

CEMAT MinAS Basic Training

OEM: Siemens • Code: ST-CEMAT

COURSE DESCRIPTION

The participants of this online training get familiar with the most important control and supervision functions of CEMAT.

AUDIENCE PROFILE

- Commissioning engineers, configuring engineers
- Service personnel
- Maintenance personnel

PREREQUISITES

- SIMATIC PCS7 project engineering knowledge according to the course ST-PCS7SYS
- Note
- Included in the course price: This course includes a 4-week Learning Membership for our digital learning platform [SITRAIN access](#). With the Learning Membership, you can deepen or repeat the content of this Learning Event as well as continue your education on other interesting topics. As an introduction to the digital learning platform, we recommend the following learning path:
- [SIMATIC PCS 7 - System Training \(Curriculum\)](#)
- Combine your face-to-face course with web-based trainings on our digital learning platform for industry and thus increase your personal learning success in the face-to-face course. On SITRAIN access you will find, for example, basic knowledge of process control technology, PROFIBUS in process automation, PROFINET or data communication with Industrial Ethernet. But also further topics such as an overview of digitization in process automation or an introduction to SIMIT and the Virtual Controller.
- [Click here for more information about SITRAIN access](#)
- CEMAT Version and Project Standard
- Dependent on the customers requirement the Cemat course exists in different characteristics:
- Project Standard 001: Minerals Automation Standard (for Cement and Mining Industry)
- Project Standard 000: Normal Standard (for Cement plants with existing Cemat installations which shall be extended, except Holcim and Lafarge Plants)
- Project Standard 004: Holcim Standard (for Holcim Plants)
- Project Standard 027: Lafarge Standard (for Lafarge Plants)
- If no different requirement exists the CEMAT Course will be carried out with Project Standard 001 "Minerals Automation Standard" and in English language.
- The Learning Membership starts 7 days before the start of the course and ends 14 days after the end of the course. During this period, you have access to all of the more than 480 web-based trainings available.

COURSE OBJECTIVES

By the end of this course, participants will be able to:

- CEMAT is a process control system based on SIMATIC PCS7, which is used in Cement and Mining plants. The CEMAT blocks and faceplates have been developed according to the requirements of the Cement and Mining industry and they are used in cement and mining plants all over the world.
- The participants of this course get familiar with the most important control and supervision functions of CEMAT.
- A function overview explains the operation and diagnostic functions. Based on application examples we teach the functions of the CEMAT Objects and the most important block interfaces.
- With practical exercises the participant learns the engineering rules for the connection of CEMAT blocks and for the parameterisation of the HMI interface. It will also be explained how to create a PCS7 project for CEMAT.

COURSE OUTLINE

Module 1: Content

- Function Overview CEMAT
- Module Structure, Control Philosophy, Diagnostic functions, Control Modes

Library Minerals_Cemat

- Open loop control and closed loop control functions in CEMAT,
 - Connecting the CEMAT Blocks in CFC,
 - Generation of Process Pictures using CEMAT Symbols and Faceplates
- Configuration settings for CEMAT