

# PRACTICAL FIBER OPTIC TECHNOLOGY



**TC100**  
**Telecommunications**

**COURSE TITLE****PRACTICAL FIBER OPTIC TECHNOLOGY****COURSE DATE/VENUE**

10– 14 August 2020

London, UK

**COURSE REFERENCE**

TC100

**COURSE DURATION**

05 Days

**DISCIPLINE**

Telecommunications

**COURSE INTRODUCTION**

This comprehensive Five-day workshop will provide you with the necessary background to understand the fundamentals of fiber optic systems and their individual components including fibers, cable construction, connectors, splices and optical sources and detectors. Various pitfalls associated with the implementation of fiber optic systems are discussed and workable solutions to these problems are provided. It will provide you with the knowledge to develop the required techniques for design, installation and maintenance of fiber optic systems. The workshop places significant emphasis on the practical techniques of component installation and system design. You will have the opportunity to get hands on experience with mechanical and fusion splicing and with fitting the popular industrial fiber connectors. At the conclusion of the course you will gain know-how in interfacing, integrating and troubleshooting fibers. To introduce trainees to Fiber optic cable technology & Optronic systems theory, history, developments, maintenance, measurements, testing & potential applications in Oil& Gas and other industries.

**COURSE OBJECTIVE**

- Solid knowledge of fiber optic communications systems
- State of the art fiber optics technology and installation practices
- Correct procedures for cable installation and termination
- Learn how to design and install your own fully operational fibre optics system
- New approaches to troubleshooting

### **COURSE AUDIENCE**

Telecom, instruments & plant maintenance staff & other personnel interested in modern technological developments & applications. No special background required.

### **COURSE CONTENT**

- Fundamentals of Optics
- Fiber optic components
- Types of Optical Fibers
- Properties of Optical Fibers
- Fiber Materials & manufacture
- Fiber Cables
- Light Sources
- Transmitters & Receivers
- Light Amplifn., Regen. & WL Conversion
- Active & Passive Components
- Optical WDM
- FOC Industrial & Medical Applications
- FOC Testing & Troubleshooting

### **COURSE CERTIFICATE**

**TRAINIT ACADEMY** will award an internationally recognized certificate(s) for each delegate on completion of training.

### **COURSE FEES**

\$6,150 per Delegate. This rate includes participant's manual, Hand-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

## **COURSE METHODOLOGY**

The training course will be highly participatory and the course leader will present, guide and facilitate learning, using a range of methods including formal presentation, discussions, sector-specific case studies and exercises. Above all, the course leader will make extensive use of real-life case examples in which he has been personally involved. You will also be encouraged to raise your own questions and to share in the development of the right answers using your own analysis and experiences. Tests of multiple-choice type will be made available on daily basis to examine the effectiveness of delivering the course.

- 30% Lectures
- 30% Workshops and work presentation
- 20% Case studies & Practical Exercises
- 10% Role Play
- 10% Videos, Software or Simulators (as applicable) & General Discussions

