State-Approved (Chapter 74)
Program Overview

Robotics and Automation Technology

Robotics engineers and technicians design, build, maintain, and operate robots and other automated machines for factories and other settings where efficiency and accuracy are most important.

What Students Learn & Do

Robotics and Automation programs provide a strong foundation for students interested in pursuing college degrees in robotics or engineering. Hands-on training is comprehensive and intended to prepare students for entry-level employment assisting engineers in designing, developing, maintaining and testing robotic and automated equipment.

Robotics and Automation programs provide excellent preparation for college degrees in robotics or electrical engineering, or for entry-level careers as robotics technicians. Students begin by learning foundational concepts related to electrical circuits, electronics, and computer programming. Safety is emphasized throughout, especially as it relates to repairing electrical and electronic equipment. As their skills progress, students begin supervised work experiences with local manufacturers.

Students in Robotics and Automation Technology are required to meet the same high academic standards as their peers outside of these programs. These standards are set by the State of Massachusetts. In addition, Robotics and Automation Technology are immersed in challenging projects that draw heavily on physics, algebra, logic, and other areas of science and mathematics.

Licenses & Certifications

Programs will prepare students to earn industry-recognized credentials, and typically students will be able to complete one or more before they graduate from high school. Examples students might achieve during this program. Examples:

- OSHA 10 Hour - General
- Autodesk: Inventor, Revit
- Solidworks: Certified Associate, Professional

Options After High School

State-Approved (Chapter 74) programs provide precise training required for entry-level employment in this in-demand career field. Here are some possible Robotics and Automation Technology career options, and how

High School Diploma

- Robotics Technician
- Automation Technician
- Robot or Industrial Maintenance Technician

Bachelor's Degree (4 Years of College)

- Robotics Engineer
- Industrial Engineer
- Software Developer

Questions to Ask a Program You Are Considering

1. What workplace experiences do you offer to students - at school, or with an employer?
2. What are some common next steps for graduates of this program and how do you support them to get there?

Learn about the differences between State-Approved (Chapter 74) and Local programs:
http://www.doe.mass.edu/ccte/cvte/cte-families/state-vs-local.html

MASSACHUSETTS DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION

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