

## Online training: Motion Control in TIA-Portal, deel 2 (TIA-MC2)

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### Short Description

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In this course, you will learn to program the motion control functions of the technology controller SIMATIC S7-1500T using TIA Portal. Core topics are gearing, cam discs and Safety Integrated.

[Also available as classroom training](#)

### Objectives

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You can already parameterize the integrated Motion Control functions of the SIMATIC S7-1500 and integrate them into your program. Using the technology CPU, you will extend the applications with absolute synchronous axes and camming. 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 completing the course, you will understand how camming works and be able to efficiently assign parameters for technology objects.

### Target Group

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Programmers  
Commissioning engineers  
Engineering personnel

### Content

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Overview of S7-1500T Technology CPU  
Absolute and relative gearing  
Strategies for synchronization and desynchronization  
Cam disc creation using the graphical cam editor and during runtime  
Closed-loop control and optimization  
Interplay between Motion Control and Safety Integrated  
Cam disc creation using libraries  
Practical exercises on training devices with SIMATIC S7-1500T and SINAMICS drives

### Prerequisites

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Experience with programming motion control objects and functions in SIMATIC TIA Portal corresponding to the course TIA-MC1.

### Type

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Online-Training

### Duration

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2 days

### Language

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