

Siemens Automation Cooperates with Education (SCE) | 02/2026

SCE Course Contents

Safety Integrated Safety Engineering on PROFINET
with SIMATIC S7 in the TIA Portal

TIA Portal course

2 days

Prerequisites

- Basic knowledge of Windows PC
- SIMATIC S7 continuation course with the TIA Portal, bus systems with SIMATIC S7

SCE Learn-/Training Documents

- PROFIsafe and PROFINET with ET 200SP and SIMATIC S7-1500 module: 072-100

Contents

- Basic information for the integration of machine safety
- Regulations and standards
- Risk analysis
- General information on fieldbus systems in use for personal safety
- Components for configuring a safety-related application on PROFINET

- Safety Integrated with SIMATIC S7 in the TIA Portal
- Fail-safe communication with PROFIsafe
- I/O components for PROFIsafe
- Safety-related programming with the STEP 7 Safety software in the TIA Portal
- Commissioning and programming of PROFIsafe with SIMATIC 1500 and ET 200SP
- Error diagnostics and error analysis for safety engineering application in the TIA Portal
- Optional: Fail-safe CPU/CPU communication in the TIA Portal with SIMATIC S7

Note:

These Learn-/Training Documents are available in the SCE Internet: [siemens.com/sce/module](https://www.siemens.com/sce/module)

This program serves as the reference and guideline for the course, in which we place great value on practical exercises and application examples.

We will of course be pleased to cover any individual suggestions, requests and questions from participants during the event.

Additional SCE courses are available in the SCE Internet: [siemens.com/sce/courses](https://www.siemens.com/sce/courses)

Increase your automation technology expertise and inspire your students.

