Ref. INST 104

Caneco HT software

Initial Training

GOAL:

To master the Caneco HT application for designing High Voltage electrical installations.

Intended for

- Design Office technicians and engineers
- Engineers
- Clerks of works
- Project Managers

Duration: 2 days (14 hours)
Capacity: 6 persons max.

Prerequisites

- BTEC Higher National Diploma or NVQ Level 3
- Good familiarity with IEC 60-909 standard
- Solid experience with computer tools in a Windows environment

Teaching resources

- One computer per participant, videoprojector, course material

Course contents

Methodology

Theory	Practical
40%	60%

> Refresher on the standards applicable in High Voltage

- Calculating short-circuit currents for symmetrical 3-phase faults
- Determination conductor cross-sections and selecting protective devices

> Graphical modelling of an electrical system

- Project data configuration system, sources, loads
- Principles for producing an electrical diagram
- Presentation of the tool menu bar
- Equipment and symbol libraries
- Starting a project
- Presentation of the electrical databases
- Setting up different operating configurations

> Application exercises:

1st study:

- Entering details and calculating a looped MV A wiring system network connected to the public supply

2nd study:

- Entering details and calculating a MV A system connected to public and generator supplies, with different types of wiring systems and protective devices, fitted with transformers and terminal devices (impedances or motors)

3rd study:

- Study of a production genset example as per EN 60909-4. Exercise 2.3

4th study:

- Calculating the voltage drop at terminal device terminals: active, on motor start-up

> Printouts

- Preview before printing, saving the report file in different formats
- Print configuration
- Producing and viewing data and results labels
- Exporting the single-line diagram in DXF

> Calculation orientation

- Running the calculations for the electrical system
- Interpretation and analysis of the results obtained, system simulations
- Table of line-to-equipment short-circuit currents
- Table of line-to-node short-circuit currents
- Summary of cable calculation by Iz and Icc
- Description of fuse protective devices and time-independent protective devices
- Application to the selection of equipment: resistance to electrodynamic forces and thermal stresses
- Collecting results for the discrimination study

Note: single-phase faults, earthing schemes, and earth connection diagrams are the subject of the specific INST 107 training course

+ Point

A training course offering all the basics to be in a position to calculate High Voltage electrical installations using a single tool, in accordance with the current standard, including calculation of thermal stresses and permitted currents in systems.