



DEPARTMENT OF ELECTRONICS AND COMMUNICATION

SKILL DEVELOPMENT PROGRAM ON ARDUINO BASICS-1

Date: 29/07/2021

Resource Person: Mr. Harish L

Asst. Prof, Dept of ECE

ACSCE, Bangalore

Participants: Technical Staff of Various Engineering Colleges

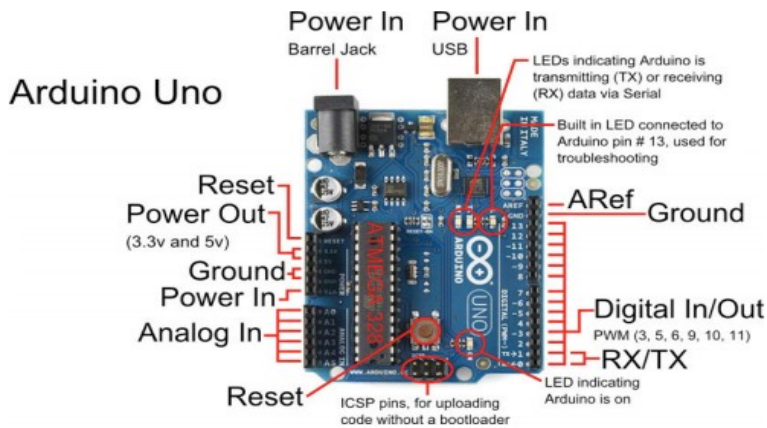
The Skill development program “ARDUINO BASICS-1” was conducted by the Mr. Harish L. Mr. Harish Lis a academician as well as an industry-oriented coding expert with over 10 years of experience in the field of teaching and industry.

Mr. Harish L started the seminar by emphasizing the importance of Arduino and its applications in day-to-daylife.Arduino is open-source electronics prototyping platform based on flexible,easy-to-usehardware and software.It’sintendedforartists, designers,hobbyistsand anyone interested increating interactive objects or environments.

The founders of Arduino wanted people to study theirhardware,to understandhow it works,make changes to it,and share those changes with the world.To facilitate this,they release allof the original design files (Eagle CAD) for the Arduinohardware. These files are licensed under a Creative Common Attribution Share-Alike license,which allows for both personaland commercial derivativeworks, aslong as they(people) credit Arduino and release their designs under the same license. The Arduino software is also open-source.The source code for the Javaenvironment is released under the GPL and the C/C++ microcontroller libraries are under the LGPL

// Arduino Uno pin type definitions: (Take a look at your Arduino board)

Reset	3v3	5v	Gnd	Vin	Analog In	RX/TX	Digital	PWM(~)	AREF
Resets Arduino sketch on board	3.3 volts in and out	5 volts in and out	Ground	Voltage in for sources over 7V (9V-12V)	Analog inputs, can also be used as Digital	Serial comm. Receive and Transmit	Input or output, HIGH or LOW	Digital pins with output option of PWM	External reference voltage used for analog



Basic Coding Structure

- Programs written using Arduino Software (IDE) are called **sketches**.
- These sketches are written in the text editor and are saved with the file extension **.ino**.

```


sketch_oct23b | Arduino 1.8.5
File Edit Sketch Tools Help
sketch_oct23b
void setup() {
  // put your setup code here, to run once:
}

void loop() {
  // put your main code here, to run repeatedly:
}





Arduino/Genuino Uno on COM4
    
```

Fig: Structure of Arduino Program

SEMINAR INVITATION:




ACS College of Engineering
Approved by AICTE New Delhi, Affiliated to VTU, Belagavi
(A Unit of RajaRajeswari Group of Institutions)
CET Code : E186 COMED-K : E003 PG CET : T918

DEPARTMENT OF ECE & ME, ACSCE
WELCOMES YOU ALL TO THE SKILL DEVELOPMENT PROGRAM FOR TECHNICAL STAFF
ON
“ ARDUINO BASICS & CAD/CAE ”

Topics covered

- ❖ Software Installation
- ❖ Introduction to Arduino
- ❖ Selection of Arduino Board
- ❖ Fundamentals of Arduino
- ❖ Exploring the Arduino Ide
- ❖ Programming Concepts



Topics covered

- ❖ Cad Modelling
- ❖ Sensors
- ❖ Transducers
- ❖ CRO
- ❖ Robotics & Automation
- ❖ Hydraulics & Pneumatics

Principal
Dr. M.S. Murali

Organizer
Dr. Bharathi Gururaj & Dr. H.S. Siddesha
HOD,ECE& ME

Faculty Coordinators
Mr. Sunil Raj B.A.
Mr. Harish L.

DATE : 29/ 06 /2021 TIME : 10:30 am onwards
PLATFORM : MS TEAMS
 Reg. Link: <https://forms.gle/num8q6HSCYGFxTeK6>

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SNAPS FROM SEMINAR

