

Electronics Engineering Technology Program

OVERVIEW OF THE PROGRAM:

The Electronics Engineering Technology (EET) program at Fairmont State University is accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, <http://www.abet.org>

The EET program prepares graduates for employment in a wide variety of industries producing and/or using electrical and electronic equipment. Our instructional strategy is designed to produce graduates with knowledge, applied skills, and experiences in engineering, but also with problem solving, critical thinking, teamwork, and communication skills required by modern industries.

In two years an Associate's EET degree can be earned opening opportunities for a new career. The Associate's EET program provides a thorough understanding of Digital Electronics, Circuit Analysis, Electronic Devices, Machinery Controls, Programmable Logic Controllers, and Industrial Electronics. Coursework involves theoretical analysis, software simulation and hands-on applications.

The Bachelor's EET degree program builds on the knowledge and experiences of the Associates program. The student will receive comprehensive training in communication systems, microcontrollers, advanced linear electronics, advanced automation systems, data acquisition and control systems. During the student's senior year a capstone project applies learned principles to develop an experimental technical application.

THEORY AND APPLICATION

The principles learned at Fairmont State can be applied in a wide range of careers including biomedical, energy, transportation, communications, entertainment, defense, and manufacturing.

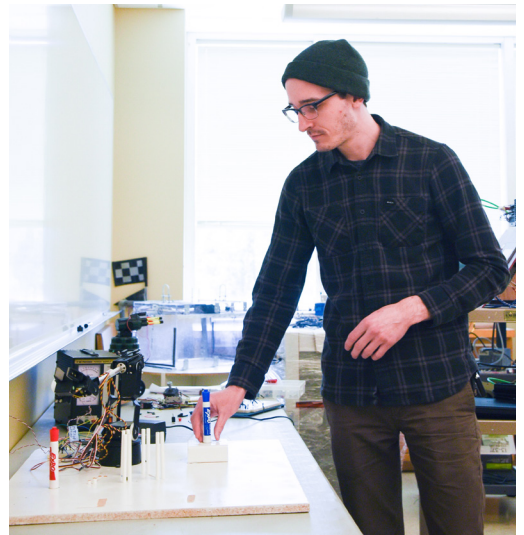
EET graduates make an impact by developing technology to improve lives. The EET graduates will design electronic components, software, products, or systems for commercial, industrial, medical, military, or scientific applications

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**FAIRMONT STATE
UNIVERSITY™**

**College of Science and
Technology**



CONTACT INFORMATION

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EMPLOYMENT OPPORTUNITIES

According to the United State Department of Labor, Electronic and Electrical Engineers median annual wage for year 2015 was \$95,000. Electrical and electronic engineers are mostly employed by industries designing, building equipment, research and development or engineering service firms. The industries that employed the most electronics engineers in 2014 were telecommunications, Federal government, engineering services, semiconductor, navigational, measuring, electro-medical, and control instruments manufacturing .

The rapid pace of technological advancements will likely drive demand for electrical and electronics engineers in research and development, an area in which engineering expertise will be needed to develop distribution systems related to new technologies. These engineers will play key roles in new developments having to do with innovations in energy, transportation and communications technologies .

NOTES:

BACHELOR OF SCIENCE IN ELECTRONICS ENGINEERING TECHNOLOGY:

MODEL SCHEDULE

FRESHMAN FIRST SEMESTER

ENGL	1101	WRITTEN ENGLISH I.....	3
MATH	1510	APPLIED TECHNICAL MATH I OR MATH 1530 (ACCORDING TO ... ACT SCORE).....	3
ELEC	1100	CIRCUIT ANALYSIS I.....	3
ELEC	1120	AC/DC ELECTRONICS ANALYSIS.....	3
			12

FRESHMAN SECOND SEMESTER

ENGL	1103	TECH REPORT WRITING.....	3
MATH	1520	APPLIED TECHNICAL MATH II OR MATH 1540 (ACCORDING TO .. ACT SCORE).....	3
COMP	1102	PRINCIPLES OF PROG I.....	3
ELEC	2210	CIRCUIT ANALYSIS II.....	3
ELEC	2225	ELECTRONIC DEVICES.....	3
			15

SOPHOMORE FIRST SEMESTER

PHYS	1101	INTRODUCTION TO PHYSICS I.....	4
TECH	2290	ENGR ANALYSIS I OR MATH 2501 CALC I.....	4
GS		ATTRIBUTE 10.....	2
ELEC	2230	DIGITAL ELECTRONICS.....	3
ELEC	2250	AC/DC MACHINERY AND CONTROLS.....	3
			16

SOPHOMORE SECOND SEMESTER

PHYS	1102	INTRODUCTION TO PHYSICS II.....	4
TECH	3300	ENGR ANALYSIS II OR MATH 2502 CALC II.....	4
COMM	2202	INTRO TO COMMUNICATION IN WORLD OF WORK.....	3
ELEC	2240	INDUSTRIAL ELECTRONICS.....	3
ELEC	2280	PROGRAMMABLE CONTROLLERS.....	3
			17

JUNIOR FIRST SEMESTER

GS		ATTRIBUTE 9.....	3
GS		ATTRIBUTE 12.....	3
		TECHNICAL ELECTIVE.....	3
ELEC	2270	INTRO TO MICROCONTROLLER SYSTEMS.....	3
ELEC	3360	COMMUNICATION SYSTEMS.....	3
			15

JUNIOR SECOND SEMESTER

GS		ATTRIBUTE 6.....	3
GS		ATTRIBUTE 16.....	3
CHEM	1101	GENERAL CHEMISTRY.....	4
ELEC	3300	ADVANCED LINEAR ELECTRONICS.....	3
ELEC	3310	ADVANCED MICROCONTROLLER SYSTEMS.....	3
			16

SENIOR FIRST SEMESTER

GS		ATTRIBUTE 14.....	3
TECH		ELECTIVE.....	3
ELEC	4410	DATA ACQUISITION AND CONTROL SYSTEMS.....	4
ELEC	4420	ADVANCED AUTOMATION CONTROLLER SYSTEMS.....	3
			13

SENIOR SECOND SEMESTER

GS		ATTRIBUTE 11.....	3
GS		ATTRIBUTE 8, 13.....	3
TECH		ELECTIVE.....	3
ELEC	4401	SENIOR ELECTRONICS PROJECT I.....	4
ELEC	4402	SENIOR ELECTRONICS PROJECT II (WRITING INTENSIVE).....	3
			16