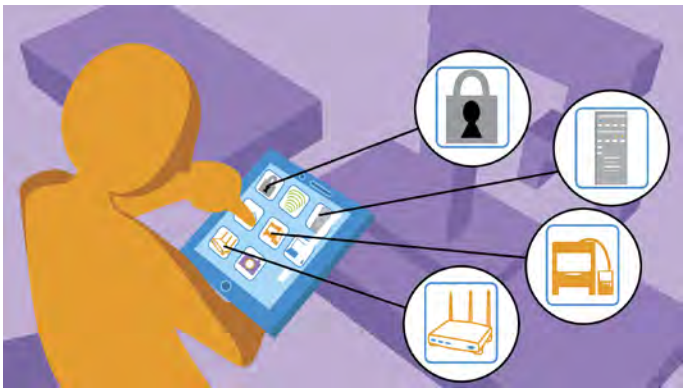
INTERNET OF THINGS: MANUFACTURING

eLearning courses designed to increase productivity and profits



Learning made Simple, Visual, and Interactive

Internet of Things: Manufacturing Basics introduces learners to the fundamental concepts and terminology associated with modern internet of things (IoT) systems in industrial and high-volume manufacturing settings. Utilizing THORS' colorful and comprehensive animations, along with informative illustrations and visually interactive quizzing methods, this course provides solid foundational knowledge for the future planners of IoT systems and technology in manufacturing industries.

Credit Hours **2**

Learning Objectives

- Understand the basic concepts and technology driving IoT developments.
- Recall the primary building blocks of IoT systems: Things, Connectivity, and The Cloud.
- Recognize the networks and network technologies that facilitated IoT development.
- Differentiate between some of the important sensors that detect motion, movement, and other variables.
- Elaborate on the importance of concepts, such as edge computing and the fog and mist.
- Recall the main challenges that manufacturing industries present for IoT systems.

Table of Contents

I. Things

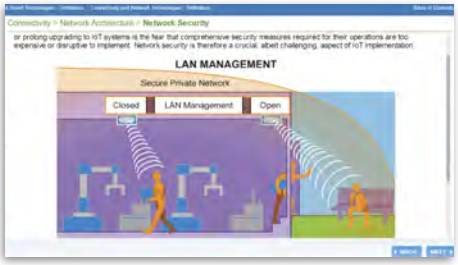
- **Sensors**
  - o Sensor Fusion
  - o Touchscreen Sensors
    - Resistive
    - Capacitive
    - Surface Acoustic Wave (SAW)
- **Compute Capability Devices**
- **Intelligent Devices and Machines**
  - o Robots and Drones
  - o Wearables
  - o Biometrics
  - o Computer and Machine Vision
  - o Virtual Reality (VR) and Augmented Reality (AR)
  - o Energy Harvesting Devices

II. Connectivity

- **Network Technologies**
  - o Local Area Network (LAN)
  - o Wide Area Network (WAN)
- **Network Architecture**
  - o Smart Gateways
  - o Virtualization
  - o Edge and Fog
  - o Network Security
  - o Spectrum Management
- **IoT Platforms**
  - o Applications (Apps)
  - o Device Management

III. The Cloud

- **Cloud Technologies**
  - o Versions of the Cloud
  - o On-Premises Data Center
  - o Virtual Chaining and vCPE
  - o Big Data Analytics
- **Cloud Services**
  - o IoT Service Management
  - o Credentials Management
  - o Security and Threat Intelligence



THORS eLearning Solutions

THORS is bringing together the best minds across many industries to create an ever-expanding library of courses that will rapidly increase the Manufacturing IQ® of your team.