

# Electrical Technology: Electronics A.A.S.

This program prepares the student for employment and advancement in the field of electronics.

## Degree Requirements

Cayuga's "hands-on" learning environment focuses on experimentation with the use of various pieces of test equipment and helps students develop troubleshooting skills for sophisticated electronic systems.

The curriculum provides the graduate with fundamental knowledge in DC and AC circuitry, digital circuits, microprocessor systems, programmable logic controllers, and high-frequency systems. Our experimental and simulation laboratory environments help students gain necessary application experience in the proper use of multimeters, oscilloscopes, logic pulsers and probes, logic analyzers, spectrum analyzers, and network analyzers.

## Academic Preparation

A background in algebra and trigonometry is recommended.

## Career Possibilities

Positions in the fields of computers, robotics, medical instrumentation, audio/radio frequency communication, and manufacturing include

- Engineering Technical Assistant
- Electronic Test and Repair Technician
- Industrial Control Technician
- Calibration and Test Technician
- Field Service Technician
- Electronic Assembler

## Transfer Information

Students should contact their advisers and/or the transfer counselor in the Student Development Center for information on transfer planning. Early consultation to plan the most appropriate course sequence will optimize transferability.

## Map your degree

Courses		Cr Hrs	Semester Completed	Grade
<b>First Semester</b>				
ENGL 101	Freshman English I	3	_____	_____
ELEC 101	Electrical Circuits	4	_____	_____
ELEC 105	Intro to Digital Computers	4	_____	_____
	Elective	3-4	_____	_____
	Behavioral/Social Sciences	<u>3</u>	_____	_____
		<b>17-18</b>		
<b>Second Semester</b>				
ENGL 102	Freshman English II or ENGL 270 Technical Writing	3	_____	_____
ELEC 102	Basic Electronics	4	_____	_____
ELEC 107	Fund. of Microcomputers	4	_____	_____
MATH 114	Applied Mathematics			
	or MATH 104 College Algebra & Trigonometry (or higher)*	3	_____	_____
C.S. 200	Programming in Visual Basic			
	or C.S. 222 Programming in C/C++	3	_____	_____
	Physical Education	<u>1</u>	_____	_____
		<b>18</b>		
<b>Third Semester</b>				
ELEC 201	Intermediate Electronics	4	_____	_____
ELEC 209	Programmable Logic Controllers	3	_____	_____
ENGR 207	Quality Assurance	3	_____	_____
PHYS 103	General Physics I	4	_____	_____
	Technical Elective**	<u>3-4</u>	_____	_____
		<b>17-18</b>		
<b>Fourth Semester</b>				
ELEC 204	Industrial Electronics	4	_____	_____
ELEC 208	Radio Frequency Communications	4	_____	_____
PHYS 104	General Physics II	4	_____	_____
	Behavioral/Social Sciences	3	_____	_____
	Health	1	_____	_____
	Physical Education	<u>1</u>	_____	_____
		<b>17</b>		
<b>Total Credit Hours</b>		<b>69-71</b>		

\* Math 112, 115, or 116 will not fulfill Math requirement.

\*\* The following will fulfill this requirement: BUS 225 or BUS 226; C.S. 200 or higher; Drafting; Electronics; Engineering; Geographic Information Systems; Math (except Math 112, 115, or 116); Physics

