

ROBOTICS AND VISION TECHNICIAN CERTIFICATE

14 Semester Credit Hours; Curriculum: 0294

Certificate prepares students for career opportunities in the field of robotics. Machine vision and robotic are increasingly becoming an integral part of industrial automation and mechatronics. The program combines robotics with machine vision and logic controllers. Students gain practical experience of programming industrial robots and creating algorithms for machine vision systems. This certificate can be completed in one semester.

Code	Title	Hours
Courses for a Certificate		
MFG 112	Introduction to Automation	3
MFG 210	Industrial Robotics and Automation	4
MFG 220	Automation Vision Systems	3
MFG 240	Programmable Logic Controllers (PLC)	4
Total Hours		14

Program Learning Outcomes

1. Follow safety procedures related to industrial robotics.
2. Create and simulate programs for varied robot operations.
3. Integrate machine vision with automation systems.
4. Develop PLC programs to control operation sequence of automated processes.