

CANape

Agenda VectorAcademy

Delivery Format:	This Course is offered in Classroom or Remote Format
Duration:	21 hours
Target Group:	CAN users and developers
Prerequisites:	Basic knowledge of CAN protocol, basic programming knowledge
Goal:	Usage of CANape as MCD tool for ECU optimization

Evaluation:

Validation of learning based on a vehicle educational project.

Pedagogical, technical and supervisory resources:

Course material is sent to each trainee. A link will be sent to each participant to install the CANape software and use hardware interface USB HW. The training will be carried out in adapted rooms.

Competence of the trainer: 15 years of experience in training related to embedded developments, network architectures.

Method of follow-up of the trainee:

A sign-off sheet must be validated by the trainee. A first satisfaction questionnaire is planned at the end of the training.

1. Introduction to the measurement technique in CANape

- > General information about the measuring techniques available in CANape
- > Comparison of CAN-Monitoring versus measuring data using the XCP protocol
- > XCP Fundamentals – Synchronous Data Transfer Concept
- > Discussion of performance of XCP

2. Measuring with CANape

- > Introduction to the CANape project structure
- > Introduction to the device configuration
- > Creating a new measurement configuration
- > Configuring different types of display windows
- > Measurement analysis
- > Configuring of the recorders / Logging of measurement data

3. Setting up a new project from scratch

- > Creating a new CANape project (canape.ini versus CNA-File)
- > Setting up new devices / description files
- > Configuring the Vector Hardware Interfaces / VNxx

4. Offline evaluation of measurement data / Data Mining

- > Loading measurement files to display recorded measurement signals
- > Comparison of measurement data from different measurement files
- > Data Mining Concept (Automated analysis of large data sets)
- > Using functions for offline evaluation

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- > Using functions for online measurement

5. Calibrating the ECU

- > Calibration concepts
- > Usage of calibration window
- > Data Management of parameter sets
- > Comparison of parameter sets using vCDMstudio

6. Panels in the MCD Environment

- > Creating and using
- > Visualization of measurement and calibration objects
- > Starting scripts

7. Diagnostic Feature Set

- > Short introduction to the basics of diagnostics and CANdelaStudio
- > Fault memory window and diagnostics window
- > Executing diagnostic services via scripts

8. Functions versus scripts

- > Introduction to the function editor
- > Introduction to the programming language CASL
- > Creating and calling scripts