

Fundamentals of Fibre Optics

This course introduces the fundamental principles and techniques underlying fibre optic systems. It covers fibre and laser safety, fibre types and how they operate, connectorisation, fibre cleanliness and the principles of fibre testing. It is a suitable platform for all engineers, technicians and technical managers involved in the design, installation, maintenance and management of modern telecoms networks.

This course is also a suitable pre-requisite for subsequent equipment related training.

Prerequisites

None, this course provides a basic overview of fibre optics.

Learning Objectives

At the end of the course, participants will have covered the following:

- Principles of communications utilising Fibre Optic Cables.
- Safety considerations when working with lasers and fibre optic cables.
- Identification of different types of fibres and relevant roles.
- Identification of different connections and the losses incurred.
- Fibre cleanliness

Who Should Attend?

- Project managers and team members that manage and work on fibre projects
- Technical managers that manage technicians and engineers who work with fibre.
- Engineers and Technicians who work with, or come into contact with fibre.
- Administration or support staff who work within a fibre-based environment.

Course Profile:

- What is Fibre?
- The Principles of Light Propagation
- The Light Spectrum
- Different Fibre Types and their roles
- Types of Testing which can be carried out on fibre
- Considerations which should be made when working with Fibre and Optical systems
- The importance of fibre cleanliness in optical systems
- Methods of cleaning fibre connectors and Optical ports
- Example of the use of different fibre connectors and their roles
- The main threats to optical systems