Program	Credential	What do students learn in the program?	What do students earn?	Career Opportunities	Are graduates prepared for/to complete exams for specific credentials/licensing/ certifications at the end of the program?
Electronic Systems Technology - Electronic Systems Technician	Associate of Applied Science	Students gain an in-depth knowledge of electrical concepts, including DC and AC circuits. Students learn to operate, wire and troubleshoot three-phase motor and control circuits and install and maintain data communication, security/fire alarm, and telephone systems. Students learn about digital systems, power supplies, and electrical circuits.	$27.35 per hour; $56,888 per year.	Avionics Bench Technician Bench Tech 1 Installation Technician Service Technician Software Engineering Tech Technician	Students are prepared to take the Certified Technology Specialist exam after completing Audio Video Solutions (ELEC 2040). See footnote*
Electronic Systems Technology - Electronic Systems Technician	Diploma	Students learn AC and DC principles advanced fundamentals of electronic circuits including voice and data communication, antenna radiation patterns, diodes, transistors, and SCRs and TRAICs. Students will also learn to use RF generators, Spectrum analyzers, Fiber optics spicers, and Wattmeters.	(salary listed above is an average for all EST credentials)	Skills provide opportunity for advancement within existing position and organization.	N/A
Electronic Systems Technology - Electronic Systems Technician	Certificate	Students will learn AC and DC principles and the fundamentals of electronic circuits including about diodes, transistors, SCRs, and TRIAC's. Students also learn about power supplies and troubleshooting.	(salary listed above is an average for all EST credentials)	Skills provide opportunity for advancement within existing position and organization.	N/A
Electronic Systems Technology - AVD/Low Voltage Systems	Associate of Applied Science	Student learn about A/V systems, site surveys, design, integration, and maintenance. Students also learn to install and maintain low-voltage systems such as fire, security, and nurse call systems and will learn commercial installation and wiring standards as well as how to build and configure networks, routers, and switches. Students gain in-depth knowledge of electrical concepts, including DC and AC principles.	(salary listed above is an average for all EST credentials)	Low Voltage Technician Security Alarm Installer Fire Alarm Installer Audio & Video System Installer	Students are prepared to take the Certified Technology Specialist exam after completing Audio Video Solutions (ELEC 2040).
Electronic Systems Technology - AVD/Low Voltage Systems	Certificate	Students gain knowledge and skills for a career in the low voltage industry. Students will learn to troubleshoot, install/ set up, program, and design low voltage systems including Audio/Visual Distribution, security and access controls, fire alarms, and nurse call systems. Students learn current audio/ visual practices as defined by AVIXA Certified Technology Specialist (CTS) standards and current installation standards as defined by the BICSI organization.	(salary listed above is an average for all EST credentials)	Low Voltage Technician	Students are prepared to take the Certified Technology Specialist exam after completing Audio Video Solutions (ELEC 2040).
Electrical & Electromechanical Technology - Automation & Robotics	Associate of Applied Science	Students learn AC and DC principles, transformers and three-phase systems, and programmable logic controls. Students in this focus learn about the programming and interfacing of industrial automation equipment. Students learn to program programmable logic controllers, robotics, variable frequency drivers, vision systems, and other industrial devices.	$33.35 per hour; $69,368 annually	Automation System Technician Controls Installation Technician Controls Maintenance Technician	N/A
Electrical & Electromechanical Technology - Automation & Robotics	Certificate	Students learn AC and DC principles and about single - phase transformers. Students will be introduced to automation devices and their applications and industrial control devices.	(salary listed above is an average for all Robo credentials)	Skills provide opportunity for advancement within existing position and organization.	N/A

***Certifications are not required, but SCC encourages and gives students the opportunity to obtain certification in the following while taking classes:**

- iNARTE Certification (without testing)
- J-STD-001 Certification (soldering and inspection of soldering)
- Network +
- CompTIA A+ International Society of Certified Electronics Technicians (ISCET)
- CISCO Certified Network Associate (CCNA)
- NCATT Aircraft Electronics Technician

» Your Next Steps to Choose SCC

- Schedule a Campus Visit - *southeast.edu/visit*
- Explore career options with an Admissions Counselor - *southeast.edu/admissionsadvising*
- Apply - *southeast.edu/applynow*

» Paying for SCC

- Free Application for Federal Student Aid (FAFSA) - *studentaid.gov/h/apply-for-aid/fafsa*
- Scholarships - *southeast.edu/scholarships*
- Payment Plan - *mycollegepaymentplan.com/southeast*
- Veteran Education Benefits - *southeast.edu/veterans-services*
- GAP Assistance Program - *southeast.edu/gap*
- Children of State Teammate Tuition Reimbursement Program - *southeast.edu/children-of-state-teammate-tuition-reimbursement-program*

Scan this code to find out more about Electronic Systems Tech

Scan this code to find out more about AVD/Low Voltage Tech

Scan this code to find out more about Automation & Robotics

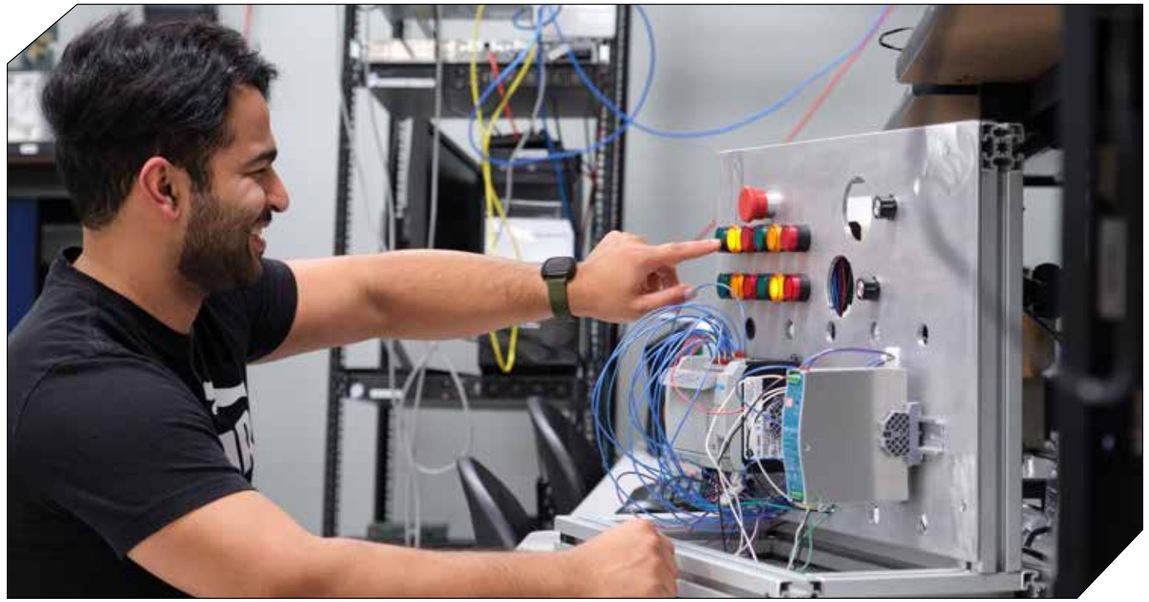
Contact Admissions to get started!
402-437-2600, 800-642-4075 ext. 2600
admissions@southeast.edu

Southeast COMMUNITY COLLEGE

2024-2025 / » southeast.edu

Electronic Systems

- Electronic Systems Technician
- AVD/Low Voltage Technician
- Automation & Robotics



In Electronic Systems Technology, we teach you to "troubleshoot to the component-level repair," meaning you will figure out which part of an electronic system is malfunctioning rather than simply replacing the entire device or board.

*You will learn to repair, install, program, and troubleshoot systems found in many industries, including: **manufacturing** such as automation in factories and machines in the trades; **AV distribution** such as audio/ visual systems; **avionics** such as communication systems, radar, and ground telemetry; **biomedical** devices such as paging, alarm, and MRIs; **security/military equipment**, **communication** systems such as cell phone hardware, and electrical systems found in retail/grocery, and agriculture such as irrigation and other devices. Troubleshooting skills are what employers are looking for since systems are continually evolving and advancing.*

When you start in our program, our instructors assume you have no prior electronics knowledge so you begin by building basic terminology and skills and advance from there. It's our role to teach you what you need to know and help you develop your skills. You'll learn and become an expert by the end of the program.

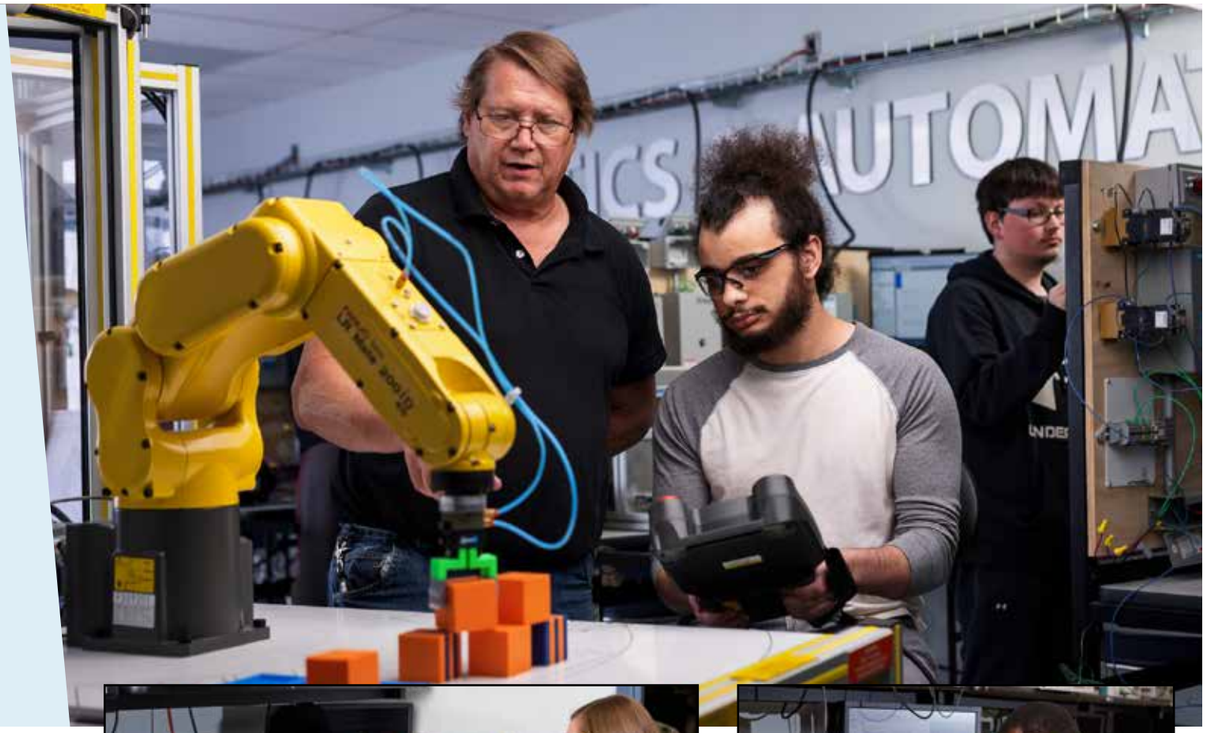
*SCC offers **military students** with an electronics background and training the opportunity to apply for credit-by-waiver. Based upon the military training transcript, you and the program chair will discuss options to complete a degree with topics you have not yet mastered. Up to two-thirds of the technical courses can be transferred in.*

Program Contact Information

Scott Eiland, Program Chair
402-437-2658, 800-642-4075 ext. 2658
seiland@southeast.edu

The SCC Experience

- You'll be prepared for a variety of career paths, including working on a bench as a technician repairing equipment being manufactured and/or repairing existing equipment, to traveling to different locations installing and repairing equipment.
- The Electronic Systems Technology programs are flexible! Earn a degree when it's convenient for you. We offer day and evening courses to meet your schedule needs.
- The programs are hands-on. You'll spend approximately 50% of your time in the lab and the other 50% in the classroom learning the theory needed to excel in the field. The hands-on experience prepares students to excel!
- Employers recruit from this program looking for interns and apprentices hoping to hire full-time once the program is completed. Internships or apprenticeships are not required, but there are many opportunities available.



Personality + Career

You will be successful in our Electronic Systems Technology program if you are a problem-solver, technically inclined, enjoy working with your hands, and taking things apart and putting them back together.

Program	Credential	Location	Credit Hours	Tuition/Fees*	Books/ Fees/ Supplies	Tools	Total Cost*	Starting Term(s)	Number of Semesters Required to Complete at Full Time Status?	Is a summer term required for FT students?	Is there an online option for students?	Can the program be completed entirely online?	Is there a Part-Time Option?	Typical Class Schedule
Electronic Systems Technology - Electronic Systems Technician	Associate of Applied Science	Lincoln	62	R- $7,626 NR- $8,928	$1,100	$90	R- $8,816 NR- $10,118	Fall and Spring	4	No, but students can complete general education courses during the summer term.	No	No	No	Courses are scheduled Monday - Friday between 8 a.m. – 10 p.m. Students select courses based on their schedule.
Electronic Systems Technology - Electronic Systems Technician	Diploma	Lincoln	32	R- $3,936 NR- $4,608	$550	$90	R- $4,576 NR- $5,248	Fall and Spring	2	No, but students can complete general education courses during the summer term.	No	No	Yes	Courses are scheduled Monday - Friday between 8 a.m. – 10 p.m. Students select courses based on their schedule.
Electronic Systems Technology - Electronic Systems Technician	Certificate	Lincoln	17	R- $2,091 NR- $2,448	$550	$90	R- $2,731 NR- $3,088	Fall and Spring	2	No, but students can complete general education courses during the summer term.	No	No	Yes	Courses are scheduled Monday - Friday between 8 a.m. – 10 p.m. Students select courses based on their schedule.
Electronic Systems Technology - AVD/Low Voltage Technician	Associate of Applied Science	Lincoln	61	R- $7,503 NR- $8,784	$1,100	$50	R- $8,653 NR- $9,934	Fall and Spring	4	No, but students can complete general education courses during the summer term.	No	No	Yes	Courses are scheduled Monday - Friday between 8 a.m. – 10 p.m. Students select courses based on their schedule.
Electronic Systems Technology - AVD/Low Voltage Technician	Certificate	Lincoln	15	R- $1,845 NR- $2,160	$630	$50	R- $2,525 NR- $2,840	Fall and Spring	1	No, but students can complete general education courses during the summer term.	No	No	Yes	Courses are scheduled Monday - Friday between 8 a.m. – 10 p.m. Students select courses based on their schedule.
Electrical & Electromechanical - Automation & Robotics	Associate of Applied Science	Lincoln, Milford	63.5	R- $7,811 NR- $9,144	$2,050	$650	R- $9,861 NR- $11,844	Fall and Spring	4	No, but students can complete general education courses during the summer term.	No	No	No	Courses are scheduled Monday - Friday between 8 a.m. – 10 p.m. Students select courses based on their schedule.
Electrical & Electromechanical - Automation & Robotics	Certificate	Lincoln, Milford	19	R- $2,337 NR- $2,736	$920	$630	R- $3,257 NR- $4,286	Fall and Spring	1	No, but students can complete general education courses during the summer term.	No	No	No	Courses are scheduled Monday - Friday between 8 a.m. – 10 p.m. Students select courses based on their schedule.

*R=Resident, NR=Non-resident. Costs listed are estimates and are subject to change based on the market price of books, supplies, tools, uniforms, etc. Estimated costs also include tuition and fees. Additionally, days/times of week for class, lab, clinical/practicum are subject to change based on curriculum, facilities, instructor, and site availability. Actual program schedules will be provided prior to each enrolled term.

✚Please note: Tools are required for the Automation & Robotics program. Please visit the Electrical & Electromechanical Technology web page. The info sheet contains the list of tools.