

INDUSTRIAL CONTROL SYSTEMS

Industrial Control Systems provides for a study of components, circuits, instruments and control techniques used with Industrial Automated Systems. The focus of study is on two main areas, one is control techniques for industrial components, such as electric motors, variable-speed drives, programmable logic controllers, servomechanisms and sensors. The second area of concentration is the computer system itself. The intent of this program is to prepare the electronic technician to deal with a broad concept of automation technology. The student will also have the ability to repair or upgrade the computer, install the necessary software to run the system, and integrate the system into computer networks.

Instructors
Ron Hutain
Jody Chrisman

Industrial Control
Systems

Curriculum in Industrial Control Systems Technical Certificate

Course Number	Course Name	Semester Hours
1st Semester		
ELT 1104	Fundamentals of Electricity	4
ELT 1112	Basic Programming	2
ELT 1113	Introduction to Digital Logic	3
ELT 1123	Semiconductors I	3
Total		12
2nd Semester		
ELT 2204	Computer System Components	4
ELT 2212	Semiconductors II	2
ELT 2214	Computer Interfacing and Networking	4
ELT 2215	Computer Troubleshooting	5
Total		15
3rd Semester		
ELT 2107	Basics of Industrial Automation	7
ELT 2115	Programmable Controllers	5
ELT 2123	Industrial Fluid Power	3
Total		15

Curriculum in Industrial Control Systems

Associate of Applied Science Degree in General Technology

Course Number	Course Name	Semester Hours
1st Semester		
ELT 1104	Fundamentals of Electricity	4
ELT 1112	Basic Programming	2
ELT 1113	Introduction to Digital Logic	3
ELT 1123	Semiconductors I	3
MATH 0903	Intermediate Algebra (or higher math)	3
Total		15
2nd Semester		
ELT 2204	Computer System Components	4
ELT 2212	Semiconductors II	2
ELT 2214	Computer Interfacing and Networking	4
ELT 2215	Computer Troubleshooting	5
ENGL 1013	Composition I	3
Total		18
3rd Semester		
ELT 2107	Basics of Industrial Automation	7
ELT 2115	Programmable Controllers	5
ELT 2123	Industrial Fluid Power	3
Total		15
4th Semester		
	Any Approved Social Science ¹	3
COMS 1003	Introduction to Computer Based Systems <i>or</i>	
COMS 2003	Microcomputer Applications <i>or</i>	3
BUS 1303	Introduction to Computers	
ELT 2903	Internship	3
ENGL 1023	Composition II	3
Total		12

¹ See appropriate alternatives or substitutions in "General Education Requirements" on page 25