

Introduction to IoT At-a-Glance



The Internet of Everything (IoE) brings together people, process, data, and things to make networked connections more relevant and valuable than ever before—turning information into actions that create new capabilities, richer experiences, and unprecedented economic opportunity for businesses, individuals, and countries.

Course Description

The Cisco Networking Academy® Introduction to IoT course provides an overview of the concepts and challenges of the transformational IoT economy. The course discusses the Internet and its evolution to the interconnection of people, processes, data, and things that forms the Internet of Thing.

The course introduces the concept of a network foundation connecting billions of things and trillions of gigabytes of data to enhance our decision making and interactions. Course modules describe how IoT drives the convergence between an organization's operational technology (OT) and information technology (IT) systems, and the business processes for evaluating a problem and implementing an IoE solution.

Machine-to-machine (M2M), machine-to-people (M2P), and people-to-people (P2P) connections in an IoE solution are also covered.

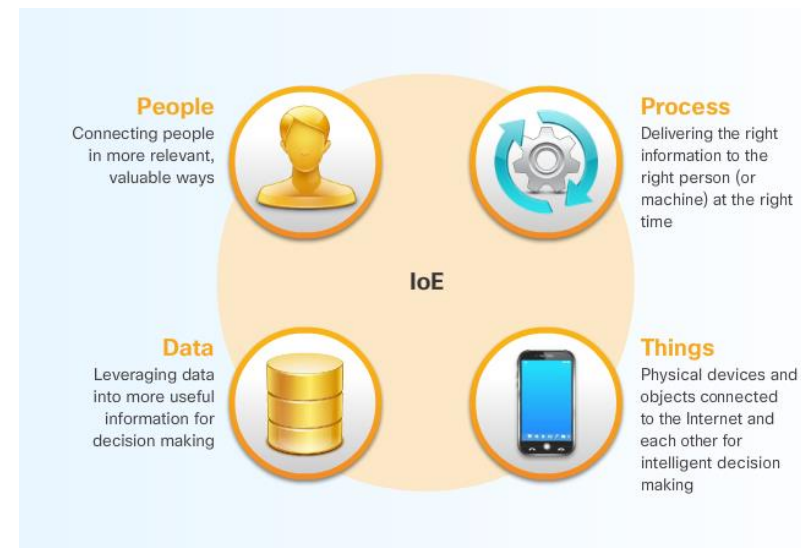
The course offers the following features:

- Recorded videos, presentations, and testimonials from customers and IoE experts
- Activities that reinforce learning
- Links to articles and websites to help you explore networking and IoE on your own
- Quizzes to check your understanding of the information presented

Internet of Thing Careers

By introducing unprecedented opportunities for organizations, individuals, communities and countries to realize dramatically greater value from networked connections, IoT is creating demand for a broad spectrum of IT jobs. The associated skills needed span multiple disciplines including computer science, computer engineering, and software engineering, and the following domains:

- Collaboration
- Data center and virtualization



- Enterprise networks

The Internet of Things is also creating demand for a new kind of ICT specialist; individuals with the skillsets to create new products and process the data they collect. A workforce is needed that specializes in both information science and software or computer engineering.

As operational technologies and information technologies converge into IoT, people must collaborate and learn from each other to understand the machines, networks, and methodologies when developing new processes.

Learning Objectives

The benefits of IoT are derived from the compound impact of connecting people, data, processes, and things, and the value this increased connectedness creates as “everything” comes online.

Students who complete the Introduction to IoT course will be able to perform the following tasks:

Module	Learning Objectives
What Is the Internet of Things?	<ul style="list-style-type: none"> Describe the Internet and its evolution to the Internet of Everything Explain the four pillars of IoE and how its innovations can transform businesses
Elements of the IoE	<ul style="list-style-type: none"> Explain the interconnection of people, process, data, and things that forms the Internet of Everything
Connecting the Unconnected	<ul style="list-style-type: none"> Explain how things that are non-IP-enabled and IP-enabled devices can be connected to a network to communicate in the Internet of Things Explain programming and show a simulated version of the Cisco Coffee JavaScript application
Transitioning to the IoE	<ul style="list-style-type: none"> Explain the steps to evaluate and implement an IoE solution Explain security concerns that must be considered when implementing IoE solutions
Bringing It All Together	<ul style="list-style-type: none"> Describe the M2M, M2P and P2P interactions of an IoE Healthcare solution model

Course Availability

The Introduction to IoT course is delivered through the Cisco NetSpace® learning environment and is available in English. Students may self-enroll in a virtual class offered by Cisco or ask their instructors about offering the course.

Students who complete this course may also be interested in the Cisco CCNA® Routing and Switching and CCNA Security courses, which are available through the Cisco Networking Academy program.



About Cisco Networking Academy

Cisco Networking Academy delivers a comprehensive learning experience to educate the architects of the Internet of Everything. We help students develop ICT, networking, and soft skills for entry-level career opportunities, continuing education, and globally recognized career certifications.

To learn more about the NetAcad™ program, visit: www.netacad.com.

To learn more about the Internet of Everything, visit [Tomorrow Starts Here](#).