Welcome to Fiber

IPC_125d | On-Demand | Transport | Express
Course Duration: 1 hour

This course covers the basics you need to handle fiber connections properly. The course introduces the basics of light, the anatomy of a fiber-optic cable, and some basic concepts used when transmitting information over fiber, like Wavelength Division Multiplexing (WDM).

Intended Audience

This course covers the basics of light and fiber optic cables, as well as the operations of a fiber for a broad audience – both technical and non-technical.

Objectives

After completing this course, the student will be able to:

- Describe basics of light and fiber optic cables
- Describe the operations of a fiber
- Describe the anatomy of optical fiber
- Compare and contrast SMF and MMF
- List factors working with connectors and ferrules
- List best practices working with fiber and SFPs
- Describe key components in WDM systems

Course Prerequisites

No Prerequisites

Outline

1. Fiber Basics
1.1 Light Basics
1.2 All About SFPs
1.3 Fiber Anatomy
1.4 SMF vs. MMF
1.5 Connectors and Ferrules

2. Fiber Operation
2.1 Power Loss, Dispersion and Attenuation
2.2 Physical Impairments in Fiber
2.3 Fiber Cleaning

3. Fiber Troubleshooting
3.1 What's wrong with this picture?

4. Wavelength Division Multiplexing
4.1 Wavelength Division Multiplexing
4.2 CWDM vs. DWDM
4.3 WDM Systems
4.4 CWDM Systems

Final Assessment

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