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

**applied control technology consortium**

# Control Fundamentals Theory and Practice

## Agenda
## (2-days Course)

**Day 1:**   **Introduction to Systems and Modeling**

09.00   *REGISTRATION*

**09.15**   **Introduction to the Course - "The Need for Control"**

**10.00**   **Linear Systems and their representation**
(Transfer Function and State Space Models)

11.15   *TEA/COFFEE*

**11.30**   **Frequency Response Analysis**
(Bode, Nichols and Nyquist)

12.30   *LUNCH*

**13.15**   **Hands-On Session:**
Introduction to Matlab/Simulink and Linear Systems Representation

**14.30**   **Fundamentals of Modelling, System Identification and Simulation**

15.30   *TEA/COFFEE*

**15.45**   **Hands-On Session:** Modelling for Controller Design

17.00   *CLOSE*

**Day 2:**   **Classical Control Design and Practical Aspect**

**09.00**   **Fundamentals of Feedback Control Design**

**10.00**   **Hands-On Session:** Control Fundamentals

10.45   *TEA/COFFEE*

**11.00**   **PID Controller Design and Simple Tuning Methods**

12.30   *LUNCH*

**13.15**   **Hands-On Session:** PID Control Design and Tuning

**14.00**   **Frequency Domain Control Design**
(incl. Lead-Lag & Root Locus Compensation)

**14.45**   **Enhanced Control Designs**

15.45   *TEA/COFFEE*

**16.00**   **Discrete-Time Modelling and Control Representation**

17.00   *CLOSE*