

ROBOTICS TECHNICIAN CERTIFICATE

Division: Science/Engineering/Mathematics

PROGRAM CODE: 1C43440N

The Robotics Technician Certificate program provides a basic foundation of industrial robotics and how they can be used in a plant or manufacturing system. The simulation softwares, integrated within the program emulates real-world robotics applications and employs the basic principles common to the vast majority of robots currently in use in the automation industry. To earn a certificate, complete the required courses as listed with a minimum grade of C or better. At least 50% of all course work must be completed at Cypress College.

Code	Title	Units
ENGT 103 C	Introduction to Embedded Systems	3
ENGT 115 C	Electric Motors and Controls	3
ENGT 120 C	Mechanical Systems	3
ENGT 125 C	Hydraulic and Pneumatic Systems	3
ENGT 210 C	Principles of Robotics Systems	3
ENGT 225 C	Robot and Automation Programming	4
ENGT 240 C	Advanced Robotics (formerly Electronics and Circuits)	3
Total Units		22

Program Student Learning Outcomes:

OUTCOME 1: Understand an automated system's structure and the role of different components in a fully integrated system.

OUTCOME 2: Demonstrate a deep understanding of an automated manufacturing platform and automation industry, including design, operation, preventative maintenance, troubleshooting, repair, and integration.

OUTCOME 3: Apply problem-solving skills in designing an automated system and product development.

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