



Electronics Engineering Technology Program

OVERVIEW OF THE PROGRAMS

The Electronics Engineering Technology program at Fairmont State prepares graduates to work in industries producing and/or using electrical and electronic equipment. Graduates are employed by a wide variety of industries including coal, aerospace, semiconductor, control, utilities, glass, and computer industries. They may be involved in areas such as design, testing, maintenance, production, and supervision.

The program is designed as a highly flexible 2 + 2 curriculum. Once the Associate degree is earned, the graduate may choose to enter the workforce or to continue at the baccalaureate level.

The Associate of Science degree in Electronics Engineering Technology emphasizes an understanding of basic electronic circuits and devices. Students concentrate on mathematics and science, written and oral communication skills, fundamentals of electronics, and electronic specialization classes including transistors, linear and digital circuits, microcomputer systems, AC/DC machinery and controls, industrial systems, communication systems, and programmable logic controllers.

The Bachelor of Science degree provides students a greater emphasis on design and analysis with advanced classes in linear and microcomputer systems, data acquisition and control systems, an independent senior electronics project and elective hours that can be applied to a work experience practicum in industry.

EMPLOYMENT OPPORTUNITIES

Employment opportunities in electrical and electronics related fields are expected to be good through the year 2016 because employment is expected to increase much faster than the average of all occupations.

Graduates with the associate degree are qualified for entry level technician positions in maintenance, repair and equipment calibration. Specific job titles include electronics technician (breadboarding and testing of circuits), equipment technician (install, specify, order and maintain equipment), maintenance engineer, and electronic drafter.

FOR MORE INFORMATION VISIT

www.fairmontstate.edu/academics/collegeofscitech/default.asp



fast fact
The annual median wage for this career field is \$83,340.00, and graduates of the program typically find employment with a salary between \$54,000 - \$56,000.00.

Graduates with the Bachelor of Science degree are qualified for positions that range from technician through electronic engineering technologist. Work at this level usually involves product design, writing performance requirements, developing maintenance schedules, data analysis, and programming PLCs. Professional engineering certification may be obtained after the completion of all West Virginia licensing requirements.

CONTACT INFORMATION

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NOTES

MODEL SCHEDULE

Electronics Engineering Technology (B.S.)

FRESHMAN FIRST SEMESTER

ECON 2200	INTRODUCTION TO ECONOMICS.....	3
ENGL 1104	WRITTEN ENGLISH I.....	3
MATH 1101	APPLIED TECHNICAL MATH I.....	3
DRFT 1100	ENGINEERING GRAPHICS.....	3
ELEC 1100	CIRCUIT ANALYSIS I.....	3
ELEC 2200	SHOP PRACTICES.....	3
		18

FRESHMAN SECOND SEMESTER

COMM 2200	INTRODUCTION TO HUMAN COMMUNICATION.....	3
ENGL 1109	TECHNICAL REPORT WRITING.....	3
MATH 1102	APPLIED TECHNICAL MATH II.....	3
ELEC 2210	CIRCUIT ANALYSIS II.....	3
ELEC 2215	BASIC TRANSISTORS.....	3
COMP 1101	APPLIED TECHNICAL PROGRAMMING.....	3
		18

SOPHOMORE FIRST SEMESTER

PHYS 1101	INTRODUCTION TO PHYSICS I.....	4
ELEC 2220	LINEAR ELECTRONICS.....	3
ELEC 2230	DIGITAL ELECTRONICS.....	3
ELEC 2250	AC/DC MACHINERY AND CONTROLS.....	3
TECH 2290	ENGINEERING ANALYSIS I.....	4
		17

SOPHOMORE SECOND SEMESTER

PHYS 1102	INTRODUCTION TO PHYSICS II.....	4
ELEC 2240	INDUSTRIAL ELECTRONICS.....	3
ELEC 2260	COMMUNICATION SYSTEMS.....	3
ELEC 2270	MICROCOMPUTERS.....	3
ELEC 2280	PROGRAMMABLE CONTROLLERS.....	3
		16

JUNIOR FIRST SEMESTER

ELEC 3310	ADVANCED MICROCOMPUTER SYSTEMS.....	3
ENGL 1108	WRITTEN ENGLISH II.....	3
SFTY 1100	SAFETY & ENVIRONMENTAL COMPONENTS OF INDUSTRY.....	3
TECH 3300	ENGINEERING ANALYSIS II.....	4
	GENERAL STUDIES - CULTURE/CIVILIZATION EXPLORATION ELECTIVE....	3
		16

JUNIOR SECOND SEMESTER

ELEC 3300	ADVANCED LINEAR ELECTRONICS.....	3
	GENERAL STUDIES - CULTURE/CIVILIZATION EXPLORATION ELECTIVE....	3
	TECH ELECTIVE.....	3
	GENERAL STUDIES - ARTISTIC/CREATIVE/INTERDISCIPLINARY ELECTIVE..	3
	GENERAL STUDIES - SOCIETY/HUMAN INTERACTION ELECTIVE.....	3
		15

SENIOR FIRST SEMESTER

	GENERAL STUDIES - CULTURE/CIVILIZATION EXPLORATION ELECTIVE....	3
ELEC 4400	SENIOR ELECTRONICS PROJECT.....	3
CHEM 1101	GENERAL CHEMISTRY.....	4
	TECH ELECTIVE.....	3
	GENERAL STUDIES - ARTISTIC/CREATIVE/INTERDISCIPLINARY ELECTIVE..	3
		16

SENIOR SECOND SEMESTER

ELEC 4410	DATA ACQUISITION AND CONTROL SYSTEMS.....	4
MANF 2250	TOTAL QUALITY & SPC.....	3
INFO 1100	3
	TECH ELECTIVE.....	3
	ELECTIVE.....	3
		16