

## Indirizzamento indiretto con SIMATIC S7-1500 (SIE-VARNT)

### Short Description

Indirect addressing allows an automation program to create versatile software that can be reused on different machines and regardless of physical addressing and structures used. TIA Portal provides, in addition to the classic pointers Pointer and ANY, indirect addresses typical of C ++, such as Variant and Reference. The course enables participants to fully understand the use of arrays, structures and UDTs within the S7-1200 and S7-1500 CPUs. In particular, it is shown how it is possible to use this information with the use of the Variant and Reference pointers.

### Objectives

After attending the course, you can:

- Distinguish the different types of pointers present in the TIA Portal
- Use pointers for simple handling of complex data
- Integrate pointers into your programs to increase the performance of your automation system

### Target Group

Programmers  
Commissioning engineers  
Engineering personnel

### Content

- System architecture
- Definition and declaration of complex data: arrays, structures and UDTs
- Fundamentals of pointers
- Classic pointers: Pointer and ANY
- Variant pointer and its use through dedicated functions
- Reference data type and its use through dedicated functions
- Comparison between Variant and Reference

The theoretical knowledge will be deepened with practical exercises by accessing a remote system. This is made up of:

- SIMATIC S7-1500
- PC station with SIMATIC STEP 7 Professional (TIA Portal)

### Prerequisites

TIA-PRO2 course or equivalent basic knowledge of automation systems.

### Note

**This course delivery data will be decided together with you:** please get in touch to [digitalindustryacademy.rc-it@siemens.com](mailto:digitalindustryacademy.rc-it@siemens.com), tell us your needs and we'll be glad to find a tailored solution for you!

[Submit Training Request](#)

### Type

Online-Training

### Duration

3 hours

### Language

it

### Fee

620 EUR  
Price for semi individual session up to 2 participants

1050 EUR  
Price for session up to 5 participants

1680 EUR  
Price for session up to 10 participants

