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

1st Year - 1st Semester	**Semester**	**Grade**	**HRS**	**Comments**
ENGL 1213 Communicating in the Workplace			3	
MATH 1233 Technical Math			3	
ELEC 1004 Principles of Technology			4	
ELEC 1014 AC/DC Fundamentals			4	
1st Year - 2nd Semester				
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	
			30	
Summer				
ELEC 2004 Programmable Logic Controllers I			4	
ELEC 2104 Programmable Logic Controllers II			4	

Completion Award: Technical Certificate Programmable Logic Controllers