

## Introduction to the Internet of Everything 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 the Internet of Everything course provides an overview of the concepts and challenges of the transformational IoE economy. The course discusses the Internet and its evolution to the interconnection of people, processes, data, and things that forms the Internet of Everything.

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. Course modules describe how IOE 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 Everything Careers

By introducing unprecedented opportunities for organizations, individuals, communities and countries to realize dramatically greater value from networked connections, IoE 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 Everything 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 IoE, people must collaborate and learn from each other to understand the machines, networks, and methodologies when developing new processes.

## Learning Objectives

The benefits of IoE 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 the Internet of Everything course will be able to perform the following tasks:

| Module                     | Learning Objectives   |
|----------------------------|---|
| What Is the IoE?           | <ul style="list-style-type: none"> <li>Describe the Internet and its evolution to the Internet of Everything</li> <li>Explain the four pillars of IoE and how its innovations can transform businesses</li> </ul>                               |
| Pillars of the IoE         | <ul style="list-style-type: none"> <li>Explain the interconnection of people, process, data, and things that forms the Internet of Everything</li> </ul>  |
| Connecting the Unconnected | <ul style="list-style-type: none"> <li>Configure non-IP-enabled and IP-enabled devices to communicate in the Internet of Things</li> <li>Explain programming and show a simulated version of the Cisco Coffee JavaScript application</li> </ul> |
| Transitioning to the IoE   | <ul style="list-style-type: none"> <li>Explain the steps to evaluate and implement an IoE solution</li> <li>Explain security concerns that must be considered when implementing IoE solutions</li> </ul>  |
| Modeling an IoE Solution   | <ul style="list-style-type: none"> <li>Describe M2M, M2P, and P2P interactions and review an example of an IoE solution at a modeled winery</li> <li>Explain the concept of prototyping and why this is critical in the IoE market</li> </ul>   |

## Course Availability

The Introduction to the Internet of Everything 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](http://www.netacad.com).

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