



CPD Short Course

EUROCODES UPSKILLING FOR PRACTICING ENGINEERS

January – March 2014

This CPD course is for practicing engineers who wish to gain a basic working knowledge of Eurocodes for structural design. The course will be delivered by John Jones, a Chartered Civil & Structural Engineer from the ITT School of Science, Technology, Engineering & Maths (STEM).

Registration & Cost:

ITT Development Office – CPD

€ 300 for 6 No. 2 hour sessions. (Min. 6 Participants)

Dates / Time / Venue:

Thursdays starting on 30/01/2014 and finishing on 06/03/2014,

6.15 pm to 8.15 pm

C216, ITT South Campus, Clash

Prerequisites:

A basic working knowledge of the superseded British & Irish Standards for structural engineering is necessary.

Learning Resources:

Comprehensive handouts & worksheets will be used to deliver the course. Participants will have access to all the necessary documents & resources for the purpose of training. It is noted that the majority of the documentation is provided for training & education purposes only; participants should purchase the necessary documentation for commercial use.

Learning Objectives: *On completion of the course, participants will*

1. Be aware of the necessary industry standard documents & resources required to undertake basic structural design in Reinforced Concrete, Steelwork, Masonry & Timber. (It is noted that Eurocodes generally do not contain derived formulae therefore additional design guides are very helpful)
2. Understand the major differences between Eurocodes and the superseded Irish & British Standards which are relevant to the design of basic structural elements.
3. Be aware of the major differences between Irish & UK National Parameters. (It is noted that the majority of design guides / manuals which are available use the UK National Parameters)
4. Be able to design basic structural elements in a variety of structural materials.

Outline of material covered:

Session 1

- Overview of Eurocodes
- Relevant documentation / resources for **basis of design & loading**
- Eurocode terminology
- Loading (permanent & variable actions, combinations)
- Practical example of load combination.

Session 2

- **Snow Loading** (Comparison with superseded codes and a practical example)
- **Wind loading** (Comparison with superseded codes and a practical example)

Session 3

- Relevant documentation / resources for **Reinforced Concrete**
- Comparison with superseded codes
- Practical examples: Beam, Column, Slab

Session 4

- Relevant documentation / resources for **Structural Steelwork**
- Practical examples of using resources to size basic structural members and joints.

Session 5

- Relevant documentation / resources for **Structural Masonry**
- Comparison with superseded codes
- Practical examples: Vertically loaded wall, Laterally loaded wall

Session 6

- Relevant documentation / resources for **Structural Timber**
- Comparison with superseded codes
- Practical examples: Joists, Posts

Further Information:

Contact John Jones on 087 6294595 or john.jones@ittralee.ie