



## Target Group

Hands-on training for individuals from the commissioning, maintenance, and service departments. Basic knowledge of industrial automation is recommended.

## Training Objectives

- Understand the basics of CAN technology and its areas of applications
- Learn the planning, installation, acceptance, and maintenance of CAN systems
- Be able to use diagnostic tools effectively
- Carry out quality assurance and troubleshooting in CAN networks

## Contents of the Course

### 1. General Principles of CANBUS protocol (layers 1 and 2)

- Principles of High-frequency data communication
- Physical Data Transfer CAN (ISA/OSI layer 1)
- Logical Data Transfer CAN (ISO/OSI layer 2a)
- CANopen (ISO/OSI layer 2b and higher)
- DeviceNet (ISO/OSI layer 2b and higher)

### 2. Metrological Quality Determination/Troubleshooting

- Determining the physical signal-to-interference ratio
- Acceptance and test criteria
- Determining the communication parameters
- Typical error patterns, troubleshooting and fault rectification in CAN networks
- Measuring and test equipment for problem analysis and fault location
- Physical and logical measuring principle of measuring devices
- Evaluating and analyzing measured data
- Creation of diagnostic and maintenance reports
- Practical application

## Troubleshooting Tools Used for Training

- CANBUSview
- EMCheck® clamps – LSMZ I, MWMZ II, ISMZ I

To register for this course or for other training inquiries please email us at [sales@indusolamerica.com](mailto:sales@indusolamerica.com).