

## PCS7 System Operator

### General Information

Course Code	SCT-PCPCSU1C
Global Code	TIA-INTROST-PCS7SYS
Length	1 Day
CEUs	0.7

### Audience

This course targets PCS7 system operators, production supervisors, and administrative staff who require a working knowledge of the system. Additionally, anyone in need of building a basic, operational understanding of the PCS7 process control system. The Day 2 option is targeted for operators with basic technical diagnostic responsibilities and backgrounds.

### Prerequisites

- None

### Profile

This course provides the student with a working exposure to the PCS7 OS control system. This is a flexible agenda with a 1-day core agenda, plus a "Day 2 option" with advanced system diagnostics. Using a prebuilt Siemens demo project, the students will learn PCS7 system operational functions and procedures in a safe and controlled environment. All core operational tasks and system tools are discussed and practiced by the students. Typical operator system inputs, acknowledgments, controls, and monitoring tasks are included. The Day 2 option is targeted for those operators with additional system diagnostics responsibilities. This section includes basic hardware, networking, and system troubleshooting. This course is a hands-on curriculum working with a typical simulated production process.

### Objectives

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

- Identify the PCS7 control system architecture
- Navigate the OS system screen hierarchy
- Control and monitor a production process
- Navigate the system keysets and functions
- Access the Trending and Messaging systems
- Access the Reports and Archive systems
- Diagnose system Hardware and Configuration using Diagnostics tools ( Day 2 option)

### Topics

1. PCS7 Overview
2. Demo Project Screen Review
  - a. Project overview
  - b. Graphic displays of the Operator Station
3. PCS7 OS Process Mode
  - a. User Interface
  - b. Overview Area
  - c. Operator control functions
  - d. Work Area
  - e. Keyset Area
  - f. Window Types and the Picture Tree
4. System Operator Inputs
  - a. Operator Inputs Overview
  - b. Log on - Log off and passwords
  - c. System Inputs
5. Graphic System Control
  - a. Functions and Outputs
  - b. Process Pictures
  - c. Picture Elements
  - d. Process Controls
  - e. Overview Area Inputs
  - f. Button Area Inputs
  - g. Process Picture Control
6. Trend System
  - a. Trend functions and outputs
  - b. Managing Trend groups
  - c. Creating new Trends
7. Message System
  - a. Functions and outputs of the Message System
  - b. Structures and States of Messages
  - c. PCS7 Message List
  - d. Message system filters and permissions
  - e. Acknowledgments
  - f. Operator Control Functions
8. Functions and Outputs of the Report System
9. Archive System
  - a. Functions and outputs of the Archive System
  - b. Process Values, Messages and Reports
  - c. Trends Graphs
  - d. Message Lists
  - e. StoragePlus Web Viewer (optional)
  - f. Exporting Process Values and Messages
  - g. Archive time periods
10. Asset Management Screens (Day 2 option)
  - a. Asset Management Overview
  - b. OS Station Diagnostics screens
  - c. PCS7 Components with Diagnostics
  - d. Structure of Diagnostics Screens
  - e. Operator inputs to diagnostic screens
  - f. Diagnostics and Maintenance Icons
  - g. Diagnostics Faceplates
11. PCS7 System Hardware Overview (Day 2 option)
  - a. Controllers, I/O and Bus Systems

- b. Hardware Configuration basics
- c. Network Overview
- 12. System Troubleshooting Basics (Day 2 option)
  - a. Diagnostics tools
  - b. Status indicators
  - c. CFC and SFC basics