Global Horizon
TRAINING CENTER

Training Course:
Fiber Optic Advanced Splicing

5 - 9 October 2026
Trabzon (Turkey)

Training Course:
Fiber Optic Advanced Splicing

Training Course code: SC234830 From: 5 - 9 October 2026 Venue: Trabzon (Turkey) - Training Course Fees: 6300 Euro

Introduction

This Fiber Optic Advanced Splicing training course is designed for those who layout, install, or maintain fiber optic cabling systems.

It identifies you as a Fiber Optic Advanced Splicing able to demonstrate a practical knowledge of fiber optic theory, codes, standards, and practices widely accepted in the fiber optics industry.

In addition, this training incorporates two days of individual hands-on training validating fiber optic installer skills, including fiber terminations, cable preparations, fusion splicing, OTDR, and optical loss testing.

Training Objectives

Fiber Optic Advanced Splicing training will provide the participants with the necessary knowledge and skills to:

- Layout, install or maintain fiber optic cabling systems
- Demonstrate a practical knowledge of fiber optic theory, codes, standards, and installation practices
- Demonstrate a practical knowledge of individual hands-on skills including:
    - Performing industry standard fiber optic terminations
    - Preparing cables for inside and outside applications
    - Performing fusion splicing and splice tray preparation
    - Testing with the OTDR and optical loss test equipment

Target Audience

- Fiber Optic Advanced Splicing is a specialized training program designed for both new and experienced personnel seeking a deeper understanding of fiber optic cabling system installation.
- The course focuses on enhancing practical and technical skills in advanced splicing techniques in line with industry standards.
- It provides comprehensive knowledge of fiber optic system installation, ensuring high-quality performance and efficiency.
- Ideal for professionals working across:
    - Construction
    - Education
    - Commercial
    - Industrial

- Utilities sectors
- Targeted at individuals involved in:
  - Designing fiber optic systems
  - Installation of fiber optic cabling
  - Maintenance activities
  - Testing and inspection of fiber optic networks
- The program aims to improve technical competency and support the successful delivery of fiber optic infrastructure projects.

Course Outlines

Day 1

Introduction to Fiber Optics

- Networking
- Fiber Optic Advantages and Applications
- Terminology and History
- The Fundamentals of Light Propagation
- Scales of Measurement and the Spectrum
- Characteristics of Single mode and Multimode
- Manufacturing, Bandwidth, and Linear Effects

Cables

- Optic fiber construction
- Cable Types, Construction, and Specifications
- Cable Marking
- Selection Criteria

Connectors and Terminations

- Temporary and Permanent Connections
- Connector Types
- Performance Specifications
- Connector Loss Issues
- Splicing Applications

Day 2

Splicing

- Fusion and Mechanical
- Fusion Splicing
- Cable Marking
- Mechanical Splicing

Enclosures and Panels

- Distribution, Patch, and Splice Types
- Application Issues and Selection Criteria
- Aerial and Burial Enclosures
- Re-Entry and Expansion Capabilities
- Routing and Preparation

Test Equipment

- Loss Testing Tools and Equipment
- Standards and Methods
- Return Loss, Bandwidth, and Dispersion
- OTDR Theory and Applications
- Loss and System Budget Calculations

Day 3

Restoration and Maintenance

- Tools and Equipment
- Practical Applications
- Time Saving Techniques
- Record Keeping and Documentation

System Components and Design Issues

- Transmitters and Receivers
- Passive Optical Components
- Couplers and Splitters
- WDM and DWDM Issues

Day 4

Lab Workshop:

Fusion Splicing

- Properly prepare an inside plant cable for mounting into a splice tray.
- Demonstrate the proper way to strip, clean, cleave, and fusion splice 900µm fiber.
- Properly pre-trim the individual fibers into the splice tray before fusion splicing.
- Properly set up and fusion splice the individual fibers together.
- Properly wrap form & dress the individual fibers back into the tray.

Mechanical Splice Connector

- Properly prepare a simplex cable for this connector termination method.
- Properly use a precision cleaver for this termination method.
- Successfully mate a cleaved cable end into a mechanical splice-on connector.
- Test the assembly to TIA Tier 1 standard.

Day 5

Mechanical Splice

- Perform a mechanical splice with < .3 dB of attenuation
- Explain the benefits of Index Matching Gel
- Use a precision cleaver to prepare fibers for splicing.
- Calculate A-B and B-A loss.

Pigtail Fusion Splice

- Perform a fusion splice with .1 dB of attenuation
- Use a precision cleaver to prepare fibers for splicing.
- Calculate A-B and B-A loss.

Registration form on the Training Course: Fiber Optic Advanced Splicing

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Complete & Mail or fax to Global Horizon Training Center (GHTC) at the address given below

Delegate Information

Full Name (Mr / Ms / Dr / Eng): .....
Position: .....
Telephone / Mobile: .....
Personal E-Mail: .....
Official E-Mail: .....

Company Information

Company Name: .....
Address: .....
City / Country: .....

Person Responsible for Training and Development

Full Name (Mr / Ms / Dr / Eng): .....
Position: .....
Telephone / Mobile: .....
Personal E-Mail: .....
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Payment Method

- ☐ Please find enclosed a cheque made payable to Global Horizon
- ☐ Please invoice me
- ☐ Please invoice my company

Easy Ways To Register

Telephone: +201095004484 to provisionally reserve your place.	Fax your completed registration form to: +20233379764	E-mail to us : info@gh4t.com or training@gh4t.com	Complete & return the booking form with cheque to:Global Horizon 3 Oudai street, Aldouki, Giza, Giza Governorate, Egypt.