

## Basics of Digitalization in Automation (DI-INTRO)

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### Short Description

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Digitalization is the answer to the most pressing requirements of our time in automation – namely increasingly shorter update cycles of products and technologies, as well as an ever-greater demand for flexibility in production. Discover holistic digitalization concepts of the future and take these ideas and solutions with you so that you can then make well-founded decisions for the future of your company. This course provides an introduction to digitalization in the field of discrete manufacturing and gives you an overview of current trends and which products in the Siemens Digital Industries portfolio will support you in digitization.

### Objectives

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You will have an overview of the latest technical developments in the field of discrete automation. You know the technologies to efficiently exploit the opportunities offered by digitalization in your company. You will be able to evaluate these ideas and solutions and make informed decisions for the future of your business.

### Target Group

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- Decision makers
- Project planners
- Automation engineers
- Sales staff

### Content

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- Standardization as the basis of digitalization
- Continuous Integration – methods and processes to optimize software development while improving the quality of deliverables
- Multiple users working together on a project
- Versioning and automated testing
- Engineering Automation Workflow (TIA Openness, TIA Add-Ins, SiVArc)
- Simulation at machine level (PLCSIM Advanced, SIMIT, NX MCD)
- Simulation at line and plant level (Simcenter/Amesim, Tecnomatix Process Simulate & Plant Simulation)
- Machine connectivity and integration (OPC UA, MQTT, PROFINET TSN, 5G)
- Industrial IoT & IT/OT convergence
- Cybersecurity

### Prerequisites

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- Basic knowledge of automation technology
- Basic knowledge of TIA Portal

### Type

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Face-to-face training

### Duration

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2 days

### Language

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