

## Power & Controls

# SIMOCODE Pro Motor Management System

### General Information

Course Code: SCT-SCSIMG1A  
Length: 2 Days

### Audience

This course is intended for SIMOCODE Pro Motor Management System users who are involved with implementation, start-up, operation or maintenance of systems containing the SIMOCODE Pro.

### Profile

1.3 CEUs (Continuing Education Credits)

This course introduces the SIMOCODE Pro Motor Management System and its components. Using representative hardware, the student will configure and operate the system. Unit controls allow the student to experience the reaction of the SIMOCODE Pro to over-current, undervoltage or over temperature. SIMOCODE ES software is used to configure the system for operation of a reversing motor and modification of the controls to adapt to user and apos - s requirements.

### Objectives

*Upon completion of this course, the student shall be able to:*

- Configure the SIMOCODE Pro for use as any particular motor starter.
- Set the SIMOCODE Pro to match the motor parameters.
- Modify the SIMOCODE program as required.
- Wire the Inputs, Outputs and Control Power.
- Recognize fault indications and how to reset them.
- Upload/Download the SIMOCODE program.
- Use Diagnostic functions in SIMOCODE ES.
- Replace a SIMOCODE device.
- Install SIMOCODE program using the memory module.
- Set the SIMOCODE communication address using the addressing plug.
- Integrate SIMOCODE ES into the Step 7 environment.

### Topics

1. Typical Operation
  - a. Starting/Stopping
  - b. Control Stations
  - c. Remote operation
2. Response to Fault Conditions
  - a. Over current
  - b. Under Voltage
  - c. Over Temperature
3. Device Configuration
  - a. Application (Control Function)
  - b. Device type
  - c. Additional modules
4. Protection
  - a. Overload
  - b. Unbalance
  - c. Stalled rotor
5. Control Station
  - a. Local
  - b. Remote
  - c. PC/PLC
6. Control Function
  - a. Operating mode
  - b. Control commands
  - c. Auxiliary control inputs
  - d. Timings
7. Monitoring Functions
  - a. Earth fault
  - b. Current limits
  - c. Operating hours
8. Inputs/Outputs
  - a. Basic Unit Inputs/Outputs
  - b. Digital Module Inputs/Outputs
  - c. Analogue Module Inputs/Outputs
  - d. Temperature Module Inputs
  - e. Cyclic Receive/Send Data
  - f. Acyclic Send Data
9. Additional Function Blocks
  - a. Test/Reset
  - b. Test Position Feedback
  - c. External Fault
  - d. Emergency Start
  - e. Logic Modules
10. Diagnostics
  - a. Measured Values
  - b. Analogue Value Recording
  - c. Control Status Information
  - d. Faults, Warnings, Status Information
  - e. Trend View
11. Communications
  - a. RS232
  - b. PROFIBUS DP
  - c. Totally Integrated Automation