

MANUFACTURING



Hands-on
Higher Ed

CRAFTSMANSHIP MEETS INNOVATION

WCTC's manufacturing grads are some of the most sought-after in the state – and for good reason! Our students learn practical, hands-on skills using the latest technology, taught by instructors with decades of real industry experience. We're embracing trends in automation and artificial intelligence to ensure that our students graduate ready to navigate today's quickly evolving landscape of manufacturing technology.

AUTOMATION SYSTEMS TECHNOLOGY | PATHWAY

Automation Systems Technology (Robotics)

60-credit AAS | wctc.edu/automation-systems

POTENTIAL CAREERS:
Automation Systems Technician, Mechatronics Technician, System Designer

Automated systems have become standard in many industries to provide reliable ways to program and control machine movements. In this program, learn about robotics and programmable logic controllers, discover how automation principles apply to business/industry, and develop skills to work with complex computers and machinery in automated production lines.

[Click here for program courses](#)

Automation - Industrial PLCs | 8-credit Cert

Automation - Control and Interface | 11-credit Cert

Industrial Electrician

28-credit APPR | wctc.edu/industrial-elec

POTENTIAL CAREERS:
Industrial Electrician, Journeyworker and Master Electrician

Industrial electricians work to install, test, troubleshoot, maintain and repair electrical equipment in industrial/commercial settings. They ensure electrical systems run safely and efficiently, as the systems they work on power large, complex facilities. Receive high-quality, hands-on classroom instruction that complements on-the-job apprenticeship training critical for success in the industrial trades.

[Click here for program courses](#)

INDUSTRIAL MAINTENANCE TECHNICIAN | PATHWAY

Industrial Maintenance Technician

60-credit TD | wctc.edu/imt

POTENTIAL CAREERS:
Industrial Maintenance Technician, Field Service Technician, Maintenance Mechanic

Industrial maintenance technicians repair and maintain commercial or industrial machinery to ensure the machines' proper functionality. In this program, gain practical experience in welding, hydraulics, electricity, mechanical fundamentals and machine alignment. Build skills in electronics, computerized equipment maintenance and preventative/predictive maintenance.

[Click here for program courses](#)

Maintenance Technician 1 | 13-credit Cert

Maintenance Technician 2 | 9-credit Cert

Maintenance Technician 3 | 12-credit Cert

Injection Mold Setup (Plastic)

16-credit APPR | wctc.edu/injection-mold

POTENTIAL CAREERS:
Injection Mold Setup Technician

Injection mold machine setters handle the setup and operation of equipment to produce parts by injecting materials, such as plastic, into a cavity and turning the molded pieces into usable parts for a variety of industries. Receive high-quality, hands-on classroom instruction that complements on-the-job apprenticeship training critical for success in the industrial trades.

[Click here for program courses](#)

Why WCTC?

DEDICATED INSTRUCTORS WITH REAL-WORLD WORK EXPERIENCE BRING ENTHUSIASM TO THE CLASSROOM.

Machinist

16-credit APPR | wctc.edu/machine-appr

POTENTIAL CAREERS:

Machinist

Machinists operate a variety of computer- and mechanically controlled machine tools to produce intricate, precision parts that are used in different industries. They possess the skills to take a single part through an entire operational procedure to completion. Receive high-quality, hands-on classroom instruction that complements on-the-job apprenticeship training critical for success in the industrial trades.

[Click here for program courses](#)

Maintenance Mechanic/ Millwright

16-credit APPR | wctc.edu/millwright

POTENTIAL CAREERS:

Maintenance Mechanic, Millwright, Maintenance Technician

Maintenance mechanics/millwrights install, dismantle, repair, maintain and move heavy industrial equipment based on blueprints, layouts or other drawings. Machine tools, conveyor systems and specialized maintenance equipment are among the types of machinery repaired by maintenance mechanic/millwrights. Receive high-quality, hands-on classroom instruction that complements on-the-job apprenticeship training critical for success in the industrial trades.

[Click here for program courses](#)

Maintenance Technician

24-credit APPR | wctc.edu/maint-tech

POTENTIAL CAREERS:

Maintenance Mechanic, Millwright, Maintenance Technician

Maintenance technicians perform tasks involving the maintenance, modification and repair of electrical and mechanical systems. Learn safety practices, machine operation and repair, metallurgy, electricity, hydraulics, pneumatics, blueprint reading, motor and logic controls, transformers, electrical codes and how to interpret schematics. Receive high-quality, hands-on classroom instruction that complements on-the-job apprenticeship training critical for success in the industrial trades.

[Click here for program courses](#)

Mechatronics Technician

24-credit APPR | wctc.edu/mechatronics

POTENTIAL CAREERS:

Mechatronics Technician

Mechatronics technicians combine knowledge of electrical, electronic and mechanical systems. They are tasked with installing, repairing and maintaining equipment and devices, operating industrial computer systems, supporting automation technologies and handling related tasks. Receive high-quality, hands-on classroom instruction that complements on-the-job apprenticeship training critical for success in the industrial trades.

[Click here for program courses](#)

Connect with WCTC



METAL FABRICATION/WELDING - ADVANCED | PATHWAY

Metal Fabrication/Welding - Advanced

60-credit AAS | wctc.edu/metal-fab-adv

POTENTIAL CAREERS:

Fabricator, Laser Operator, Assembler, Welder/Press Operator

Metal fabrication manipulates metal from one form to another for a particular purpose, while welding fuses parts together. In this program, develop advanced skills involving the intricate planning and preparing a part for cutting, fabrication and welding, and produce parts by employing new techniques and using a variety of materials.

[Click here for program courses](#)

Metal Fabrication/Welding

33-credit TD | wctc.edu/metal-fab

POTENTIAL CAREERS:

Fabricator, Laser Operator, Assembler, Welder/Press Operator

Metal fabrication involves preparing and manipulating materials, while welding fuses parts together. In this program, learn to read prints; create the shape of a part for cutting, fabrication and welding; and produce quality parts. Develop skills to program/operate computer-controlled press brakes/shears, plasma arc cutting machines and microprocessor-based power sources.

[Click here for program courses](#)

Pathway continues →

METAL FABRICATION/WELDING - ADVANCED | PATHWAY (CONTINUED)

Welding Technician

19-credit TD | wctc.edu/welding-tech

POTENTIAL CAREERS:

Welder, Fitter/Welder

Welders fuse metal parts together to create a permanent bond. In this program, develop knowledge of print reading; learn safe handling techniques for gas cylinders, manual and machine oxy-fuel cutting, plasma cutting and air carbon arc cutting; and become introduced to gas metal arc welding/flux core arc welding techniques.

[Click here for program courses](#)

[GMAW/Fabricator | 9-Credit Cert](#)

[Industrial Laser Operator | 9-credit Cert](#)

Tool and Die Making

59-credit TD | wctc.edu/tool-die

POTENTIAL CAREERS:

Tool and Die Maker, Moldmaker, Machinist, Tool and Die Operator

A tool and die maker's craft is an exacting one; the parts they make enable machines to produce various products for different industries. In this program, use state-of-the-art equipment to learn complex and conventional machining, computer numerical control machining and grinding operations. Develop skills in precision work, and make molds/dies.

[Click here for program courses](#)

Machine Tool Operation

33-credit TD | wctc.edu/machine-tool

POTENTIAL CAREERS:

CNC Operator, Tool Room Machinist, Machine Tool Operator

Machinists, or machine tool operators, produce parts to precise specifications, generally from setup to operation. In this program, acquire skills for the safe operation of engine lathes, vertical milling machines and surface grinders. Learn to operate computer numerical control (CNC) machines, interpret engineering drawings and use applied mathematics.

[Click here for program courses](#)

Pathway continues →



Connect with WCTC



CNC Setup Technician

20-credit TD | wctc.edu/cnc-setup-tech

POTENTIAL CAREERS:

CNC Setup Technician, Machine Operator, CNC Programmer

CNC setup technicians read blueprint drawings and convert them to machine code. They operate machines that produce precision parts used in numerous products for various industries. In this program, learn how to interpret prints and make parts to accepted tolerances, and develop skills to program computer numerical control machines.

[Click here for program courses](#)

CNC Operator | 11-credit Cert

“Every class, every instructor and nearly every minute of my education has been important in preparing me for my job.”

Joel Beskow, CNC Setup Technician '20



Apply Online Now

wctc.edu/apply-online

Technical Studies - Journeyworker

60-credit AAS | wctc.edu/tech-studies

POTENTIAL CAREERS:

Construction Manager, Estimator, Expeditor, Foreman, Production Supervisor

Build on the technical skills developed in your apprenticeship by completing coursework in communications, social science, behavioral science, and math or science. Work with an academic advisor to develop a plan that meets your individual needs and goals.

[Click here for program courses](#)

Tool and Die

16-credit APPR | wctc.edu/tool-appr

POTENTIAL CAREERS:

Tool and Die Operator, Machinist, CNC Operator

Tool and die makers create precision tools or dies that are used to form, cut and shape metal and other materials. They make jigs and fixtures, which hold metal while it is bored, stamped or drilled, along with gauges and other devices. Receive high-quality, hands-on classroom instruction that complements on-the-job apprenticeship training critical for success in the industrial trades.

[Click here for program courses](#)

Welding

12-credit APPR | wctc.edu/welding-appr

POTENTIAL CAREERS:

Welder and Cutter

Welders work in a wide variety of industries – from automobile manufacturing, shipbuilding, aerospace and many others. Their duties include joining metal parts by fusing them together and creating a permanent bond using different welding techniques. Receive high-quality, hands-on classroom instruction that complements on-the-job apprenticeship training critical for success in the industrial trades.

[Click here for program courses](#)

Ready to take a closer look?

We'd love to show you around! Explore our state-of-the-art training facilities, cutting-edge technology, helpful student resources and more - in person or online.

Take a Campus Tour

Join us for a guided walking tour to get a first-hand look at our facilities and learn about all WCTC has to offer.



wctc.edu/visit

Connect with an Enrollment Counselor

Our friendly enrollment counselors are here to help you navigate the process of becoming a WCTC student.

enroll@wctc.edu | 262.691.5129



WAUKESHA
COUNTY TECHNICAL
COLLEGE

Hands-on Higher Ed