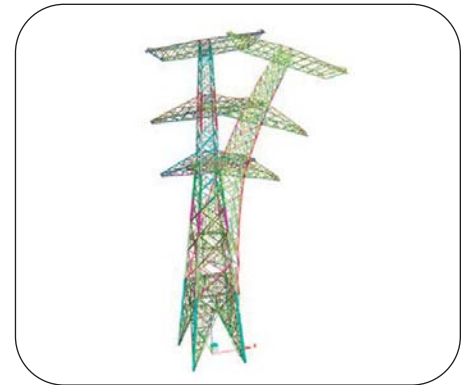
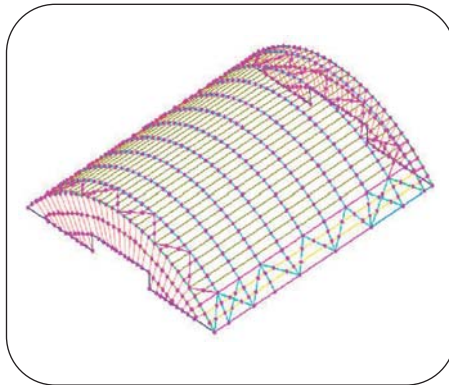
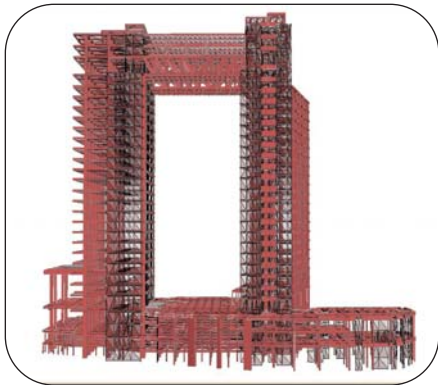


# Second order analysis & design of steel structures

20 July 2015



**This one day course presents a comprehensive treatment of the second order analysis and design of steel structures.**

Course participants will be provided with an overview of the provisions of Eurocode 3, an explanation of the various types of structural analysis and conventional design to Eurocode 3 will be covered. Emphasis will then be placed on advanced analysis and design techniques including the treatment of frame and member imperfections, second order  $P-\Delta$  and  $P-\delta$  effects and the interpretation of analysis results.

## The following topics will be covered:

- Introduction to structural design to the Eurocodes
- Load combinations
- Conventional design of structural steel elements
- Structural analysis techniques
- Eigenvalue analysis and modelling of imperfections
- Second order  $P-\Delta$  and  $P-\delta$  effects
- Nonlinear analysis and design of steel structures
- Practical worked examples
- Practical design exercises

## Presenters include:

- Professor Siu-Lai Chan is Chair Professor in Computational Structural Engineering at Department of Civil and Environmental Engineering, The Hong Kong Polytechnic University
- Professor Leroy Gardner is Professor of Structural Engineering in the Department of Civil and Environmental Engineering at Imperial College London
- Stephen McCrory is a Director of NIDA Europe Ltd

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**Venue:** Imperial College London,  
South Kensington Campus,  
London

**Fees:** £295 (booking made after 31 May 2015)  
£265 (booking made before 31 May 2015)  
£80 (Student fee)

## For information and registration, contact:

Stephanie O'Mahony, Centre for Continuing Professional Development, tel: 020 7594 6882 or email: [cpd@imperial.ac.uk](mailto:cpd@imperial.ac.uk)

**[www.imperial.ac.uk/cpd/steelstructures](http://www.imperial.ac.uk/cpd/steelstructures)**