

Electronics Engineering Technology A.A.S

Program Description

The Electronics Engineering Technology program emphasizes the theory and application of electronics. The student is taught a fundamental understanding of the principles and practices of electronics. Laboratory exercises provide applications to enhance learning. The electronics technician applies electronics theory, principles of electrical circuits, electrical testing procedures, technical mathematics, physics, and related topics, and related subjects to design, build, repair and modify electronics equipment such as computers, communication equipment and automated manufacturing. To provide the flexibility required in the electrical science and electronics industries, the curriculum offers a solid foundation in mathematics, science and electronics.

Technical Occupational Specialty

<input type="checkbox"/>	EET	1104	Fundamentals of Electricity
<input type="checkbox"/>	EET	1244	Circuit Analysis I
<input type="checkbox"/>	EET	2101	Electronic Construction and Design
<input type="checkbox"/>	EET	2224	Electronic Amplifiers I
<input type="checkbox"/>	EET	2234	Analog and Digital Systems
<input type="checkbox"/>	EET	2373	Digital Logic Analysis
<input type="checkbox"/>	EET	2454	Electronic Computers
<input type="checkbox"/>	EET	2643	Operational Amplifiers
<input type="checkbox"/>	EET	2764	Electronic Communications Systems
<input type="checkbox"/>	EET	2814	Maintenance of Microcomputer System

34 Credit Hours

Date	Institution

or

<input type="checkbox"/>	ITD	1503	A+Hardware
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Support and Related Courses

17 Credit Hours

<input type="checkbox"/>	EET	2103	Electronic Instruments
<input type="checkbox"/>	EET	2333	Industrial Computer Programming

or

<input type="checkbox"/>	CIS	2013	C++Language Programming
<input type="checkbox"/>	EET	2854	Industrial Microcomputer Applications
<input type="checkbox"/>	MATH	2133	Calculus for Technology Programs II
<input type="checkbox"/>	PHYS	1114	General Physics I

Cooperative Agreement

This program is part of a cooperative agreement offered between OSU-Oklahoma City and Metro Technology Centers.

Employment Information

There are many areas of employment specialization in electronics technology. Labor statistics report that employment opportunities for electronic technicians will be favorable through the next decade.

or

<input type="checkbox"/>	PHYS	1514	Introduction to Lasers
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General Education Courses

21 Credit Hours

<input type="checkbox"/>	ENGL	1113	English Composition I
<input type="checkbox"/>	HIST	1213	English Composition II
or			
<input type="checkbox"/>	SPCH	1113	Introduction to Speech Communications
<input type="checkbox"/>	HIST	1493	U.S. History Since 1865
<input type="checkbox"/>	MATH	1513	College Algebra
<input type="checkbox"/>	MATH	1613	Trigonometry
<input type="checkbox"/>	MATH	2123	Calculus for Technology Programs I
<input type="checkbox"/>	POLS	1113	American Government

Degree Awarded

Associate in Applied Science

For More Information Contact:

Calvin Hill
Associate Professor
Science and Engineering Technologies Division
Engineering Technology Building
Room 300
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Oklahoma City, OK 73107
(405) 945-3220
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Total to Graduate

72 Credit Hours

*Refers to technical courses that transfer to the OSU-Stillwater Electronics Technology program.

Cooperative Alliance Services
Student Center, Rom 132
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melissa.woodruff@osuokc.edu

Student Name:	_____
CWID:	_____
Counselor:	_____
Catalog 2008-2009	

EET 1104 FUNDAMENTALS OF ELECTRICITY

Elementary principles of electricity covering basic electric units, OHM's law, Kirchoff's law, circuit solutions, network solutions, magnetism, inductance and capacitance. Lab: two hours per week. Co-requisite: MATH 1513.

EET 1244 CIRCUIT ANALYSIS I

The study of transient analysis and network theorems for electric circuits. This course introduces resonant circuits, filters, AC power and computer aided circuit analysis techniques. Lab: two hours per week. Prerequisite: EET 1104. Co-requisite: MATH 1613.

EET 2101 ELECTRONIC CONSTRUCTION AND DESIGN

Circuit design, test, development and fabrication in wired and printed form. Lab: two hours per week. Prerequisite: EET 2224.

EET 2224 ELECTRONIC AMPLIFIERS I

A study of the theory and application of amplifiers using bipolar and FET transistors. Bias stabilizing and feedback techniques along with RC coupling, direct coupling and transformer coupling circuits will be studied in this course. Lab: two hours per week. Prerequisites: EET 1104 and EET 1244.

EET 2234 ANALOG AND DIGITAL SYSTEMS

A summarization of topics covered in the electronics curriculum including ADC, DAC, operational amplifiers, dynamic circuit analysis and physics. This course will include Laplace Transforms, transfer functions and DC motors used to form a closed loop system. PID control theories will be examined to show how an analog system can be controlled by a digital device such as a computer. Lab: three hours per week. Prerequisites: EET 1244 and EET 2333 and MATH 2133.

EET 2373 DIGITAL LOGIC ANALYSIS

The study of number systems, digital codes, Boolean algebra, logic simplification and Karnaugh mapping, timing and control including registers, counters, decoders and multiplexers as related to digital systems. Lab: two hours per week. Co-requisite: EET 1104.

EET 2454 ELECTRONIC COMPUTERS

The methods of using electronic circuits to perform computations, the elements of digital computers and the organization of these elements in a functioning computer. Lab: two hours per week. Prerequisite: EET 2373.

EET 2814 MAINTENANCE OF MICROCOMPUTER SYSTEMS

Maintenance of microcomputer systems as used in business and industry. Transducers, advanced programming and troubleshooting microcomputer systems including transducers and peripherals. Lab: three hours per week. Prerequisite: EET 2373.

EET 2764 ELECTRONIC COMMUNICATIONS SYSTEMS

An introduction to the basic principles and components of receivers and transmitters used in modern communications. Lab: three hours per week. Prerequisite: EET 2224.

EET 2643 OPERATIONAL AMPLIFIERS

A study of operational amplifiers, their characteristics and their applications will be presented in this course. Other linear devices such as voltage regulators, phase-lock loops and function generator chips will also be studied. Lab: three hours per week. Prerequisites: EET 1244 and EET 2224.

ITD 1503 A+ HARDWARE

Students will be introduced to hardware concepts through hands-on experience with the fundamentals of current microcomputer technologies including installation, configuration, upgrades, diagnosis and troubleshooting, system optimization and repair. Additional topics will include preventive maintenance as well as safety.