

- modelling and simulation
- control design
- system troubleshooting
- technology transfer and training
- energy efficiency investigation
- software tools



## ISC Limited: Training Course Titles

### Introductory or Basic Level

- Introduction to Artificial Intelligence and Machine Learning in Control
- Control Fundamentals I - Introduction to Control Systems
- Control Fundamentals II- More on Basic Concepts in Control Engineering
- Control Engineering Practice - Basic Course with Applications Focus
- Introduction to PID Control Design and Tuning
- Control Systems Design for Servomechanisms
- Control Engineering for Nuclear Power Generation Plant
- Introduction to Process Control
- Introduction to Wind Turbine Control
- Benchmarking Controllers and Automatic Tuning

### Intermediate Level

- Role of Artificial Intelligence and Machine Learning in Advanced Control and Estimation
- Modelling, Kalman Filtering, Optimal and Predictive Control
- Overview of Modern Control Methods
- Optimization Techniques and Methods
- Optimal Control and Optimization and Methods
- Modelling, Identification and Parameter Estimation Methods
- Estimation and Kalman Filtering Techniques
- Overview of Modern Control Methods
- Multivariable and Optimal Control Systems Design Methods
- Fundamentals of Nonlinear Systems Modelling and Control
- Linear and Nonlinear Predictive Control and Applications
- Digital Control and Processing (includes MV, GMV and Predictive Laws)
- Introduction to Neural Networks, Fuzzy Control and Global Optimization
- Wind Turbine Control (Part 1 = Individual Turbines) or (Part 2 = Wind Farms)
- Modelling Rolling Mill Processes for Improved Control

### Advanced Level

- Model Predictive Control Methods and Applications
- Estimation and Kalman Filtering Techniques
- Robust Control Systems Design Methods
- Nonlinear Systems Modelling and Control Design
- System Identification, Fault Detection and Adaptive Control
- System Identification Methods for Linear and Nonlinear Systems
- Filtering and Prediction for Linear and Nonlinear Systems
- Advanced Robust Multivariable Control and Stochastic Systems
- Overview of State of Art of Advanced Control Systems
- Wind Turbine Control Course on Robust Control and Stochastic Systems
- Signal Processing for Control Applications and Condition Monitoring
- Advanced Control for Hot and Cold Rolling Mills
- Nonlinear Predictive Control for Automotive Applications
- Control of Autonomous Vehicles and Use of AI and Machine Learning

*Number of days can be tailored to company needs and presented at company premises.*