Fibreplus

Description	This unit is concerned with safe working practices and the basic principles of communications systems.
Venue	Melksham, Wiltshire
Duration	Depending on units selected—Either 5 or 9 days

COURSE CONTENT

Identify Safe working practices in communication systems

♦ Undertaking installation

♦ Carrying out preparation

♦ Precautions when carrying out a communications installation

♦ Terminating cable s

Basic Principles of Communications Systems

♦ Types of communication systems

♦ Methods of communication

♦ Differences between analogue and digital signals

♦ Advantages & disadvantages of fibre versus copper

Basic Principles of SI Units Symbols

♦ Basic SI Units

♦ Names and symbols for preferred SI prefixes

♦ Waves and wave motion

♦ Amplitude, wavelength , frequency and the unit frequency

♦ Relationship between velocity, frequency and wavelength

Basic Principles of Data Communication

♦ Advantages and disadvantages of digital versus analogue

♦ Types of computer networks

♦ Advantages and disadvantages of serial versus parallel data communication

City & Guilds 3667-02
Unit 3 Fibre Optic Cabling in an External Environment

Description	This unit is concerned with the installation, splicing, termination and testing of fibre optic cables, typically a multi-element, singlemode fibre cable of at least 24 fibres, used in an external environment
Venue	Melksham, Wiltshire
Duration	Depending on units selected—Either 5 or 9 days

COURSE CONTENT

Working Safely with Optical Fibres in an External Environment

- ♦ Safe working procedures and regulations in regard to;
- - Installation
- - Splicing
- - Testing
- - Industry legislation/guidance

Recommended Installation Procedures

- ♦ Fibre optics in communication networks
- ♦ Fibre specifications and parameters
- ♦ Test and inspection methods
- ♦ Components and equipment
- ♦ Best practices and fibre management
- ♦ Testing methods
- ♦ Cable laying procedures

Preparing Fibre Optic Cable for Fibre Splicing

- ♦ Identifying Cables
- ♦ Constructional features of singlemode fibre
- ♦ Cable cutting and stripping tools
- ♦ Fibre cleaning materials and techniques
- ♦ Preparing cable for splicing

Joining Fibre Optic Cables by Splicing

- ♦ Cable jointing environment
- ♦ Working principles of splicing
- ♦ Preparing bare fibre
- ♦ Splicing fibres
- ♦ Sealing and cable retention for joint enclosure

Terminating Fibre Optic by Splicing on pre-terminated pigtails

- ♦ Suitable connectors for telecoms environment
- ♦ Cable termination
- ♦ Cleaving ,tools and techniques
- ♦ Splice management and protection systems

Testing Fibre Optic Links

- ♦ Test methods
- ♦ Testing equipment i.e ILM, OTDR.
- ♦ Understanding results
- ♦ Documenting and comparing results

Exam and Assessment Method

City & Guilds Multiple Choice Assessment
- ♦ Online 1 hour City & Guilds—Multiple choice
- ♦ Assessed practical exercises