

# Is technology in YOUR future?



## Moraine Park STEM Scholars Program

Through a grant from the National Science Foundation, Moraine Park is awarding up to 30 scholarships annually—ranging from \$500 to \$10,000—to promising science, technology, engineering and math students.



Scholarships are available to students with financial needs who are pursuing, or intend to pursue a Moraine Park Technical College degree in any of the following programs:

### Agriculture, Food and Natural Resources

- ✓ Water Quality Technician

### Science, Technology, Engineering and Mathematics

- ✓ Engine Research and Development Technician
- ✓ Engineering Technologist
- ✓ Mechanical Design Technology
- ✓ Tool Design Engineering Technology

### Information Technology

- ✓ Information Technology – Applications Developer
- ✓ Information Technology – Network Specialist
- ✓ Information Technology – Technical Support Specialist

### Architecture and Construction

- ✓ Civil Engineering Technician – Structural

## We've created a program that's committed to you.

Today, there is a growing need for broadened participation in technology and science fields. We are making a difference in meeting these needs, through our STEM Scholars Program—and we are committed to our scholarship candidates.

We've developed a three-tiered approach to scholarship awards, directed by specific student needs, including multiple exit points, based on your desire to finish a degree at MPTC, or to transfer to a four-year college. Program levels include:

- ✓ STEM Gold Scholars – New and current STEM program students meeting all academic and financial need requirements are eligible to receive from \$1,000 to \$10,000 per year.
- ✓ STEM Silver Scholars – New and current STEM program students who meet financial need requirements but need additional assistance to improve GPA may receive \$500 per year, plus the opportunity to apply for a full scholarship as grades improve.
- ✓ STEM Scholars on the Move – Graduates of Moraine Park who have participated in the STEM program are eligible to receive up to \$10,000 per year toward completing the STEM baccalaureate degree at a four-year college.

## MPTC works to ensure your success.

As part of the STEM Scholars Program, you will have access to special enrichment activities including group studies, field trips, online support and real-world experience. Students will have access to activities relative to their STEM Scholars Program level:

Awards	Scholar Activities	Scholar Services	MPTC Support
<b>Gold Scholars</b>	<ul style="list-style-type: none"> <li>✓ Day-Long Orientation</li> <li>✓ Online STEM Club</li> <li>✓ Field Trips</li> </ul>	<ul style="list-style-type: none"> <li>✓ Tutoring</li> <li>✓ Study Group</li> <li>✓ Online STEM Advising</li> <li>✓ Field Trips</li> <li>✓ Job Shadowing</li> <li>✓ Mentoring</li> </ul>	<ul style="list-style-type: none"> <li>✓ Career Advising</li> <li>✓ Transfer Assistance</li> <li>✓ Student Success Course and Center</li> <li>✓ Academic Advising</li> <li>✓ Nontraditional and Minority Support</li> <li>✓ TechConnect Job Placement</li> </ul>
<b>Silver Scholars</b>	<ul style="list-style-type: none"> <li>✓ Day-Long Orientation</li> <li>✓ Online STEM Club</li> <li>✓ Field Trips</li> </ul>	<ul style="list-style-type: none"> <li>✓ Tutoring</li> <li>✓ Study Group</li> <li>✓ Online STEM Advising</li> <li>✓ Field Trips</li> <li>✓ Mentoring</li> </ul>	<ul style="list-style-type: none"> <li>✓ Same as Gold Scholars</li> </ul>
<b>Scholars on the Move</b>	<ul style="list-style-type: none"> <li>✓ Day-Long Orientation</li> <li>✓ Online STEM Club</li> <li>✓ Field Trips</li> </ul>	<ul style="list-style-type: none"> <li>✓ Participation in any STEM Activity</li> <li>✓ Online STEM Advising</li> <li>✓ Mentoring</li> </ul>	<ul style="list-style-type: none"> <li>✓ Transfer Assistance</li> <li>✓ TechConnect</li> </ul>

Mentorship is key to the success of the STEM program. Through the STEM Scholars Program, you will have the resources to achieve your goals. While all MPTC student support services are available to STEM scholars, an online virtual STEM community lets STEM scholars connect with their peers. What a great way to support each other!

Additional College resources beneficial to STEM scholars, like the Nontraditional Occupations (NTO) Office and the Diversity Resource Center, can offer additional support. These student support areas offer academic support, peer and mentor support and one-on-one counseling.

Get connected to future employers! Local employers collaborate with Moraine Park instructional areas to provide job shadowing and placement opportunities. This enhancement of the on-campus services provides STEM scholars the benefit of real-world experience interacting with STEM professionals. Your professional development begins with enrollment in any of the MPTC designated STEM programs.

**Being a STEM scholar is your pathway to success!**

## Get Started

### Associate of Applied Science Degree

- ✓ Complete the Admissions Application. Fee: \$30
- ✓ Complete the placement test (ACCUPLACER), ACT or other acceptable college entrance exams. Test must be within the last five years to be considered. Fee: \$15
- ✓ Forward high school/postsecondary transcripts to Moraine Park Technical College.
- ✓ Additional admission steps may be required for some programs. Check with the Admissions Office staff.

### STEM Application Process

- ✓ Complete the FAFSA application form.
- ✓ See complete list of application processes at [www.morainepark.edu/STEM](http://www.morainepark.edu/STEM) or contact Lisa Pollard, STEM project director for assistance ([lpollard@morainepark.edu](mailto:lpollard@morainepark.edu)).

## Financial aid helps make your education affordable.

### Funding is available in the form of grants, loans, scholarships and work-study programs.

The financial aid process starts with the Free Application for Federal Student Aid, also known as "FAFSA." You will need to:

- ✓ Complete the FAFSA application after January 1 for the start of the following school year. Applications are available at Moraine Park's Financial Aid Office or online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). (The FAFSA asks for a school code; Moraine Park's code is 005303.)
- ✓ Complete the Financial Aid Survey form and return it to Moraine Park's Financial Aid Office.
- ✓ Complete the program admissions process. Certificates and apprenticeships are not financial aid eligible.
- ✓ Contact our Financial Aid Office with any questions: 1-800-472-4554. We're happy to help you.

## STEM scholars can easily transfer into STEM programs at these 4-year campuses.

Moraine Park Technical College Credit Transfer Opportunities												
	Private Colleges:				UW System:				Other:			
	Cardinal Stritch University	Lakehead University	Morain	Midwest State of Engineering	UW-Creen Bay	UW-La Crosse	UW-Milwaukee	UW-Oshkosh	UW-Platteville	UW-Stevens Point	UW-Stout	UW-Wisconsin
<b>Moraine Park Programs</b>												
Civil Engineering Technician – Structural		X	X	X	X		X	X	X	X	X	X
IT – Applications Developer	X	X	X	X	X	X	X	X	X	X	X	X
IT – Network Specialist	X	X	X	X	X	X	X	X	X	X	X	X
IT – Technical Support Specialist	X	X	X	X	X	X	X	X	X	X	X	X
Engine Research and Development Technician		X	X	X	X		X	X	X	X	X	X
Engineering Technologist		X	X	X	X		X	X	X	X	X	X
Mechanical Design Technology		X	X	X	X		X	X	X	X	X	X
Tool Design Engineering Technology		X	X	X	X		X	X	X	X	X	X
Water Quality Technician			X				X	X	X	X		X

Agreements subject to change. For the most up-to-date agreements, go to [www.morainepark.edu](http://www.morainepark.edu).

For more information about the STEM Scholars Program and application forms, visit:

[www.morainepark.edu/STEM](http://www.morainepark.edu/STEM)

### Contact

**Lisa Pollard, STEM Project Director / IT Faculty Member**  
[lpollard@morainepark.edu](mailto:lpollard@morainepark.edu)  
 920-924-3352

### Financial Aid

[financialaid@morainepark.edu](mailto:financialaid@morainepark.edu)  
 920-924-3207 or 1-800-472-4554

### 920-924-3207

In Wisconsin, call 1-800-472-4554.  
 TTY 920-929-2109  
 Fax 920-924-6392

### Beaver Dam

700 Gould St., Beaver Dam, WI 53916-1994

### Fond du Lac

235 N. National Ave., Fond du Lac, WI 54935-2884

### West Bend

2151 N. Main St., West Bend, WI 53090-1598



Moraine Park Technical College is accredited by:  
 The Higher Learning Commission of the  
 North Central Association of Colleges and Schools  
 30 N. LaSalle Street, Chicago, IL 60602

800-621-7440

The MPTC STEM Scholarships are made possible through  
 a grant from the National Science Foundation.

AA/EOE

Your  
future  
in technology  
starts  
here.





**STEM Scholars Program participation is available to students with financial needs who are pursuing, or intend to pursue a Moraine Park Technical College degree in any of the following programs:**

## Information Technology

### Information Technology – Applications Developer

Business and industry seek highly skilled information technology professionals who understand many computer programming languages and client/server applications. Learn to understand and work with multiple Internet applications, operating systems and software programs. Become a valuable employee who is trained in database theory, systems analysis and design.

#### Associate of Applied Science Degree

Online

#### What will you learn?

Elevate your skill set! As a graduate of this program, you will have the skill to develop custom business and client/server and Web-based applications, as well as manage customer databases to maximize business operations.

#### Career Opportunities

- ✓ Programmer/Analyst
- ✓ Systems Analyst
- ✓ Applications Support Specialist
- ✓ Applications Developer

### Information Technology – Network Specialist

Every day, business people use computers to conduct work and share information from a networked (connected) computer system. Behind the scenes, network specialists make this system function. With an interest in both areas, you can earn two degrees (IT – Network Specialist and IT – Technical Support Specialist) by completing four additional classes. With focus on the design, installation and integration of computer networks, this program prepares graduates to help business and industry meet corporate demands for information sharing using integrated technologies. Courses available in a part- or full-time format to fit your needs!

#### Associate of Applied Science Degree

Campus: Fond du Lac

#### What will you learn?

In demand by business and industry, as an IT – Network Specialist graduate, you will have the skills to design, install, integrate, maintain and support computer networks tailored to specific business and/or organizational needs. Upon graduation, you'll also be prepared for the Comp TIA A+ and Comp TIA Network+ certifications.

#### Career Opportunities

- ✓ Network Specialist
- ✓ Network Designer
- ✓ Network Manager



### Information Technology – Technical Support Specialist

The Information Technology – Technical Support Specialist program gives students the skills to support micro-computer systems and their users in stand-alone and networked (connected) environments. Often working closely with the end-user, including businesses, organizations and individuals, technical support specialists have a broad understanding of multiple software applications and computer hardware functionality.

#### Associate of Applied Science Degree

Campus: Fond du Lac

#### What will you learn?

As a graduate, you will have the skills to set up new computers, troubleshoot and repair computers and software, support and troubleshoot business applications, manipulate databases and write technical documentation, and help a computer user fix the problem and get back on track.

#### Career Opportunities

- ✓ Technical Support Specialist
- ✓ Microcomputer Specialist
- ✓ Computer Support/Help Desk
- ✓ Computer Support Technician
- ✓ PC Technician

### Engine Research and Development Technician

Satisfy your curiosity of internal combustion engines by learning, in a hands-on environment, how to assist engineers in engine development and design. Learn to determine engine characteristics such as torque and horsepower curves, engine efficiencies, exhaust emissions and durability! Prepare yourself to become a test lab technician or other employee of a manufacturer of internal combustion engines, and use engine dynamometers, engine transducers and data acquisition systems to gather and analyze engine data.

#### Associate of Applied Science Degree

Campus: Fond du Lac

#### What will you learn?

Not only will you prove your ability to assemble and disassemble small internal combustion engines, you'll create plans and procedures for engine modification and successfully operate engine evaluation equipment. Be well prepared to research, test and help develop internal combustion engines; author professional reports; and proficiently evaluate engine performance and drive train components.

#### Career Opportunities

- ✓ R&D Technician
- ✓ Emission Technician
- ✓ Engine Technician
- ✓ Dynamometer Technician
- ✓ Manufacturer's Representative
- ✓ Field Service Representative
- ✓ Associate Test Engineer
- ✓ Service Technician

### Engineering Technologist

#### Industrial/Manufacturing Track or Quality Assurance Track

Today, the industrial and manufacturing fields continually conduct process analysis and improvement to maintain a competitive advantage. If you enjoy problem solving using automation and technology and have an interest in quality control processes, Moraine Park's Engineering Technologist program is for you! You will develop critical skills in the planning, set up, monitoring, analyzing and controlling of integrated systems to improve efficiencies within a manufacturing environment. You will also learn to standardize and streamline processes and initiate cost savings for businesses.

Looking to specialize? Look no further. Even though a broad range of manufacturing skills are covered in this program, when you reach the final stages of coursework, you select a specialized training track in either Industrial/Manufacturing or Quality Assurance, whichever meets your needs.

#### Associate of Applied Science Degree

Campus: Fond du Lac (Some courses also available at the West Bend Campus)

#### What will you learn?

Specialized skills, like solving manufacturing-related problems and programming and operating automated machines are thoroughly covered to give students the strong foundation needed to be an engineering technologist. Operating gauging and measuring equipment, planning quality assurance systems, performing basic robotic programming and setup, and completing a project with a cross-functional team is also covered. Graduates learn to work as members of teams that consist of engineers and production workers in a variety of industrial and manufacturing settings.

#### Career Opportunities

- ✓ Industrial Engineering Technician
- ✓ Manufacturing Engineering Technician
- ✓ Quality Assurance Technician
- ✓ CNC Programmer
- ✓ Robotics and Material-Handling Technician
- ✓ Continuous Improvement Technician

## Science, Technology, Engineering and Mathematics

### Mechanical Design Technology

Products begin as mere concepts, but you can make them a reality. The Mechanical Design Technology program focuses on the computer skills necessary to assist engineers in the design of products and preparation of engineering drawings for all types of machines and products in manufacturing industries. You will engage in highly extensive coursework design emphasizing computer-aided design (CAD) techniques, project and product development, and the various materials used in design and manufacturing.

Learn the skills and traits that foster success in the mechanical design industry including strong computer and visualization skills. Focus on details, math skills and a mechanical aptitude. Build your critical thinking, problem solving, effective communication and cooperation skills to gain the knowledge and skills for future career excellence.

#### Associate of Applied Science Degree

Campus: Fond du Lac (Some courses also available at the West Bend Campus)

#### What will you learn?

Your ability to construct three-dimensional, computer-aided design (CAD) solid models and two-dimensional CAD drawings is just the tip of the iceberg. As a graduate, other skills include designing mechanical parts; implementation of a mechanical design project; and preparing, detailing and assembling engineering drawings for the manufacturing industry.

#### Career Opportunities

- ✓ Mechanical Designer
- ✓ CAD Detailer/Operator
- ✓ Engineering Technician
- ✓ Design Technician
- ✓ Detail Drafter

### Tool Design Engineering Technology

Looking for the high-level manufacturing skills required in Wisconsin's evolving tool and die industry for the national and international customers it serves? Moraine Park's Tool Design Engineering Technology program will do just that. Critical to the manufacturing workforce, tool design engineers design fixtures, parts, molds and stamping dies with the latest CAD (computer-aided design) software. While coursework emphasizes the computerized design aspect of tool and die making, you will receive shop instruction to experience hands-on machine operations.

#### Associate of Applied Science Degree

Campus: West Bend (Some courses also available at the Fond du Lac Campus)

#### What will you learn?

Graduates are prepared to enter the industry as designers working on new tooling projects. You'll have acquired the essential skills of the trade, including designing jigs and fixtures, mold dies and stamping dies; developing detailed working drawings and analyzing part drawings; and developing 3D working models of tool assemblies.

#### Career Opportunities

- ✓ Tool Designer
- ✓ Product Designer
- ✓ Die Designer
- ✓ Mold Designer

## Civil Engineering Technician – Structural

If you are detail-oriented and possess creativity and analytical skills, this is the right program for you. Planning and design are critical construction industry skills and the Civil Engineering Technician – Structural program will prepare you with the computer skills and knowledge needed to excel in these areas. You will apply computer-aided design and drafting (CADD) as it relates to architectural and related design, and you will fine-tune your math, spatial and analytical skills to meet the demands of the engineering coursework.

#### Associate of Applied Science Degree

Campus: Fond du Lac

#### What will you learn?

As a graduate, you will have the skills to handle many of the unique demands of the construction industry including using surveying equipment to measure distance, elevation and direction, and calculating the forces in wood and steel trusses, the heat loss for a commercial building, and the load-bearing capacities of soils. Graduates are also able to develop engineering construction drawings for concrete, pre-engineered steel, structural steel and wood-pole buildings.

Graduates from the program thrive in many work arenas including civil engineering firms, architectural firms, contractors, surveyors, municipalities and public utilities.

#### Career Opportunities

- ✓ Drafter
- ✓ Construction Estimator
- ✓ Architectural Technician
- ✓ Public Utility Technician
- ✓ Architectural Designer
- ✓ Engineering Technician
- ✓ Construction Inspector
- ✓ Surveyor



## Water Quality Technician

An interest in environmental issues and a strong science background combine for a solid career as a Water Quality Technician. Students in this program gain the skills needed for employment in industry and municipalities, ensuring the water we use is safe. Through collection and analysis, graduates of this program ensure that wastewater is treated and cleaned effectively. Students also engage in on-the-job internships, where they apply learned skills in a real-life environment!

#### Associate of Applied Science Degree

Online

#### What will you learn?

As a graduate, you will have the occupational skills and analysis techniques related to water safety and treatment. You'll also know how to design an industrial waste treatment strategy, determine flow in a hydraulic design and modify an operational procedure and maintenance program for a waste treatment facility!

#### Career Opportunities

- ✓ Lab Technician
- ✓ Industrial Waste Technician
- ✓ Water Plant Operator
- ✓ Wastewater Systems Technician
- ✓ Manufacturer's Representative (water treatment equipment)

**Connect with your fellow scholars.**

**STEM scholars have access to all MPTC support services, including an online virtual community.**

**STEM**  
SCHOLARS  
MORAINE PARK TECHNICAL COLLEGE