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

applied control technology consortium

Introduction to Estimation and Kalman Filtering

Agenda
(1-day Course)

08.45 *REGISTRATION*

09.00 Introduction to Probability, Stochastic Processes and Signals
(Basic Theorems, Disturbances & Noise Representation)

09.45 Hands-on Session:
Implementation of Disturbance & Noise in State-Space Model

10.45 *TEA/COFFEE*

11.00 Introduction to Kalman Filter
(Continuous and Discrete Time)

12.00 Discrete Time Kalman Filter
(Derivation, Properties, Riccati Equation and Tuning)

12.45 *LUNCH*

13.30 Hands-on Session:
Application of Observers & Building the Kalman Filter

14.30 Introduction to Time Varying and Nonlinear Systems

15.00 *TEA/COFFEE*

15.15 Parameter Estimation using Extended Kalman Filters
(Condition Monitoring, Model Based Fault Detection Methods)

16.00 **Hands-on Session:** Kalman Filtering for Parameter Estimation

17.00 *CLOSE*