

<p>Description</p>	<p>This course is aimed at new entrants, e.g cable installers or for those looking to enhance their promotion prospects. It is also suitable for learners career progression within the industry. The level 3 in Design & Planning Communications Networks combines the study of current telecommunications and networks, planning and management. This qualification also provides progression for learners who have completed the City & Guilds 3667-02 Award in Communication Cabling</p>
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COURSE CONTENT

(Unit 1) Concepts of Designing & Planning a Communications Infrastructure

- ◆ Terms used and different types of communications infrastructure
- ◆ Principles of planning
- ◆ UK Licenses, legislation and codes of practice
- ◆ Project management tools

(Unit2) Design& Plan for an Internal Network Cabling Infrastructure

- ◆ Site Survey—Internal Network Cabling Infrastructure (NCI)
- ◆ NCI— provision options and optimum routes
- ◆ NCI Designs

(Unit 3) Design & Plan for an External Overhead Network Cabling Infrastructure

- ◆ Site Survey—External overhead telecoms infrastructure
- ◆ Preliminary, provisional and detailed designs for an external overhead communications cabling infrastructure
- ◆ Determining workflow activities

Design & Plan for an External Underground Network Cabling Infrastructure

- ◆ Site survey– External underground telecoms infrastructure
- ◆ Preliminary, provisional and detailed design for an external underground communications infrastructure
- ◆ Determining workflow activities

Description This unit is concerned with the principles of Designing and Planning Communications Infrastructures in a range of environments.

Venue Melksham, Wiltshire

Duration 10,15 or 20 Days—Depending on Units Selected

COURSE CONTENT

Common and Network Infrastructures & Terms Used

- ◆ Common terms used
- ◆ Communication Infrastructures
- ◆ Infrastructure environments
- ◆ Network classes

Planning Concepts

- ◆ Role of infrastructure planning
- ◆ Reasons for planning
- ◆ Drivers for planning
- ◆ Annual charges and costs
- ◆ Inherent construction and maintenance costs

Importance of UK 3rd Party Issues

- ◆ Wayleave and 3rd party issues
- ◆ 3rd party impacts on a project
- ◆ Preliminary survey s
- ◆ Use of a detailed survey
- ◆ Importance of routes to programmed delivery costs

Legislation & Regulations

- ◆ Acts of parliament and relevance upon infrastructure planning.
- ◆ Operators license conditions
- ◆ Codes of practice and standards
- ◆ Health & safety legislation

Customer Needs in Regard to an Engineering Scope of Works

- ◆ Importance of customer requests in an engineering requirement
- ◆ Identifying sources of information useful to design and planning of a telecoms infrastructure

Project Management Tools, Techniques and Other Supporting Documentation

- ◆ Suitable diagrammatic representation and how its used in the construction process
- ◆ Critical path
- ◆ Records involved
- ◆ Geographical and non-geographical record
- ◆ Advantages & disadvantages of digital media

Exam & Assessment Method

- ◆ City & Guilds 15 question written exam

Description

This unit will provide the learner with the basic principles needed to plan an underground cable route. Also how internal or campus communications infrastructure is specified, planned and provided.

Venue

Melksham, Wiltshire

Duration

10,15 or 20 Days—Depending on Units Selected

COURSE CONTENT

Site Surveys

- ◆ Systems, areas, data and equipment required
- ◆ Plans & records of areas to be surveyed
- ◆ Constraints to systems and equipment
- ◆ Health & safety issues
- ◆ Variations and accurate recording

Detailed Plans

- ◆ Work activities
- ◆ Costing
- ◆ Potential risks
- ◆ Methods of assessing
- ◆ Financial confidentiality

Optional Provisions & Optimum Routes

- ◆ Relevant legislation, regulations and organizational obligations
- ◆ Options & costing
- ◆ Forecasts
- ◆ Obtaining authority
- ◆ Principles of risk, cost benefit and sensitivity analysis

Co-ordinating Provisions

- ◆ Work programs
- ◆ Resource management
- ◆ Critical path activities
- ◆ Safety & quality standards
- ◆ Timescales

Design—Internal Network Cabling Infrastructure

- ◆ Produce designs and identify components
- ◆ Hazards
- ◆ Types of internal network cabling infrastructure
- ◆ Constraints & limitations
- ◆ Legislation & regulations
- ◆ Network Infrastructure—
- ◆ Duct, chambers, joints etc.

Legislation & regulations

- ◆ Radio frequency allocation
- ◆ Planning authority
- ◆ Highways authority

Exam & Assessment Method

- ◆ Assessed design project

Description

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- ◆ Variations and accurate recording
- ◆ Hazardous environments

Preliminary Designs & Provisions

- ◆ Planning and collating information
- ◆ Budget calculation
- ◆ Forecasts
- ◆ Obtaining authority
- ◆ Telecoms infrastructure capability
- ◆ Emerging technology

Design—External Overhead Network Cabling Infrastructure

- ◆ Produce designs and identify components
- ◆ Hazards
- ◆ Types of telecoms systems
- ◆ Constraints & limitations
- ◆ Legislation & regulations
- ◆ Network Infrastructure—
- ◆ Duct, chambers, joints etc.

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Workflow Activities

- ◆ Work programs
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