

## PCS 7 AS Advanced Engineering (SCT-PCSASE1B)

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### Global Reference

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SIMATIC PCS 7 AS-Engineering (ST-PCS7ASE)

### Type

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Face-to-Face Learning

### Duration and Continuing Education Units (CEU)

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29.5 Hours over 4.5 Days  
2.9 CEUs

### Target Group

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- Programmer
- Other

### Short Description

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2.9 CEUs (Continuing Education Credits) This is an advanced AS engineering course designed for experienced PCS 7 users, engineers and Solution Partners. The goals of this course are to enhance the student's skill-set by exploring advanced AS configuration topics and solutions to common application problems. This course begins with the programming/specifying of the hardware components based on memory and cycle time requirements. Project handling will include archiving, Multiproject / multi-user engineering, project comparison, access protection and license management. AS hardware configuration topics will include important settings, Profinet / field device integration, high precision time stamping and redundant automation systems. APL v8 innovations and CPU overload reactions will also be discussed as efficient engineering topics. Bulk engineering with Advanced ES will be presented with a highlight on Control module types vs. Process tag types as well as the importing of control modules/process tags using excel. Some advanced SFC and advanced alarm engineering/management topics will be reviewed including Advanced Process Control (APC) options.

### Objectives

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- Calculate memory, systems structure and architecture requirements
- Configure automatic archives/read-back jobs and a distributed Engineering Station
- Compare project versions and use access protection
- Engineer with Advanced ES tools
- Use advanced features of SFCs, SFC types and alarm messaging
- Use advanced Process Control (APC) strategies

### Content

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- Common simulation tools
- PCS 7 Documentation and Online Support
- Requirements and functional process description
- System design and component specification
- PCS7 Project handling
- Advanced ES
- SFC Advanced

- Advanced alarm engineering
- Advanced Process Control (APC)

**Mandatory Prerequisites**

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[PCS7 System Engineering 1: SCT-PCSYSE1D](#)

OR

[PCS7 System Engineering 1 - Virtual: SCT-PCOILSYSE1D](#)

**Language**

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English

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