



Hennepin Technical College<sup>SM</sup>

# YOUR CAREER IN MANUFACTURING & ENGINEERING TECHNOLOGY

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**BROOKLYN PARK CAMPUS**

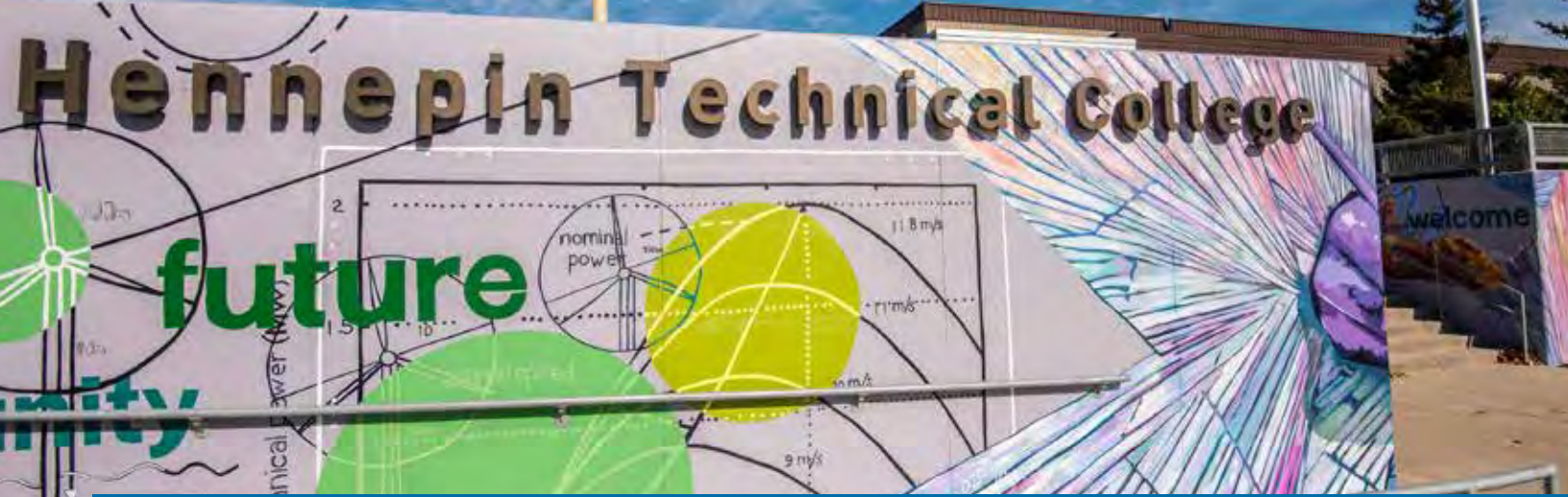
9000 Brooklyn Boulevard  
Brooklyn Park MN 55445

**EDEN PRAIRIE CAMPUS**

13100 College View Drive  
Eden Prairie MN 55347

**LAW ENFORCEMENT & CRIMINAL  
JUSTICE EDUCATION CENTER**

9110 Brooklyn Boulevard  
Brooklyn Park MN 55445



# ABOUT Hennepin Technical College

## Learn the technical skills needed to say

*“I made it!”*

Hennepin Technical College is an innovative higher education institution that focuses on hands-on training and excellence in education for our graduates. With a high job placement rate, we excel in providing our students with all they need to boost their career prospects during life after graduation. One of the ways we uphold this level of excellence is through our steadfast partnerships with local employers and our sense of community through our diverse program models. With over 45+ programs, Hennepin Technical College has a place for everyone. Leading in value, flexibility, and affordability, Hennepin Technical College is a place where anyone's interest and career goals become a reality. It is our goal, and our privilege,

to make sure every student succeeds at Hennepin Technical College.

### **HTC's Manufacturing & Engineering Technology Programs**

Join one of the most exciting and innovative industries by completing a degree program within the Manufacturing and Engineering Technology pathway. Sharpen your analytical skills while learning about the newest tools and technologies to ensure you will be a leader in your field of choice.

# AUTOMATION ROBOTICS

Automated technology in today's workplace calls for individuals who are highly skilled in the field of Mechatronics. Mechatronics Technicians are trained in the fields of Robotics, Programmable Logic Controllers, Mechanical Systems, Electrical Systems, Motor Controls, and Pneumatic Systems. A common challenge in manufacturing is the need for Mechatronics Technicians who have knowledge and hands-on experience in all of these areas to be a multi-skill technician. With training in Automation Robotics Engineering Technology at Hennepin Technical College, you will be ready to apply your skills in designing, building, installing, and troubleshooting automated electro-mechanical machinery systems for packaging, supply chains and other manufacturing applications. Whether it is diagnosing and quickly solving problems so production flow is maintained or assisting engineers in the development and modification of new and existing designs, you will be prepared for a career that is set to grow as technology advances. Graduates are eligible to pursue baccalaureate programs in manufacturing and engineering technology.



## AWARDS & CERTIFICATES

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### Associate in Applied Science

Automated Machinery Repair Technician (EP)  
Automation Robotics Engineering Technology (EP)  
Mechatronics (EP)

### Diploma

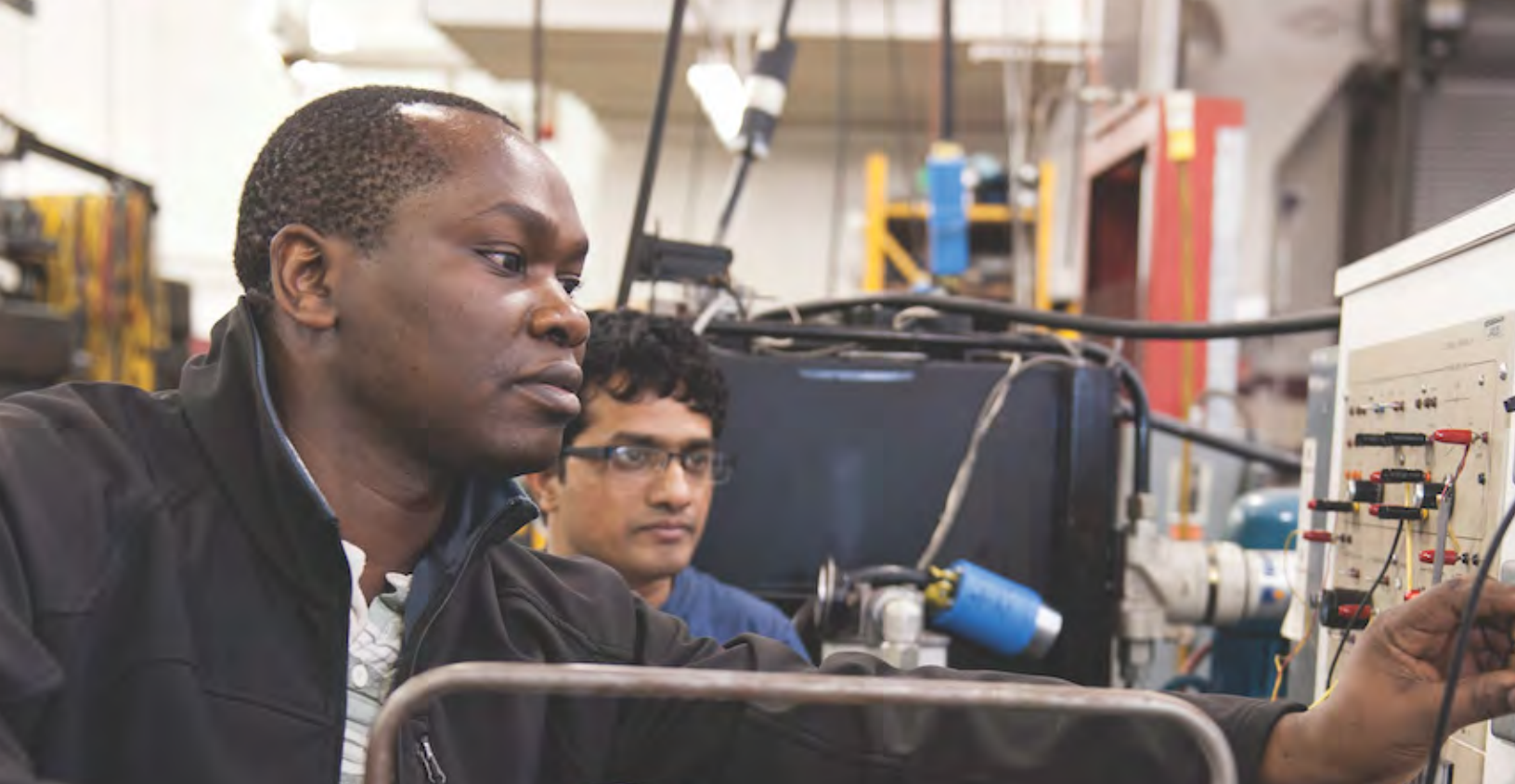
Automated Machinery Systems (EP)  
Controls Engineering Technician (EP)  
Mechatronics (EP)  
Supply Chain Technician (EP)

### Occupational Certificates

Automation Technologies (BP/EP)  
Production Technologies (BP/EP)

### Advanced Technical Certificate

Mechatronics (EP)



# ELECTRONICS TECHNOLOGY

The Electronics Technology program at Hennepin Technical College provides hands-on training that will prepare you to help design, build, develop, test, troubleshoot, and manufacture electronic equipment. These types of equipment are used in applications such as communications, medical monitoring devices, navigational equipment, machine tool numerical controls and computers.

You'll gain a solid grounding in electronics theory combined with intense hands-on laboratory training (both computer-assisted instruction and breadboarding) giving you the confidence to perform at a professional level on the job. Electronics technicians are in demand in small and large companies and in almost all government agencies.

## AWARDS & CERTIFICATES

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**Associate in Applied Science**  
Electronics Technology (BP)

**Diploma**  
Electronics Technology (BP)

**Occupational Certificates**  
Electronics Technician (BP)



# ENGINEERING CAD TECHNOLOGY

Are you looking for a career that blends creativity and technology? HTC's Engineering CAD (Computer-Aided Design) Technology program will prepare you for a career in the design and development of manufactured products. You will gain the skills to translate rough sketches, layouts and written specifications into a drawing showing

complete details. From light fixtures to motorcycles, to computer monitors to bridges, nearly every type of fabricated product requires a design technician to detail the entire project and its component parts. With the skills developed through the engineering technology program, you'll be ready to build a career as a mechanical designer.

## AWARDS & CERTIFICATES

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### **Associate in Applied Science**

Engineering CAD Technology (BP/EP)

### **Diploma**

Engineering CAD Technology (BP/EP)

### **Advanced Technical Certificates**

3D Printing System Maintenance (BP/EP)

Additive Manufacturing Designer (BP/EP)

AutoCAD Operator (BP/EP)

Creo Parametric Operator Certificate (BP/EP)

SOLIDWORKS Operator (BP/EP)

# FLUID POWER ENGINEERING AND MOTION CONTROL

Are you interested in the way things move? Fluid Power engineering technology takes that curiosity and puts it to work. The fluid power industry is one of the fastest growing technologies today. Fluid Power technicians are responsible for researching and designing, fabricating, operating, testing, servicing, and selling fluid power systems. You will work with hand and machine tools, evaluating and adjusting systems for maximum efficiency. At HTC, you will get the hands-on training that prepares you for success, so you are ready for opportunities in industries such as automation, material handling and processing, heavy equipment, plant automation, and fluid power distribution.

## AWARDS & CERTIFICATES

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### Associate in Applied Science

Fluid Power Engineering Technician (BP/EP)  
Hydraulic Engineering Technician (BP/EP)  
Pneumatic Engineering Technician (BP/EP)

### Diploma

Fluid Power Engineering Technician (BP/EP)  
Fluid Power Mechanic (BP/EP)  
Hydraulic Engineering Technician (BP/EP)  
Pneumatic Engineering Technician (BP/EP)

### Occupational Certificate

Industrial Maintenance Mechanic (BP/EP)

### Advanced Technical Certificate

Manufacturing Support Technician Level I (BP/EP)  
Manufacturing Support Technician Level II (BP/EP)  
National Certified Fluid Power Specialist (BP/EP)



# INDUSTRIAL BUILDING ENGINEERING & MAINTENANCE

With training in the Industrial Building Engineering and Maintenance program (IBEM), you'll benefit from a multi-discipline education in building and machine maintenance technologies. Learn about various aspects of maintenance, carpentry, heating and cooling

practices, hydraulic and pneumatic systems, electrical and motor control operation, machine-tool processes, welding, CAD operation, and troubleshooting techniques. If it helps you understand building and machine maintenance, you'll learn it here.

## AWARDS & CERTIFICATES

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### Diploma

Industrial Building Engineering and Maintenance (BP)



# MACHINE TOOL TECHNOLOGY AND QUALITY ASSURANCE

In HTC's Machine Tool Technology & Quality Assurance program, you will develop a strong understanding of machining as you gain hands-on experience on the industry's most up-to-date tools and equipment for Computer Numerical Control (CNC) or Tool and Die/Moldmaking. As a skilled machinist able to

follow specifications, you will be ready to create quality products and make the most of innovative technology. Through this program, you'll develop the skills and craftsmanship that lead to precision work and a valuable well-paying career in this exciting field, with particular demand in the medical device field.

## AWARDS & CERTIFICATES

### Associate in Applied Science

Computer Numerical Control (CNC) Technician (BP)  
Tool and Die/Moldmaking (BP)

### Diploma

Computer Numerical Control (CNC) Technician (BP)  
Tool and Die/Moldmaking (BP)

### Occupational Certificates

CNC Operator (BP)  
Quality Assurance (BP)

### Advanced Technical Certificate

CNC Set Up Technician (BP)  
Mazak CNC Technician (BP)  
CNC Swiss Turning Center Technician (BP)





# MANUFACTURING ENGINEERING TECHNOLOGY

In today's global manufacturing market, you will benefit from developing a multi-discipline skill base that prepares you for the high level tasks that are required to excel. At HTC, you'll have the advantage of earning a degree that allows you to receive a broad-based education in the manufacturing environment along

with a specialization in one or more of the many areas involved in this field, including: automated machinery systems, electronics, fluid power, machine technology, engineering CAD, plastic technology or welding. That's the kind of training that helps you establish or advance a career in manufacturing.

## AWARDS & CERTIFICATES

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**Associate in Applied Science**  
Manufacturing Engineering Technology (BP/EP)

**Occupational Certificates**  
Manufacturing Technician (BP/EP)



# PLASTICS ENGINEERING TECHNOLOGY

From the toothbrush you used this morning, to cell phones, computers, and medical device applications used to prolong life on earth - plastics are everywhere! They're a lightweight, durable, and versatile part of countless products used by people all over the world to make living easier, and safer. Bioplastics and new product developments are also

becoming high-demand in the future, with many plastics being recycled each day. For the plastics industry to grow and prosper, it depends upon competent technicians with a focused education in plastics - that's where you come in! Plastics Manufacturing Technician graduates are well-positioned for advancement as well as long-term employment.

## AWARDS & CERTIFICATES

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### Diploma

Plastics Engineering Technology (BP)

### Advanced Technical Certificate

Scientific Injection Molding Specialist (BP)

### Occupational Certificates

Extrusion Molding (BP)

Injection Molding (BP)

Medical Device Molding (BP)

# WELDING METAL FABRICATION

Knowledgeable. Efficient. Competent. Those words can describe you after you complete training in the Welding and Metal Fabrication program. Whether your objective is to gain additional skills or embark on a rewarding career, this program will give you the solid foundation necessary to achieve your goals in the field of welding. Encompassing basic welding and fabrication methods, blueprint reading, and advanced technical skills, this program provides you with the essential knowledge and hands on experience to set you up for success. The field of welding continues to evolve, with significant advancements in technology. Welders can specialize in an exciting variety of disciplines; including:

- Robotics and other Automated Systems**
- Nanotechnology**
- Pipe-fitting**
- Alternative Energy Applications**
- Infrastructure Fabrication**
- Underwater Welding and Inspection**

Welding has become a dominant force in virtually every aspect of our daily lives, and with the continued advances the industry is experiencing, welding will provide almost endless opportunities for those on the cutting edge.

## AWARDS & CERTIFICATES

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### Diploma

Welding (BP)

### Occupational Certificates

GMAW Production Welder (MIG)

GTAW Production Welder (TIG)

Robotic Arc Welding (BP)

Structural Iron Fabrication and Repair

# Get started in 5 easy steps!

## Apply for Admission

1

New students may submit their high school transcript or GED certificate to Enrollment Services.

Transfer students from previously attended non-Minnesota State system colleges should submit their college transcript(s).

Visiting students can register for courses online without submitting a college application.

You may be charged a **\$20 application fee** that should be paid online when submitting the application.

## Determine How to Pay for College

2

Financial aid is available for students who qualify. Access to grants, loans, scholarships, and/or work-study begins by completing the Free Application for Federal Student Aid® (FAFSA). Students must have a high school diploma, GED, or its equivalent, and declare an eligible major, in order to receive Federal Title IV financial aid funds. Please apply early to allow time for processing. Hennepin Technical College's FAFSA School Code is **010491**.

## Complete Placement Testing

3

Schedule your ACCUPLACER placement testing appointment.

*You may be exempt from some or all of your placement tests under certain conditions.*

## Complete New Student Orientation

4

Once your placement testing requirements have been met, you are ready for New Student Orientation.

## Register for Classes

5

When you have completed the steps above, you are ready to register for classes. Start today! **[hennepintech.edu/getstarted](https://hennepintech.edu/getstarted)**

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