

# Engine Research and Development Technician

Associate of Applied Science Degree: 18-606-5  
Campus: Fond du Lac

## Description

The Engine Research and Development Technician program trains students to assist engineers in engine development and design. Engine technicians conduct tests to determine engine characteristics such as torque and horsepower curves, engine efficiencies, exhaust emissions and durability. Data is collected using technologies such as engine dynamometers, engine transducers and data acquisition systems.

Graduates of the program become test lab technicians and other technical employees for manufacturers of internal combustion engines. Engine research and development technicians need strong mechanical aptitude, sound math and science skills, and an interest in internal combustion engines.

## Program Outcomes

- Complete the assembly and disassembly processes for small internal combustion engines.
- Develop plans and procedures for engine modification.
- Evaluate engine and drivetrain components.
- Evaluate engine performance.
- Prepare professional reports.
- Operate advanced engine evaluation equipment.

## Career Opportunities

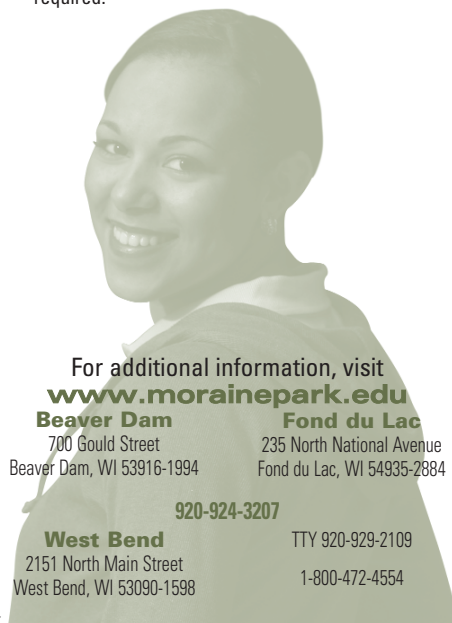
- R&D Technician
- Emission Technician
- Engine Technician
- Dynamometer Technician
- Manufacturer's Representative
- Field Service Representative
- Associate Test Engineer
- Service Technician

## MPTC Yearly Salary Range for Recent Graduates

\$33,402 - \$40,872

## Admission Process

- Submit the college admission application.
- Submit the \$30 one-time fee.
- Submit high school/other official college transcripts.
- Take the college placement assessment (ACCUPLACER, ACT or other).
- Meet with an admissions specialist to determine the best course sequencing and prerequisites (strongly encouraged).
- Check with Admissions if any additional steps are required.



For additional information, visit  
[www.morainepark.edu](http://www.morainepark.edu)  
**Beaver Dam** 700 Gould Street  
Beaver Dam, WI 53916-1994  
**Fond du Lac** 235 North National Avenue  
Fond du Lac, WI 54935-2884  
920-924-3207  
**West Bend** 2151 North Main Street  
West Bend, WI 53090-1598  
TTY 920-929-2109  
1-800-472-4554

Course Number	Course Title	Year	2009-2010					2010-2011			
			Ct.	S	F	W	P	S	F	W	P
<b>Technical Studies Courses</b>											
106-138	Computer Essentials	2									
606-150	Electronics and Instrumentation	3									
606-155	Ignition Fuels and Combustion	4									
606-164	Engine Fundamentals	3									
606-167	Engine Development and Design	2									
606-168	Engine Testing and Testing Equipment	5									
606-169	Engine Emission Testing and Controls	3									
606-173	Engine Problems	3									
606-174	Transmission of Power	3									
606-176	CAD 2-D, AutoCAD	3									
623-162	Manufacturing Processes	3									
628-135	Principles of Machining	2									
<b>General Studies Courses</b>											
801-195	Written Communication	3									
801-196	Oral and Interpersonal Communication (or)	3									
801-197	Technical Reporting										
804-113	College Technical Math 1A	3									
804-114	College Technical Math 1B	2									
806-137	Comprehensive Technical Physics	4									
809-166	Introduction to Ethics: Theory and Application	3									
809-195	Economics	3									
809-199	Psychology of Human Relations (or)	3									
809-198	Introduction to Psychology										
	Students must choose an additional three credits of electives.	3									
	<b>Total</b>	<b>63</b>									
An Engine Research and Development Technician Exit Assessment is a graduation requirement for this program.											
<a href="#">Schedule a Course</a>					<a href="#">Academic Planner</a>						
<b>Institutional Requirements</b>											
890-125	Student Success - take 1st semester										
103-159	Computer Literacy/Advanced Standing - take 1st semester										
890-130	Career Development - take 3rd semester										

Semester Codes: S - Summer F - Fall W - Winter P - Spring

For information on how program credits transfer to a four-year college, please visit us at [www.morainepark.edu/academics/transfer](http://www.morainepark.edu/academics/transfer).

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