# **ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY, ASSOCIATE OF APPLIED SCIENCE**



The ever-changing and increasing field of Electronic Technology is expanding the need for highly trained electronic technicians. These electronic technicians assist engineers and scientists in various electronic environments such as electronic instrumentation and control, aerospace research, electronic communications, process control, robotics and computer repair. Students completing the program gain the theoretical knowledge and skills that enable success in these various electronic fields.

Program contact: Learn more

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify the Office of the Registrar at RegistrarOffice@tri-c.edu.

Learn more about how certificate credits apply to the related degree.

### **Related Degrees and Certificates**

- Electrical/Electronic Engineering Technology with a Concentration in Bio-Medical Engineering, Associate of Applied Science
- FirstEnergy Power Systems Institute PSI, Associate of Technical
- · Electronic Engineering Technician, Certificate of Proficiency

## **Program Admission Requirements**

- · High School Diploma/GED
- · ENG-0995 Applied College Literacies or appropriate score on English Placement Test.
- · MATH-0965 Intermediate Algebra or appropriate score on Math Placement Test.
- · EET-1161 Direct Current Circuits with a "B" grade or higher

# **Program Learning Outcomes**

This program is designed to prepare students to demonstrate the following learning outcomes:

1. Demonstrate effective oral and written communication skills using appropriate technology.

- 2. Work independently and collaboratively as an effective member of a team to complete projects.
- 3. Identify, acquire, evaluate and ethically use technical information from multiple sources.
- 4. Exhibit professional, ethical, and social responsibilities and the need for lifelong learning in the engineering profession.
- 5. Conduct, analyze and interpret electronic experiments using electronic instrumentation standard measurements.
- 6. Apply knowledge of circuit analysis/design and use computer languages and software to solve a stated problem in analog or digital electronics.
- 7. Apply knowledge of physical sciences and practice of engineering standards to build, test, operate and maintain electrical and electronic
- 8. Use algebra, trigonometry, or applied calculus to conduct experiments of electrical and electronic systems.

### **Suggested Semester Sequence**

First Semester	•	Credit
		Hours
EET-1161	Direct Current Circuits	3
EET-1180	Surface Mount Soldering	1
EET-1190	Printed Circuit Layout	2
MET-1100	Technology Orientation	2
COMM-1000	Fundamentals of Interpersonal Communication	3
Select one of the	following:	3
ENG-1010	College Composition I	
ENG-101H	Honors College Composition I	
	Credit Hours	14
Second Semeste	er	
EET-1210	AC Electric Circuits	3
EET-1241	Digital Fundamentals	3
Select one of the	3	
MATH-1530	College Algebra	
MATH-153H	Honors College Algebra	
One of the following:		4
PHIL-2020	Ethics	
PHIL-202H	Honors Ethics	
One of the follow	ving:	3
ENG-1020	College Composition II	
ENG-102H	Honors College Composition II	
ENG-2151	Technical Writing	
	Credit Hours	16
Third Semester		
EET-2112	Industrial Electronics	3
EET-2120	Electronics I	3
EET-2170	Signal Analysis	3
EET-2242	C and ASM Programming with Embedded Applications	3
Select one of the	following:	3
MATH-1540	Trigonometry	
MATH-154H	Honors Trigonometry	
	Credit Hours	15

#### **Fourth Semester**

EET-2220	Electronics II	3
EET-2290	Electrical Design Project	2
EET-2500	Instrumentation and Control	3
ITNT-2300	Networking Fundamentals	3
PHYS-1210	College Physics I	4
Select one of the following:		2-3
EET-2520	Programmable Logic Controllers	
EET-xxxx	EET Elective Course	
	Credit Hours	17-18
	Total Credit Hours	62-63

MATH-1580 Precalculus and MATH-1610 Calculus I or higher will be accepted in place of MATH-1530 College Algebra and MATH-1540 Trigonometry.

#### **Electives**

Select from the below courses to fulfill elective requirement.

Code	Title	Credit Hours
EET-1100	Introduction to Robotics	2
EET-1150	Basic Robotics with Math	2
FFT-1195	Unmanned Aerial Vehicles	3