

**INDUSTRIAL MAINTENANCE TECHNOLOGY**  
**PROGRAMMABLE LOGIC CONTROLLERS –TECHNICAL CERTIFICATE**

Industrial Maintenance addresses the need of the multi-crafted maintenance technician covering a variety of technical skills areas including Programmable Logic Controllers (PLC), instrumentation and controls, electronics and digital devices, welding fundamentals, AC/DC fundamentals, and HVAC principles. Stackable Certificates of Proficiencies lead to the Associate of Applied Science degree. Certificates of Proficiency provides students with both the skills needed in each particular area of industrial maintenance and the soft skills needed to acquire a job, maintain a job, and work safely in an industrial setting. Introduction to blueprint reading, OSHA, and technical mathematics are also covered in the coursework for each of these certificates.

The Technical Certificate in Programmable Logic Controllers (PLC) is designed to provide the fundamentals of installing, programming, and troubleshooting digital and analog PLCs. This class provides a solid foundation in PLC theory, installation, programming techniques, principles of operation, maintenance of PLCs, and troubleshooting. Basic relay ladder logic programming experiments are performed using timers, counters, and internal coil instructions in laboratory projects.

**2020**

**BE SURE TO CHECK THE COLLEGE CATALOG FOR PREREQUISITES BEFORE ENROLLING IN A CLASS**

<b>1st Year - 1st Semester</b>			<b>Semester</b>	<b>Grade</b>	<b>HRS</b>	<b>Comments</b>
ENGL	1213	Writing for the Workplace	_____	_____	3	_____
MATH	1233	Technical Math	_____	_____	3	_____
ELEC	1004	Principles of Technology	_____	_____	4	_____
ELEC	1014	AC/DC Fundamentals	_____	_____	4	_____
 <b>1st Year - 2nd Semester</b>						
ELEC	1034	Industrial Motor Controls	_____	_____	4	_____
MECH	1054	Electro-Mechanical Devices	_____	_____	4	_____
MECH	1044	Fluid Power (Hydraulics/Pneumatics)	_____	_____	4	_____
ELEC	1024	Electronics & Digital Devices	_____	_____	4	_____
					<b>30</b>	
 <b>Summer</b>						
ELEC	2004	Programmable Logic Controllers I	_____	_____	4	_____
ELEC	2104	Programmable Logic Controllers II	_____	_____	4	_____

**Completion Award: Technical Certificate Programmable Logic Controllers**