THE CAN BUS
Available in-person or remotely (Distance learning)

Type	Reference	Duration	Price HT
INTER	1.01.03.0001	2 days (14 h)	1390 €
INTRA	2.01.03.0001	2 days (14 h)	3980 €*

* flat rate for up to 6 participants

TRAINING DESCRIPTION
With over 20 years of experience in the CAN field, ISIT offers a training course based on the theory of the CAN protocol, hardware, and associated protocol layers to help you understand and quickly implement the CAN (Controller Area Network) fieldbus.

LEARNING OBJECTIVES
At the end of the training, the participant will be able to:
- ▶ Understand the fundamentals of the CAN bus and draw analogies between the CAN bus and application layers using the OSI model
- ▶ Understand the structure of CAN frames (2.0A, 2.0B, FD)
- ▶ Grasp the implementation of CAN networks/devices
- ▶ Understand the integration with application layers (standardized or proprietary)

PROGRAM
- ▶ **Introduction to CAN Bus**
- ▶ **CAN protocol (ISO 11898-1)**
  - CAN 2.0A
    - Frame structure
    - Stuffing / arbitration mechanism
    - Errors
    - Bus speed (Bit Timing)
  - CAN 2.0B - Differences
  - CAN FD - Evolutions
- ▶ **Physical Layers (LS/HS/FD)**
  - Topologies
  - Medias
  - Physical signals
- ▶ **CAN Components**
  - Controllers
  - Transceivers
- ▶ **Application Layer protocols**
  - CANopen
  - DeviceNet
  - J1939
  - ISO-TP

USEFUL INFORMATION

Target Audience
This course is intended for project managers, engineers, and technicians who may be required to initiate, supervise, or contribute to the development of CAN-based applications, as well as individuals involved in the management and operation of systems based on CAN networks.

Prerequisites
Basic knowledge of fieldbus networks and industrial computing.

Teaching, Technical and Supervisory Resources
A digital training manual is provided to each participant. The session's teaching plan outlines the methods used.

Trainee Monitoring Methods
Entry questionnaire, mid-course quiz, final questionnaire, and a satisfaction survey.

Access Timeframe
Groups are organized based on demand, with a maximum lead time of 4 weeks before the session starts.

Disability Accessibility
Our training offer is accessible to all. If you have a disability that requires specific accommodations, you may contact our Disability Coordinator at:
Phone: +33 5 61 30 69 00
Email: formation@isit.fr
Multiple training formats are available — please contact us.

Several training formats available, please contact

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ISIT est agréée centre de formation professionnelle sous le numéro d'enregistrement : 73 31 04675 31
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