

Application Process

TO APPLY:

MTC Application for Admission and nonrefundable applicable fee.

1. Final high school transcript (or GED results) and college transcripts (if applicable).
2. Successful completion of the Basic Skills Assessment (COMPASS) and Technology Skills Test is required. Any College Foundation courses recommended by COMPASS results are also required.
3. COMPASS math score of 41 or above required to take the first mathematics course in the engineering program

Career Opportunities

Associate Engineer
Maintenance Technician
Field Representative
Systems Designer
Testing Technician

Degree Received

Associate of Applied Science

Two-year full-time degree schedule; mixture of core engineering, mathematics, CAD, and communications courses; program can be completed on a part-time basis.

For More Information:

Admission Office
Marion Technical College
1467 Mt Vernon Avenue
Marion, OH 43302
Email: enroll@mtc.edu
740.389.4636

To Learn More Visit

<http://www.mtc.edu/Engineering/index>

The Program - Electrical Engineering Technology

Electrical Engineering graduates will help design, develop, test, and manufacture electrical and electronic equipment such as communication equipment; radar, industrial and medical monitoring or control devices; navigational equipment and computers. They may work in product evaluation and testing, using measuring and diagnostic devices to adjust, test, and repair equipment. They often fit older manufacturing equipment with new automated control devices.

Graduates of this program will be able to ...

- Analyze, interpret and troubleshoot DC and AC electric circuits.
- Develop and interpret electrical diagrams for installation and troubleshooting.
- Select and use various electrical tools and instruments such as the digital multimeter, oscilloscope and function generator.
- Develop and interpret technical specifications used in designs and acceptance tests for electrical applications.
- Prepare electrical schematics using manual and computer assisted drafting software.
- Select, install and troubleshoot various DC and AC motors used for various applications in industry.
- Construct, analyze, and troubleshoot power and control circuits.
- Identify and explain the operation of the basic components in an electric power distribution system.
- Program, interface and troubleshoot systems controlled by programmable logic controllers.
- Program, operate and troubleshoot legacy programmable controllers that are still in use.
- Program, operate and troubleshoot industrial robots.
- Follow required electrical and environmental safety procedures.
- Practice the 5S approach for visual order, organization, cleanliness and standardization.
- Work both independently and as an integral part of a technical team.
- Produce concise correspondence, reports, instructions, and proposals that will be effective in a technical work setting.
- Independently maintain and improve upon both technical skill level and knowledge of current technology.
- Communicate effectively with customers, suppliers, and co-workers.

Options

The **Alternative Energy Track** is available for those students interested in focusing on these specific technologies. Please see the Program Degree Curriculum on the following page for information on proper course selection for completion of this track.

Cooperative Education (or Co-op) is a learning experience that integrates academic skills with workplace experience. Students in Engineering Technologies can earn college credit, make valuable professional contacts, and link their classroom studies to real-world workplace challenges. Contact the department dean or academic advisor for details.

ELECTRICAL ENGINEERING TECHNOLOGY

*Associate of Applied Science Degree
(Effective Academic Year 2017-18)*

Course No	Course Title	Credits	OTM, TAG, CT ² approved course	Term(s) Offered	Pre-Requisites
FIRST SEMESTER (Fall)					
GET 1000	Intro to Engineering	2	X	FA, SP	Placement or ENG0970
EET 1000	Intro to Electricity	2		FA, SP	Placement or ENG0970
EET 2010	Intro to Programmable Controllers	2		FA, SP	EET1000
EET 2400	Robotics I, OR	2		FA, SP	EET1000
AET 1100	Alternative Energy (3)		X	FA	None
MET 1010	Technical Drawing w/CAD	3		FA,SP	Placement or ENG0970
TMT 1110	Applied Technical Math	3		FA,SP	Placement or MTH0920
OIS 1240	Computer Applications I	3	X	All	Placement or OIS1200
SECOND SEMESTER (Spring)					
EET 1210	Digital Circuits, OR	4	X	SP	Placement or MTH0990; EET1000
AET 2100	Photovoltaic Technology (3)		X	SP	TMT1110 (conc.)
EET 1500	Circuit Analysis I	3	X	SP	EET1000
ENG 1000	English Composition I	3	X	All	Placement and OIS1240/concurrent
PHY 1110	Applied Physics	4		FA, SP	TMT1110 (conc.)
MTH 1245	College Algebra	3		FA, SP	Placement or MTH0920 or TMT1110 or BUS1100; and, currently with MTH0945
THIRD SEMESTER (Fall)					
EET 1550	Circuit Analysis II	3	X	FA	EET1500, TMT1110
EET 2060	Advanced Programmable Controllers	3		FA, SP	EET2010
EET 2460	Robotics II, OR	3		FA, SP	EET2400
AET 1510	Business of Energy (2)			FA	ENG1000
EET 2200	Electrical Distribution Systems	3		FA	EET1500
ENG 1400	Oral Communications	3	X	All	None
HSS 2020	Ethnic and Cultural Diversity	3	X	FA	Placement or ENG0970
FOURTH SEMESTER (Spring)					
EET 2300	Electronics	4	X	SP	EET1550
EET 2510	Automated Process Control, OR	3		SP	EET2010
MET 1200	Computer Aided Drafting (CAD) (3)		X	SP	MET1010
GET 2300	Engineering Statistics	2	X	SP	MTH1245
GET 2700	Engineering Cooperative Work Experience (20/Lab)	1		All	Greater than 30 cr hrs
SOC/PSY 0000 ¹	Social and Behavioral Science Elective	3		All	None
Credit Hour Total		65			

AUTOMATION TRACK

EET 2060 Advanced Programmable Controllers
EET 2400 Robotics I
EET 2460 Robotics II
EET 2510 Automated Process Control

¹ **Select from:** PSY1100 or SOC1200

ALTERNATIVE ENERGY TRACK

AET 1100 Alternative Energy
AET 1510 Business of Energy
AET 2100 Photovoltaic Technology
MET 1200 Computer Aided Drafting (CAD)