TechnoScripts

[An ISO 9001:2008 Certified Company]

GET TRAINED

BECOME EXPERT AND GET PLACED

100% JOB ORIENTED ADVANCE EMBEDDED COURSES

SCAN & CONNECT

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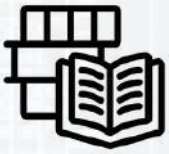
ABOUT US

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

Advance Career Track | Automotive Embedded | PG Diploma in Embedded | MATLAB Simulink | MBD Training | IOT Training | Autosar Training

LIVE PROJECTS | INTERVIEW PREPERATION | MOCK INTERVIEWS

CONTACT US FOR DEMO NOW

COURSE SYLLABUS : MATLAB TRAINING COURSE IN PUNE

Module 1: Introduction to Embedded Systems and Model-Based Design

- *Learn what embedded systems are, including their structure, purpose, and role in real-world applications.*
- *Understand how Model-Based Design (MBD) has evolved as a methodology for designing complex embedded systems.*
- *Explore the key benefits and limitations of using MBD, especially in industries like automotive and aerospace.*
- *Get a basic overview of MATLAB and Simulink, the primary tools used for model-based development.*

Module 2: Fundamentals of Model-Based Design

- *Understand core modeling and simulation concepts, including how digital models represent real systems.*
- *Get introduced to the Simulink environment, its components, libraries, and how to navigate its workspace.*
- *Learn to build simple system models and run simulations to analyze performance and behavior.*
- *Discover methods for verifying and validating models to ensure accuracy and reliability.*

Module 3: Modeling Dynamic Systems

- *Learn what dynamic systems are and how their behavior changes over time.*
- *Understand how to model both continuous-time and discrete-time systems using mathematical tools.*
- *Apply differential equations within Simulink to simulate complex system behavior.*
- *Practice running simulations to visualize and analyze how systems evolve dynamically.*

Module 4: Control System Design

- *Get introduced to the principles of control systems, including feedback loops and system response.*
- *Learn how to represent systems using transfer functions and state-space models.*
- *Design and implement controllers such as PID in Simulink to control system output.*
- *Simulate closed-loop systems to test controller performance and system stability.*

Module 5: Code Generation and Deployment

- *Understand how embedded code can be automatically generated from Simulink models for deployment.*
- *Learn to convert models into C code using built-in tools and check for compatibility with hardware.*
- *Explore how to integrate generated code with real-time operating systems for time-sensitive applications.*
- *Perform Hardware-in-the-Loop (HIL) testing to validate your model in a near-real environment.*

Module 6: Advanced Topics in Model-Based Design

- *Work with multi-domain simulation involving mechanical, electrical, and control systems.*
- *Analyze and optimize model performance to make simulations more efficient and reliable.*
- *Learn how to connect Simulink with external software and hardware platforms for extended functionality.*
- *Understand how to manage complex, large-scale models involving multiple components and subsystems.*

Module 7: Case Studies and Real-World Applications

- *Study the use of MBD in developing automotive systems such as ECUs and ABS controllers.*
- *Explore aerospace applications like flight control and navigation systems designed using Simulink.*
- *Understand how robotics and industrial automation benefit from MBD workflows.*
- *See how IoT devices are modeled and tested using embedded MBD techniques.*

Module 8: Project Work and Hands-On Labs

- *Engage in practical exercises and projects to apply your knowledge in real development scenarios.*
- *Design and simulate embedded systems from scratch using Simulink and hardware integration.*
- *Implement control algorithms and test them in virtual and hardware environments.*
- *Use industry-standard hardware platforms to bring simulations to life with real-world interaction.*

Module 9: Best Practices and Industry Standards

- *Learn the importance of maintaining good documentation and using version control in model development.*
- *Understand how the Software Development Lifecycle (SDLC) applies to embedded systems.*
- *Get familiar with regulatory standards like ISO 26262 and DO-178C used in safety-critical industries.*

Module 10: Career Development and Networking

- *Learn how to build an effective resume tailored for embedded systems and MBD roles.*
- *Attend guest lectures to gain insights into industry expectations and career paths.*
- *Participate in networking opportunities to connect with professionals and experts in the field.*
- *Get support with job placement, interview preparation, and long-term career guidance.*

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

KPIT, SANEPAR, Atos, TCS TATA CONSULTANCY SERVICES, HARMAN, Lenovo, UNISOUL, HCL, American Megatrends, Cummins, innovita, BOSCH, SIEMENS, SAMSUNG, Deloitte., KNORR BREMSE, Honeywell, Tech Mahindra, HITACHI, suntel, Onward TECHNOLOGIES, TATA ELXSI, AVIN SYSTEMS, RENU ELECTRONICS PVT. LTD., JOHN DEERE, infotech Solutions, KALYANI, Qualcomm, Valeo, ASUS, Whirlpool CORPORATION, FORBES MARSHALL, SEDEMAC

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