# ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY: AAS

Associate in Applied Science | 60 credit hours minimum

Area of Interest: Advanced Manufacturing, Industrial Occupations, and Transportation

Program Website (https://stlcc.edu/programs-academics/pathways/s-t-e-m/electrical-electronic-engineering-tech/)

Academic Advising (https://stlcc.edu/admissions/advising/)

#### **Program Description:**

Electrical/Electronic Engineering Technology AAS program prepares students to function as technical assistants to scientists and engineers. Through classroom work and practical experience in technology laboratories, students learn to prepare and interpret drawings and diagrams, perform testing procedures, and compile technical data.

Persons interested in the program should be mechanically inclined and be able to follow instructions. Prior course work in math and its application with science is beneficial.

Graduates are qualified for electrical/electronic engineering technician positions in industry and research.

Locations. This program is offered in its entirety at Florissant Valley.

**Related Programs.** The Engineering Department offers a certificate in the following area:

Biomedical Electronics Technology, Certificate of Proficiency (http://catalog.stlcc.edu/programs/ biomedical-electronics-technology-certificatespecialization/)

**Transfer/Articulation Information.** This is a 2-year terminal degree. Several courses are transferrable to other institutions. Students should check with the receiving institution to determine credit transferability.

Students who are interested in pursuing courses leading to engineering bachelor's degree programs should follow the courses listed in the Engineering Science, Associate in Science (http://catalog.stlcc.edu/programs/engineering-science-as/) or the General STEM Transfer Studies, Associate in Science (http://catalog.stlcc.edu/programs/general-stem-transfer-studies-associate-science/) degrees.

**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:

- read wiring documents such as schematics, block diagrams, and wiring diagrams.
- 2. assemble electronic and electrical circuits from schematic diagrams.
- troubleshoot problems within electrical, electronics, or biomedical systems.
- 4. develop electrical, electronic, and digital circuits.
- 5. implement solutions to technical design problems.
- 6. use equipment within safety standards.
- 7. exhibit interpersonal and team skills.

**Missouri Civics Examination.** Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Information on who is eligible for a waiver can be found on the STLCC website (https://stlcc.edu/programs-academics/missouri-civics-exam.aspx).

Credit

### **Program of Study**

	н	ours		
General Education	1			
ENG 101	College Composition I (MOTR ENGL 100)	3		
MTH 140	Intermediate Algebra (or MTH 140S or higher)	3		
PSI 101	Physical Science (MOTR PHYS 110)			
or BIO 109	Human Biology (MOTR LIFS 100)			
COM 103	Small Group Communication (MOTR COMM 125)			
or COM 201	Interpersonal Communication (MOTR COMM 120)			
XXX xxx	Social & Behavioral Sciences: Civics Requirement	3		
	(http://catalog.stlcc.edu/general-education/)			
Program Requiren	nents			
GE 131	Engineering Technology Orientation	1		
GE 101	Technical Computer Applications	3		
GE 135	Blueprint Reading for Engineering Technicians	2		
EE 134	Electric Circuits	6		
EE 132	Electronic Devices	5		
EE 235	Electronic Communications	4		
GE 240	Product Design and Fabrication	4		
Electives		20		
Any EE prefix co	urse			
IT 101	Cisco Networking Academy I: Introduction to Networks	;		
BE 254	Biomedical Applications			
BE 153	Workplace Learning: Biomedical Electronics Technology			
ME 140	Introduction to Robotics			
ME 210	Robotics Subsystems and Components			

ME 254	
ME 237	Programmable Logic Controllers II
GE 290	Workplace Learning: General Engineering

#### **Workplace Experience**

Students may substitute appropriate and relevant workplace learning experience for technical courses, and/or electives, included in the program. In order for the workplace learning credit to be counted for the degree requirement, the learning experience must be pre-approved by the department, and the appropriate faculty member must supervise the work.

Total Credit Hours 60

#### **Full-Time Academic Plan**

**Missouri Civics Examination.** Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Information on who is eligible for a waiver can be found on the STLCC website (https://stlcc.edu/programs-academics/missouri-civics-exam.aspx).

**PLEASE NOTE:** If you originally enrolled at STLCC prior to Fall 2024, 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 MTH 140S or higher)	3	Satisfactory placement and Reading Proficiency	
GE 101	Technical Computer Applications	3	Reading Proficiency	
GE 131	Engineering Technology Orientation	1	Reading Proficiency	
GE 135	Blueprint Reading for Engineering Technicians	2	Reading Proficiency	
ENG 101	College Composition I (MOTR ENGL 100)	3	Placement score or ENG 030 or ENG 070 with a grade of "C" or better or recommendation of department and Reading Proficiency or concurrent enrollment in RDG 079	
XXX xxx	Social & Behavioral Science: Civics Requirement (http://catalog.stlcc.edu/ general-education/)	3		
	Credit Hours	15		
Spring				
EE 134	Electric Circuits	6	MTH 140 (or MTH 140S) with a minimum grade of "C" or equivalent placement test scores or department approval and Reading Proficiency	
PSI 101 or BIO 109	Physical Science (MOTR PHYS 110) or Human Biology (MOTR LIFS 100)	3	MTH 108 or MTH 140S with a minimum grade of "C", or placement into MTH 140 or higher, and Reading Proficiency	Select BIO 109 if you plan to pursue the Biomedical Electronics Technology, Certificate of Proficiency.
COM 103 or 201	Small Group Communication (MOTR COMM 125) or Interpersonal Communication (MOTR COMM 120)	3	Reading Proficiency	
Elective		4		Any EE course, IT 101, BE 254, BE 153, ME 140, ME 210, ME 254, ME 237, GE 290
	Credit Hours	16		
Second Year				
Fall				
EE 132	Electronic Devices	5	EE 134 with a minimum grade of "C" and Reading Proficiency	

Elective		4		Any EE course, IT 101, BE 254, BE 153, ME 140, ME 210, ME 254, ME 237, GE 290
Elective		4		Any EE course, IT 101, BE 254, BE 153, ME 140, ME 210, ME 254, ME 237, GE 290
Elective		4		Any EE course, IT 101, BE 254, BE 153, ME 140, ME 210, ME 254, ME 237, GE 290
	Credit Hours	17		
Spring			,	
EE 235	Electronic Communications	4	EE 132 with a minimum grade of "C" and Reading Proficiency	
GE 240	Product Design and Fabrication	4	ME 151 or EE 134 or EGR 100 or ME 111 with minimum grades of "C" or department approval, and Reading Proficiency	
Elective		4		Any EE course, IT 101, BE 254, BE 153, ME 140, ME 210, ME 254, ME 237, GE 290
	Credit Hours	12		
	Total Credit Hours	60		

 $<sup>{}^{\</sup>star}\mathsf{Click}\ on\ the\ hyperlinked\ course\ number\ to\ view\ additional\ information\ about\ the\ course.$ 

<sup>\*\*</sup>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.

<sup>\*\*\*</sup> 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.