multisoft
Systems

PCAN (Peak CAN) Training

COURSE CONTENT

GET IN TOUCH

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About Multisoft

Train yourself with the best and develop valuable in-demand skills with Multisoft Systems. A leading certification training provider, Multisoft collaborates with top technologies to bring world-class one-on-one and certification trainings. With the goal to empower professionals and business across the globe, we offer more than 1500 training courses, which are delivered by Multisoft's global subject matter experts. We offer tailored corporate training; project Based Training, comprehensive learning solution with lifetime e-learning access, after training support and globally recognized training certificates.

About Course

The PCAN (Peak CAN) training by Multisoft Systems is designed to provide a comprehensive understanding of the Controller Area Network (CAN) protocol, widely used in automotive and embedded systems for efficient and reliable data communication.

Module 1: Introduction to CAN and PCAN Basics

- ✓ Overview of Controller Area Network (CAN) Protocol
  - History and Development
  - Application Areas (Automotive, Industrial Automation, etc.)
- ✓ Introduction to PCAN Tools and Interfaces
  - PCAN-USB, PCAN-PCI, and other Hardware Interfaces
  - PCAN-View Software Overview

Module 2: Understanding the CAN Bus Architecture

- ✓ CAN Network Architecture
- ✓ CAN Communication Model
- ✓ Message Frames and Data Transmission
  - Standard and Extended CAN Frames
  - Bit Timing and Synchronization

Module 3: PCAN-View Software

- ✓ PCAN-View Installation and Setup
- ✓ Configuring PCAN-USB and Other Devices
- ✓ Data Logging and Real-Time Monitoring of CAN Messages
- ✓ Bus Load Monitoring and Error Detection

Module 4: Advanced PCAN Tools and Configuration

- ✓ Configuring CAN Filters and Message Masks
- ✓ Using PCAN-Explorer for Data Analysis
- ✓ Scripting and Automation with PCAN-Basic API

- Writing and Executing Simple Scripts
- Exporting and Importing CAN Data

Module 5: Fault Diagnosis and Troubleshooting

- ✓ Analyzing CAN Bus Errors
  - Error Frames, Overload Frames, and Bus Off Conditions
- ✓ PCAN Diagnostic Tools and Error Recovery Techniques
- ✓ Troubleshooting CAN Networks using PCAN-View and PCAN-Explorer

Module 6: Integrating PCAN with Other Systems

- ✓ PCAN and Third-Party Software Integration
- ✓ Using PCAN with Data Acquisition Systems
- ✓ Network Simulation and Testing with PCAN-Explorer

Module 7: Practical Session: CAN Bus Network Setup and Testing

- ✓ Setting up a Simple CAN Bus Network using PCAN Hardware
- ✓ Monitoring CAN Messages in Real-Time
- ✓ Simulating Fault Conditions and Analyzing Responses
- ✓ Configuring Message Filters and Identifying Bus Errors

Module 8: Advanced CAN Topics

- ✓ Understanding CANopen and J1939 Protocols (Optional)
- ✓ Introduction to CAN FD (Flexible Data Rate)
- ✓ PCAN Tools for CAN FD
- ✓ Real-Time Data Analysis with PCAN