Introduction To Embedded Systems

8:45 AM - 10:15 AM: Session 1: Basics of Embedded Systems

Overview of embedded systems and their applications.
Hands-on session on understanding microcontrollers.
Introduction to embedded system design and architecture.

10:15 AM - 10:30 AM: Coffee / Tea / Snacks Break

Networking and refreshments.

10:30 AM - 12:00 PM: Session 2: Programming Embedded Systems

Interactive session on programming microcontrollers using C/C++.
Workshop on writing and debugging embedded software.
Practical demonstration of simple embedded applications.

12:00 PM - 1:00 PM: Lunch Break

Catered lunch and networking opportunity.

1:00 PM - 2:30 PM: Session 3: Embedded Hardware Design

Exploring the principles of embedded hardware design.

Hands-on training on designing and testing embedded circuits.
Case studies on hardware-software integration in embedded systems.

2:30 PM - 2:45 PM: Short Break

Time for a stretch and informal discussions.

2:45 PM - 4:15 PM: Session 4: Real-Time Operating Systems (RTOS)

Workshop on the basics of real-time operating systems.
Practical use of RTOS in embedded applications.
Case studies on RTOS implementation in various projects.

4:15 PM - 4:30 PM: Coffee / Tea / Snacks Break

Last networking opportunity with snacks.

4:30 PM - 5:30 PM: Closing Session: Implementing Changes and Technology Adoption

Group discussions on implementing new techniques learned today.
Dialogue on overcoming challenges in adopting new technologies in similar sectors.
Feedback session and closing remarks.
Certificate Issue

5:30 PM: Workshop Concludes