

# Curriculum and courseware | Courseware availability MPS 400 in Festo LX 1/2 (➤ 160 h learning time)



## Basics of Sensors and Actuators

Get to know the electrical and pneumatic components of the MPS joining Station Pro and put the station into operation.

- Learning time: 15 hours
- Difficulty: Beginner
- Language: English, more
- Category: Factory Automation
- elab course
- Public
- © 2020 all rights reserved to Festo Didactic SE

15 hrs. Learning time,  
available in de/en/es/fr



## Basics of Pneumatics

Get to know the electrical and pneumatic components of the MPS joining Station and put the station into operation.

- Learning time: 18 hours
- Difficulty: Beginner
- Language: English, more
- Category: Factory Automation, Fluid Power
- elab course
- Public
- © 2020 all rights reserved to Festo Didactic SE

18 hrs. Learning time,  
available in de/en/es/fr



## Basics of PLC Programming

Get to know the basic principles of PLC programming using the MPS inline sorting station and commission the station.

- Learning time: 20 hours
- Difficulty: Advanced
- Language: English, more
- Category: Factory Automation
- elab course
- Public
- © 2021 all rights reserved to Festo Didactic SE

20 hrs. learning time,  
available in de/en/es/fr



## Basics of PLC Programming

Check your acquired knowledge. Complete 20 interactive questions on the basics of PLC programming.

- Difficulty: Advanced
- Language: English, more
- Category: Factory Automation
- Evaluation
- Public
- © 2021 all rights reserved to Festo Didactic SE

Evaluation: 1 hr. learning time,  
available in de/en/es/fr



## PLC Programming for intelligent Systems

In this course, you design a modular program structure in accordance with SOA and develop and test simple, reusable modules.

- Learning time: 10 hours
- Difficulty: Expert
- elab course
- Public

10 hrs. learning time,  
available in de/en/es/fr



## From Object Identification to Product Memory with RFID

You will become familiar with RFID as a form of object identification. Program the RFID system in the MPS Distributing Station Pro and evaluate the RFID systems in product automation.

- Learning time: 12 hours
- Difficulty: Intermediate
- Language: English, more
- elab course
- Public
- © 2021 all rights reserved to Festo Didactic SE

12 hrs. learning time,  
available in de/en/es/fr



## Plant Visualization with HMI

In this course you will learn the basics of the structure and function of an HMI. In numerous practical exercises, you will learn how to integrate and parameterize various visual control elements and objects in a user interface. Based on this, you will integrate sensors and actuators of the MPS 400 Distributing Pro into the project engineering.

- Learning time: 14 hours
- Difficulty: Intermediate
- Language: English, more
- Category: Factory Automation, IoT and Industry 4.0
- elab course
- Public
- © 2021 all rights reserved to Festo Didactic SE

14 hrs. learning time,  
available in de/en/es/fr



## Evaluation - Basics of Plant Visualization with HMI

Check your acquired knowledge. Complete 20 interactive tasks on the basis of plant visualization with HMI.

- Schwierigkeit: Mittelstufe
- Sprache: Englisch, mehr
- Kategorien: Fabrikautomatisierung, IoT und Industrie 4.0
- Lernzeitpunkt: Öffentlich
- © 2021 alle Rechte sind der Festo Didactic SE vorbehalten

Evaluation: 1 hr. learning time,  
available in de/en/es/fr



## Plant Control and Commissioning (MES)

In this course you will learn the basics of production planning and control. In particular, you will get to know one system: the Manufacturing Execution System - MES for short. In numerous practical tasks, you will work on the basis of production planning and control using the example of MES in the MPS system.

- Learning time: 6 hours
- Difficulty: Intermediate
- Language: English, more
- Category: Factory Automation
- elab course
- Public
- © 2021 all rights reserved to Festo Didactic SE

6 hrs. learning time,  
available in de/en/es/fr



## Grundlagen des MES

Diese Lernerkontrolle gibt Ihnen die Möglichkeit, Ihr erworbenes Wissen zum folgenden Thema zu überprüfen: Grundlagen des MES.

- Difficulty: Intermediate
- Language: Deutsch
- Category: Factory Automation
- Evaluation
- Public
- © 2021 all rights reserved to Festo Didactic SE

Evaluation: 1 hr. learning time,  
available in de,  
coming soon in en/es/fr



## Quick Start – MES

The Manufacturing Execution System (MES) is a subsection of the production management system – a level close to the process that is responsible for production management.

- Learning time: 2 hours
- Difficulty: Intermediate
- Language: English, more
- Category: Factory Automation
- User Guide
- Public
- © 2021 all rights reserved to Festo Didactic SE

2 hrs. learning time,  
available in de/en/es/fr



## Energy Efficiency in Production

Learn the basics of energy efficiency and optimization strategies for a technical system.

- Learning time: 9 hours
- Difficulty: Intermediate
- Language: English, more
- Category: IoT and Industry 4.0
- elab course
- Public
- © 2021 all rights reserved to Festo Didactic SE

9 hrs. learning time,  
available in de/en/es/fr

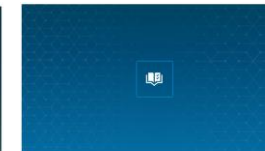


## Evaluation - Basics of Energy Efficiency

Check your acquired knowledge. Complete 20 interactive tasks on the basis of energy efficiency.

- Difficulty: Intermediate
- Language: English, more
- Category: IoT and Industry 4.0
- Evaluation
- Public
- © 2021 all rights reserved to Festo Didactic SE

Evaluation: 1 hr. learning time,  
available in de/en/es/fr



## Commissioning Energy Efficiency Package

In this tutorial, you will learn how to commission the Energy Efficiency package on the MPS 400.

- Learning time: 2 Stunden
- Schwierigkeit: Mittelstufe
- Sprache: Englisch, mehr
- Kategorie: IoT und Industrie 4.0
- Benutzerhandbuch
- Öffentlich
- © 2021 alle Rechte sind der Festo Didactic SE vorbehalten

2 hrs. learning time,  
available in de/en/es/fr



## Integration of the Vacuum Generator

In this tutorial, you will learn how to integrate the vacuum generator into the MPS 400 joining system module.

- Learning time: 15 Minuten
- Schwierigkeit: Mittelstufe
- Sprache: Englisch, mehr
- Kategorie: IoT und Industrie 4.0
- Benutzerhandbuch
- Öffentlich
- © 2021 alle Rechte sind der Festo Didactic SE vorbehalten

15 min learning time,  
available in de/en/es/fr



## Integration of the Air-Saving Circuit

In this tutorial, you will learn how to integrate the air-saving circuit into the MPS 400 joining system module.

- Learning time: 15 Minuten
- Schwierigkeit: Mittelstufe
- Sprache: Englisch, mehr
- Kategorie: IoT und Industrie 4.0
- Benutzerhandbuch
- Öffentlich
- © 2021 alle Rechte sind der Festo Didactic SE vorbehalten

15 min learning time,  
available in de/en/es/fr

# Curriculum and courseware | Courseware availability MPS 400 in Festo LX 2/2 (➤ 160 h learning time)



## Smart Sensors for Smart Systems

In this course, you will learn the fundamentals of smart sensors and how the advantages of these sensors can be used.

- Learning time: 11 hours
- Difficulty: Intermediate
- Language: English, more
- Category: Factory Automation
- elab course
- Public
- 2021 all rights reserved to Festo Didactic SE

11 hrs. learning time,  
available in de/en/es/fr



## Smart Sensors for Smart Systems

This evaluation gives you the opportunity to measure your knowledge on the following topic: Smart Sensors for Smart Systems

- Difficulty: Intermediate
- Language: English, more
- Category: IIoT and Industry 4.0
- Evaluation
- Public
- 2021 all rights reserved to Festo Didactic SE

Evaluation: 1 hr.  
learning time,  
available in de/en/es/fr



## Smart Sensor – First Steps

In this tutorial, you will learn how to commission smart sensors using an MPI station as an example.

- Learning time: 2 hours
- Difficulty: Intermediate
- Language: English, more
- Category: Factory Automation
- User Guide
- Public
- 2021 all rights reserved to Festo Didactic SE

2 hrs. learning time,  
available in de/en/es/fr



## Introduction to Industry 4.0

Learn more about the core technologies and development of the 4th industrial revolution and how these changes are impacting our personal and professional lives.

- Learning time: 2 hours
- Difficulty: Beginner
- Language: English, more
- elab course
- Public
- 2021 all rights reserved to Festo

2 hrs. learning time,  
available in de/en/es/fr



## Industrial Communication with PROFINET

This course teaches you the basics and how to use the PROFINET industrial communication standard.

- Lernzeit: 5 Stunden
- Schwierigkeits: Mittelstufe
- Sprache: Englisch, mehr
- Kategorie: IIoT und Industrie 4.0
- elab-Kurs
- Öffentlich
- 2021 alle Rechte sind der Festo Didactic SE vorbehalten

5 hrs. learning time,  
available in de/en/es/fr



## Industrial Communication with OPC-UA

This course teaches you the basics and setup of OPC-UA communication in an industrial environment.

- Learning time: 4 hours
- Difficulty: Intermediate
- Language: English, more
- Category: IIoT and Industry 4.0
- elab course
- Public
- 2021 all rights reserved to Festo Didactic SE

4 hrs. learning time,  
available in de/en/es/fr



## Autonomous Mobile Robotics with Robotino 4

In this course, you will learn about the functions and features of the Robotino 4 mobile robots and how to use them.

- Learning time: 26 hours
- Difficulty: Beginner
- Language: English, more
- Category: Factory Automation
- elab course
- Public
- 2021 all rights reserved to Festo Didactic SE

26 hrs. learning time,  
available in de/en/es/ fr/zh



## IT-Security for Production Systems

This course provides a hands-on approach to Ethernet technology and secure communication based on an industrial Siemens router and switch.

- Learning time: 6 hours
- Difficulty: Advanced
- Language: English
- Category: IIoT and Industry 4.0
- elab course
- Public
- 2022 all rights reserved to Festo Didactic SE

6 hrs. learning time,  
available in en

...