Raspberry Pi

Zetlan Technologies

e-Learning Course

COURSE MODULES

Introduction
- Introduction to Raspberry Pi - I
- Introduction to Raspberry Pi - II
- Download and Transfer NOOBS to SD Card
- Install and Configure Raspbian OS.

Learning Linux and Python
- Introduction to Linux
- Python Basics - Mathematical Operations and Print Command
- Python Basics - Control Flow and Decision-Making Statement
- Python Basics - Comparison Operator and Random Function

First Step to Physical Computing
- Introduction and Hardware Requirements
- Program the LEDs
- Real Time Demonstration - LEDs Blinking

The Number Guessing game programming the Pi using Python
- Guess the Number Game - Get the Player's Name
- Guess the Number Game - Restrict Player Attempts
- Guess the Number Game - Run the Program
- Guess the Number Game - Error Debugging

Dancing Christmas Tree Light- Controlling the Raspberry Pi Hardware

- Know Your Christmas Lights
- How the Christmas Light Circuit Works?
- Assembling the Hardware for Christmas Lights
- Begin the Code
- Code for Lights - Pattern RGB
- Code for Lights - Pattern ONE BY ONE
- Code for Lights - Pattern RUNNING
- Code for Lights - Call the User Defined Function
- Error Debugging and Running the Project

Operating System

- The Raspberry Pi Operating System
- The Raspberry Pi Desktop
- Adding and using software on your Raspberry Pi
- Everyday computing with your Raspberry Pi
- Connecting more hardware
- Getting started with coding
- The Unix command line
- Remote access and security