Overview
Imagine a world without electronics. There would be no music playing on the radio. No telephones to communicate with friends and family. No computers to help business and industry prosper. Obviously, electronic circuits and systems affect the daily lives of every citizen in our country. Our electronic and computer engineering technology program prepares you for an exciting career in electronics.

Professional options
Careers
Electronic and computer engineering technology graduates generally work as members of a team of engineers, scientists and other technical professionals in research and development, manufacturing, technical sales, maintenance and customer service.

Employers
Employers include companies using and developing data communications equipment, automated manufacturing systems and computer peripheral equipment. Associate degree graduates work as engineering technicians in product development, plant operation and maintenance, production and technical sales.

The advanced expertise attained by bachelor’s degree graduates opens additional career paths in product design and development, industrial control systems design, maintenance engineering and management.

Academics
Degree options
The degree programs offered in electronic and computer engineering technology provide a solid foundation in a range of electronic circuit topics. Students study circuit analysis, digital electronics, microprocessor programming and interfacing, computer programming, and radio frequency communication circuits and systems. These technical subjects are taught in conjunction with courses in mathematics, science and interpersonal communications.

Accreditation
The bachelor’s degree program option in electronic and computer engineering technology is accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org.

Preparation
The electronic and computer engineering technology program is for students interested in the practical application of electronic circuit theories. The ability to think through a problem in a logical, step-by-step manner is very important in this field, as is a genuine interest in hands-on laboratory activities. High school studies should concentrate on mathematics, physical sciences with related laboratory activities, and written and oral communications.

Facilities
Laboratory facilities used in the electronic and computer engineering technology program include an electrical manufacturing laboratory, a computer-controlled instrumentation laboratory, a power circuits laboratory, and a digital circuits and systems laboratory. Several computer laboratories on campus provide access to modern circuit simulation programs, compilers, business software and the Internet.

Required coursework
Electronic and Computer Engineering Technology, bachelor’s degree option (126 credit hours)

Freshman
Fall semester (17 credit hours)
3 COMM 106 Public Speaking I
4 ECET 100 Basic Electronics
4 ECET 250 Digital Logic
3 ENGL 100 Expository Writing I
0 ETA 020 Engineering Technology Seminar
3 MATH 100 College Algebra

Spring semester (16 credit hours)
3 CMH 110 General Chemistry
1 CHM 111 General Chemistry Laboratory
1 CMST 103 Computing Principles
3 CMST 250 Hardware and Network Fundamentals
3 ECET 101 Direct Current Circuits
3 MATH 150 Plane Trigonometry

Sophomore
Fall semester (16 credit hours)
4 ECET 110 Semiconductor Electronics
4 ECET 201 Alternating Current Circuits
1 ECET 335 Industrial Control Topics
3 ENGL 302 Technical Writing
4 MATH 220 Analytic Geometry and Calculus I

Spring semester (17 credit hours)
3 ECET 240 Electronics Manufacturing
4 ECET 350 Microprocessor Fundamentals
3 MET 382 Industrial Instrumentation and Controls
4 PHYS 113 General Physics I
3 Humanities/Social Science elective

Junior
Fall semester (14 credit hours)
3 CMST 302 Applications for C Programming for Engineering Technology
3 ECET 304 Electric Power and Devices
4 ECET 352 Digital Circuits and Systems
4 MATH 221 Analytical Geometry and Calculus II

Spring semester (17 credit hours)
3 BUS 315 Supervisory Management
4 ECET 320 Electronic Communications Systems
3 ENGL 200 Expository Writing II
3 Humanities/Social Science elective
4 Science elective with lab

Senior
Fall semester (14 credit hours)
3 ECET 430 Network Analysis
4 ECET 450 Digital Systems and Computer Architecture
1 ECET 480 Electronics Design I
3 Humanities/Social Science elective
3 Technical elective

Spring semester (15 credit hours)
4 ECET 420 Communications Circuits Design
2 ECET 481 Electronics Design II
3 Humanities/Social Science elective
3 Humanities/Social Science elective*
3 Technical elective

*Marked electives must be upper-level courses, 300 and above.

Points of pride
Graduates of Kansas State University’s electronic and computer engineering technology program find work in a wide variety of areas, ranging from product design to advanced data communications.
Electronic and Computer Engineering Technology, associate degree option
(66 credit hours)

Freshman
Fall semester (17 credit hours)
3 COMM 106 Public Speaking I
4 ECET 100 Basic Electronics
3 ECET 250 Digital Logic
3 ENGL 100 Expository Writing I
0 ETA 020 Engineering Technology Seminar
3 MATH 100 College Algebra

Spring semester (16 credit hours)
3 CHM 110 General Chemistry
1 CHM 111 General Chemistry Laboratory
3 CMST 103 Computing Principles
3 CMST 250 Hardware and Network Fundamentals
3 ECET 101 Direct Current Circuits
3 MATH 150 Plane Trigonometry

Sophomore
Fall semester (16 credit hours)
4 ECET 110 Semiconductor Electronics
4 ECET 201 Alternating Current Circuits
1 ECET 335 Industrial Control Topics
3 ENGL 302 Technical Writing
4 MATH 220 Analytic Geometry and Calculus I

Spring semester (17 credit hours)
3 ECET 240 Electronics Manufacturing
4 ECET 350 Microprocessor Fundamentals
3 MET 382 Industrial Instrumentation and Controls
4 PHYS 113 General Physics I
3 Humanities/Social Science elective

For more information about the electronic and computer engineering technology program, contact:
Kansas State Polytechnic
Office of Admissions
2310 Centennial Road
Salina, KS 67401-8196
785-826-2640
polytechnic@k-state.edu

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Notice of nondiscrimination
Kansas State University prohibits discrimination on the basis of race, color, ethnicity, national origin, sex (including sexual harassment and sexual violence), sexual orientation, gender identity, religion, age, ancestry, disability, genetic information, military status, or veteran status, in the University’s programs and activities as required by applicable laws and regulations. The person designated with responsibility for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination policies is the University’s Title IX Coordinator: the Director of the Office of Institutional Equity, equity@k-state.edu, 103 Edwards Hall, Kansas State University, Manhattan, Kansas 66506, (785) 532-6277. The campus ADA Coordinator is the Director of Employee Relations, charlott@k-state.edu, who may be reached at 103 Edwards Hall, Kansas State University, Manhattan, Kansas 66506, (785) 532-6277.

Post-Graduation Statistics
k-state.edu/postgrad-stats
kodegreestats.org 2017