

# **Robotics and Automation Internship**

## Overview

The Robotics and Automation Internship at Spizatech Electrifying Life Pvt. Ltd. is a practical, skill-driven program tailored for students, graduates, and enthusiasts eager to build intelligent robotic systems. It offers real-world experience in designing, programming, and automating robots using sensors, microcontrollers, and control logic.

# **Objective**

The program introduces core robotics concepts including mechanical design, sensor integration, motor control, and basic automation algorithms for real-world applications like obstacle avoidance and IoT-based control.

## **Key Modules**

- Basics of Robotics and Mechatronics
- Motor Drivers and Actuator Control
- Sensor Integration (IR, Ultrasonic, Gyro)
- Programming with Arduino and ESP32
- IoT-Based Robotic Control
- Project Work

#### **Outcomes**

Participants will design functional robotic systems, implement automation logic, and complete a hands-on project, gaining experience for careers in robotics, automation, and smart systems engineering.