

# Associate of Applied Science Degree Engineering Technologies

## Electronic Engineering Technology

The Department of Electronic Engineering Technology's mission is to provide a quality learning opportunity in Electronic Engineering Technology. - The purpose is to prepare students to further their education at a 4-yr institution and/or employment-in the field of Engineering Technology. - Both the day and evening programs are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc. (TAC/ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, phone 410.347.7700, [www.abet.org](http://www.abet.org).

Program Educational Objectives: Graduates will be able to: (1) solve technical problems typical of those encountered in the electronic engineering technology discipline by using critical thinking skills, current technology, and principles of mathematics and applied science; (2) work and communicate effectively in multidisciplinary teams in both industrial and academic settings; and (3) understand current professional issues and the need to pursue lifelong learning.

**Certificates are also available.**

### Electronic Engineering Technology (9420)

**First Semester:**

CPET 1120 . . . . .	C Programming for Engineering Technology . . . . .	3
ELEC 1100 . . . . .	Direct Current Circuit Analysis . . . . .	3
<b>ENGL 1110*</b> . . . . .	<b>English Composition I (A)</b> . . . . .	3
<b>OR</b>		
<b>ENGL 1111</b> . . . . .	<b>English Composition I (B)</b> . . . . .	
ENGR 1000 . . . . .	Introduction to Engineering Technology . . . . .	2
MATH 1101 . . . . .	Technical Mathematics I . . . . .	4
PHYS 1100 . . . . .	Applied Physics I . . . . .	3

18

**Second Semester:**

ELEC 1200 . . . . .	Alternating Current Circuit Analysis . . . . .	3
ELEC 1320 . . . . .	Digital Systems Fundamentals . . . . .	3
ENGL 1120 . . . . .	English Composition II . . . . .	3
MATH 1201 . . . . .	Technical Mathematics II . . . . .	4
PHYS 1200 . . . . .	Applied Physics II . . . . .	3

16

**Summer**

<b>ELEC 2000</b> . . . . .	<b>Electronic Technology Field Experience</b> . . . . .	2
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**OR**  
Choose course(s) from the Technical Electives list.

2

**Third Semester:**

<b>ECON 1150</b> . . . . .	<b>Basic Economics</b> . . . . .	3
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**OR**  
**ECON 2500** . . . . .**Principles of Macroeconomics**  
**OR**

<b>ECON 2600</b> . . . . .	<b>Principles of Microeconomics</b> . . . . .	
ELEC 2101 . . . . .	Linear and Switch-Mode Power Supplies . . . . .	3
ELEC 2400 . . . . .	Microcontroller Applications . . . . .	3
ELEC 2500 . . . . .	Feedback Control Systems . . . . .	3
ELEC 2821 . . . . .	Programmable Logic Controllers . . . . .	3
Choose course(s) from the Arts and Humanities Electives list. . . . .		3

18

**Fourth Semester:**

ELEC 2151 . . . . .	Operational Amplifiers and Linear Integrated Circuits . . . . .	3
ELEC 2300 . . . . .	Sensors and Actuators . . . . .	3
ELEC 2600 . . . . .	Robotics Project Lab . . . . .	3
ELEC 2700 . . . . .	Motor Control and Servo Systems . . . . .	3
<b>SPCH 1100</b> . . . . .	<b>Effective Interpersonal Communications</b> . . . . .	3
<b>OR</b>		
<b>SPCH 1000</b> . . . . .	<b>Effective Public Speaking</b> . . . . .	
Choose course(s) from the Technical Electives list. . . . .		2

17

**Program Total: 71**

*\*English course selection is based on placement test results (ENGL 1111 is 4 credits, only 3 credits apply to the degree).*

**Technical Electives: minimum 4 credits**

CNET 1100 . . . . .	Cisco Networking Technology I . . . . .	2
CNET 1200 . . . . .	Cisco Networking Technology II . . . . .	2
CNET 1300 . . . . .	Cisco Networking Technology III . . . . .	2
CNET 1400 . . . . .	Cisco Networking Technology IV . . . . .	2
CNET 2520 . . . . .	Cisco Networking V: Advanced Routing . . . . .	4
CNET 2540 . . . . .	Cisco Networking VI: Remote Access . . . . .	4
CPET 1200 . . . . .	Visual Basic for Engineering Technology I . . . . .	2
CPET 2200 . . . . .	Visual Basic for Engineering Technology II . . . . .	2
ELEC 1400 . . . . .	Stand-Alone Photovoltaic Systems . . . . .	2
ELEC 2000 . . . . .	Electronic Technology Field Experience . . . . .	2
ELEC 2850 . . . . .	Advanced Programmable Controller Applications . . . . .	2

**Arts and Humanities Electives: minimum 3 credits**

ARTS 1120, 2220, 2230; ENGL 2250, 2260, 2280, 2290; HUMX 1100, 1200; MUSC 1200, 1215, 1800, 2200, 2250; PHIL 1500, 2000