

SCE Automation Fundamentals Certification Test: PLC - TIA Portal Basics (SCT-CEPLCS1A)

Type

Online Self-Paced Learning

Duration and Continuing Education Units (CEU)

1 Hour over 0.25 Day 1 session per day
0 CEUs

Target Group

- Instructor

Short Description

The SCE (Siemens Cooperates with Education) Program is an overall program designed to educate and equip schools with hardware and software of automation technology. This program provides schools with a recommended training program and materials to ensure that their technical instructors have the necessary level of knowledge to effectively demonstrate the fundamental competencies of an automation technician.

The goal of the SCE Automation Fundamentals Certification is to provide a structured, repeatable method for both training and verifying the ability of an instructor or student to properly implement a Totally Integrated Automation solution while utilizing good engineering and recommended SIMATIC best practices. Certification candidates are first given the materials to build both their automation knowledge and their knowledge of SIMATIC solutions. The candidate is eligible to participate in the certification testing after meeting the training and knowledge requirements. Experiential training and past training will also satisfy the pre-requisites of the certification exam. Passing the (electronic) written sections of the certification exam, offered in 3 distinct parts: PLC, HMI/Networking, and Drives is required to obtain certification. The applicant may take tests independently and achieve certification through each part separately (i.e. "Siemens Certified in Automation Fundamentals: PLCs").

Objectives

- Support creation of a PLC application program using Ladder Logic (LAD) following the SIMATIC recommended best practices
- Troubleshoot errors associated with the automation system
- Troubleshoot functional errors in the application program or equipment under control
- Manage project-related tasks
- Recognize key S7-1200 and TIA Portal features and documentation

Content

- Ability to support the creation of a PLC application program that meets the operational criteria of the customer using the programming languages of Ladder Logic (LAD) and Function Block Diagram (FBD) following the SIMATIC recommended best practices
- Ability to troubleshoot system errors or functional faults within the TIA system or Siemens S7-1200 PLC hardware
- Ability to manage project-related and maintenance-related tasks, such as hardware catalog updates, hardware and firmware version management, user and system libraries, project documentation, intellectual property protection, archive management, and license management in accordance with recommended SIMATIC best practices

Language

English

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