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- <u>support@krutanic.com</u>

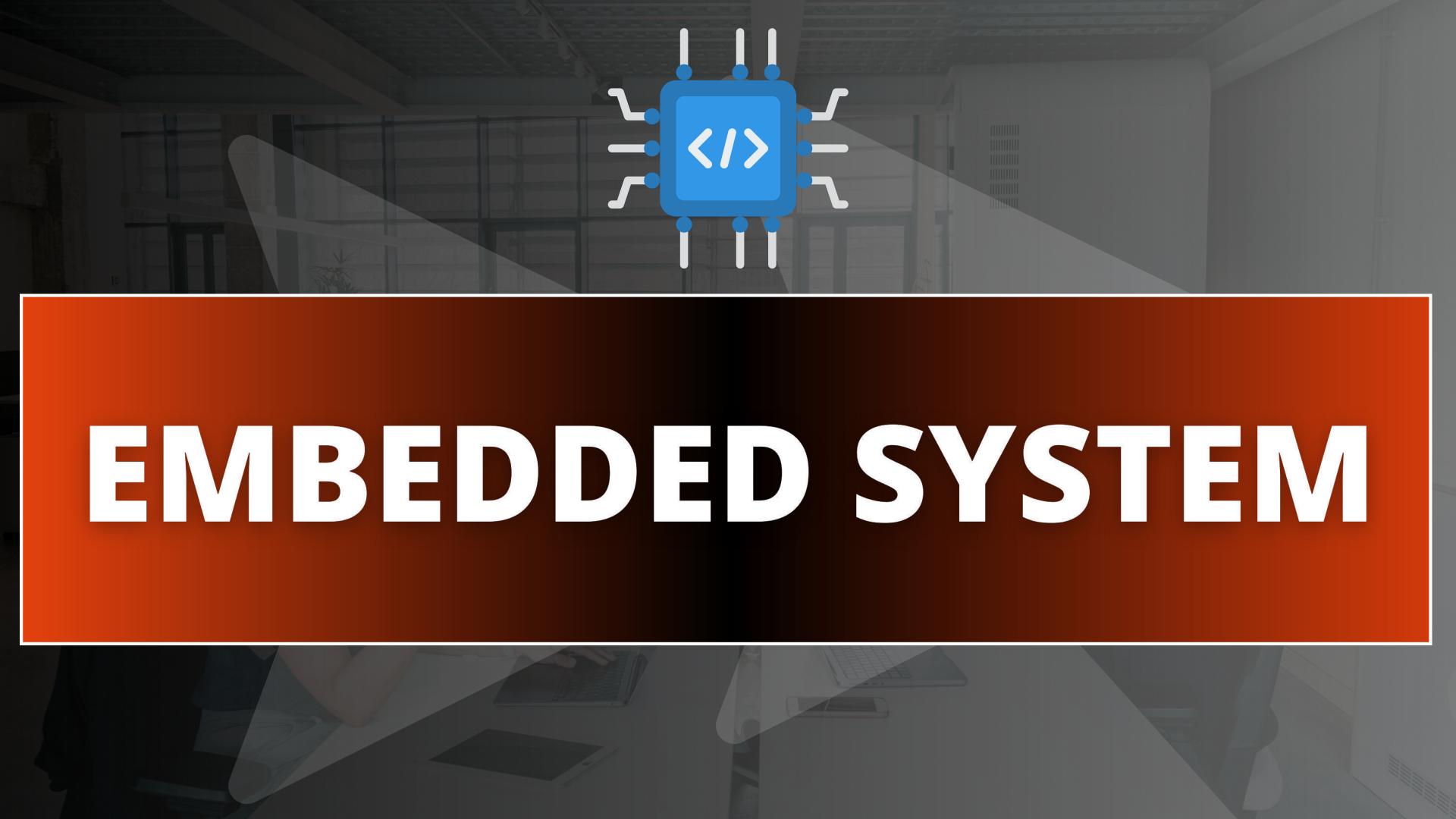




About us

"Krutanic Solutions is at the forefront of transforming education through cutting-edge technology. Our comprehensive platform empowers learners with personalized learning experiences, collaborative tools, and real-time analytics. With adaptive assessments and interactive content creation, we enhance student engagement and achievement. Join us in revolutionizing education for the digital age, driving positive outcomes and preparing learners for success in tomorrow's world."





Why Embedded System?

- Embedded systems are crucial in sectors like automotive, healthcare, and IoT, driving rapid industry growth.
- Skilled embedded engineers are essential for developing smart devices, ensuring strong demand across various industries.
- Embedded system roles, such as firmware engineers, often offer competitive salaries due to specialized skills.
- From robotics to consumer electronics, embedded systems offer versatile career paths in innovative fields.
- Embedded systems play a key role in emerging technologies like AI, IoT, and autonomous vehicles, keeping you future-ready.
- With the constant evolution of smart technologies, embedded system professionals enjoy long-term career stability and growth.

ST 1 MONTH

LIVE SESSIONS

Live sessions with industrial experts having experience above 10 years in the industry.

RECORDINGS

Recordings of all live sessions available with lifelong access in our LMS portal.



2 MONTH

REAL TIME PROJECTS

Two real time industrial projects One minor project and One major project

ASSISTANCE

All mentors will be assigned as project leads and guide the intern till the completion of the project

PERSONAL DEVELOPMENT

Additional projects
for personal
development can
be required



Curriculum included

MODULE 1

Introduction to Embedded
Systems Overview of
embedded systems and
their applications
Characteristics and
challenges of embedded
systems design
Introduction to
microcontrollers and
microprocessors.

MODULE 2

Architecture and components of microcontrollers Embedded systems development tools (IDEs, compilers, debuggers) Introduction to assembly language programming for microcontrollers.

MODULE 3

Embedded C Programming
Basics of C programming
for embedded systems
Data types operators and
control structures in
embedded C Memory
management and I/O
operations in embedded.

MODULE 4

Interrupts and Timers
Introduction to interrupts
and interrupt handling
mechanisms Timer
modules and their
applications in embedded
systems Writing interrupt
service routines (ISRS) in
embedded C

Curriculum included

MODULE 5

Input/Output Interfacing
Basics of digital and
analog I/O interfacing
Interfacing with sensors
and actuators Serial
communication protocols
(UART, SPI, 12C)

MODULE 6

Embedded Systems
Development Platforms
Introduction to development
boards and kits (Arduino,
Raspberry Pi, etc.) Setting up
and configuring development
environments Hands-on
exercises with development
boards

MODULE 7

Real-time Operating
Systems (RTOS) Overview
of real time operating
systems Task scheduling
and management in RTOS
Case studies of RTOS
applications in embedded
systems

MODULE 8

Techniques Design
considerations for
embedded systems
(power, size, cost, etc.)
Hardware/software codesign methodologies
Case studies of embedded
systems design projects

Curriculum included

MODULE 9

Embedded Systems
Testing and Debugging
Testing methodologies
for embedded systems
Debugging techniques
and tools Code
optimization and
performance tuning

MODULE 10

Wireless Communication in Embedded Systems Introduction to wireless communication protocols (Bluetooth, Wi-Fi, etc.)
Designing embedded systems with wireless connectivity Case studies of wireless sensor networks and IoT applications.

Discover why this Embedded System course is essential for your learning journey



Google Ratings

4.8 / 5



Mentees Trained

15k +



Hiring Partners

200+



Job Openings

45000+



Average Salary

12+ LPA



Global Size

USD 192 Billion

Certifications

01

Training Completioon
Certificate Validates the
skills which acquired

02

Internship Completion certificate certified by "WIPRO dice Id"

03

LOR (Letter of recommendation)

04

Certificate of exellence

KRUTANIC

DER FOR BRIGHTE

05

Placement Assistance

Our process

Quick guide



Program ratings







STUDENTS AVERAGE RATINGS



4.85 / 5

Companies where our alumni thrive

























Axxela





































































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