

Certified PREEvision Modeler

Agenda VectorAcademy

Delivery Format:	This Course is offered in Classroom or in Blended Learning Format
Duration:	Classroom: 7 days Blended: 46 hours of remote sessions (6 hours of exam included). Additionally, some of the content will be learned via E-Learning.
Target Group:	PREEvision Application Engineers
Prerequisites:	Understanding of vehicle or component development; basic AUTOSAR knowledge; strong competence in self paced learning (Aprox. Same amount of time is needed for the self-study phase as for the practice part)
Goal:	Certification "Certified PREEvision Modeler"

1. Concepts of PREEvision

- > PREEvision as a product for the whole architecture management
- > Development process
- > Layer model

2. Introduction to PREEvision

- > Usability aspects
- > Windows and diagrams
- > Filtering
- > Perspective configuration

3. PREEvision in Multiuser Mode

- > Lock/Commit
- > Versioning by check-in/check-out
- > Branching
- > 3-tier architecture
- > Reuse concepts
- > Working head model based
- > Change history

4. Requirements Layer and Customer Feature Layer

- > Customer Features and Requirements
- > Tables
- > Table templates
- > Link Requirements and Customer Features
- > Attribute concept

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5. Logical Architecture Layer

- > Logical components
- > Type-Instance concept
- > Ports, Port Interfaces and Data Elements
- > Activity Chains

6. Software Components Layer

- > Kinds of software components
- > Type-Prototype-Instance concept
- > Port/Assembly
- > Data types
- > Usage of the library

7. SOA and Ethernet

- > Service Design in PREvision
- > Network Topology Definition
- > VLAN and MAC Definition (OSI Layer 2)
- > ECU Communication Specification (OSI Layer 3..7)
- > Service Deployment
- > Ethernet Socket Adapter

8. The Layers Network Topology and Component Architecture

- > Components and bus systems
- > Connection and bus types
- > Using types
- > Switched Ethernet networks

9. Signal Routing and Communication

- > Create and edit mappings
- > Configuration of the signal router
- > Visualize the router's results
- > Layout of PDUs and frames
- > PREvision communication model
- > Import and export

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10. The Layers Electric Circuit and Wiring Harness

- > Synthesis functionality
- > Electric circuit artifacts
- > Wiring harness artifacts
- > Families
- > Header details

11. The Layer Geometrical Topology

- > Geometrical topology artifacts
- > Diagrams with connector layout
- > Layer perspective
- > Mapping
- > Visualizing headers
- > Editor references

12. The Wiring Harness Router

- > Configuration of the router
- > Visualize the router's results

13. Product Lines and Variants

- > Artifacts for structuring like alternatives, systems and sets
- > Feature based approach
- > Concept based approach
- > Conditions
- > Approaches to manage variants
- > Propagation
- > Assets
- > Usage of product lines

14. Exam

- > Theoretical exam
- > Practical exam