

EUROCODE SEMINARS

Thursday 7 January and Friday 8 January 2010

Holiday Inn, Birmingham city centre,
Smallbrook, Queensway,
Birmingham B5 4EW

Special £90 B&B rate when you quote “integr8”

Eurocode 2 short course

Led by Dr W McKenzie & Dr B Zhang

Day 1:

1. Introduction to the Structural Eurocodes Programme;
Introduction to EN 1990 and EN 1991;
(Both components taught in common with the Eurocode 7 course).
2. Introduction to EN 1992 Parts 1 & 2;
General rules for buildings and structural fire design;
Load arrangements in reinforced concrete elements.
3. Design of Reinforced Concrete Slabs;
Simply supported one-way slab;
Continuous one-way slab.

Day 2:

1. Design of Reinforced Concrete Columns.
2. Design of Reinforced Concrete Beams;
Simply supported and continuous beams;
Continuous T-beams and L-beams.
3. Design of Reinforced Concrete Foundations.
4. Summary.

1 day attendance – £275 • 2 day attendance – £295

Eurocode 7 short course

Led by Dr Ian Smith

Day 1:

1. Introduction to the Structural Eurocodes Programme;
Introduction to EN 1990 and EN 1991;
(taught in common with the Eurocode 2 course).
2. Introduction to EN 1997 Parts 1 & 2;
Basis of geotechnical design.
3. Geotechnical design by Calculation;
Characteristic values of geotechnical parameters.
4. Limit states and partial factors of safety;
Design approaches.

Day 2:

5. Gravity retaining wall design;
Embedded retaining wall design.
6. Shallow foundation design.
7. Pile foundation design.
8. Summary

1 day attendance – £275 • 2 day attendance – £295

Each course will provide the attendee with a sound understanding of the principles of the Eurocodes and how they are to be used in the design of the structural/geotechnical elements. There are many design examples through which attendees will really gain knowledge of how to use the codes.

All attendees should bring a calculator and a copy of the appropriate Eurocode to the course.

Note: Although both courses are delivered by academic staff, the content will be pitched at the appropriate level for all attendees, and a short revision of the university-level fundamentals will be provided at appropriate points.

Speakers

Dr Ian Smith • **Dr W McKenzie** • **Dr B Zhang**

Dr Ian Smith is Head of Civil and Transportation Engineering and Senior Lecturer in Geotechnical Engineering at Edinburgh Napier University. He is widely recognised as an authority on the use of Eurocode 7 for geotechnical design and has given many presentations and CPD courses in the area. He is author of the leading undergraduate textbook on soil mechanics, Smith's Elements of Soil Mechanics, published by Wiley and now in its 8th Edition. This is the first undergraduate text book to cover design to BS EN 1997.

He is a member of the IStructE Teaching of Eurocodes committee and is coordinator of the associated Eurocode 7 sub-committee. He was recently invited by BSI to represent the UK for Eurocode 7 at the Eurocodes Background and Applications 3-day long workshop in Brussels.

Dr Bill McKenzie is a Teaching Fellow and Lecturer in Structural Engineering at Edinburgh Napier University with several years teaching experience behind him. He has authored many books on the design of structural elements, including: Design of Structural Steelwork (1998); Design of Structural Timber (2000); Design of Structural Masonry (2001); Design of Structural Elements (2003); Examples in Structural Analysis (2006); Design of Structural Timber to Eurocode 5 (2007) with Ben Zhang, and Design of Structural Elements to Eurocodes (2009).

Bill is recognised in Scotland as an authority on the use of Eurocodes 1 (Actions on Structures), 2 (Concrete), 3 (Steel) and 5 (Timber) and has led seminars and CPD courses on these codes over the past few years.

Dr Binsheng (Ben) Zhang has twenty years' teaching, research, consultancy and industrial experience in structural engineering. His main research interests include the structural design and analysis of concrete, steel and timber structures and non-destructively and/or destructively experimental investigations of high strength high performance construction materials, structural components and full structures under various loading and environmental conditions.

During his work as a CPD Learning Materials Developer at the Centre for Timber Engineering of Napier University, Dr. Zhang produced numerous teaching materials and design examples on timber structures to the Eurocodes and British Standards and conducted research activities for CTE. Alongside Bill McKenzie, Ben has delivered CPD courses in Design to Eurocode 2 for the past few years.