

Biomedical/Electronics Technology

Associate in Applied Science in Technical Studies

Program Description:

The Electronics Technology program is offered in cooperation with the Cabell County Career Technology Center (CCCTC). The CCCTC is responsible for providing the electronics courses and electronics laboratories. Mountwest Community & Technical College provides support courses that enhance a student's analytical, communication, computer, customer service, and interpersonal skills.

Upon completion of the Associate of Applied Science Degree in Electronics Technology, the graduate will be able to:

- Exhibit knowledge of electronic terminology;
- Demonstrate a working knowledge of the proper techniques for maintaining, troubleshooting, and repairing electronic devices through proper use of schematic diagrams and common test equipment;
- Apply quantitative principles to analyze and solve problems;
- Make decisions after gathering and analyzing information;
- Prepare and present written and oral communication;
- Demonstrate teamwork and customer service skills.

Career Outlook:

Electronics Technician is one of today's fastest growing careers, a career that can provide not only a great salary and job security but also exciting work in a field that is always growing and changing. This field has many opportunities including maintenance, design, service and sales in commercial, manufacturing and process industries.

The following industries employ electronic technicians: computer industry, consumer electronics industry, robotics industry, utility companies, healthcare, broadcast, manufacturing, aerospace, automotive, mining, office equipment, waste-treatment, and any other industries that use electrical/electronic systems.

Salary Forecast:

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|--------------|----------------------|
| • Low Range | \$21,710 to \$27,680 |
| • Mid Range | \$27,680 to \$45,750 |
| • High Range | \$45,750 to \$62,540 |

(Information obtained from Occupational Outlook Handbook, 2006-2007)

Tech Prep Affiliation:

The Electronics Technology program is aligned with the West Virginia Tech Prep Engineering/Technical cluster. This career track provides the opportunity for West Virginia students to acquire college credit while attending high school.

Major Code - CE10 • Concentration Code - CE13

FIRST YEAR	
<p>First Semester</p> ENL 111 Written Communication3 ELT 111 Direct Current Circuit Analysis ¹4 ELT 111L Direct Current Electronics Lab2 IT 101 Fundamentals of Computers (EDGE)3 MAT 145 Applications in Algebra3 SS Social Science Elective ²3 TOTAL CREDITS 18	<p>Second Semester</p> COM 112 Oral Communication3 ELT 121 Alternating Current Circuit Analysis ^{1,3}4 ELT 121L Alternating Current Electronics Lab2 MAT 215 Applied Discrete Mathematics ⁴3 SCI 110 Introductory to Physics ⁴4 TOTAL CREDITS 16
SECOND YEAR	
<p>Third Semester</p> IT 131 Introduction to Networking ⁵4 ELT 131 Analog Circuits ^{1,6}5 ELT 131L Analog Circuits Lab1 ELT 211 Combinational Logic Circuits ^{1,7}5 ELT 211L Combinational Logic Circuits Lab2 IT 270 Computer Repair ⁵ (EDGE)3 TOTAL CREDITS 20	<p>Fourth Semester</p> AH 151 Medical Terminology (EDGE)3 ELT 222 Introduction to Microprocessor ⁸4 ELT 223 Biomedical Instrumentation ⁹3 ELT 299 Electronic Technology Internship3 BIOL 257 Introduction to Anatomy & Physiology (EDGE) ...3 TOTAL CREDITS 16
HOURS REQUIRED FOR GRADUATION: 70	

Employment Opportunities:

- Bench technician
- Design technician
- Process control technician
- Bio-medical technician
- Maintenance technician
- Electronics trainers
- Electronics sales
- Installation technician

Earn a Degree Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

Contact Information:

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1. ELT 111, ELT 121, ELT 131 and ELT 211 must be taken concurrently with their respective labs: ELT 111L, ELT 121L, ELT 131L and ELT 211L.
2. Social Science requirement: Select from EC 102, SS 201, SS 210, or SS 215.
3. ELT 121 has a prerequisite of ELT 111.
4. MAT 215 and SCI 110 have a prerequisite of MAT 145.
5. IT 131 and IT 270 have a prerequisite of IT 101
6. ELT 131 has a prerequisite of ELT 121.
7. ELT 211 has a prerequisite of ELT 131 and MAT 215.
8. ELT 222 has a prerequisite of ELT 211.
9. ELT 223 has a prerequisite of ELT 211 and ELT 211L.