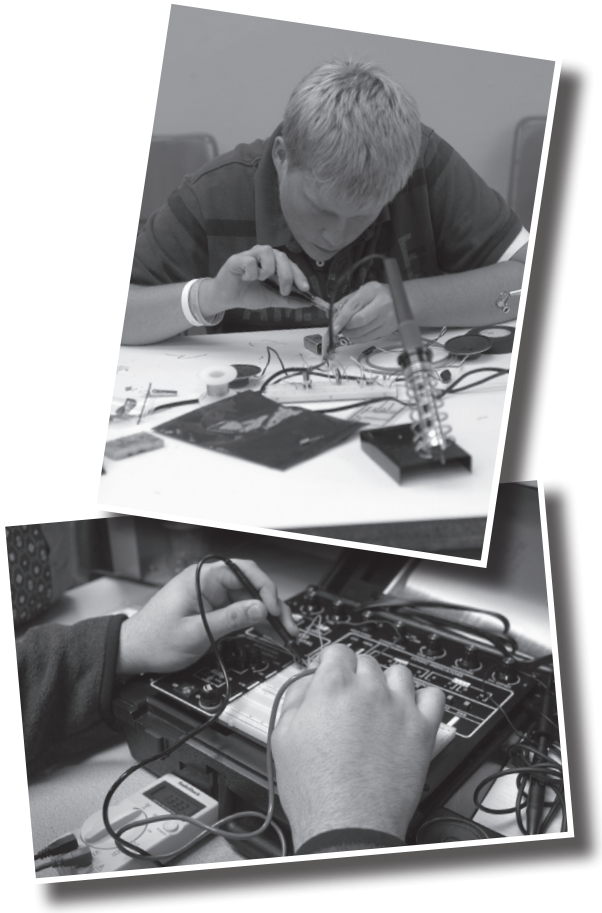
COLLEGE OF SCIENCE AND TECHNOLOGY

FAIRMONT STATE UNIVERSITY

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.

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.

FOR MORE INFORMATION VISIT

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

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

Mr. Larry Allen, Coordinator
Department of Technology
Room 316c, Wallman Hall
Phone: (304) 367-4631
E-mail: lallen2@fairmontstate.edu

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
TECH ELECTIVE			3
ELECTIVE			3
			13