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. ⁱ

Career Areas/Job Titles

Management and Industry

Sales Person Consultant

Entrepreneur

Marketing Specialist

Finance

Manager

Science and Technology

Systems Analysis Software Design Circuit Design

Antennas and Radar Engineering

Reliability Engineering

Audio Systems Intelligent Transportation

Fiber Optics/ Lasers Mobile Computing

Automotive/Aerospace/ Semiconductor Materials

Spacecraft Biomedical Devices Integrated Optics
Nanotechnology Autonomous Vehicles
Sustainable Energy Micro-Electro-Mechanical
Image Processor Systems Terahertz Device

Image Processor

Systems Terahertz Devices
and Systems Manufacturing

Artificial Intelligence Data processing/mining
Patent lawyer Consumer Electronics

Medicine Education
Solar cells K-12 Teacher
Biomedical Informatics Professor

Transferable Skills:

Computer SkillsWrittenAdaptability/FlexibilityCreating InnovativeCommunicationAttention to DetailSolutions QuantitativeTeamworkImplementingReasoningWillingness to TakeDecisions

Analytical/Critical Thinking Risks Administrative Skills
Problem Solving Conceptualization Prioritizing Tasks

Computer Programming Creativity/Imagination Strategic Planning/Visioning

Engineering Defining Needs
Fundamentals Identifying Problems

Mathematic Skills Setting Goals

*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/



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