



Pine Technical & Community College

AUTOMATED SYSTEMS TECHNOLOGY

Make advanced industrial systems run efficiently and reliably. PTCC's Automated Systems Technology AAS program prepares students to install, troubleshoot, and optimize electrical, mechanical, and automated equipment. Through hands-on projects involving computer controlled electronics, PLCs, robotics, fluid power, and industrial programming, students gain the technical depth and teamwork skills demanded in modern manufacturing. Graduates are ready for high-tech careers in automation and advanced manufacturing environments.



18 Credits
Earns a Certificate

+



32 Credits
Earns a Diploma

+



60 Credits
Earns an AAS



\$257 per Credit
on Average



18:1 Student/Instructor
Ratio on Average

Program Delivery Mode: On-Campus

Automated Systems Technology Certificate

(18 credits)

Technical Education Courses

ETEC 1551 Programmable Logic Controllers I.....	3
ETEC 1550 DC Power & Basic Control Circuits.....	3
ETEC 1552 AC Power	3
ETEC 1558 Motor Controls	3
ETEC 1560 Human Machine Interface I	3
ETEC 2543 Programmable Controllers II.....	3
Total Credits	18

Automated Systems Technology Diploma

(14 additional credits)

Technical Education Courses

ETEC 1541 Mechanical Systems.....	3
ETEC 1581 Automated Systems I	3
ETEC 2522 Fluid Power	2
MTTP 1241 Introduction to CAD	3

Choose One:

WELD 1501 Introduction to Welding	
AENG 2230 Manufacturing Project Management.....	3

Total Credits 32

Automated Systems Technology AAS

(28 additional credits)

General Education Courses

ENGL 1276 College Composition	
or ENGL 1277 Technical Communications.....	4
MATH 1260 College Algebra	
or MATH 1256 Mathematical Thinking.....	3
General Education Elective (MnTC Goal Area 2, 3,5-10)	4
General Education Elective (MnTC Goal Area of Choice)	4

Technical Education Courses

MTTP 1201 Basic Machine Shop	3
AENG 1231 Materials & Mfg Process	3
ETEC 2900 Automated Systems Technology Capstone.....	4

Take the one you haven't already taken:

WELD 1501 Introduction to Welding	
AENG 2230 Manufacturing Project Management.....	3

Total Credits 60

Recommended Course Sequence for Completion in 2 Years

First Fall

MTTP 1241 Introduction to CAD	3
ETEC 1541 Mechanical Systems.....	3
ETEC 1550 DC Power & Basic Control Circuits.....	3
ETEC 1551 Programmable Logic Controllers I.....	3
ETEC 1552 AC Power	3
ETEC 2522 Fluid Power	2
Total Credits	17

First Spring

ETEC 1558 Motor Controls	3
ETEC 1560 Human Machine Interface I	3
ETEC Automated Systems I.....	3
ETEC 2543 Programmable Logic Controllers II.....	3

Choose one:

WELD 1501 Introduction to Welding or	
AENG 2230 Manufacturing Project Management.....	3
Total Credits	15

Automated System Technology Diploma Earned!

Second Fall

AENG 1231 Materials & Manufacturing Process.....	3
MTTP 1201 Basic Machine Shop	3
ENGL 1276 College Composition	4
MnTC Goal Area 2, 3, 5-10.....	4
Total Credits	14

Second Spring

ETEC 2900 AST Capstone.....	4
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Take the course you haven't already taken:

WELD Introduction to Welding or	
AENG 2230 Manufacturing Project Management.....	3
MnTC Goal Area of Choice.....	4
MATH 1260 College Algebra or	
MATH 1256 Mathematical Thinking	3
Total Credits	14

TOTAL DEGREE CREDITS 60

Automated System Technology AAS Earned!

Career Outlook

Possible Job Titles

- Industrial Maintenance Technician
- Automation Technician
- Industrial Machinery Mechanic



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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