Course Outline: CAN Troubleshooting

S1 – Intro to Networks & CAN
- S1L1 – Intro to CAN
- S1L2 – CAN Benefits
- S1L3 – Notation
- S1L4 – Topology
- S1L5 – Typical System

S2 – Intro Standards & Layers
- S2L1 – Standards & Layers Intro
- S2L2 – Layers in Details
- S2L3 – Application Layer

S3 – CAN Wiring Overview
- S3L1 – Intro to Standards & Layers
- S3L2 – J1939 Physical Layer
- S3L3 – Bus Termination
- S3L4 – Tool Location
- S3L5 – Deviating from Standards
- S3L6 – Data Link Layer

S4 – CAN System Diagrams
- S4L1 – Intro to System Diagrams
- S4L2 – Harness Analysis
- S4L3 – Schematics Refactoring

S5 – CAN Electrical Overview
- S5L1 – Intro to CAN Electrical
- S5L2 – Resistance Refresher
- S5L3 – Bus Resistance
- S5L4 – Line Continuity
- S5L5 – Node Resistance Check
- S5L6 – CAN Line Voltage
- S5L7 – Oscilloscope & CAN Signals

S6 – CAN Faults
- S6L1 – Intro to CAN Faults
- S6L2 – Root Causes
- S6L3 – Wiring Failures
- S6L4 – Node Design Issues
- S6L5 – Node Check
- S6L6 – Other causes

S7 – Wiring Diagnostic
- S7L1 – Wiring Diag Intro
- S7L2 – Termination Check Flow
- S7L3-5 – Scenarios

S8 – Advanced Diagnostics
- S8L1 – Advanced Diagnostics Intro
- S8L2 – Node Presence
- S8L3 – Component Bench Test
- S8L4 – Intermittent faults & Error Frames