

learnandbuild.in

www.projections.co.in



Who we are

We are Learn and Build (LnB), an Employee Tech vertical by TechieNest Pvt. Ltd. Furthering our 10+ years of strong legacy and training over 250K students from 350+ premium institutions including IIT's & NIT's. LnB aims at bridging the future skills gap between Industry and learners.

# Our Big Idea

To inspire learners to LEARN and BUILD their own ideas from scratch after completing the workshop. We don't simply want our students to understand the technologies; besides, we want them to put their application in solving real-world problems so that they can think and implement big.

### Curriculum

### 1. Introductory & Theoretical session

- Introduction to Embedded Systems & IOT.
- Future aspects.
- Wide description about Arduino & ESP8266
- Software installation
- Input & Output peripherals in Arduino & ESP8266.
- Programming of Arduino & ESP8266

#### 2. Practical session

- Interfacings of peripherals
- Output devices interfacings
- Programming for LED interfacings with Arduino
- LED blinking programming

### 3. Introduction to ESP8266

- Installing & Programming ESP8266 boards
- LED blinking programming

## 4. Sensor Interfacing

Introduction to IR sensor
 Interfacing of IR sensor through ESP8266
 Introduction and working of LM358 comparator IC

Project - Automatic Day/Night Device Controlling

Introduction to DHT11
Interfacing of DHT11 sensor through ESP8266

Project - Temperature and Humidity Monitoring System

### 5. Relay Interfacing

- Working of Relay
- Controlling Relay as a switch using ESP8266
   Project Computer controlled home appliance

### 6. Connecting Node-MCU with ThingSpeak

- Transmitting Temperature sensor data over thingspeak
- Receiving data from ThingSpeak & Controlling Relay.

Project - Communication with IoT server

Major Project - Build Voice Controlled Home Automation using IoT

#### **Program Outcomes**

- Learning to build entire product life cycle from scratch
- Build your IoT applications
- Learning most advanced tools used in the IoT industry currently
- Get your First Practical Hands-on IoT Certification
- Learning how the knowledge can be used for Research and Development.



# **Contact Us**



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