



Masterclass: **ROBOTICS WITH RASPBERRY Pi**

INTRODUCTION

This Masterclass imparts knowledge on Robotics with IoT using Raspberry Pi. Students learn how Robots can monitor the events happening around them, fuse their sensor data, make use of local and distributed intelligence to decide their courses of action, and then behave to manipulate or control objects by IoT devices.

COURSE-LEARNING OUTCOMES (CLO)

- Acquire knowledge of the Internet of Things and its hardware and software components
- Integrate mechanical and electrical hardware for a real prototype of robotic devices
- Select a robotic system for given applications

WHO CAN ATTEND THIS MASTERCLASS?

This is open to all undergraduate students.

CERTIFICATION

Certificate of Completion in MasterClass Robotics with Raspberry Pi.

COURSE OUTLINE

1. Programming Raspberry Pi
2. Providing Speech Input and Output
3. Adding Vision to Raspberry Pi
4. Creating Mobile Robots on wheels
5. Controlling the Movement of Robots with Legs
6. Avoiding Obstacles Using Sensors

