

SKILLS CERTIFICATE, ADVANCED MANUFACTURING WORKFORCE

The Skills Certificate, Advanced Manufacturing Workforce, is designed as an employment credential for people with no manufacturing experience. Students will train for a new career in just a few weeks through our self-paced training format. Students will learn terminology and processes used in manufacturing, precision measurement, safety, and quality systems.

Outcomes

Students completing the certificate will practice safety at all levels in modern manufacturing or distribution plants.

Student completing the certificate will apply knowledge and skills used to obtain advanced manufacturing/distribution employment.

Students completing the certificate will use quality control standards to troubleshoot inefficiencies in a production/distribution environment.

Code	Title	Units
ELM 110	Electrical/Electronic Circuits	4
OR		
ELM 110M	Electrical Safety and Theory ¹	
ELM 110M	Devices & Symbols/Digital Multi Meters (DMM) ¹	
ELM 110M	Ohm's Law ¹	
ELM 110M	Series Circuits ¹	
ELM 110M	Parallel Circuits ¹	
ELM 110M	Combination Circuits ¹	
ELM 110M	Alternating Current Theory ¹	
ELM 110M	Inductance and Capacitance ¹	
MPT 110	Automated Production Concepts I	3
OR		
MPT 110M	Production System Overview ¹	
MPT 110M	Manufacturing Process Management ¹	
MPT 110M	Automated Manufacturing Overview ¹	
MPT 110M	Industrial Documentation ¹	
MPT 110M	Manual Assembly Manufacturing ¹	
MPT 110M	Intro to Industrial Instrumentation & Process Control ¹	
ELM 134	Programmable Logic Controllers I	3
OR		
ELM 134M	Introduction to Programmable Logic Controllers ¹	
ELM 134M	Number Systems and Logic ¹	
ELM 134M	Programming and Application ¹	
ELM 134M	Input/Output Devices and Modules ¹	
ELM 134M	Maintenance and Troubleshooting ¹	
ELM 134M	System Expansion and Data Networks ¹	
Total Units		10

¹ Each M class is 0.5 credits

1st semester		Units
ELM 110	Electrical/Electronic Circuits	4
Semester Total		4
2nd semester		Units
ELM 134	Programmable Logic Controllers I	3
MPT 110	Automated Production Concepts I	3
Semester Total		6
Total Units		10