BIOMEDICAL ELECTRONICS TECHNOLOGY, CERTIFICATE OF PROFICIENCY

Florissant Valley

The Biomedical Electronics Technology Certificate of Proficiency provides students with skills necessary to enter the field of Biomedical Electronics service and support as Biomedical Electronics Technicians (BMET). Students will learn electrical and electronic concepts associated with medical electronics and devices, basic science behind instruments, and troubleshooting techniques.

An individual who has been convicted of a felony may not be qualified for employment as a BMET in healthcare.

Cost of Attendance. For more information on cost of attendance visit MoSCORES (https://scorecard.mo.gov/Search/).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: https://scorecard.mo.gov/scorecard/ (https://www.google.com/url/?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

Interested in this program? Start the enrollment process by visiting the Apply to STLCC (https://www.stlcc.edu/admissions/apply-to-stlcc/) page.

At the completion of the program, students are expected to:

1. repair basic medical patient monitoring equipment.
2. troubleshoot common problems and issues with electronic equipment.
3. describe the regulatory requirements that govern a hospital's or clinic's ability to provide a safe environment for patients and employees.
4. evaluate medical equipment for electrical safety (including electrostatic discharge, ESD).
5. read schematic diagrams and service manuals in order to address issues with complex equipment.
6. analyze electronic circuits, both Alternating Current (AC) and Direct Current (DC), using instruments, meters, and analyzers to troubleshoot circuits and circuit boards.
7. describe future trends in medical instrumentation and patient care technology, including computer systems and integration with network systems.
8. apply basic networking terminology for describing medical device setups.

Code	Title	Credit Hours
Program Requirements		
MTH 140	Intermediate Algebra (or higher excluding MTH 161 and MTH 180)	3
EE 134	Electric Circuits	6
EE 132	Electronic Devices	5
BE 153	Workplace Learning: Biomedical Electronics Technology	4-6
BE 254	Biomedical Applications	5
IT 101	Cisco Networking Academy I: Introduction to Networks	5
Total Credit Hours		**28-30**

PLEASE NOTE: If you originally enrolled at STLCC prior to Fall 2021, you may need to view an archived catalog (https://www.stlcc.edu/programs-academics/course-catalog/) for your correct program requirements. Please speak with an advisor or the program coordinator for more information.

Code	Title	Hours	Prerequisites	Milestones/Notes
First Year				
Fall				
MTH 140	Intermediate Algebra (or higher)	3	MTH 030 or MTH 040 or MTH 050 with a grade of "C" or better or satisfactory score on placement test and Reading Proficiency	Excluding MTH 161 and MTH 180
EE 134	Electric Circuits	6	MTH 140 or equivalent placement test scores or department approval and Reading Proficiency	
	Credit Hours	**9**		
Spring				
EE 132	Electronic Devices	5	Prior or concurrent enrollment in EE 131 and Reading Proficiency	
IT 101	Cisco Networking Academy I: Introduction to Networks	5	Reading Proficiency	
	Credit Hours	**10**		

Second Year				
Fall				
BE 153	Workplace Learning: Biomedical Electronics Technology	4-6	BE 254 and Reading Proficiency	Student may need prerequisite override
BE 254	Biomedical Applications	5	EE 132 and Reading Proficiency	Student may need prerequisite override
	Credit Hours	**9-11**		
	Total Credit Hours	**28-30**		

*Click on the hyperlinked course number to view additional information about the course.

**Students completing a course that has been assigned a MOTR number may transfer that course to any public institution in Missouri. Those who complete CORE 42 requirements will have that verification on their transcript.

*** It is your responsibility to verify that the courses listed above will transfer to the four-year institution of your choice. Maximize your transfer credits/classes by meeting with an academic advisor.