



# 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	Network Specialist	System Engineer
Application Engineer	Software Engineer	Electrical Engineer
Information Technologist	Technical Sales Representative	Sales Engineer
Computer Sales Representative	Aircraft Technicians	Avionics Technician
Computer Hardware Engineer	Science Technicians	Civil Engineer
Engineering Managers	Science Manager	Drafters
Industrial Control Systems Designer	Control Systems Specialist	College Faculty
Electrical and Electronics Engineer	Hydraulics Specialist	Geoscientist
Electrical and Electronics Installer	Electrical and Electronics Repairer	
Product Design Specialist	Manufacturing Technology Specialist	
Customer Service Technology Specialist		
Electrical and Electronics Engineering Technician		

## 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/>
- WCU Electrical and Computer Engineering Technology: <http://www.wcu.edu/academics/departments-schools-colleges/Kimmel/academic-programs-degrees-offered/engtech/ecet/index.asp>

## **CONTACT INFORMATION**

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