

## SIMATIC Programming with S7-GRAPH in the TIA Portal (TIA-GRAPH)

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### Type

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Instructor-led Learning

### Duration and Continuing Education Units (CEU)

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2 Days  
1.3 CEUs

### Target Group

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- Programmer

### Short Description

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This course concentrates on the S7 GRAPH programming language with a review of the S7 block architecture focusing on the Function Block and the Instance Data Block. The STEP 7 TIA Portal software tools and S7 GRAPH programming element's structure are introduced within the course to guide the student through the development of a realistic application. The use of test, debug, and diagnostic tools complete the programming exercises. The course is a combination of instruction and hands-on exercises.

### Objectives

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- Structure and process a program using the program elements of S7 GRAPH
- Create, document, test and troubleshoot an application program
- Identify the components and performance characteristics of an S7 GRAPH structure
- Structure and process a program using the program elements of S7 GRAPH
- Create, document, test and troubleshoot an application program
- Objective 2

### Content

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- S7 GRAPH Programming Elements
- Principles of S7 GRAPH Programming
- S7 GRAPH Program Structures
- Interaction with Other Program Modules
- Documentations and Storage

### Mandatory Prerequisites

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[TIA Portal Programming 1: US-PTTIAP1A](#)

OR

[SIMATIC Service 1 in the TIA Portal: TIA-SERV1](#)

### Language

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English

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