

## **Badge Details**

Name	4593 – Robotics I
Description	The first in a sequence of courses that prepares individuals with a lab-based, hands-on curriculum combining electrical, mechanical and engineering principles. Students will learn to design, build, program, and control robotic devices. A rigorous study and application of electrical concepts will include: sources of energy, electrical safety, use and identification of basic electronic components, sensors and actuators. Engineering concepts will include: mechanical design, prototype development, design testing, programming, and proper engineer documentation.

	Candidates receiving this certification will take an exam with the following criteria:
	The exam is composed of 32 questions.
Criteria	<ol> <li>Safety Practices 9%</li> <li>Development and Application 9%</li> <li>Basic Components of Robots 18%</li> <li>Fundamentals of Electricity 26%</li> <li>Fundamental Programming 38%</li> </ol>