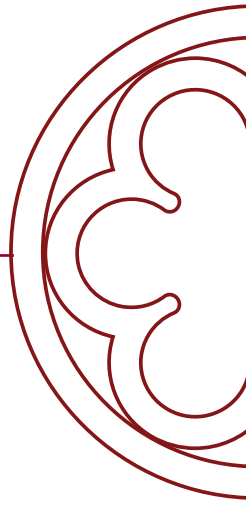




SCHOOL OF ELECTRICAL AND COMPUTER ENGINEERING



Electrical and Computer Engineering (ECE) is the foundation of the vast majority of technologies that we use every day. In ECE, students learn how electrical systems, computers, and software cooperate to enable communications, renewable energy systems, medical devices, and consumer electronics. Our ABET-approved programs strike a balance between lecture and hands-on lab work, providing students with experience in areas such as electronics, signal processing, control systems, and embedded computing. By introducing them to lab work and applied problem-solving, students gain practical knowledge that they can use in many diverse industries. Regardless of whether your interests are in power systems, computer hardware, or software design, ECE provides you with the solid foundation necessary to start a career in engineering or pursue advanced study.

BY THE NUMBERS

\$19.5M+

Research Expenditures

16:1

Student to Faculty Ratio

\$79,000

Average starting salary for OU ECE graduates

MAJORS

Electrical Engineering
Computer Engineering

Accelerated (5-year)

Dual Degree Programs

B.S. Computer Engineering/
M.S. Electrical and Computer Engineering
B.S. Electrical Engineering/
M.S. Electrical and Computer Engineering
B.S. Computer Engineering/
M.S. Computer Science

MINOR

Electrical and Computer Engineering

CONTACT US

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www.ou.edu/coe/ece
For general questions:
goengineering@ou.edu



Undergraduate student, Thomas Fugate, member of Paul Moses', Ph.D., research group the Laboratory for Electrical Energy and Power Systems. Sooner Competitive Robots team at competition after winning the Lescoe Cup at the 2023 Intelligent Ground Vehicle Competition.

“The Electrical and Computer Engineering program at OU has given me a fulfilling experience in pursuing my dream career in robotics. The faculty has your success in mind, and I have had the opportunity to take classes in interesting fields such as microprocessor system design, VLSI digital system design, artificial intelligence, and digital signal processing. By incorporating experiential learning into the curriculum and being able to practice engineering on a competition team such as Sooner Competitive Robotics, the ECE program has given me the confidence to apply the knowledge learned in the classroom to real world settings.”

– Braden White, Computer Engineering, Class of 2024

Terms to Know

Major—Primary area of study
Minor—Complimentary area of specialization

B.S.—Bachelor of Science
M.S.—Master of Science

M.B.A.—Master of Business Administration
M.E.S.—Master of Environmental Science

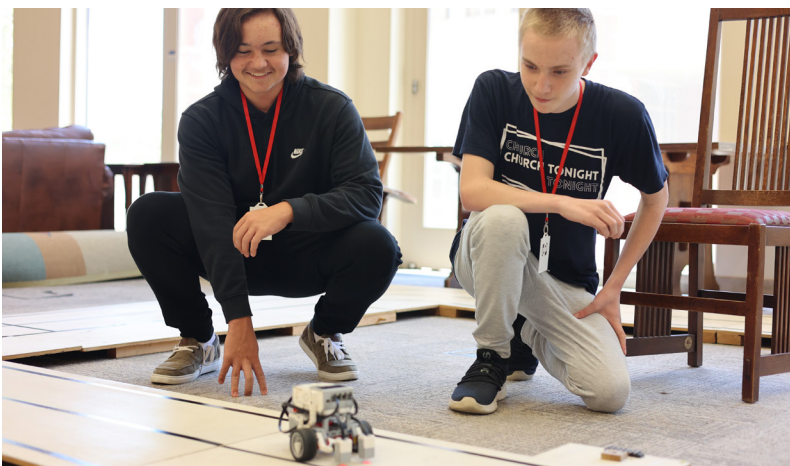


THINGS TO KNOW

1 Outstanding faculty specialize in the fields of radar and electromagnetics; medical imaging technology; solid state and photonics; communications; computer and embedded systems; signals, systems, and controls; and power and energy systems. These focus areas provide an opportunity for students to engage in specialized learning to gain research experience in areas of targeted interest. Such experience often proves invaluable in building one's engineering skillset.

2 OU ECE's academic structure ensures early and continuous lab engagement, emphasizing real-world problem-solving through digital and analog electronics, signal processing, embedded systems, and control. Students develop and implement complex systems using tools such as Multisim, EAGLE, MATLAB/Simulink, and dSPACE—accumulating over 150 hours of lab instruction prior to their senior capstone. Advanced labs provide direct experience in power electronics, adaptive controllers, and inverter-based renewable systems.

3 Student innovation is central to the OU ECE experience. Projects span machine-learning-based prosthetics, quantum-compatible grid control, electromagnetic noise diagnostics, fractal learning agents, and virtual gyroscope systems. Many initiatives proceed to publication, patent, or commercialization under faculty mentorship. Co-curricular engagement through IEEE includes over 20 technical events annually, certification opportunities, design competitions, and peer-led mentorship—leading to early-stage internships, co-authorship, and industry collaboration.



Student participates in hands-on projects during the OU Engineering Days summer camps.

SELECT COURSES

Optoelectronics
Radio Frequency and Microwave Engineering
Communication Networks
VLSI Digital System Design
Machine Learning for Engineers
Inverter-Based Renewable Energy Systems

ECE STUDENT ORGANIZATIONS

Institute of Electrical and Electronic Engineers (IEEE)
Eta Kappa Nu
Sooner Competitive Robotics
+ over 60 engineering student organizations

CAREER PATHS

Boeing Oklahoma City, OK
Design and Analysis Engineer

ConocoPhillips Bartlesville, OK
Information Technology Engineer

Fiat Chrysler Automobiles Belvidere, IL
Electrical Engineer

United States Patent and Trademark Office Alexandria, VA
Electrical Engineering Patent Examiner

Western Digital Colorado Springs, CO
Software Engineer

OG&E Oklahoma City, OK
Power and energy generation, transmission and distribution