

#### [An ISO 9001:2008 Certified Company]

# GET TRAINED BECOME EXPERT AND GET PLACED

### **100% JOB ORIENTED ADVANCE EMBEDDED COURSES**



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## **ABOUT US**

TechnoScripts is an ISO 9001:2015 certified best training institute for advance courses in Embedded System. We are pioneer of Embedded System training in Pune development. Though we provide many different courses and training in embedded all aim at giving good practical knowledge to students as well help them in career

### **OUR FEATURES**



STUDY MATERIAL



ISO 9001:2015 CERTIFIED



100% PLACEMENT SUPPORT



COURSE COMPLETION CERTIFICATE



INTERVIEW PREPERATION



**LIVE PROJECTS** 



STATE OF THE ART LABS



LEARN ONLINE / CLASSROOM

### **OUR COURSES**



## **COURSE SYLLABUS : AUTOSAR TRAINING COURSE**

#### Module 1: Fundamentals of Automotive Systems

- Understand the automotive product development life cycle, including stages from concept to deployment and maintenance.
- Learn the basics of the automotive domain, covering key components, systems, and industry structure.
- Explore automotive embedded system design, including the integration of hardware and software for vehicle control units.

#### Module 2: Automotive Architecture and Design

- Study the different types of frames used in automotive communication, such as standard and extended CAN frames.
- Learn the building blocks of automotive product design, including ECUs, sensors, actuators, and software modules.
- Understand automotive functional safety concepts and their importance in critical vehicle systems.

#### Module 3: Automotive Safety Standards and Validation

- Get introduced to ISO 61508 and ISO 26262 safety standards, which ensure safe automotive electronics development.
- Learn the basics of testing and validation methods used in the automotive industry to ensure system reliability.
- Understand how safety and compliance are addressed throughout the development lifecycle.

#### Module 4: Introduction to AUTOSAR

- Gain a foundation in AUTOSAR architecture, its purpose, and its role in modern automotive software development.
- Learn the advantages of using AUTOSAR, such as standardization, modularity, and reusability.
- Explore the methodology used in AUTOSAR, including layered development and model-based approaches.

#### Module 5: AUTOSAR Data Formats and Architecture

- Understand the data exchange formats in AUTOSAR like ECU Extract, ECUC, and System Description files.
- Explore the detailed AUTOSAR layered architecture, from application to hardware abstraction.
- Learn about the various layers of AUTOSAR, including Application, RTE, and BSW.

#### Module 6: AUTOSAR Software Infrastructure

- Get introduced to key AUTOSAR concepts such as BSW (Basic Software), RTE (Runtime Environment), and SWC (Software Components).
- Study the AUTOSAR BSW layer, its structure, and how it supports hardware interaction and services.
- Learn the design and development of BSW modules, including configuration using AUTOSAR-compliant tools.

#### Module 7: AUTOSAR Application and RTE Layer

- Understand the functionality of the AUTOSAR RTE, which facilitates communication between software components.
- Learn the basics of Software Components (SWCs), including Runnables, Interfaces, and Ports.
- Study the design and configuration of SWCs, enabling modular and scalable application development.

#### Module 8: AUTOSAR Communication Stack

- Explore the communication stack used in AUTOSAR, covering protocols such as CAN, LIN, and FlexRay.
- Understand the data flow between the layers of the communication stack, from the application down to the physical layer.
- Learn the configuration of communication modules like MCU, COM, CANTP, CAN, and CANIF for effective communication setup.

## **PLACEMENTS**

We provide 100% placement support to every student enrolled for Job oriented courses. We invite top companies for campus interview at our centre as well arrange the interviews for students at company premises.

## **OUR ALUMNIES ARE PLACED AT**





SCAN & GET A GLIMPSE. Our placed students.