metro Area and the surrounding suburbs. Some have gone out-of-state, and a few have even gone overseas.

Positions include welder, fitter, welder helper, weld shop supervisor, welder/lead-man, welding apprentice trainer, boilermaker, pipefitter, welding robot operator, sheet metal worker, millwright/welder, quality assurance manager, welding inspector, plant superintendent, welding business owner and more.

# Minnesota North College

## 2024-25 PROGRAM PLANNER

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### PROGRAM FACULTY

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