

Item No.: CO4204-8J

Course – Practical introduction to control technology

Features:

- 1 Experiment board: temperature, level, position, speed and light control loops with inputs for switching through disturbance variables
- P, I and D controllers which can be arbitrarily combined and have independently configurable parameters
- Configurable two- and three-position controllers with adjustable switching hysteresis
- Adjustable analog PID-controller
- Virtual instruments for analysis and optimisation of control loops
- CD-ROM with Labsoft browser and course software

Training contents:

- Operational principles of open- and closed-loop control
- Design and function of continuous and discontinuous controllers
- Temperature control using switching and continuous controllers
- Speed control for a 4-quadrant drive system
- Position control along a linear axis
- Design of lighting control for a room
- Measurement of the response of control loops over time: recording of step response
- Experimental investigation of control response of various continuous controllers
- Parameter setting and optimisation of control loops
- Investigation of control system response to changes in reference and disturbance variables
- Investigation of closed control loops