

[An ISO 9001:2008 Certified Company]

GET TRAINED BECOME EXPERT AND GET PLACED

100% JOB ORIENTED ADVANCE EMBEDDED COURSES



Office No. 86-89, 5th floor, C-Wing Shreenath Plaza, Dyaneshwar Paduka Chowk, FC Road, Pune 411005

> Mobile: 8605006788 | Gmail: technoscriptspune@gmail.com

> > www.technoscripts.in

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 : C PROGRAMMING FOR EMBEDDED

Module 1: Fundamentals of Embedded Systems

- · Definition and characteristics of embedded systems
- · Applications of embedded systems in daily life
- · Comparison of embedded systems with general-purpose systems
- · Overview of embedded system components and architecture

Module 2: Embedded System Development Life Cycle

- Stages of embedded design: requirement analysis, design, implementation, testing
- Importance of prototyping and iterative development
- Role of documentation in the development process
- · Introduction to project management in embedded projects

Module 3: Embedded System Programming Basics

- Introduction to programming for embedded systems
- Overview of programming languages: Assembly vs. C
- · Understanding memory constraints in embedded programming
- · Basics of writing efficient and optimized code

Module 4: Embedded Systems Design Concepts

- Key electronics concepts for embedded design (voltage, current, signals)
- Understanding microcontroller and microprocessor basics
- Introduction to schematic design and PCB layout
- · Design considerations for power efficiency and performance

Module 5: Trends & Challenges, Embedded Systems

- IoT, AI, and real-time processing in embedded systems
- · Common design challenges: size, cost, power, and reliability
- · Addressing security issues in embedded systems
- · Scalability and upgradability in embedded designs

Module 6: Memory in Embedded Systems

- Types of memory: RAM, ROM, EPROM, EEPROM, FLASH
- · Role of each memory type in embedded applications
- · Memory mapping and addressing techniques
- · Managing memory constraints in resource-limited systems

Module 7: Development Environment and Tools

- · Difference between host and target development environments
- · Introduction to cross-compilers and their role
- · Overview of embedded development tools: assemblers, compilers, linkers, loaders
- · Using debuggers and in-circuit emulators for troubleshooting

Module 8: Advanced Tools and Debugging

- Introduction to JTAG for testing and debugging
- · Role of build tools in embedded system development
- · Configuring and using embedded in-circuit emulators
- · Best practices for efficient debugging and validation

Module 9: Basic Hardware Interfacing

- · Interfacing LEDs and switches for simple input/output
- Programming relays for controlling external devices
- Interfacing 7 segment displays & LCDs for visual output
- Configuring and reading ADCs

Module 10: Advanced Hardware Interfacing & Communication

- Interfacing stepper and DC motors for motion control
- Connecting real-time clocks (RTC) for timekeeping
- Interfacing GSM modules and mobile phones using DTMF
- Implementing serial communication and sensor interfacing

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.