Robotics and Automation Key Terms

Please note the following Key Terms are provided as a reference. Vocabulary terms are embedded within the curriculum and are addressed within that context. Students are not expected to commit the list of terms to memory.

Term	Definition
Automated Systems	Control devices with minimal human intervention.
Constraints	A limitation or a restriction. Constraints might include limits on time, materials, or size.
Criteria	Guidelines or rules used to judge or make a decision about something.
Design Process	A step-by-step way to solve problems that is used to develop many possible solutions to a problem and then narrow down the possible solutions to one final choice.
Engineer	A person who is trained to use technology, mathematics, and science to solve problems.
Engineering	The use of technology, mathematics, and science to solve problems.
Input	Information fed into a system. In robotics, sensors detect inputs such as color.
Output	Information or action coming out of a system. In robotics, motors are an example of an output that creates movement.
Robot	A mechanical device that can be programmed to carry out instructions and perform complicated tasks. Robots often perform tasks that would normally be done by a human.
Robotic Systems	Programmed to complete specific tasks with or without human interaction.
Robotics	A type of engineering and computer science that deals with designing, constructing, and /or the applications of robots.
Sensor	A device that detects information from the surrounding environment and sends it to the robot in electronic form.

	Sensors provide input to automated and robotic systems which can be used to adjust the behavior of outputs.