

career fields

- Communication engineer
- Electrical engineer
- Design engineer
- Control systems engineer
- Sales engineer
- Avionics engineer
- Engineering technician
- Engineering associate
- Technical sales associate

areas of interest

- Electronic design
- Automated manufacturing systems
- Industrial control systems
- Digital design
- Programmable logic devices
- Telecommunications systems
- RF circuits and devices

job placement

- Average starting salary around \$55,000
- 100 percent job placement for most years

about our program

K-State at Salina's electronic and computer engineering technology program can prepare you for an exciting career in electronics. **The mechatronics emphasis** is designed to tailor the electronic and computer engineering technology degree (ECET) program to address the needs of the electromechanical industry. The ECET program provides a solid foundation in a range of electronic circuit topics. Students also receive a strong background in mathematics, science and interpersonal communications.

Education Core Topics

- Circuit analysis
- Digital electronics
- Microprocessors
- Programming and interfacing
- Computer programming
- RF communication circuits

Both the associate's and the bachelor's degrees in electronic and computer engineering technology are accredited by the Technology Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 - telephone: (410) 347-7700



contacts

Department Head:

Dr. Saeed Khan

Phone: 785-826-2675

E-mail: saeed@k-state.edu

Faculty:

Dr. Saeed Khan

Phone: 785-826-2675

E-mail: saeed@k-state.edu

Aaron Westerman

Phone: 785-826-2673

E-mail: aww@k-state.edu

Eduard Plett

Phone: 785-826-2926

E-mail: eplett@k-state.edu

Department Office:

Annette Hernandez

Phone: 785-826-2646

E-mail: ahernan@k-state.edu



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ELECTRONIC & COMPUTER

engineering technology

Emphasis in

MECHATRONICS



**K-STATE
AT SALINA**

projects

Students work on many interesting projects during their degree program in ECET. Here are some samples:

Analog electronics

Students are required to design and build power supplies for a manufacturing course. They use their own parameters and assemble it from the circuit board to the chassis.

Digital electronics

Microcontroller projects include building robots and security systems. Digital System students have designed video games, traffic light controllers and assembly line controllers.

Wireless/RF electronics

Students have built satellite antennas and microstrip line feeds.

Senior projects

Senior design projects will be fine-tuned to the mechatronics area and will make use of the knowledge and experience gained throughout a student's college career. Students are usually given a design problem from an area employer. They create a solution and deal with the company from concept to completion. They also learn how to utilize a budget and work on a team.



the courses

ASSOCIATE'S DEGREE

Freshman Fall Semester				Hrs.
ECET	100	Basic Electronics		4
MATH	100	College Algebra		3
MATH	151	Applied Plane Trigonometry		2
ENGL	100	Expository Writing I		3
SPCH	105	Public Speaking 1A		2
ETA	020	Engineering Technology Sem.		0
				14

Freshman Spring Semester				Hrs.
ECET	101	DC Circuits		4
ECET	110	Semiconductor Electronics		4
MATH	220	Analytic Geometry & Calculus I		4
PHYS	113	General Physics I		4
CMST	110	Intro. to Visual Basic		3
				17

Sophomore Fall Semester				Hrs.
ECET	201	AC Circuits		4
ECET	210	Linear Circuit		4
ECET	240	Electronic Manufacturing		3
ECET	250	Digital Logic		4
ENGL	302	Technical Writing		3
				18

Sophomore Spring Semester				Hrs.
CMST	250	Computer Networking		3
ECET	330	Industrial Controls		4
ECET	350	Microprocessor Fundamentals		4
CHM	110	General Chemistry		3
CHM	111	General Chemistry Lab		1
				3
				18

BACHELOR'S DEGREE

Junior Fall Semester				Hrs.
ECET	352	Digital Circuits & Systems		4
CMST	302	Applications in C for Engineering Technology		3
MATH	221	Analytic Geometry & Calculus II		4
				4
				15

Junior Spring Semester				Hrs.
ECET	320	Electronic Communications Systems		4
ENGL	200	Expository Writing II		3
BUS	315	Supervisory Management		3
				3
				16

Senior Fall Semester				Hrs.
ECET	421	Telecommunication Systems		4
ECET	430	Network Analysis		3
ECET	480	Electronic Design I		1
MET	252	Fluid Power Technology		3
				3
				14

Senior Spring Semester				Hrs.
ECET	420	Communications Circuits Design		4
ECET	450	Digital Systems & Computer Architecture		4
ECET	481	Electronic Design II		2
CET	211	Statics		3
				3
				16

clubs / student life

Students in the electronic and computer engineering technology program also have several chances to get involved in campus life outside the classroom. Whether you join the Solar Boat Club or Mini Baja Team, or become a member of the student chapter of the Institute of Electrical and Electronics Engineering (IEEE), you'll be able to take what you've learned in the classroom and have fun with it!



Dennis Kuhlman, dean of K-State at Salina, and students pose with last year's entry into the Solar Boat competition.