

2018-2019

SOUTHEAST
COMMUNITY
COLLEGE
NEBRASKA

ELECTRONIC SYSTEMS TECHNOLOGY

Associate of
Applied Science
Degree

LINCOLN CAMPUS

www.southeast.edu/GoEST



Get ready for a variety of career opportunities, including industrial and personal networking, robotics, automation systems, avionics, biomedical, communications, and many other commercial electronic systems, as well as non-commercial, personal systems. A degree in Electronic Systems Technology can open a variety of exciting, stable and lifelong career opportunities with great salaries and benefits.

Courses are designed for the "hands-on" learner, with 50 percent of the time spent in theory and 50 percent spent in lab. This hands-on approach allows students the time and experience necessary to develop the skills to be successful in their field of choice. We begin with the basics, and each course builds upon the skills and knowledge already learned.

Types of jobs available:

- Audio Technician
- Avionics Technician
- Car Stereo Installer/Repairer
- Electronic Systems Designer
- Engineering Assistant
- FAA Electronic Technician
- Field Service Technician
- Home Theater Installer/Repairer
- Industrial Automation Technician
- Network Administrator
- Network Technician
- PC Support Technician
- Radio/TV Broadcast Engineer
- Robotics Technician
- Security Systems Technician
- Studio Technician
- Technical Manager
- Telephone Technician
- Telemetry Technician
- Two-way Radio Installer/Repairer
- Video Technician

"Electronic Contracting Company is a strong advocate of Southeast Community College's Electronics programs. SCC has done a tremendous job in training and preparing its students for the workforce, and for decades, our company has hired SCC's students for this reason. Many of our SCC hires are working in engineering, systems programming, sales and upper management, including our president.

SCC has demonstrated a willingness to keep up with the fast-paced changes in our industry, and this has recently been proven in the newly renovated electronics lab. As an employer, I see this as one of the many impressive attributes to the Electronics program, and I appreciate that SCC deeply invests in the quality of its students' education."

*-Matt Thorne, Vice President of Technical Operations,
Electronic Contracting Company, Lincoln, Neb.*



Graduate Earnings

Recent graduates report an average starting salary of \$43,992 per year plus benefits.

For more information contact:

Mike Aalberg, Program Chair
402-437-2658, 800-642-4075 ext. 2658
maalberg@southeast.edu

or the College Admissions Office
Lincoln 402-437-2600, 800-642-4075 ext. 2600

Equal Opportunity/NonDiscrimination Policy - It is the policy of Southeast Community College to provide equal opportunity and nondiscrimination in all admission, attendance, and employment matters to all persons without regard to race, color, religion, sex, age, marital status, national origin, ethnicity, veteran status, sexual orientation, disability, or other factors prohibited by law or College policy. Inquiries concerning the application of Southeast Community College's policies on equal opportunity and nondiscrimination should be directed to the Vice President for Access/Equity/Diversity, SCC Area Office, 301 S. 68th Street Place, Lincoln, NE 68510, 402-323-3412, FAX 402-323-3420, or jsoto@southeast.edu. This publication should not be considered a contract between SCC and any prospective student. SCC's Board of Governors reserves the right to make changes in this publication during the life of the publication and without notice. A0719 - EST (05/18)

Core Electronic Systems Technology Courses

First Quarter

ELEC 1100	Introduction to Electronic Engineering	4.5
ELEC 1129	Engineering Electronics I	7.5
GENN xxxx		4.5

Second Quarter

ELEC 1219	Engineering Electronics II	7.5
ELEC 1227	Digital Circuits	4.5
MATH xxxx		4.5

Third Quarter

ELEC 1317	Active Devices	7.5
ELEC 1482	Advanced Digital Circuits	4.5
GENN xxxx		4.5

Fourth Quarter

ELEC 1422	Analog Circuits	7.5
ELEC 2530	Microprocessor Applications	4.5
GENN xxxx		4.5

Fifth Quarter

ELEC 2863	Programmable Logic Controllers in Automation Sys.	4.5
ELEC 2760	Introduction to Networks	4.5
GENN xxxx		4.5

Electronic Systems Technician Focus

Sixth Quarter

ELEC 2519	Communications Systems	7.5
ELEC 2570	Audio Systems	4.5
ELEC xxxx	Technical Elective(s)	3

Seventh Quarter

ELEC 2640	Advanced Communication Systems	4.5
ELEC 2750	Video Systems	6.5
ELEC xxxx	Technical Elective(s)	4.5

Robotics and Automation Focus

Sixth Quarter

ELEC 2761	Routing & Switching Essentials	4.5
ELEC 2853	Fluid Power and Robotics	3
ELEC xxxx	Technical Elective(s)	9

Seventh Quarter

ELEC 2864	Adv. PLCs in Automation Systems	4.5
ELEC 2883	Robotics and Vision Systems	4.5
ELEC xxxx	Technical Elective(s)	4.5

Cisco Networking/Security Focus

Sixth Quarter

ELEC 2761	Routing & Switching Essentials	4.5
ELEC 2753	PC Operating Systems and Hardware	4.5
ELEC xxxx	Technical Elective(s)	4.5

Seventh Quarter

ELEC 2860	Scaling Networks	4.5
ELEC 2900	CCNA Security	4.5
ELEC 2823	Network Operating Systems and Administration	7

Contact your program advisor to select general education courses which will meet your program's graduation requirements.



Military Transfer (Advanced Placement) in the Electronic Systems Technology program

The Electronic Systems Technician Military focus offers military students who have electronics background and training to apply that training and reduce the courses necessary to complete the degree. Based upon the Military training transcript, the student and the program chair will select courses that will enhance technical expertise. Up to two-thirds of the technical courses can be transferred in for a technician focus or computer, automation and networking focus.

Cisco Networking/Security	Up to 71 credit hours transferred in and 38 required
Robotics and Automation	Up to 72 credit hours transferred in and 37.5 required
Electronic Systems Technician	Up to 72 credit hours transferred in and 38 required

22.5 credit hours required for general education

Classes are offered in three convenient time blocks to make planning your schedule easier!

8 a.m. - Noon begins each fall	10 a.m. - 3 p.m. begins each spring	6 - 10 p.m. begins each winter
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Choose the time frame that works best for you!

Estimated Expenses

Nebraska Resident tuition/fee rate is \$69.50 per credit hour. Out-of-state tuition/fee rate is \$83.50 per credit hour. Graduation fee is \$25. Housing is available at Beatrice and Milford campuses only. Tuition, books and fees are dependent upon classes taken each quarter. Students should plan a budget that includes room, meals, clothing, laundry, medical care, recreation and entertainment, transportation, insurance, etc.

EST CORE COURSES

Quarters 1-5 (79.5 credits)	
Tuition/Fees	\$5,525
EST Books	907
Gen. Ed Books	620
Tools & Certification Exam Fee	825
Total Estimate	\$7,877

Tools Fee includes:

(1st quarter) ELEC-1100 or 1129	
• Estimated Lab/Tool fee	\$350
• Estimated IPC Standard Exam Fee	\$35
(2nd Quarter) ELEC-1219 or 1227	
• Estimated Lab/Tool fee	\$140
(4th Quarter) ELEC2530/1422	
• Estimated Lab/Tool fee	\$300

ELECTRONIC SYSTEMS TECHNICIAN FOCUS

Quarters 6-7 (30.5 credits)	
Tuition/Fees	\$2,120
EST Books	203
Tools & Certification Exam Fee	465
Total Estimate	\$2,788

Tools Fee includes:

(6th Quarter) ELEC-2519/2570	
• Estimated Lab/Tool fee	\$400
(7th Quarter) ELEC-2570	
• IS CET Exam	\$65

ROBOTICS AND AUTOMATION FOCUS

Quarters 6-7 (30 credits)	
Tuition/Fees	\$2,085
EST Books	212
Total Estimate	\$2,297

CISCO NETWORKING/SECURITY FOCUS

Quarters 6-7 (29.5 credits)	
Tuition/Fees	\$2,050
EST Books	175
Total Estimate	\$2,225