



## Electronic Engineering Technology Associate of Applied Science (A.A.S.)

2018–2019

### DESCRIPTION:

The Electronic Engineering Technology A.A.S. degree program provides students with the instruction and hands-on training to support the design, installation, testing, operation, troubleshooting, maintenance, and repair of analog and digital electronics and embedded programmable microcontroller systems. In a laboratory setting, students will learn to use common electronic test bench equipment such as oscilloscopes, digital multi-meters, function generators, and power supplies. The program is accredited by the Engineering Technology Accreditation Commission of ABET. For more information, see [csc.edu/academics/departments/engineering-technologies/electronic-engineering.shtml](http://csc.edu/academics/departments/engineering-technologies/electronic-engineering.shtml).

### ADMISSION REQUIREMENTS:

This is a non-selective, open-admission program. However, students must place into ENGL 1100 and MATH 1115 or MATH 1148.

### ONGOING REQUIREMENTS:

Technical course offerings are limited each semester due to the small class size and the equipment needed for lab experiences. In order to progress through the program, students should prioritize their schedules with technical courses first and then supplement their schedules with non-technical courses. EET courses are available only in accelerated 8-week terms and are offered in three distinct time blocks: mornings 8:00 A.M. to 12:00 P.M.; afternoons 12:00 P.M. to 4:00 P.M., and evenings 6:00 P.M. to 10:00 P.M. Students must maintain minimum overall GPA required by the College.

### OPPORTUNITIES FOR GRADUATES:

#### Career:

Graduates of the Electronic Engineering Technology A.A.S. program qualify for careers in a variety of settings as electrical and electronic engineering technicians. They apply electrical and electronic theory and related knowledge, usually under the direction of engineering staff, to design, install, repair, calibrate, and modify electrical components, circuitry, controls, and machinery for subsequent evaluation and use by engineering staff in making engineering design decisions.

Other job titles include controls technicians, electronics technicians, electronics engineering technicians, electrical engineering technicians, electrical technicians, engineering technicians, field service technicians, field service engineers, instrument and controls technicians (I & C tech), repair technicians, service technicians, test engineers, test specialists, test technicians, instrument specialists, and instrumentation technicians.

#### Transfer:

Graduates can transfer to the Electro-Mechanical Engineering Technology B.S. degree program through the Columbus State's partnership with Miami University. Miami's program is online, so the degree can be completed on Columbus State's campus. Columbus State also has articulation agreements with Ohio University, Franklin University, and other institutions.

## DEGREE REQUIREMENTS (ELECTRONIC ENGINEERING TECHNOLOGY A.A.S.):

### FIRST SEMESTER

Course	Term	Credits	Milestones/Progress Check
ENGL 1100 Composition I	AU/SP/SU	3	• First-year lab experiences involve building and testing electronic circuits on proto-boards with discrete components and integrated circuits (IC chips).
EET 1105 Basic DC Electronic Systems	AU/SP/SU	3	
EET 1115 Basic Digital Systems	AU/SP/SU	3	
ITST 1101 Industrial Applications and Software	AU/SP/SU	2	
COLS 1100 First Year Experience Seminar	AU/SP/SU	1	
ITST 1123 A+ Cert, Managing/Troubleshooting PCs	AU/SP	3	
<b>Semester Credits</b>		<b>15</b>	

### SECOND SEMESTER

Course	Term	Credits	Milestones/Progress Check
EET 1125 Basic AC Electronic Systems	AU/SP/SU	3	• Second-year lab experiences utilize computer applications to program microcontrollers and programmable integrated circuits (IC chips) using both text-based and graphical programming languages.
EET 2235 Data Acquisition Systems	AU/SP/SU	3	
EET 2215 Advanced Digital Systems	AU/SP/SU	3	
EET 2225 Embedded Microcontroller Systems	AU/SP/SU	3	
MATH 1115 Mathematics for Engineering Technologies	AU/SP/SU	4	
<b>Semester Credits</b>		<b>16</b>	

### THIRD SEMESTER

Course	Term	Credits	Milestones/Progress Check
COMM 2204 Technical Writing	AU/SP/SU	3	• In these EET courses, students will master the skills: 1) to build and test the most sophisticated analog circuits and 2) comprehend digital concepts that drive cellular communications, the Internet, and computer networks.
EET 1135 Electronic Switching and Amplifier Systems	AU/SP/SU	3	
EET 1145 Data Communication Systems	AU/SP/SU	3	
PHYS 1200 Algebra Based Physics I	AU/SP/SU	5	
SBS Elective (select from approved Gen Ed list)	AU/SP/SU	3	
<b>Semester Credits</b>		<b>17</b>	

### FOURTH SEMESTER

Course	Term	Credits	Milestones/Progress Check
EET 2599 EET Capstone	AU/SP	3	• Capstone: In addition to learning the skills required for functional team work, students learn to create technical requirements documentation, manage project schedules, submit frequent project status reports, and complete test procedures. They also practice effective project design, prototyping, troubleshooting, completion, and presentation.
PHYS 1201 Algebra Based Physics II	AU/SP/SU	5	
HUM Elective (select from approved Gen Ed list)	AU/SP/SU	3	
COMM 1110 Small Group Communication	AU/SP/SU	3	
<b>Semester Credits</b>		<b>14</b>	
<b>Total</b>		<b>62</b>	

AU: Autumn Semester/SP: Spring Semester/SU: Summer Semester  
Requirements subject to change.