

## Learning Journey - Motion Control in TIA Portal 1 (TIA-MC1-LJ)

---

### Breve descripción

---

In this Learning Journey, you will learn to program the motion control functions for single axes integrated in the SIMATIC S7-1500 or S7-1200 controllers using TIA Portal.

### Objetivos

---

You will program the SIMATIC S7-1500 or S7-1200 controllers in the TIA Portal. You will be able to precisely control the motion of axes with the integrated motion control functions.  
In this technology course, you will learn step by step the benefits and the use of these functions. After each learning step, you will deepen your knowledge with hands-on programming.  
After attending the course you will understand the interaction of the technological functions. You will be able to select and configure appropriate technology objects, such as speed axis and positioning axis, and integrate them in your program.

### Dirigido a

---

Programmierer  
Commissioning engineers  
Engineering personnel

### Contenido

---

Basics of motion control  
SpeedAxis technology object  
PositioningAxis technology object  
Homing and traversing movements  
Programming with PLCopen  
Communication and libraries  
Measuring input technology object  
Error messages and diagnostics  
Practical exercises on virtual training devices

### Prerrequisitos

---

Knowledge of programming in the SIMATIC TIA Portal (equivalent to knowledge after completion of the TIA-PRO1 or TIA-SERV2 course)

### Modalidad

---

Jornada de aprendizaje

### Duración

---

20 horas

### Idioma

---

en