# TechnoScripts

[An ISO 9001:2008 Certified Company]

# GET TRAINED

## BECOME EXPERT AND GET PLACED

### 100% JOB ORIENTED ADVANCE EMBEDDED COURSES

SCAN & CONNECT


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

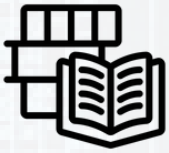
**Mobile: 8605006788 | Gmail: technoscriptspune@gmail.com**

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



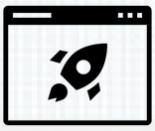
STUDY MATERIAL

ISO 9001:2015 CERTIFIED

100% PLACEMENT SUPPORT

COURSE COMPLETION CERTIFICATE

INTERVIEW PREPERATION



LIVE PROJECTS

STATE OF THE ART LABS

LEARN ONLINE / CLASSROOM

# OUR COURSES

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 : PG DIPLOMA IN EMBEDDED SYSTEMS

***Module 1: Introduction to Programming and the C Language***

- *Introduction to C, its history, and basic structure (tokens, keywords, identifiers)*
- *Data types, variables, constants, operators, and expressions*
- *Control flow statements and functions (if, for, while, function prototypes)*
- *Arrays, pointers, structures, and unions*
- *File I/O, dynamic memory allocation, macros, and preprocessor directives*

***Module 2: C Programming Foundations and Software Development***

- *Concepts of software development and programming techniques*
- *Program design, debugging strategies, and testing methods*
- *Overview of software development life cycle and methodologies*
- *Hands-on exercises and assignments to reinforce learning*
- *Outcome: Ability to write and debug basic C programs independently*

***Module 3: Embedded C Programming***

- *Microcontroller architecture, register-level programming, and DMA*
- *Programming and debugging techniques for embedded applications*
- *Interrupts, real-time considerations, and embedded C features*
- *Lab work using development boards with sensors and hardware*
- *Use of embedded C in automotive, medical, and control systems*

***Module 4: Embedded Systems Overview***

- *What is an embedded system and its development life cycle*
- *Programming techniques and common design challenges*
- *Memory types: RAM, ROM, EPROM, EEPROM, FLASH*
- *Embedded tools: cross compilers, assemblers, linkers, and loaders*
- *Debugging, troubleshooting, and project integration practices*

***Module 5: PIC Microcontroller***

- *Introduction to PIC family and architecture of PIC18F4520*
- *Memory structure, SFRs overview, and functional block diagram*
- *Developing and debugging assembly-level programs using MPLAB*
- *Hardware interfacing and real-time project development on PIC18F*
- *Debugging methods and troubleshooting on PIC18F4580*

***Module 6: ARM7 Microcontroller***

- *Overview of ARM architecture and processor core*
- *Instruction decoding, conditional execution, and ARM series comparison*
- *Efficient C coding for ARM, software interrupts, and peripheral interfacing*
- *Development environment, timers, UART (polling/interrupt) programming*
- *Project work using debugging tools and hardware-level testing*

***Module 7: Hardware Interfacing***

- *Interfacing LEDs, switches, relays, and displays (LCD, 7-segment)*
- *ADC, stepper motor, and DC motor integration*
- *Sensor interfacing: IR, ultrasonic, MEMS, and RTC*
- *Serial communication and real-time data handling*
- *Hands-on application testing using microcontroller boards*

***Module 8: Communication Protocols***

- *Overview of UART, USART, and communication parameters (baud rate, parity, etc.)*
- *Voltage levels, MAX232 usage, and protocol architecture*
- *Implementing serial communication on microcontrollers*
- *Transmitting and receiving data, both wired and wireless*
- *Configuration, modes, and embedded applications*

# 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

## SCAN & GET A GLIMPSE. OUR PLACED STUDENTS.