



WELDING TECHNOLOGY

Build a career that sparks opportunity. PTCC's Welding Technology program provides extensive hands-on training using state-of-the-art equipment and industry-aligned techniques to prepare students for high-demand careers in manufacturing and fabrication. Students develop expertise in multiple welding processes while strengthening safety, blueprint reading, and quality control skills. With stackable credentials from certificate to AAS degree, graduates can enter the workforce quickly



COLLEGE CATALOG 2026-27



8 Credits
Earns a
Certificate

+



33 Credits
Earns a Diploma

+



50 Credits
Earns a
Certificate

+



60 Credits
Earns an AAS



\$259 per Credit
on Average



18:1 Student/Instructor
Ratio on Average

Program Delivery Mode: On-Campus

Manufacturing Foundations Certificate

(8 credits)

Technical Education Courses

CMAE 1514 Safety Awareness.....	2
CMAE 1518 Manufacturing Processes and Production	2
CMAE 1522 Quality Practices	2
CMAE 1526 Maintenance Awareness	2
Total Credits	8

Welding Technology Diploma

(25 additional credits)

General Education Courses

CCPD 1010 Success Strategies for College & Professional Development.....	2
MATH 1251 Technical Math.....	3

Technical Education Courses

WELD 1558 Print Reading for Welders	2
WELD 1562 Oxyfuel Welding and Cutting Process	2
WELD 1564 Shield Metal Arc Welding (SMAW).....	4
WELD 1566 Gas Metal Arc Welding (GMAW)/Flux Cored Arc Welding (FCAW)	4
WELD 1568 Gas Tungsten Arc Welding (GTAW)	4
WELD 1570 Metallurgy and Mechanical Properties of Metals.....	1

WELD 1580 Welding Technologies Capstone Project or WELD 1585 Welding Internship.....	3
Total Credits	33

Advanced Welding Technology Certificate

(17 additional credits)

Technical Education Courses

WELD 2550 Advanced Print Reading for Welders	1
WELD 2566 Advanced Gas Metal Arc Welding (GMAW)/Flux Cored Arc Welding (FCAW).....	4
WELD 2572 Advanced Gas Tungsten Metal Arc (GTAW)	4
WELD 2564 Advanced Shield Metal Arc Welding (SMAW) ...	4
MTTP 1201 Basic Machine Shop	3
MTTP 1208 Measuring Tools	1
Total Credits	50

Welding Technology AAS

(10 additional credits)

General Education Courses

ENGL 1276 English Composition	4
General Education Electives	
MnTC Goal Area 3 (with lab)	4
MnTC Goal Areas 5-10.....	2
Total Credits	60

Recommended Course Sequence for Completion in 2 Years

First Fall

WELD 1558 Print Reading for Welders	2
WELD 1566 Gas Metal Arc Welding.....	4
WELD 1562 Oxy Fuel	2
CMAE 1518 Manufacturing Processes.....	2
CMAE 1514 Safety Awareness.....	2
CMAE 1522 Quality Practices	2
CMAE 1526 Maintenance Awareness	2
CCPD 1010 Success Strategies for College.....	2
Total Credits	18

Manufacturing Foundations Certificate Earned!

First Spring

WELD 1568 Gas Tungsten.....	4
WELD 1564 Shield Metal	4
WELD 1570 Metallurgy and Mechanical Properties	1
WELD 1580 Welding Tech Capstone Project or	
WELD 1585 Welding Internship.....	3
MATH 1251 Technical Math.....	3
Total Credits	15

Welding Technology Diploma Earned!

Second Fall

WELD 2550 Advanced Blueprint Reading for Welders	1
WELD 2566 Advanced GMAW and FCAW	4
MTTP 1201 Basic Machine Shop	3
MTTP 1208 Measuring Tools	1
ENGL 1276 College Composition	4
Total Credits	13

Second Spring

WELD 2572 Advanced Gas Metal Arc (GTAW)	4
WELD 2564 Advanced (SMAW)	4
MnTC Goal Area 3 (with lab)	4
MnTC Goal Area 5-10	2
Total Credits	14

TOTAL DEGREE CREDITS **60**

Welding Technology AAS Earned!

Advanced Welding Technology Certificate Earned!

Career Outlook

Possible Job Titles

- Welder
- Fabricator
- Welding Technician



6.1%

MN Projected
Growth % (2022-2032)



\$59,700

MN Median Annual
Wage (\$) (approx.)

*Data from ONET & MN DEED

Get the Credit You Deserve!

What is Credit for Prior Learning (CPL)?

PTCC awards college credit for knowledge gained outside the classroom, including work and life experience.

You may qualify through:

- Job skills/work experience
- Employer training
- Military education
- Industry certifications
- Volunteer service
- Self-study
- High school articulated credit
- Standardized exams

Getting Started is Easy:

- Visit mycpl.minnstate.edu to view eligible courses and requirements.
- Contact records@pine.edu for guidance on options, assessments, and any applicable fees.

New to PTCC? Visit Campus!

- Take a campus tour
- Learn about scholarships
- Meet the admissions team
- Tour housing and The REC

Book an Appointment to Explore PTCC!



Sign up to visit in person, or virtually, to learn more about PTCC programs, admissions requirements, housing options, and more.

www.pine.edu/visit



Apply Today!

www.pine.edu/apply

320-629-5100 • 800-521-7463