

# Equipment Requirements

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February 19, 2021

Parts are listed with example pricing from The Pi Hut: <https://thepihut.com>

## 1 RaspberryPi 4 Base Kit

Parts:

- RaspberryPi 4 Model B - 4GB, SKU: SC0194, Price: £54.00
- Official UK Raspberry Pi 4 Power Supply (5.1V 3A) - White, SKU: SC0212, Price: £8.00
- 'NOOBS' Preinstalled Micro SD Card (Latest v3.4.0) - 16GB, SKU: SC0267, Price: £7.00

Instructions:

1. Unbox the parts in a safe and clean environment in preparation for assembly.
2. Locate or provision a nearby power socket for the power supply.

Notes:

- A small Phillips head screwdriver may be required for hardware assembly.
- Depending on the use case, a USB or Bluetooth keyboard and mouse may be required.
- The Micro SD card will be formatted during the software installation later. The preinstalled 'NOOBS' software will not be used.

## 2 RaspberryPi 4 using existing HDMI monitor

Additional parts:

- Official Raspberry Pi 4 MicroHDMI Cable - 1M / White, SKU: SC0222, Price: £5.00
- Official Raspberry Pi 4 Case - Red and White, SKU: SC0229, Price: £5.00
- USB or Bluetooth keyboard.

Instructions:

1. Install the RaspberryPi in the case. Note: Depending on the case, you may need to open it again later to install the Micro SD card.
2. Connect the RaspberryPi using the HDMI cable to the external monitor.
3. Connect a USB keyboard and mouse to the Raspberry Pi.

## 3 RaspberryPi 4 using Official RaspberryPi 7" touchscreen

Additional parts:

- Official Raspberry Pi 7" Touchscreen Display, SKU: SC0025, Price: £60.00
- Case for Raspberry Pi 4 and Official 7" Touchscreen - White, SKU: 102544, Price: 12.00
- USB or Bluetooth keyboard.

Instructions:

1. Install the Raspberry Pi with the touchscreen display and case. Additional small tools may be required. Follow online install video for step-by-step instructions: <https://www.youtube.com/watch?v=J69-bxOSMC8>
2. Note that you may have to open the case to install the Micro SD card.
3. Connect a USB or Bluetooth keyboard instead of using the onscreen keyboard.

## 4 DHT11 temperature and humidity sensor

Additional parts:

- DHT11 Temperature-Humidity Sensor, Price: £4.00

Instructions:

1. Wire DHT11 sensor to RaspberryPi GPIO pins. Follow online install video for step-by-step instructions up to the point where the instructor begins writing code (this requirement will be dealt with in a different way in this course): <https://www.youtube.com/watch?v=GSG1OClojOk>

Figure 1: RaspberryPi 4 GPIO Pinout)

