



# SIEMENS

## Siemens S7 PLC and WINCC Flexible Programming

This course introduces the S7 product family and provides an overview of the SIMATIC S7-300/400 system. Hardware and software components as well as system configuration issues are discussed. The course uses a realistic conveyor model for demonstrations and exercises. This course concentrates on STEP 7 software, program structuring and the instruction set. STEP 7 software tools and programming instructions are demonstrated to guide the student through the development of a realistic application. Analog processing and alarming are detailed through theory and program examples. The course format consists of instruction and hands-on exercises. Students will use test, debug and diagnostic tools to complete the programming exercises.

### Career Classification

This course is for SIMATIC S7-300/400 PLC users involved in developing automation systems and their application programs.

### Course Prerequisites

Students are required to have a working knowledge of the Windows Operating Systems.

### Course Objectives

At the conclusion of this course, the student should be able to:

- Identify the components and performance characteristics of the SIMATIC S7-300 PLC
- Program, using the multiple address types
- Use symbolic addressing
- Create, document, test and troubleshoot an application program
- Use binary operation, timers, counters, comparators and arithmetic operations
- Structure a program that can use a program block multiple times
- Use the data access functions
- Program using the processed analog values
- Generate data blocks
- Loading, licensing and configuring WinCC Flexible
- Integrating WinCC Flexible with Step 7
- Creating WinCC Flexible tags
- Creating WinCC Flexible screens
- Animating WinCC Flexible screens
- Establishing communications with Siemens Operator Panels
- Downloading WinCC Flexible programs to Siemens Operator Panels

### Class Details

CLASS FEE

CLASS TIME

CLASS LENGTH

### 2016 Class Schedule

Farmington Hills

West Michigan

Ohio

Register Online:

[www.electro-matic.com/learning-center](http://www.electro-matic.com/learning-center)

**Please Note:** Class dates are subject to change. Contact Katie Perkins at [kmperkins@electro-matic.com](mailto:kmperkins@electro-matic.com) or 248-615-3955