

- industry cross-fertilisation
- technology transfer
- industry forum
- seminars
- consultancy and case studies
- training

## Modelling, Identification and Estimation

### (2 days Course) Agenda

#### Day 1: Introduction to System Identification

- 09.00 REGISTRATION
- 09.30 System Identification for Linear Systems**
- 11.00 TEA/COFFEE
- 11.15 Hands-On Session: System ID with Least Squares Algorithm**
- 12.00 Hands-On Session: System ID with a Kalman Filter to Estimate an Offset**
- 12.45 LUNCH
- 13.30 System Identification Implementation Issues and Model Validation**
- 14.30 Hands-On Session: Estimation of Parameters in Physics-based Models**
- 15.45 TEA/COFFEE
- 16.00 Self-Tuning Control**
- 17.00 CLOSE

#### Day 2: System Identification using Grey-Box and Multiple Linear Models

- 09.00 Grey-Box Models – The System Structure and Essential Elements**
- 10.00 Parameter Estimation for Grey-Box Models**
- 11.00 TEA/COFFEE
- 11.15 Hands-On Session: Grey-Box Model Identification**
- 12.30 LUNCH
- 13.15 Non-linear system Modeling through Multiple Linear Models**
- 14.15 Hands-On Session: Multiple-Model Approach**
- 15.15 TEA/COFFEE
- 15.30 Neural Networks as Universal Approximators:  
Static and Dynamic Models**
- 16.30 Hands-On Session: Neural-Network Model Identification Procedure**
- 17.00 CLOSE