



# Bachelor of Science in Electrical Engineering Technology (EET)

*An applications-oriented 2+2 transfer program in electronics and engineering*

Electrical and electronic products usage is dramatically increasing in today's world. Wireless communication devices, electrical vehicles and high-definition television are just a few examples of exciting, new high-technology areas. Graduates of the EET program are often involved with these products and projects.

## **The EET Program**

The EET program provides a distinctive educational path into the electrical/electronic disciplines from two aspects: structure of the curriculum and typical careers of the graduates.

This is a "+2" (junior/senior years) program. Students first complete an appropriate Associate of Applied Science (AAS) degree program at a two-year college before enrolling in the +2 program at MSOE.

Students who have graduated with an AAS degree in electrical/electronics engineering technology from an institution that MSOE has a transfer agreement in EET with and who meet the EET admission requirements at MSOE, will be accepted into the EET program with junior standing. These students can follow the +2 EET track at MSOE without any need for prerequisite course work.

Those with other AAS degrees or other college experience are encouraged to apply, although applicants may be required to complete prerequisite course work. A transition plan into the program will be developed with an EET program advisor. The transition plan will identify the prerequisites to be fulfilled in order to establish junior standing in the EET program.

Currently, MSOE has transfer agreements with:

- Fox Valley Technical College
- Gateway Technical College
- College of Lake County (IL)
- Madison Area Technical College
- Milwaukee Area Technical College
- Northeast Wisconsin Technical College
- Waukesha County Technical College
- Western Technical College

## **Topics and Careers**

The EET curriculum is focused on an experience-building learning style. A strong emphasis is placed on design, applications and hands-on laboratory experimentation. You will design, build and debug electronic systems that function just like the specifications.

The EET program generally appeals to students who like to experience what they are learning, prefer specific examples to learn general concepts, and who favor physical concepts to clarify mathematics.

MSOE also has a strong relationship with local industry. For students, this equates into ideas for design projects and industry internships or summer jobs. We prepare graduates for successful and immediate entry into industry.

Graduates of the EET program can be found at a wide variety of companies such as Rockwell Automation, Bucyrus International and Underwriters Laboratories, to name a few.

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# Bachelor of Science in Electrical Engineering Technology Curriculum

## Part-time Track

		Credits	Fall	Winter	Spring	Summer
ET3051	Signals, Circuits, and Systems I	4	X			
MA227	Differential Equations for Technologists	3	X			
OR307S	Transfer Orientation Seminar	0	X			
EN241	Speech <sup>1</sup>	3		X		
ET3001	Transient Circuit Analysis	4		X		
ET3060	Signals, Circuits, and Systems II	4			X	
ET3100	Electronic Circuit Design	4			X	
IE423	Engineering Economy <sup>1</sup>	3				X
AE1311	Introduction to CAD	1	X			
CH310	Applied Chemistry	4	X			
EG1260	Engineering Graphics – Visualization	1	X			
ET3801	Real-time Programming	4		X		
HU100	Contemporary Issues in the Humanities	3		X		
ET3201	Electromagnetic Field Concepts	4			X	
ET3900	Design of Logic Systems	4			X	
SS461	Organizational Psychology <sup>1</sup>	3				X
ET4261	Transmission Lines	4	X			
ET4620	Data Communications	4	X			
ET4250	Electromagnetic Field Applications	4		X		
GE300	Career and Professional Guidance	1		X		
MT4501	Mechanics	3		X		
MT4511	Thermodynamics and Heat Transfer	3			X	
PH361	Physics of Materials	4			X	
	Humanities Elective <sup>1</sup>	3				X
ET4021	Senior Project I	1	X			
ET4601	Quality in Electronic Systems	3	X			
ET4710	Feedback Control Systems and Circuits	4	X			
ET4022	Senior Project II	1		X		
MS4801	Project Management	3		X		
	Technical EET Elective <sup>2</sup>	3		X		
ET4023	Senior Project III	3			X	
HU432	Ethics for Professional Managers and Engineers	3			X	
	Humanities Elective <sup>1</sup>	3				X

<sup>1</sup> These courses are also offered in different quarters. Consult with an EET advisor for alternative scheduling.

<sup>2</sup> This technical elective must be from the approved EET Technical Electives list.