



PRESENTS

“Winter Internship Program”

Raspberry Pi’ Duration

15 Days

Kit Partner

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Course Name : **Raspberry Pi**
Certification : By Robosapiens Technologies Pvt. Ltd.
Fee : 7900/- Only
LIVE Projects Covered : **MORE THAN 13 Projects** Covered in 15 Days

Detailed Course Content

1. Introduction to Raspberry Pi

- 1.1 Different Models of Raspberry Pi
- 1.2 Why Raspberry Pi.
- 1.3 Peripherals of Raspberry Pi.
- 1.4 Applications of Raspberry Pi.
- 1.5 Future of Micro Computing.

2. Preparing Your Raspberry Pi for First Use

- 2.1 Different Operating Systems for Raspberry pi.
- 2.2 Getting Started With NOOBS
- 2.3 Getting things ready for first use.
- 2.4 NOOBS OS inside out.
- 2.5 Booting for the First time.

3. Setting Up for a Perfect Pi Experience

- 3.1 Operation Procedures.
- 3.2 Do's and Don'ts
- 3.3 Updating Pi to Latest softwares.
- 3.4 Setting various Options and Personalizing.
- 3.5 First introduction to the LINUX terminal.
- 3.6 Introduction to the Open Source Software Library.
- 3.7 The Linux Files Organization Structure.
- 3.8 NOOBS Configuration Files.
- 3.9 Connecting to the Network and Troubleshooting.

4. Introduction to LINUX Environment

- 4.1 The Linux Organization Structure.
- 4.2 LINUX Shell.
- 4.3 SHELL Scripting.
- 4.4 SHELL Scripting.
- 4.5 Introduction to various Functions.

5: Getting Familiar with the GPIO Pins of your Pi -1

- 5.1 Pin numbering Formats
- 5.2 The Voltage hazard Information.
- 5.3 The LED Interfacing.
- 5.4 The First Button Interface with Raspberry Pi.
- 5.5 General information on other pins and their functionality.
- 5.6 ADC example.
- 5.7 PWM example.
- 5.8 UART example.

6.Using Raspberry Pi for Applications.

- 6.1 Web Browser Experience.
- 6.2 Mp3 Player.
- 6.3 Video Player.
- 6.4 Online Video Streaming.

7.Setting Up Pi to be Accessed Remotely.

- 7.1 Remote Computing Basics.
- 7.2 Connecting Raspberry Pi to a Remote Access Client.
- 7.3 Using Raspberry Pi Remotely.

8.Live Projects

- 8.1 LED Running Lights.
- 8.2 Buttons Interfacing.
- 8.3 Buzzer Interfacing.
- 8.4 7-Segment display Interfacing.
- 8.5 RGB LED Interfacing.
- 8.6 Motor Interfacing.
- 8.7 UART interfacing.
- 8.8 TTL Level converter interfacing for Other Controller's Interface.
- 8.9 Suggested Projects
- 8.10 Problem Solving
- 8.11 Troubleshooting