

CANoe Workshops

Get to know the Development and Testing Tool for ECUs and Networks

CANoe Fundamentals Workshop

Duration: 1-5 Days

Prerequisites: none

Content:

In this workshop you will acquire a fundamental understanding of CANoe as a development environment for CAN projects. First the fundamentals of the CAN protocol are covered. Then you will learn how to operate CANoe as a measurement and analysis tool and for remaining bus simulation based on practical examples. You will use CAPL and special DLLs to create your own program node and the Panel Designer to create a graphic user interface window for emulating ECUs. In the last module, you will apply your acquired knowledge by conducting extensive measurements, remaining bus simulations and analyzes on real automotive networks.

Modules:

- > CAN Fundamentals | 1 Day
- > Introduction to CANoe | 3 Days
- > CANoe in Practice | 1 Day

CANoe.Ethernet

Duration: 1-3 Days

Prerequisites: Basic understanding of serial data transmission and of CANoe/CANalyzer

Content:

This workshop gives you a fundamental knowledge of Ethernet and IP based communication in motor vehicles. Additionally you will get an overview of relevant protocols and their application areas. In practical exercises you will measure, analyze and simulate with CANoe/CANalyzer. Ethernet. These exercises focus on the extended functions of Ethernet and IP based communication and therefore require basic knowledge of CANoe/CANalyzer.

Modules:

- > Ethernet and IP Fundamentals | 1 Day
- > Introduction to CANoe/CANalyzer for Ethernet and IP | 1 Day
- > Application oriented Protocols in CANoe for Ethernet and IP | 1 Day

CANoe.FlexRay Workshop

Duration: 1-4 Days

Prerequisites: none

Content:

FlexRay in theory and practice: This workshop teaches you the fundamentals of the time-triggered bus system FlexRay. You will also learn about the goals and potential uses of FlexRay as well as the basic principles and technical terms of the protocol. Using the Vector tool CANoe/CANalyzer.FlexRay you will work on a real cluster and conduct measurements, evaluations and simulations. Practical work using a test ECU round out this workshop.

Modules:

- > FlexRay Fundamentals | 1 Day
- > Introduction to CANoe/CANalyzer.FlexRay | 1 Day
- > Introduction to CANoe Models for FlexRay | 1 Day
- > CANoe.FlexRay in Practice | 1 Day

CANoe.LIN Workshop

> Duration: 1-3 Days

> Prerequisites: none

Content:

In this workshop you will learn the theoretical fundamentals of the LIN bus, as well as handling of CANoe/CANalyzer.LIN in the analysis and simulation of LIN networks. The first module is concerned with all the aspects of LIN specification LIN2.1. In the second module you become familiar with the CANoe/CANalyzer.LIN tools and deepen your theoretical knowledge in extensive exercises with real hardware. In Module 3 we teach you how to use the integrated CAPL language to simulate, analyze and disturb the bus in specific ways. Furthermore, the LIN Conformance Test that is integrated in the tool is presented.

Modules:

- > LIN Fundamentals | 1 Day
- > Introduction to CANoe/CANalyzer.LIN | 1 Day
- > Extended Functionalities of CANoe.LIN | 1 Day

CANoe.J1939 Workshop

- > Duration: 1-2 Days
- > Prerequisites: none

Content:

This Workshop will provide you with comprehensive basic knowledge of the J1939 protocol. The first module will focus on the correct usage of the SAE J1939 documents and introduce protocol-specific expressions and properties. The second module teaches you by means of practical examples how to use the analysis and simulation tool CANoe/CANalyzer in J1939 based networks. Main aspects are the simulation of ECUs and testing conformity to the standard.

Modules:

- > SAE J1939 Fundamentals | 1 Day
- > Introduction to CANalyzer/CANoe.J1939 | 1 Day

CANoe.ISO11783 Workshop

- > Duration: 1-2 Days
- > Prerequisites: none

Content:

This Workshop provides you with solid basic knowledge of ISO11783 (ISOBUS) systems. In the first module not only pure communication aspects are addressed, but also the most important device profiles are presented such as: Tractor ECU, Virtual Terminal and Task Controller. The second module teaches you by means of practical examples the extended functionality of CANoe.J1939 and CANoe.ISO11783. Additionally you will get an overview of typical ISO11783 application cases that can be realized with CANoe.

Modules:

- > ISO11783 Fundamentals | 1 Day
- > Introduction to CANoe.ISO11783 | 1 Day

CANoe Diagnostics Workshops

- Duration: 1 Day
- Prerequisites: none

Content:

First the workshop provides you with a fundamental knowledge of diagnostics. Afterwards you learn about the many different uses of CANoe and CANalyzer as a diagnostic tool. The use of basic diagnostics is explained as well as the use of a diagnostic description file. Additionally this knowledge is reinforced by practical exercises. Another focus is the use of CAPL programs and the development of corresponding panels for diagnostic applications.

ECU Tests with CANoe Workshop

- Duration: 2 Days
- Prerequisites: none

Content:

During this workshop you will gain an extensive knowledge of CANoe as test environment. During numerous exercises you will create sequential CAPL test procedures. You will use diagnostic communication in the test procedure according to KWP2000 and UDS.

ECU Tests with vTESTstudio Workshop

- Duration: 2 Days
- Prerequisites: none

Content:

You will realize test projects with vTESTstudio and its integrated test design editors. A focus will be the project organization and test efficiency.

ECU Tests with the VT System Workshop

- Duration: 2 Days
- Prerequisites: none

Content:

During this training you will plan and realize a VT System that is then used in automated tests with a VC121 ECU.

Dates and Prices

You can find scheduled dates and available places on our website. Irrespective of these planned dates it is always possible to arrange an individual training at your company site – please contact us.

Our prices are dependent on the training and the number of booked modules. You can compose your individual training on our website and will receive the price according to your choices.

Registration and Information

You can register online, via E-mail, Fax or regular mail. Registrations are accepted in the order in which they are received. If your reservation has been made successfully, we will return a confirmation of your registration.

If you have any questions or wish to register by phone, please contact Ms. Heller or Ms. Witulski:

- > Phone: +49 711 80670-5770
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Our website always offers the latest information on workshops, contents and scheduled dates.

www.vector-academy.com