



Fibre optic links are becoming an increasingly essential part of cabling infrastructures. Installers have to be competent when specifying, installing, terminating and testing fibre optics. The Connectix Fibre Optic Course provides delegates with the hands-on practical experience and theoretical knowledge needed to successfully install and terminate fibres on site.

Coverage of typical LAN applications and their specific fibre requirements will provide delegates with the confidence to specify the correct type of fibre for intended applications whilst also considering environmental factors. Coverage of fibre optic testing is also included within the days course.

### Course Description

FO01 is a one day course with the following key elements. A mixture of theory presentation, practical demonstration and hands on exercises are used to relate theory to real world scenarios.

#### Introduction to Connectix

- Background, history and activities
- Information with regards to 25 Year Warranties

#### Course Introduction

- Course materials, objectives, test information

#### Fibre Optic Cabling Theory

- What is fibre optic cabling ?
- Fibre for data communication applications
- Fibre within the structured cabling standards
- How does it compare to copper and where is it used ?
- Multimode and single mode, what is the difference ?
- Selecting the right fibre type and grade for the installation
- What is 'blown fibre' and what are the benefits ?
- Loss budgets, what does it all mean, how can we calculate, do we need to ?

#### Product Information

- Construction and selection, Loose Tube and Tight Buffered
- Armoured Cables, why, which and where ?
- Terminating hardware (Patch panels and breakout boxes)
- Current connector types in fibre optic cabling
- Pre-terminated solutions

#### Fibre Optic Installation Considerations

- Handling and bend radius concerns (macro, micro bending)
- Presentation of installed fibre links, the same both ends ?
- Fibre termination – health and safety considerations
- Review of different termination methods with summary
- CPR regulations with regards sheath flammability

#### Fibre Link Testing

- Why test ? What to test ? Testing needed for a warranty ?
- Methods of testing
- Different types of test equipment
- Loss testing with light source and meter

### Features and Benefits

- Gives delegates confidence to install and test fibre optic cables and connectors successfully.
- The different types of fibre optic cables and where they should be installed will be understood.
- Fibre optic technology overview with theory of operation relating to real world applications is explained.
- Hands-on fusion splicing and mechanical termination methods.
- Successful delegates receive a certificate forming the basis of the Connectix Approved Installer programme.

### Training Centre Opening/Course Time Tables

The training centre will be open from 8:45am with a selection of tea and coffee available. A lunch consisting of sandwiches/drink will be supplied.

Courses start at 9am. Courses aim to finish by 5:00pm with the training centre being closed by 5:30pm.

The course timetable may be flexible during the day however we have to start promptly, please ensure you can arrive at the start time specified in the course itinerary.



The FO01 is a one-day course with no requirement for previous experience. A mixture of theory, presentation, practical demonstration and hands on exercises are used to relate to real world scenarios.. The practical exercise is used to enable delegates to have a 'hands on' experience with the common fibre optic products such as patch panels, cables and connectors.

It is intended that inexperienced delegates will leave with adequate knowledge, confidence and practical experience for future assessment and/or installation of fibre installations.

Delegates new to fibre optic cabling and those already experienced in practical installation will obtain/improve formal knowledge of the standards and cable installation / termination practice. The course is run by a fully qualified Connectix Cabling Systems Trainer who is constantly updated in line with the rapidly changing standards, technologies and terminologies. Upon completion of the course a test is offered for assessment purposes. Successful delegates are awarded a certificate acknowledging their competence, this can then be used to obtain Connectix Approved Installer status.

### Practical Exercise – Key Activities

The practical elements of this course are based on two termination methods: fusion splicing and mechanical splicing. Other termination methods (such as glue and polish) will be explained in some detail. The key objectives are for delegates to become competent in fibre optic termination, understanding the relative merits of each method covered. The practical aspect will include:

- Fibre cable preparation
- Cleaving
- Fusion splicing (and mechanical splicing)
- Optical loss testing

### Course Availability

Please contact Connectix Cabling Systems for up-to-date course availability information.

Telephone: 01376 346600  
Fax: 01376 346620  
Email: training@connectix.co.uk

### General Guidance & Information

Training is primarily held at the Connectix Training Centre based at the Connectix HQ in Braintree, Essex.

If required, courses can be held externally at a customer's site. Typically, 6 or more delegates will be required to justify an external course.

Please note that while external courses aim to provide the same value as those held in our training centre the practical exercises may not be as comprehensive or offer the same level of learning benefit.

