



Pine Technical & Community College

APPLIED ENGINEERING TECHNOLOGY

Design innovative solutions for real-world manufacturing challenges. PTCC's Applied Engineering Technology AAS program blends engineering principles with hands-on technical training in CAD, machine design, automation, quality control, and manufacturing processes. Students work on industry-simulated projects that strengthen both technical expertise and professional skills such as teamwork, communication, and project management.

COLLEGE CATALOG 2026-27



16 Credits
Earns a Certificate

+



31 Credits
Earns a Diploma

+



60 Credits
Earns an AAS



\$220 per Credit
on Average



18:1 Student/Instructor
Ratio on Average

Program Delivery Mode: On-Campus

Applied Engineering Technology Certificate

(16 credits)

General Education Courses

CCPD 1010 Success Strategies for College & Professional Development.....	2
MATH 1260 College Algebra.....	3

Technical Education Courses

AENG 1231 Material & Manufacturing Process.....	3
MTTP 1201 Basic Machine Shop.....	3
MTTP 1220 Print Reading I.....	2
MTTP 1241 Intro. to Computer Aided Design (CAD).....	3
Total Credits	16

Applied Engineering Technology Diploma

(15 additional credits)

General Education Courses

ENGL 1276 College Composition.....	4
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Technical Education Courses

AENG 1205 Geometric Dimensioning & Tolerancing.....	2
AENG 1241 Introduction to Statics.....	3
AENG 1250 Applied Engineering Design Project.....	3
AENG 2230 Manufacturing Project Management.....	3
Total Credits	31

Applied Engineering Technology AAS

(29 additional credits)

General Education Courses

General Education Electives (MnTC Goal Areas 3, 5-10).....	7
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Technical Education Courses

AENG 2210 Reverse Engineering.....	3
AENG 2215 Prototyping.....	2
AENG 2220 Machine Design & Kinematics.....	3
AENG 2241 Advanced Computer Aided Design (CAD).....	3
AENG 2250 Applied Engineering Capstone.....	3
EETC 1550 DC Power & Basic Control Circuits.....	3
EETC 1551 Programmable Logic Controllers I.....	3
EETC 2522 Fluid Power.....	2
Total Credits	60

Recommended Course Sequence for Completion in 2 Years

First Fall

MATH 1260 College Algebra	3
MTTP 1220 Print Reading I	2
MTTP 1241 Intro. to Computer Aided Design (CAD)	3
AENG 1231 Material & Manufacturing Process	3
MTTP 1201 Basic Machine Shop	3
CCPD 1010 College Success Strategies	2
Total Credits	16

Applied Engineering Technology Certificate Earned!

First Spring

AENG 1241 Introduction to Statics	3
AENG 1250 Applied Engineering Design Project	3
AENG 2230 Manufacturing Project Management	3
AENG 1205 Geometric Dimensioning & Tolerancing	2
ENGL 1276 College Composition	4
Total Credits	15

Applied Engineering Technology Diploma Earned!

Second Fall

AENG 2241 Advanced Computer Aided Design (CAD)	3
AENG 2210 Reverse Engineering	3
EETC 2522 Fluid Power	2
EETC 1550 DC Power & Basic Control Circuits	3
EETC 1551 Programmable Logic Controllers I	3
Total Credits	14

Second Spring

AENG 2220 Machine Design & Kinematics	3
AENG 2215 Prototyping	2
AENG 2250 Applied Engineering Capstone	3
MnTC Goal 3, 5-10	7
Total Credits	15

TOTAL DEGREE CREDITS **60**

Applied Engineering Technology AAS Earned!

Career Outlook

Possible Job Titles

- Manufacturing/Processing Technician
- Industrial Maintenance Technician
- Engineering Technician



20.5%
MN Projected
Growth % (2022-2032)



\$69,700
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

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