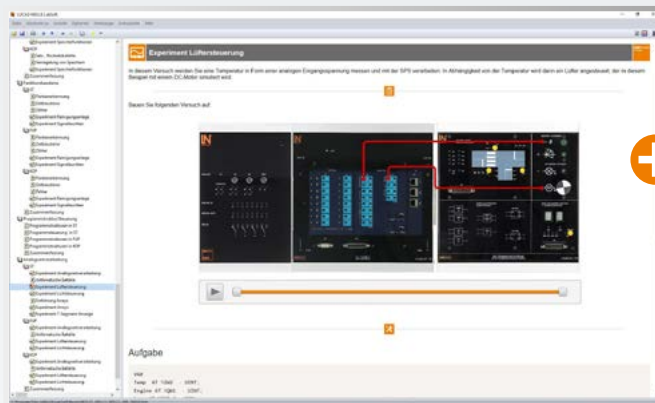


# PLC PROGRAMMING MADE EASY

# FUNDAMENTALS OF PLC PROGRAMMING



- + • Programming to IEC standards using structured text (ST), function block diagrams (FBD), and ladder diagrams (LD)
- Multimedia course



+ With application board



+ PLC trainer

Programming of programmable logic control systems was already of key importance long before the introduction of the smart factory. Such programming forms the very basis of automation. The contents and object of this set serve to introduce students to this topic, its applications and the design of new projects

## Training contents

- Basic principles and terminology for PLCs
- Logic operations, memory functions, timer and counter functions, signal edge detection, control of program sequence, processing of analog values
- Project planning and programming with CODESYS
- Project planning of an automation system
- Programming to IEC 1131 using structured text (ST), function block diagrams (FBD) or ladder diagrams (LD)
- Basic operations in ST, FBD and LD
- Combination of basic operations
- Memory chips and function blocks
- Program structures
- Processing of analog values
- Sequential process controls
- Project planning for digital technology, traffic light control, processing of analog values, 7-segment displays

## Technical data for PLC trainer

- CPU with PLC functionality
- 32 digital inputs and outputs with 8 fault simulation switches and status LEDs
- 8 analog inputs, 4 x 0-10 V and 4 x 4-20 mA
- 4 analog outputs, 2 x 0-10 V and 2 x 4-20 mA
- 1 Analog potentiometer, 0-10 V
- 1 Analog potentiometer, 4-20 mA
- LAN switch with three ports
- D-Sub sockets for connection of applications such as IMS stations

## Projects

- Digital technology
- Traffic light control
- Motor control
- Light control
- 7-segment displays



7 | SUCCESS

6 | WORK



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