

Arduino Basics and Beyond



Highlights:

- ★ Digital Certification by Makxenia
- ★ 18 Demonstration during course
- ★ Access to study material and codes
- ★ No Prerequisites
- ★ Learn from the best in industry
- ★ Interesting assignments
- ★ Application based demonstrations
- ★ Live Interactive sessions
- ★ Instant Doubts solving
- ★ Perfect blend of live demonstration with knowledge based theory



Demonstrations

- Tv remote controlled light bulb
- Tv remote controlled LEDs
- Keyboard controlled light bulb
- Keyboard control LEDs
- Motor control & differential drive
- Line follower robot
- Graph Plotter (Digital oscilloscope)
- Automatic night light
- Digital thermometer
- Digital voltmeter
- LCD display interfacing
- Serial monitor
- Switch to led
- Sound intensity control
- Buzzer control
- LED brightness control
- LED blink
- LED glow

Course Content

Day 1: Introduction to embedded system and its components, Introduction to microcontroller & microprocessor, Its History and Atmega328

Day 2: Introduction to arduino, software installation, and first demo: LED blink, basics of C language

Day 3: Demos and Code: LED glow, Buzzer, LED Intensity control, Sound intensity control, Switch to LED

Day 4: Demos and Code: Switch to serial, Serial commands, Keyboard control LEDs, Keyboard control bulbs.

Day 5: Demos and Codes: Analog day, Potentiometer to serial. Plotting Real time graphs. Digital Voltmeter, Automatic Night Light, Digital thermometer

Day 6: Demos and Codes: LCD display, LCD blink, LCD scroll. Tv remote controlled LEDs, Tv remote controlled bulbs

Day 7: Introduction to robotics, Demos and Codes: , Motor control, Line follower robot