

ELECTRICAL ENGINEERING

OKLAHOMA CHRISTIAN UNIVERSITY

OC.EDU



PROGRAMS

ELECTRICAL ENGINEERING

ELECTRICAL ENGINEERING WITH SOFTWARE
ENGINEERING EMPHASIS

ENGINEERING WITH PURPOSE

Oklahoma Christian University's ABET-accredited Electrical Engineering program prepares students to design, develop and improve technologies. Taught by industry-experienced faculty, the curriculum emphasizes hands-on labs and real-world projects, preparing graduates for industry, professional practice or graduate school. Students may also pursue a Software Engineering Emphasis to combine electrical engineering with advanced software development skills.

WHERE CAN THESE DEGREES TAKE YOU?

POWER & ENERGY

- Power Systems Engineer
- Electrical Power Engineer
- Renewable Energy Engineer

ELECTRONICS & CIRCUIT DESIGN

- Electrical Design Engineer
- Electronics Engineer
- Circuit Design Engineer

AEROSPACE & DEFENSE

- Aerospace Systems Engineer
- Avionics Engineer
- Defense Systems Engineer

COMMUNICATIONS & TECH

- Communications Engineer
- Network Systems Engineer
- Signal Processing Engineer

EMBEDDED SYSTEMS & SOFTWARE

- Controls Engineer
- Software Engineer

SMART TECHNOLOGIES

- Embedded Systems Engineer
- Robotics Engineer
- Controls Engineer
- AI Systems Engineer

*SOME CAREERS LISTED MAY REQUIRE ADDITIONAL PROFESSIONAL EXPERIENCE AND/OR EDUCATION.



\$111,910

NATIONAL MEDIAN ANNUAL SALARY
FOR ELECTRICAL ENGINEERS.

17,500+

ELECTRICAL ENGINEERING JOB
OPENINGS PER YEAR OVER THE
NEXT DECADE.

7%

PROJECTED JOB GROWTH
RATE THROUGH 2034.

Source: U.S. Bureau of Labor Statistics

ADMISSIONS@OC.EDU | 405.425.5050

KEY DIFFERENCES IN OUR ENGINEERING PROGRAMS

Regardless of which of our Engineering programs you choose (Mechanical, Electrical or Computer), faith will be seamlessly integrated into every academic discipline. The primary differences are your interests and what you will learn to design and create.

	MECHANICAL ENGINEERING	ELECTRICAL ENGINEERING	COMPUTER ENGINEERING
DESIGN	machines and mechanical systems	electrical systems and electronics	computer hardware and smart devices
FOR THINGS LIKE	airplanes, structures, 3D printing, manufacturing, energy systems and product design	power systems, circuits, communications and controls	embedded systems, hardware, software and AI technologies
IF YOU	enjoy physics, mechanics and materials science	are interested in advanced math, electromagnetics and electronics	enjoy technology, computer science, data structures, and discrete math

CLASSES, PROJECTS & OPPORTUNITIES

ELECTRICAL ENGINEERING COURSES

- Analog Electronics
- Electronic Devices
- Continuous-Time Linear Systems
- Discrete-Time Linear Systems
- Digital Signal Processing
- Electromagnetic Fields
- Controls Systems
- Mechatronic System Design
- Software Engineering of Real-Time Systems
- Systems Design I, II and III

UNIQUE PROJECTS & OPPORTUNITIES

- **Baja SAE:** Design and build an off-road vehicle from scratch.
- **SAE Aero:** Design and build a fully functional radio-controlled aircraft from scratch.

- **Air Force Research Lab (AFRL) Aerospace Propulsion Outreach Program (APOP):** Design, build and test a modification on a small gas turbine engine. (Each year, there is a different design challenge.)
- **Humanitarian UAV Design:** Design specialized drones for remote medical supply delivery and infrastructure mapping in underserved areas.
- **Interdisciplinary Projects:** Collaborate on larger multidisciplinary teams for AI, robotics and semiconductor manufacturing challenges sponsored by local industry partners.
- **Toastmasters:** Practice public speaking through a learn-by-doing format. Deliver spontaneous, impromptu short speeches to practice thinking on your feet and implementing feedback.

GRADUATES OF THE ELECTRICAL ENGINEERING PROGRAMS

- Build the technical skills for a successful engineering career.
- Add value to the engineering process.
- Work effectively with teams to solve engineering challenges.
- Stay current with new technologies and industry advancements.
- Lead with integrity, a strong work ethic and professionalism.
- Apply faith to work and relationships.
- Use talents to balance career, family, church and community.

SCAN TO
LEARN
MORE



WHY OC? WHY OKC?

At OC, Electrical Engineering students are provided a Christ-centered education, hands-on learning and personal faculty mentorship. Our campus is located just 10 minutes from the heart of Oklahoma City, which provides access to internships, industry partnerships and career opportunities in aerospace, energy, manufacturing, technology and more.

ABET

ACCREDITED ELECTRICAL
ENGINEERING PROGRAM

\$107,760

AVERAGE OKLAHOMA ELECTRICAL
ENGINEER SALARY.¹

\$80,244

AVERAGE ENTRY-LEVEL STARTING
SALARY FOR ELECTRICAL
ENGINEERS IN OKLAHOMA CITY.²

TOP 15

BEST BIG CITIES TO LIVE.³

SOURCES: ¹ O*NET ONLINE

² ZIPRECRUITER

³ U.S. NEWS & WORLD REPORT

WHERE SOME OF OUR ALUMNI ARE WORKING

- Tinker Air Force Base
- Northrop Grumman
- OG&E
- Ford Audio and Video
- The Boeing Company
- Autoquip
- Kratos Defense and Security Solutions
- W&W | AFCO Steel
- ASRC Federal
- Kimley Horn
- Kimray
- KBR
- Nortek
- Textron
- King Aerospace
- JASCO
- Garmin
- Oklahoma Christian University

DR. JEFF BIGELOW
PROFESSOR OF ELECTRICAL
ENGINEERING
DEPARTMENT CHAIR