

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

Fundamentals of Dynamic Control using LabVIEW (3-day Course) Agenda

Day 1

- 08.00 Intro "The Need for Control"
- 08.45 Linear Systems & Transfer Functions/Frequency Responses
- 10.30 Tea / Coffee
- 10.45 Linear Systems & Transfer Functions/Frequency Responses (cont.)
- 12.00 Lunch
- 13.00 Linear & Nonlinear Modelling & Simulation
- 13.45 Demo: Intro to LabVIEW Control Design & Simulation Toolkits
- 14.45 Tea / Coffee
- 15.00 Hands-On: Modelling & Simulation
- 16.30 Close

Day 2

- 08.00 Sensors & Actuators (incl. motors, gyros, valves, etc.)
- 08.30 System Identification
- 10.00 Tea / Coffee
- 10.15 Hands-On: System Identification
- 11.00 Fundamentals of Control Design
- 12.15 Lunch
- 13.15 Hands-On: Fundamentals of Control Design
- 14.00 Root Locus & Lead-Lag Compensation
- 15.15 Tea / Coffee
- 15.30 Hands-On: Root Locus & Lead Lag
- 16.30 Close

Day 3

- 08.00 PID Controller & Tuning Methods
- 09.30 Hands-On: PID Tuning
- 10.30 Tea / Coffee
- 10.45 Implementation Issues & Time Delay Compensation
- 11.30 Hands-On: Noise & Saturation
- 12.00 Lunch
- 13.00 Control System Architectures
- 13.30 Discrete-Time Systems Modeling & Control
- 14.45 Tea / Coffee
- 15.00 Hands-On: Discrete Time Systems
- 15.45 State-Space Representation
- 16.30 Close