

# ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY WITH A CONCENTRATION IN BIO-MEDICAL ENGINEERING, ASSOCIATE OF APPLIED SCIENCE



Technology has impacted biomedical equipment in the health field. Bio-medical engineering technicians are needed to perform safety checks, preventive maintenance, calibration and repair various bio-medical pieces of equipment. This general bio-medical equipment may involve infusion pumps, ventilators, patient monitors, electrosurgery units, defibrillators and other medical apparatus. Students completing the biomedical program in electrical engineering technology will find jobs in hospitals, medical equipment manufacturers or third-party service organizations associated with hospitals.

**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 Digital Communications, Including RF, Radio Frequency, Associate of Applied Science
- Electrical/Electronic Engineering Technology, Associate of Applied Science
- 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.

## Program Learning Outcomes

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

1. Use organizational skills for time management, scheduling, and resource allocation to meet and satisfy organizational, quality and customer regulatory requirements.
2. Work independently and as a member of a diverse team while maintaining a high-level of professionalism.
3. Communicate in a clear, concise written and verbal manner to all levels of clinical and non-clinical staff.
4. Utilize information gathered through the troubleshooting process and develop and communicate an action plan to correct medical equipment, patient and user issues in a timely and efficient manner.
5. Perform all aspects of medical equipment support and service, including but not limited to inspection, repair, installation and networking in the healthcare industry.
6. Prepared to sit for the certified Bio Medical Equipment Technician Exam.

## Suggested Semester Sequence

First Semester		Credit Hours
EET-1161	Direct Current Circuits	3
EET-1180	Surface Mount Soldering	1
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		12
Second Semester		Credit Hours
BIO-1050	Human Biology	3
BIO-105L	Human Biology Laboratory	1
EET-1210	AC Electric Circuits	3
EET-1241	Digital Fundamentals	3
Select one of the following:		3
ENG-1020	College Composition II	
ENG-2151	Technical Writing	
Select one of the following:		4
MATH-1530	College Algebra	
MATH-153H	Honors College Algebra	
Credit Hours		17
Third Semester		Credit Hours
EET-2112	Industrial Electronics	3
EET-2120	Electronics I	3
EET-2170	Signal Analysis	3
EET-2400	Biomedical Instrumentation I	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-2410	Biomedical Instrumentation II	3
EET-2490	Biomedical Design Project	2
PHYS-1210	College Physics I	4
ITNT-2300	Networking Fundamentals	3
Select one of the following:		3
PHIL-2020	Ethics	
PHIL-202H	Honors Ethics	
Credit Hours		18

**Summer Completion**

EET-2901	Clinical Internship	3
Credit Hours		3
Total Credit Hours		65