What Can I Do With This Ohio State Major?

Bachelor of Science in Electrical and Computer Engineering

Electrical & Computer Engineering

College of Engineering

Electrical engineers and computer engineers work at the frontier of high technology and are involved in the creation of new ideas, and the design and development of new products, manufacturing, and marketing activities. The field of electrical engineering encompasses a very broad spectrum of technical areas, including computers and digital systems, electronics and integrated circuits, communications, systems and control, electromagnetics and photonics, energy conversion and power distribution, robotics, signal processing, and semiconductor devices. The field of computer engineering covers a wide range of topics including computer architecture, operating systems, communications, computer networks, robotics, artificial intelligence, supercomputers, computer-aided design, and neural nets.

Career Areas/Job Titles

Management and Industry
- Audio Systems
- Fiber Optics/ Lasers
- Automotive/Aerospace/
- Spacecraft Biomedical Devices
- Nanotechnology
- Sustainable Energy
- Image Processor
- Sensors
- Artificial Intelligence
- Patent lawyer
- Medicine
- Solar cells
- Biomedical Informatics
- Intelligent Transportation
- Mobile Computing
- Semiconductor Materials
- Integrated Optics
- Autonomous Vehicles
- Micro-Electro-Mechanical
- Systems Terahertz Devices
- and Systems Manufacturing
- Data processing/mining
- Consumer Electronics
- Education
- K-12 Teacher
- Professor

Science and Technology
- Systems Analysis
- Software Design
- Circuit Design
- Antennas and Radar Engineering
- Reliability Engineering
- Intelligent Transportation
- Mobile Computing
- Semiconductor Materials
- Integrated Optics
- Autonomous Vehicles
- Micro-Electro-Mechanical
- Systems Terahertz Devices
- and Systems Manufacturing
- Data processing/mining
- Consumer Electronics
- Education
- K-12 Teacher
- Professor

- Written
- Communication
- Teamwork
- Willingness to Take
- Risks
- Conceptualization
- Creativity/Imagination
- Defining Needs
- Identifying Problems
- Setting Goals
- Adaptability/Flexibility
- Attention to Detail
- Implementing
- Decisions
- Administrative Skills
- Prioritizing Tasks
- Strategic Planning/Visioning

*Some careers may require licensure, certification, or further education. Talk to an advisor about specific requirements.

Transferable Skills:

Computer Skills
Creating Innovative
Solutions Quantitative
Reasoning
Analytical/Critical Thinking
Problem Solving
Computer Programming
Engineering
Fundamentals
Mathematical Skills

Written
Communication
Teamwork
Willingness to Take
Risks
Conceptualization
Creativity/Imagination
Defining Needs
Identifying Problems
Setting Goals

Adaptability/Flexibility
Attention to Detail
Implementing
Decisions
Administrative Skills
Prioritizing Tasks
Strategic Planning/Visioning

*This is not an extensive list of transferable skills. See larger list of skills you might develop here: http://ccss.osu.edu

Professional Links:
Institute for Electrical and Electronics Engineers: http://www.ieee.org/index.html
American Society for Engineering Education: http://www.asee.org/