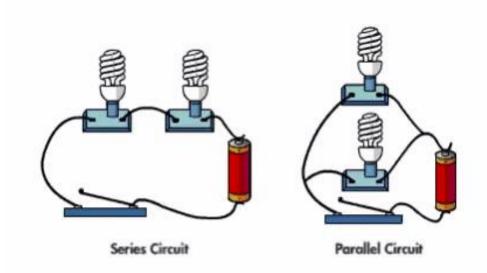


# **ELECTRONICS**



TEACHER: CERTIFIED TRAINER DURATION: 16 CLASSES ( x3 LEVELS) (1 HOUR PER CLASS) MODE: OFFLINE

Study of flow and control of electrons, their behavior and effects. Let your child learn the basic of electronics which includes introduction of various electronic components and symbols. What is voltage, Current, Resistance, Open and Short circuit, series and parallel circuit. Puzzle solving using Logic Gates, etc. Experiments and concepts conducted on specifically designed imported kits which will help students to make amazing electronics projects.



## **COURSE CURRICULUM**

#### LEVEL 1:

- Paper Circuit
- Getting started with electronic
- Series, parallel & combinational circuit
- Decoration lights
- Smart watch display
- Logic Gates
- Integrated Circuits
- Seven Segment Display
- Automated Sharpener
- Automated Street Light
- Motor Boat

#### LEVEL 2:

• VOLUME & BRIGHTNESS CONTROL USING POTENTIOMETER



- LDR
- Capacitor and Microphone
- Transistor
- NPN Transistor & PNP Transistor
- Mail Notifying System & Optical Transmitted Receives Using Snap Circuit
- Microphone & Voice Controlled Rays Of Light
- Project Using PeeCee
- Amplifier Using Snap Circuit
- Eco Motion Lights
- Challenges

#### **LEVEL 3:**

- Recording IC
- Power Amplifier
- SCR
- EMI
- Transformer
- Laser Burglar Alarm PeeCee
- Camera Pan Synchronization PeeCee
- Smart Bin
- Home Automation
- Challenges

The PEECEE microcontroller, often referred to as PIC (Peripheral Interface Controller), is indeed an essential part of electronics, especially in embedded systems. PIC microcontrollers are used in a wide range of applications, including automation, robotics, and sensor systems.



#### **LEVEL 1:**

- Introduction To PeeCee (minicomputer)
- Light and Sound
- Eyes Never Lie
- Rookie Programmer
- Add-Ons to PeeCee
- Who's at Door
- Stand in the Line
- Next Cross
- Touch to Start
- Dependent on Line
- Introduction to Motor
- Switch and Motors
- Scribbling Robot
- Elegant Lights
- Throne of PeeCee
- Disco Light Hanger
- Strobe Light
- Challenges

#### **LEVEL 2:**

- Robo
- Watch The Wall
- Waving
- Unique Motors Beginner
- Laser Burglar Alarm
- Camera Pan System
- Responsive Traffic Signal
- Walking Dog
- Sound Activated Car



### **LEVEL 3:**

- Introduction to Smart Machine
- RGB Mix Master
- LED Color Dance
- Switch & Shine
- Knock Knock Alert
- Twinkle Tunes
- Rhythmic Glow
- Touch to Glow
- Rise and Shine
- Motor Magic
- Spin Master Control
- Variable Speed Fan
- Robotic Claw