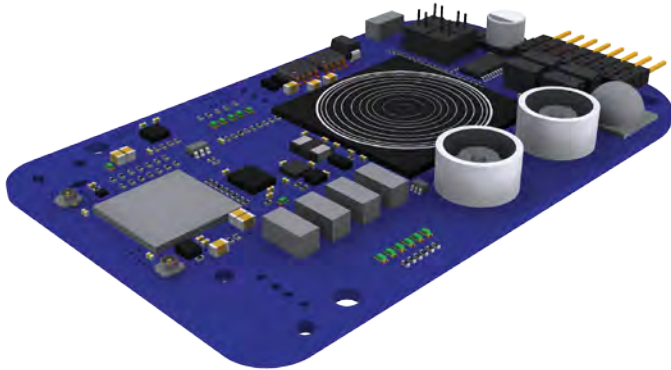


SENSORS: MEASUREMENT CONCEPTS

eLearning courses designed to increase productivity and profits



Learning made Simple, Visual, and Interactive

This course is designed to provide learners with an understanding of the importance for taking measurements by exploring the various sensor families, sensor categories, and the attributes being measured by the sensor.

Credit Hours **1.5**

Learning Objectives

- Identify the difference between self-generating and passive sensors.
- Recall the various types of self-generating and passive sensors.
- Recognize the difference between embedded, process control, and product validation sensors.
- Explain why attributes are measured during sensor measurements.

Table of Contents

I. Sensor Families

- Self-Generating Sensors
 - o Piezoelectric Effect
 - o Faraday Effect
 - o Thermoelectric Effect
 - Thermocouple
 - o Photoelectric Effect
- Passive Sensors
 - o Strain Gauge
 - o RTD
 - o Thermistor
 - o LVDT

II. Sensor Categories

- Embedded Sensors
- Process Control Sensors
- Product Validation Sensors

III. Measured Attributes

- Force
- Pressure
- Length
- Strain
- Temperature
- Acceleration
- Time
- Flow Volume

