

# New content on SmartScreen!

Level 3 NVQ Diploma in  
Electrotechnical Technology (2357)



## Level 3 NVQ Diploma in Electrotechnical Technology (2357)

There will be 21 units supported on SmartScreen:

- Unit 301 (ELTK01)
- Unit 302 (ELTK02)
- Unit 303 (ELTK03)
- Unit 321 (ELTK03a)
- Unit 304 (ELTK04a)
- Unit 305 (ELTK04)
- Unit 306 (ELTK05)
- Unit 307 (ELTK06)
- Unit 308 (ELTK07)
- Unit 309 (ELTK08)
- Unit 322 (ELTK09a)
- Unit 323 (ELTK09)
- Unit 311 (ELTP01)
- Unit 312 (ELTP02)
- Unit 313 (ELTP03)
- Unit 315 (ELTP04)
- Unit 316 (ELTP05)
- Unit 317 (ELTP06)
- Unit 318 (ELTP07)
- Unit 332 (ELTP09a)
- Unit 333 (ELTP09)



My qualifications

PARISH CLERK

DBT

MAIN CCU

WATER

GAS

Handouts

Handout 2: Health and safety legislation

Handout 7: Procedures for

Handout 18: First aid

First Aid at work is necessary not only for the treatment of injuries but also for people who are taken ill. It can save lives and prevent minor injuries becoming life threatening. There is no legal obligation to cover non-workers in the workplace (shoppers etc) but most companies will do so.

The Health and Safety (First Aid) Regulations require that adequate and appropriate facilities be provided but it does not list what should be included in a First Aid box.

The minimum requirements will be:

- A suitably stocked First Aid box
- An appointed person to take charge
- Information for employees about accidents and illness can occur at a

Accidents and illness can occur at a

**First-aid box contents**

There is no mandatory content but s

- A leaflet giving general guidance
- Individually wrapped plasters

Unit 301 Sample questions

Question 3 of 15

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Dedicated online support

Terminating fibre optic cables may produce particular health and safety risks

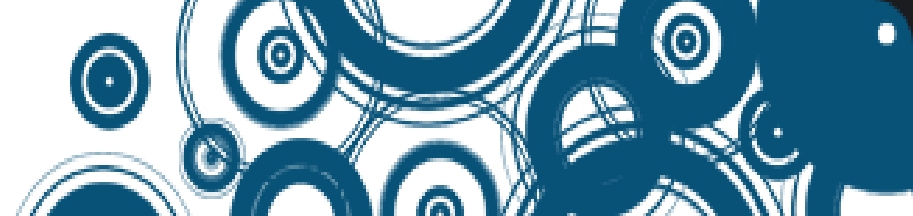
- the risk of glass shards piercing the skin
- electric shock from charged cables due to EMI
- oil escaping from cables staining the skin and clothes
- tiredness due to length of time taken to terminate cable

Score so far: 20 points out of 20

SUBMIT

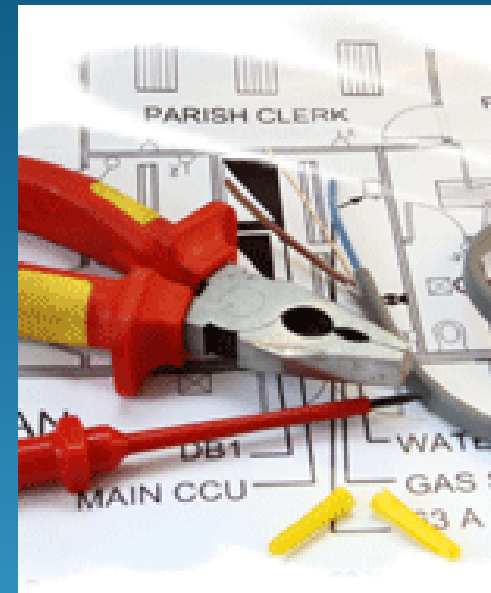


Our SmartScreen support breathes colour and life into this demanding qualification with the aid of comprehensive resources, including handouts, worksheets, sample questions and much more!



## Support for the units includes:

- Sample scheme of work
- Sample lesson plans
- Handouts
- Worksheets
- PowerPoint presentations
- Sample questions
- Qualification information



# Example: Handout

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Unit 302 Handout 19

## Unit 302 (ELTK 02): Understanding environmental legislation, working practices and the principles of environmental technology systems

### Handout 19: Environmental technology systems

#### Heat pumps

A heat pump basically collects energy from the soil or air outside a building and uses it to heat water or air inside the building. If the action of a refrigerator is considered, energy is removed from inside the fridge (so the inside goes cold) and given off as heat normally from pipes at the back of the unit. If the ground or air is compared to the inside of the fridge and the heating system on the back of the fridge then it is simple to see the arrangement.

Ground source heat pumps normally need long lengths of pipes buried in the ground to extract the energy which can be limiting with small gardens. Air source heat pumps need space around the building for mounting the unit. The systems are best for replacing electricity or coal systems. They are not recommended for replacing gas systems.

The heat output from heat pumps tends to be at a lower temperature which may require the radiators to be on 24/7 with a lower surface temperature.

For more details see the Energy Saving Trust website: <http://www.energysavingtrust.org.uk/>

#### Combined heat and power

The average percentage efficiency of a power station or internal combustion engine is about 30-35%. A tremendous amount of energy is lost as heat. If this lost heat could be used to heat a building then the efficiency could increase overall to about 95%.



## Example: Worksheet

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Unit 303 Handout 21

### Unit 303 (ELTK 03): Understanding the practices and procedures for overseeing and organising the work environment (Electrical Installation)

#### Handout 21: Liaising with others when organising and overseeing work activities



It is essential that any person on site is able to communicate clearly with any other person who may come onto site. It promotes a good image and helps enhance the reputation of the company. It may not always be possible to answer the questions posed but a polite response and an offer to forward the question/problem on will be appreciated.

It is unlikely that as an apprentice in a large company you will be asked to deal directly with the higher representatives of the customer or client themselves. You must be prepared at all times for the unexpected, however, and be ready with an appropriate answer. When working on smaller sites or domestic installations then contact with the customer is virtually inevitable and you must be prepared to answer questions as to progress (eg 'when do you expect to finish?') working area (eg 'which room will you be working in today?') etc.

There is an ever increasing number of ways of communicating with people. Even the basic telephone has multiple variations! See the list below for some suggestions on how to liaise with others when organising and overseeing work activities.

**Face to face:** Not everyone's favourite method as it demands an immediate response to a question or conversation and words said may not express what was intended. It does however give an opportunity to directly impress with your knowledge. If you don't know the answer then offer to pass the query on to someone who knows. Speak clearly and don't mumble.

# Example: PowerPoint presentation

## Sources of technical and functional information



Manufacturers provide a wide range of information about their products in general and specifically to individual equipment or components.

Catalogues are produced which illustrate the type and range produced by that manufacturer. It is usual for this to be quite general but some will include technical data as well.

The production costs of these catalogues etc is covered by the price charged by the manufacturer. The printing costs of these catalogues is relatively high.

## Example: Sample questions

### Unit 301 Sample questions

Question 4 of 15 ▾

Point Value: 10

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A fellow worker falls from a pair of steps and complains of severe pains in his/her legs. The correct action to take would be to:

- call an ambulance to take them to hospital for a check
- tell them to walk it off for a few minutes
- ask them to carry on with their work
- tell them to lay down in a dark room for 10 minutes

Score so far: 0 points out of 0

SUBMIT

## Additional support

The recommended books listed below should help you with this qualification. If you have any recommended books you would like added to this list, please email us at [smartscreen@cityandguilds.com](mailto:smartscreen@cityandguilds.com) with your suggestions. You can also use the [tutor forum](#) to share your recommendations with other tutors.



### Order your Level 3 logbook today!

**The new 2357 Level 3 NVQ Diploma in Electrotechnical Technology Candidate Logbook is now available!**

This new candidate logbook provides easy-to-use recording forms to make evidence recording simple.

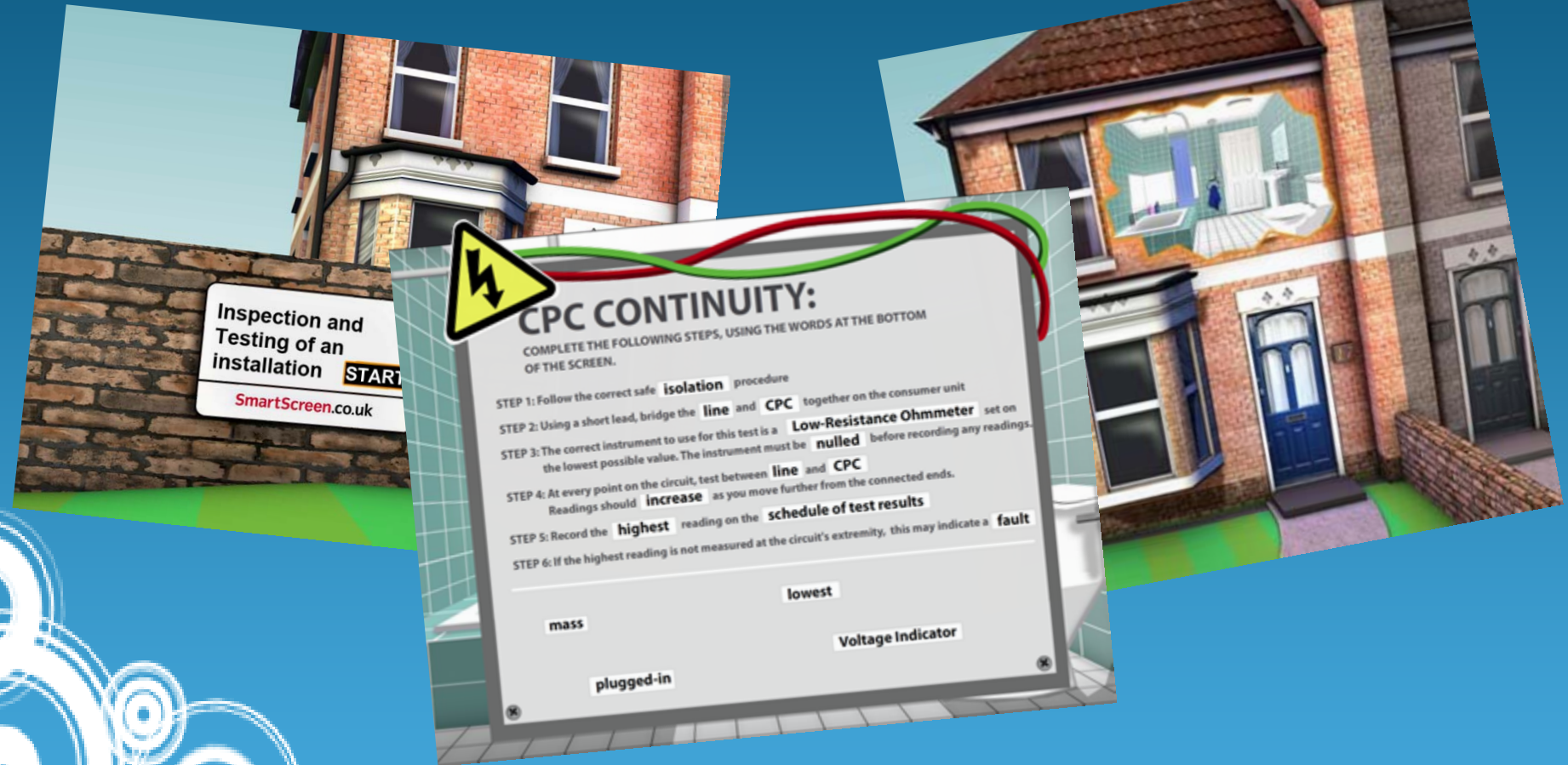
All performance units for both the 2357-13/91 and 2357-23/92 routes are included.

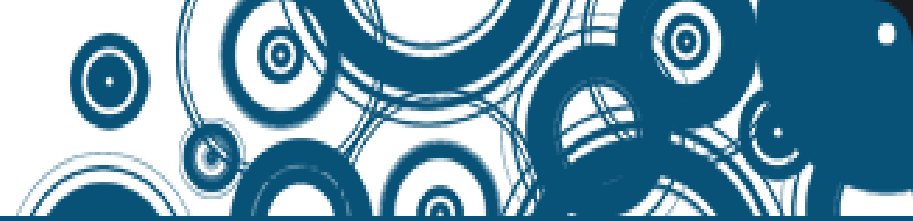
To order your copy call 0844 543 0000, go to the [Walled Garden](#).

- Recommended book and website lists
- Glossary and FAQs
- Unit information
- Tutor forums

PLUS...

# Coming soon: Brand new Electrotech game!





**For information on the upcoming game and for updates on when units will be going live please email:**

**[smartscreen@cityandguilds.com](mailto:smartscreen@cityandguilds.com)**

