

MOXA TECHNICAL COLLEGE

Moxa Technical College is a series of online, self-paced, courses that cover foundational topics for Industrial Ethernet and IP Networking.

WHY PARTICIPATE?

- Gain knowledge of Industrial Networking
- As a result: Bring value quickly to your customers
- Prerequisite before face 2 face Moxa IES Trainings

AVAILABILITY

- Available NOW!



WHO CAN ENROLL?

Sales and technical support representatives eager to increase their knowledge of networking (other than your MTSC attendee(s)).

HOW TO SIGN UP

Sign up by sending a request following link:

<https://pages.moxa.com/MTC>Contact-Form.html>



COURSE LIST

Below are two learning paths available to participants:



ETHERNET AND NETWORKING FOUNDATIONS:

Introduction to the OSI Model (MTC-NET-100 / 12 min.)

This course explains how a conceptual model, like the OSI Model, facilitates interoperability between devices from different manufacturers.

Ethernet Media Copper & Fiber (MTC-NET-102 /15 min.)

This course describes the benefits of using optical fiber over copper Ethernet and introduces the different types of fiber and fiber connectors.

Essentials of Ethernet Networking (MTC-NET-105 /18 min.)

This course introduces a brief history of Ethernet and its elements that facilitate communication between Ethernet devices.

Power over Ethernet Fundamentals (MTC-NET-107 /18 min.)

In this course, you will learn the Benefits of PoE, basic PoE Terminology and PoE Characteristics and Differences to be able to identify and select the PoE devices based on the Moxa Product Portfolio.

Introduction to Internet Protocol (MTC-NET-110 /16 min.)

This course introduces key concepts of Internet Protocol(IP) like IP addressing. It explains key differences between IP, Transport Protocol Port numbers, and device MAC Address and how to distinguish them.

Ethernet Switch Basics (MTC-NET-120 /21min.)

This course breaks down the key operational differences of an unmanaged and managed ethernet switch.

Introduction to WiFi (MTC-NET-125 / 17 min.)

This course introduces the fundamental elements of wireless networking and its advantages before reviewing the most common 802.11 standards used today.

IP NETWORKING WITH SWITCHES AND ROUTERS:

TCP/IP Protocol Stack (MTC-NET-112 / 16 min.)

This course introduces the TCP/IP protocol suite. You'll learn about TCP/IP's client/server model and how a TCP/IP packet encapsulates into an Ethernet frame. With this course, you'll gain a better understanding of key terminology and be able to compare the OSI Model and the TCP/IP model.

Ethernet Redundancy: Foundation (MTC-NET-130 / 17 min.)

This course introduces the importance of redundancy before breaking down the two most used redundancy standards.

Ethernet Redundancy: Turbo Ring & Turbo Chain (MTC-NET-135 / 18 min.)

This course continues the conversation of Ethernet Redundancy and introduces the fundamental concepts of Moxa's Turbo Ring and Turbo Chain redundancy protocols.

Multiple Ring (MTC-NET-138 / 15 min.)

This course covers multiple ring topologies and the best practices for designing them.

Introduction to Virtual Local Area Networks (MTC-NET-140 / 15 min.)

This course reviews the fundamental concepts of Virtual Local Area Networks (VLAN) and its existing standards.

IP Multicast and IGMP (MTC-NET-150 / 17 min.)

This course will review the different types of IP communication before introducing the fundamental concepts of IP Multicast.

Multicast Routing Fundamentals (MTC-NET-151/ 15 min.)

This course explains the purpose of multicast traffic and its benefits. You'll also learn best practices of implementing multicast in your industrial network.

Advanced IP Addressing and Subnetting (MTC-NET-160 / 15 min.)

This course reviews the theory of IP addressing before diving into key concepts of IP subnetting.

Network Address Translation and Router Basics (MTC-NET-170 / 18 min.)

This course covers key concepts of a Network Router before deep diving into Network Address Translation(NAT).

