What Can I Do With A Major In: Electrical & Computer Engineering Technology

Western Carolina University Center for Career and Professional Development
828.227.7133, CCPD Website

DESCRIPTION
The program emphasizes the application of microcomputers to the solution of industrial problems relating to automation, instrumentation, and control, in systems involving robotics, data communications, networks, and/or automated testing. In all cases, microcomputer hardware and software are used for data acquisition, transfer, and analysis.

WHAT JOBS ARE AVAILABLE?
- System Administrator
- Application Engineer
- Information Technologist
- Computer Sales Representative
- Computer Hardware Engineer
- Engineering Managers
- Industrial Control Systems Designer
- Electrical and Electronics Engineer
- Product Design Specialist
- Customer Service Technology Specialist

- Network Specialist
- Software Engineer
- Technical Sales Representative
- Aircraft Technicians
- Science Technicians
- Science Manager
- Control Systems Specialist
- Hydraulics Specialist
- Electrical and Electronics Repairer
- Manufacturing Technology Specialist
- Electrical and Electronics Engineering Technician

System Engineer
Sales Engineer
Avionics Technician
Civil Engineer
Drafters
College Faculty
Geoscientist

WHO EMPLOYS STUDENTS WITH THIS MAJOR?
Computer Companies | Software Companies | Construction Companies | Energy Companies | Corporations | Electrical Engineers | Home Repair Companies

INTERNSHIP INFORMATION
At Western Carolina University there are numerous internship opportunities for students. In some cases internships are established through a faculty member in the student's major. Oftentimes students find part-time jobs in an area related to their field of study. When this happens, students should discuss with their academic advisor the possibility of receiving college credit. Generally, three hours of general elective credit can be earned for a minimum of 200 hours of experience.

WHAT SKILLS ARE LEARNED IN THE CLASSROOM?
- an ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities;
- an ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies;
• an ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments and to apply experimental results to improve processes;
• an ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives;
• an ability to function effectively as a member or leader on a technical team;
• an ability to identify, analyze, and solve broadly-defined engineering technology problems;
• an ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature;
• an understanding of the need for an ability to engage in self-directed continuing professional development; an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity;
• a knowledge of the impact of engineering technology solutions in a societal and global context;
• and a commitment to quality, timeliness, and continuous improvement.

Interested in the classes you’ll be taking? Check you your eight semester program here: http://www.wcu.edu/WebFiles/PDFs/ECET.pdf

KNOWLEDGE
1. Apply their technical knowledge as practicing professionals or engage in graduate education.
2. Work successfully in their chosen career individually and within a professional team environment.
3. Engage in professional development in their profession by adapting to new technology and career challenges.

PROFESSIONAL RESOURCES
• Institute of Electrical and Electronics Engineers: http://www.ieee.org/index.html
• Electronics Technicians Association International: http://www.eta-i.org/
• International Society of Certified Electronic Technicians: http://www.iscet.org/

ADDITIONAL RESOURCES
• Association of Technology, Management, and Applied Engineering: http://www.atmae.org/
• International Society of Automation: https://www.isa.org/

CONTACT INFORMATION
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