

VASS 6 OEM Workshop for Beginners V17

General Information

Course Code	SCT-VAOILS6OEE
Global Code	CT-VAS6OEE
Length	5 Days
CEUs	NA

Audience

Volkswagen OEM PLC programmers, commissioning engineers or configuration engineers responsible for the maintenance, configuration, commissioning and/or planning of TIA Portal projects using the VASS V06 Standard. TIA Portal is the base platform used; however, the concepts and practices are transferable to other platforms.

Prerequisites

- Proficiency in the use and programming of the S7-1500 CPU as well as programming in the Safety Integrated environment is required.
- The following TIR packages must be known, the students should have worked with it:
- WinCC advanced
- Handling the TIR package
- MS Windows Expertise

Profile

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This virtual, instructor led workshop is for PLC users who will be responsible for the planning, configuration, commissioning and/or maintenance of automation projects and programs using the Volkswagen VASS V06 Standard.

Participants will gain proficiency in the VASS standard with emphasis on the following:

- Installation and configuration of PROFINET and PROFIsafe components
- Gaining familiarity with the PLC program structure for plant control
- Operating the visualization and becoming familiar with the alarm system.

During the virtual sessions, students will learn about building a STEP7 project from the beginning and proper program structure and documenting. Software diagnostic tools will be used for debugging both hardware and code. Various instruction sets, tags, memory areas, program blocks, and libraries will be introduced to provide the student with solid concepts of structured

programming. The workshop format consists of instruction and exercises. Access to fully functional TIA Portal programming software and exercises are provided through a cloud-based application.

Workshop Considerations

Please bring your own notebook to the workshop. The installation of disk drives C and D is required.

- Please install the following programs (version 17) before the workshop:
- SIMATIC STEP 7 Professional (V17)
- SIMATIC STEP 7 Safety Advanced (V17)
- SIMATIC WinCC Advanced (V17)
- SIMATIC Visualization Architect (V17)
- TIA Portal Openness (V17)
- SIMATIC WinCC Runtime Advanced, 8192 Power Tags (V17)
- PLCSIM (V17)
- SINAMICS Startdrive (V17)
- SINAMICS DCC (V17)
- TIA Portal V17

Topics

1. Preparation of the programming device
2. TIA project procedure
3. Preparation of the TIA project
4. Project creation
 - a. General overview
 - b. S7 basic project
 - c. Configuration steps
 - d. PROFINET device names
 - e. Hardware configuration
 - f. Provided data
 - g. Basics of block organization
 - h. Basics of symbols
 - i. Basics of data structures
 - j. Basics of Tags
 - k. Basics of project structure
 - l. Basics of program structure
 - m. ProDiag alarm system
 - n. Programming of sequential programs
 - o. Robots
 - p. Multiple language support
 - q. Function definitions
 - r. Safety programs
 - s. Definition of terms