

# Ethernet Fundamentals

0077W



**Delivery Type:** e-Learning

**Duration:** 1 day

## Overview

This Self-Paced eLearning course is designed to provide you with a comprehensive high-level understanding of various aspects of Ethernet. Regardless of your current level of knowledge, you will gain from this course a solid understanding of the operational and theoretical components of an Ethernet network.

## Pre-Requisites

There are no prerequisites for this course.

## Objectives

After you complete this course you will be able to:

- ✓ Describe how devices communicate across an Ethernet network.
- ✓ Describe the cable requirements, distances, and transmission mechanism for the following IEEE Ethernet specifications for physical media:
  - ✓ 802.3 CSMA/CD Ethernet (ISO/IEC 8802 ISO/IEC 8802-3)
  - ✓ 802.3i 10BaseT (ISO/IEC 8802-3)

- ✓ 802.3u 100BaseT (ISO/IEC 8802-3)
- ✓ 802.3z Gigabit Ethernet
- ✓ 802.3ab Gigabit Ethernet 1000BaseT 4 pair Cat5 UTP
- ✓ 802.3ae 10 Gigabit Ethernet
- ✓ Explain the Ethernet frame format and the differences between Fast Ethernet, Gigabit Ethernet, and 10 Gigabit Ethernet.
- ✓ Explain how the network devices, repeaters, bridges and switches, operated within an Ethernet collision and broadcast domains.
- ✓ Describe Power over Ethernet (PoE) IEEE 802.3af specification to supply data terminal equipment (DTE) power over Ethernet ports and the typical implementation within an Ethernet network.

## Target Audience

This course is designed for anyone who needs to gain a solid understanding of the operational and theoretical components of an Ethernet network.

## Further Information

You have one year from the date when you order your online course or enter your activation code for your CD course to complete your training, after which your access expires. You can retake your training as often as you like during that year.