

List of Parts Required

Here's a list of the components used throughout the "Home Automation using ESP8266" course and "Build a Powerful Web Server" video course. We don't recommend purchasing all the items at once. Instead, we recommend going through each project and see exactly what you want to build and get the components accordingly.

Important: all components and parts are linked to our website [MakerAdvisor.com/tools](https://makeradvisor.com/tools) where you can compare prices in more than 8 different stores.

Parts for "Home Automation using ESP8266" eBook

- [ESP-01](#)
- [FTDI programmer](#)
- [ESP8266-12E NodeMCU kit](#)
- [ESP8266 Wemos D1 Mini](#)
- [Arduino UNO](#)
- [Breadboard](#)
- [Jumper wires](#)
- [5mm LEDs](#)
- [Assorted resistors](#): 220 Ω (at least 2), 470 Ω (at least 3), 1k Ω (at least 3), 10k Ω , 4.7k Ω
- [Pushbutton](#)
- [Potentiometer](#)
- [Mini AM312 PIR Motion Sensor](#)
- [DHT11](#) or [DHT22](#) temperature and humidity sensor
- [BME280 temperature, humidity and pressure sensor](#)
- [DS18B20 temperature sensor](#)

- [0.96 inch OLED display](#)
- [I2C Liquid crystal display \(LCD\)](#)
- [433MHz receiver/transmitter module](#)
- [RF remote controlled sockets](#) that operate at 433 MHz
- [5V RGB LED Strip](#)
- [NPN transistors](#) (3 units)
- [IR receiver/emitter TSOP4838](#)
- [IR LED transmitter](#)
- [E27/B22 IR RGB LED Lamp with remote control](#)
- [Li-ion/LiPo battery](#) + battery holder
- [Low-dropout or LDO regulator \(MCP1700-3302E\)](#)
- [1000uF electrolytic capacitor](#)
- [100nF ceramic capacitor](#)
- [Plastic box enclosure](#)
- [Prototyping circuit board](#)
- [SONOFF basic wi-fi smart switch](#)
- [Button switch](#)
- [Raspberry Pi Kit](#) (for MQTT Units)
- [PIR motion sensor](#)
- [RGB LED](#) (common anode or common cathode)
- [12V RGB LED Strip](#)
- [12V DC Power Supply/ 12V DC power adapter](#)
- [LM2577/LM2596 Step Down Buck Converter](#)
- [NPN Transistors 2N2222](#) or equivalent (at least 3)

Parts for “Build a Powerful Web Server” Video Course

- [Breadboard](#)
- [Jumper wires](#)
- [ESP8266-12E NodeMCU kit](#)
- [PIR Motion sensor](#)
- [MQ-2 smoke sensor](#)
- [DHT11 temperature and humidity sensor](#)
- [Buzzer](#)
- [4x LEDs](#)
- [Resistors](#): 4x 470 Ω , 2x 220 Ω , 1x 100 Ω and 1x 4.7k Ω resistor