Robotics, Certificate

TECHNICIAN II

School of Technology

A Robotics Technician II will function as a skilled technician who can analyze and assess complex manufacturing systems as well as work with modules and components in these systems. This technician can manage, investigate, repair and troubleshoot advanced manufacturing systems with the aim of operational efficiency and cost control. Topics covered include both theory and hands-on experience with advanced mechanical systems, industrial robotics systems, motor drive systems, manufacturing work cell applications and project management. An emphasis is placed on safe work habits and procedures, systematic preventive maintenance, localization and correction of malfunctions, and troubleshooting techniques. Students must complete the Basic Systems and Technician I certificates before enrolling in the Robotics Technician II Certificate.

Career Opportunities

Manufacturing systems is a blend of mechanical, electrical, electronics and computerized technologies that together form complex automated systems. The need for skilled individuals to support these systems is ongoing. Graduates of the Advanced Manufacturing and Robotics Technician II Certificate will be able to configure and troubleshoot manufacturing systems.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Program manufacturing systems and modules including PLCs.
- Connect and configure PLC networks.
- Analyze systems operations.
- Incorporate relevant technical literature into understanding system operations.
- Apply understanding of electrical systems and devices to manufacturing systems.
- Propose procedural and operational changes based on sound judgment.
- Observe, follow and influence cost control and process efficiency procedures.
- Describe and apply safety rules while working on manufacturing systems.
- Perform as part of a team to complete a complex automated systems project.

Sugg. Term	Seq #	Course ID	Course Title	Cr.	Prereq/Coreq(Co)	Options Available
2nd Fall	1	PDV 101	First Year Seminar	1		
	2	RBT 221	Process Control Technology	4	RBT 111	
	3	RBT 225	Industrial Electronics In Advanced Manufacturing	4	RBT 111	
	4	RBT 250	Mechanical Components and Systems	4	RBT 121	
	5	RBT 265	Robotics and Automation	4	RBT 135 and RBT 245	

Total Program Credits 17 ROBT2