

Workshop Course Contents:

1. Introduction to Coding in C:

- Syntax and structure
- Input/output operations
- Loops, conditions, and functions

2. Basics of Automation:

- Understanding sensors and actuators
- Logic flow in automation systems
- Real-world examples (e.g., traffic lights, smart homes)

3. Microcontrollers Overview:

- Introduction to Arduino or similar platform
- Programming the microcontroller
- Interfacing with sensors and motors

4. Capstone Project:

- Teams design and build a simple robot (e.g., line follower or obstacle avoider)
- Testing, debugging, and presenting the final prototype