NetworksCentre.
Training Academy

City and Guilds 3668-03

Unit 301 & 302: Level 3 Safe Working Practices & Behaviours and Telecoms Fundamentals (Core Modules)
Course length: 2 days including assessments

These two modules are mandatory and are offered as part of a training package including one of three optional modules leading to a full level 3 Certificate in Communications Cabling.

Unit 301 supports the development of the safe working practices and behaviors for working in internal and external environments including public highway, underground, overhead and internal networks to national legislative safety and industry standards. Students will be assessed by assignments including preparing a site survey and plan, including works guarding, PPE and risk assessment.

Unit 302, covering telecommunication fundamentals, is intended to enable attendees to learn about the fundamentals of telecoms transmission technologies and digital networks. This will be relevant to wired and wireless networks. Exploring issues such as enterprise cabling and telecoms utilities, learners will become familiar with concepts that will be developed further in the other units developed as part of this qualification. Students will be assessed on this module by timed assignments.

Who Will Benefit

The Safe Working Practices & Behaviours and Telecoms Fundamentals - City and Guilds 3668-03: 301/302 modules are aimed at anyone who wishes to progress further than Level 2, such as those entering supervisory, design or project management roles. The Level 3 Certificate in Communications Cabling builds on installation competences and supports candidates moving into more senior roles and provides them with eligibility for an Electrotechnical Certification Scheme (ECS) Network Infrastructure card.

Gaining the full Level 3 requires the core modules (Unit **301/302**) and one of the three offered practical modules; **303** Fibre Optic Cabling, **305** Passive Optical Networks (PON), **306** Structured Cabling and Enterprise Networks.

Course Content

Unit 301: Safe Working Practices & Behavoirs
- Legislation and regulations relevant to the telecommunications industry
- Key factors of health and wellbeing
- Comprehensive risk assessments, method statement and permit to work including underground, overhead, and internal networks
- Conducting a site surveys
- Road works guarding and set up
- Confined spaces working
- Responding to emergencies
- Working at heights and electrical hazards
- Asbestos hazards and legal requirements
- Fire stopping materials
- Safe system of work to identify hidden services

Unit 302: Telecommunication Fundamentals

- Media, wired and wireless
- Media Characteristics e.g. Baseband, broadband, bandwidth, attenuation and gain
- Data transmission methods e.g. circuit and packet switching and cellular
- Applications in digital networks
- Data transmission methods
- Standards and their purpose; Organizations responsible for establishing standards
- OSI model & function referencing TCP/IP
- Protocols in data & telecom networks.

Part Number	Description
*	See other module datasheets for combined course part number