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601/2519/6 Level 3 Diploma in Electrical Power Engineering

OVERVIEW

• What does this qualification cover?

This Framework qualification covers the following mandatory topics:

- Comply with statutory regulations and organisational safety requirements
- Minimise risk to life, property and the environment

and for an Overhead Linesperson:
- Install overhead line plant and equipment
- Maintain overhead plant and equipment

for a Fitter:
- Install substation plant and apparatus
- Maintain substation switchgear

for a Jointer:
- Low voltage distribution cable jointing
- High voltage distribution underground cable jointing

for a Technician:
- Organise the use of resources for work on power networks
- Produce, communicate and record technical information for work on power networks

and a choice of the following to make up the required size of qualification providing they are not included in the above groups:

- Access, movement and egress of high voltage overhead line work areas
- Inspection and maintenance of battery systems
- Install substation earthing
- Access, movement and egress of high voltage substation work areas
- Co-ordinate the mechanical movement of power plant and apparatus
- High voltage switching operations
- Install overhead line plant and equipment
- Dismantle overhead line plant and equipment
- Live low voltage overhead line connections
- Jointing overhead line conductors
- Install overhead line conductors

- Maintain overhead plant and equipment
- Inspection of overhead line routes
- Low voltage distribution cable jointing
- Low voltage consac underground cable jointing
- High voltage distribution underground cable jointing
- High voltage polymeric transmission cable jointing
- High voltage pressurised transmission cable jointing
- Dismantle substation plant and apparatus
- Fault repair of substation plant and apparatus
- Maintain compressed air systems
- Develop yourself in the work role
- Organise the use of resources for work on power networks
- Produce, communicate and record technical information for work on power networks
- Low voltage sub-station switching operations
- Diagnostic testing and fault finding on power networks
- Protection testing on overcurrent and earth fault schemes
- Pressure testing of high voltage distribution equipment
- Install supervisory control and data acquisition (SCADA) systems
- Install protective relays and metering equipment
- Install high voltage current transformer metering equipment
- Diagnose faults on compressed air systems
- Low voltage cable fault location and diagnosis
- Fibre optic fusion splicing and terminations
- Phasing out of high voltage cables
- Inspect and maintain oil and gas filled cable systems
- Low voltage overhead line switching operations
- Overhead line fault diagnosis
- High voltage live line operations using insulated rods
- Hot stick operations
- Hot glove operations
- Install overhead line apparatus on steel tower structures
- Fault repair of overhead line apparatus on steel tower structures
- Earthing of overhead line transmission conductors
- Erection of steel tower structures
- Maintain power transformers
- Maintain supervisory control and data acquisition (SCADA) systems
- Electrical testing of power equipment
- Install substation plant and apparatus
- Control of working parties
- Co-ordinate work activities on plant and apparatus

• Who could take this qualification? or who is this qualification designed for?

These qualifications are for those employed in the industry. There are no entry requirements for these qualifications. However, centres must ensure that learners have the potential and opportunity to gain the qualifications successfully.

These qualifications are not approved for under 16 years of age.

WHAT COULD THIS QUALIFICATION LEAD TO?

These qualification are suitable for those employed as a Distribution & Transmission:

- Linesperson
- Cable Jointer
- Electrical Fitter
- Technician

• Will the qualification support progression to further learning, if so, what to?

After completing this qualification further skills can be gained by taking the following qualifications:

- Level 3 Diploma in Electrical Power Engineering - Distribution and Transmission (Technical Knowledge)

Or to move to another area of the Power Industry:

- Level 3 Diploma in Electrical Power Engineering - Wind Turbine Operations and Maintenance
- Level 3 Diploma in Electrical Power Engineering - Wind Turbine Maintenance (Technical Knowledge)
- Level 3 Diploma in Electrical Power Engineering - Wind Turbine Engineering Installation and Commissioning

or to progress to supervision or management:

- Level 3 Award in First Line Management
- Level 3 Diploma in First Line Management
- Level 3 Certificate in First Line Management

WHO SUPPORTS THIS QUALIFICATION?

This qualification is supported by RenewableUK.