



# National Institute of Electronics and Information Technology, Aurangabad

## COURSE PROSPECTUS

Name of the Group : Embedded & VLSI Design Group  
Name of the Course : Arduino UNO  
Starting Date : April 06, 2017  
Duration : 2 Days  
Time : 10:00 To 17:00

### **Preamble:**

Arduino is an open-source physical computing platform based on a simple I/O board and a development environment that implements the Processing/ Wiring language. Arduino can be used to develop interactive objects, taking inputs from a variety of switches or sensors and controlling a variety of lights, sensors and other outputs. Arduino projects can be stand-alone or they can communicate with software running on your computer.

### **Objective of the Course:**

The course is aimed at giving exposure to and enhancing the knowledge and skills of fresh graduate engineers and Professionals involved in the embedded systems industry. The curriculum has been designed in consultation with industry and academic experts and our strategic partners, to map the skill sets and design methodologies, which is high in demand in Embedded Systems industries.

### **Outcome of the Course:**

This course makes the successful participants readily employable in multiple roles available in broad spectrum of relevant industries. For people interested in entrepreneurship this would be an excellent launch pad. In addition the course also serves as a concrete platform for people involved in application research, consultancy and high end product development in both industry and academia.

### **COURSE DESCRIPTION:**

- Arduino Platform
- Arduino IDE
- C Programming
- Interfacing discrete LEDs
- Interfacing Seven Segment LEDs
- Interfacing LCD & switch Interface
- Interfacing Serial Port
- Interfacing with RFID
- Interfacing with different type of sensors
- Project

### Course Structure:

<ul style="list-style-type: none"><li>• Introduction to Arduino</li><li>• Interfacing</li></ul>	Day 1
<ul style="list-style-type: none"><li>• Coding on Arduino IDE</li><li>• Project</li></ul>	Day2

### Lab Facilities:

Arduino UNO Boards, Arduino IDE, Flash Magic, Material for Interfacing etc.

### Other Contents

- a. **Course Fees:** 1,250/- service tax extra.
- b. **Eligibility:** B.E/ B.Tech/ Diploma/ M.Sc. in Electrical, Electronics and Allied branches (Final year students may also apply)
- c. **Number of Seats :** 20
- d. **Selection of candidates:** The selection of candidates is based on the qualification subject to eligibility and availability of seats.