



GIDC Degree Engineering College

Managed by GIDC Education Society

Two Day Workshop

On



“ARDUINO AND ITS PROGRAMMING”

03. MARCH.2017 to 04.MARCH.2017

Organized by

Department of Electrical Engineering Department,
GIDC Degree Engineering College,
Block No 997, Village Abrama,
Ta:Jalalpore

ACKNOWLEDGEMENT

The **two day workshop on “Ardiuno & its Programming”** was impossible to us without the efforts and valuable inputs from collage and faculties. We are here extending to our great acknowledgement and appreciation to following persons with their memorial inputs that are not limited only those mentioned below:-

The first and the most acknowledged is **Dr.K.N.Mistry, Principal Sir** who was very helpful to us. As a principal, he has inspired us to arrange **two day workshop on “Ardiuno & its Programming”** to Pre final year and final students. He has injected us the familiarity and methodology of planning of **two day workshop on “Ardiuno & its Programming”**. Not only that as giving the permission of **two day workshop on “Ardiuno & its Programming”**, his academic guidance, fairness and responsiveness to kind of queries remains him as a role model, there of we are extending our gratitude to **Dr.K.N.Mistry, Principal Sir**.

Next and the acknowledged **Mr.Rajesh T.Patel (H.O.D. of Electrical Engineering Department)** who was faithful to us, he is also always ready for solving problem related to **two day workshop on “Ardiuno & its Programming”** and conclude it, ascertaining him a commemorative plaque at deep of our heart.

Again thanks for valuable collaborations

Workshop Co-Ordinators:-

Mr.Ankur P Desai (Assistant Professor)

Mrs.Chetna Patel (Lab Assistant)

Mrs.Apexa Desai (Lab Assistant)

About Workshop

A two day workshop on “Arduino and its Programming” is scheduled to be held during 03-MARCH-2017 to 04-MARCH-2017. The main objective of this workshop is to promote programming skill of arduino and enhanced innovation in field of electrical engineering.

Course Contents

- Basic of Arduino and its programming
- PIR Sensor and its interfacing
- Gas Sensor and its interfacing
- Ultrasonic sensor and its interfacing
- Motor control using Arduino
- Analog signals and device control
- Matlab simulink and arduino interfacing etc.

Arduino Education is committed to empowering educators with the necessary hardware and software tools to create a more hands-on, innovative learning experience. Take your students on a fun and inspiring journey through the world of programming and electronics.

Workshop is organized for Pre-Final and Final year students of electrical Engineering Department. About 42 students and some faculty members are attended the workshop. Prof. Rajesh T Patel (Head of Electrical Department) and Principal Dr.K.N.Mistry also were present in the Two day workshop on “Arduinio and its programming”. Principal Dr.K.N.Mistry addressed that they have to put efforts about new technology and innovation in final year project work. He also congratulated all participants for attending workshop. About 20 practical programs are performed by each participant. Also some of students created hardware implementation of programs on arduino board.

About Arduino

What is Arduino?

Arduino is an open-source electronics platform based on easy-to-use hardware and software.

Arduino was born at the Ivrea Interaction Design Institute as an easy tool for fast prototyping, aimed at students without a background in electronics and programming.

As soon as it reached a wider community, the Arduino board started changing to adapt to new needs and challenges, differentiating its offer from simple 8-bit boards to products for different applications, 3D printing, and embedded environments.

Why Arduino?

Inexpensive - Arduino boards are relatively inexpensive compared to other microcontroller platforms. The least expensive version of the Arduino module can be assembled by hand, and even the pre-assembled Arduino modules cost less than \$50.

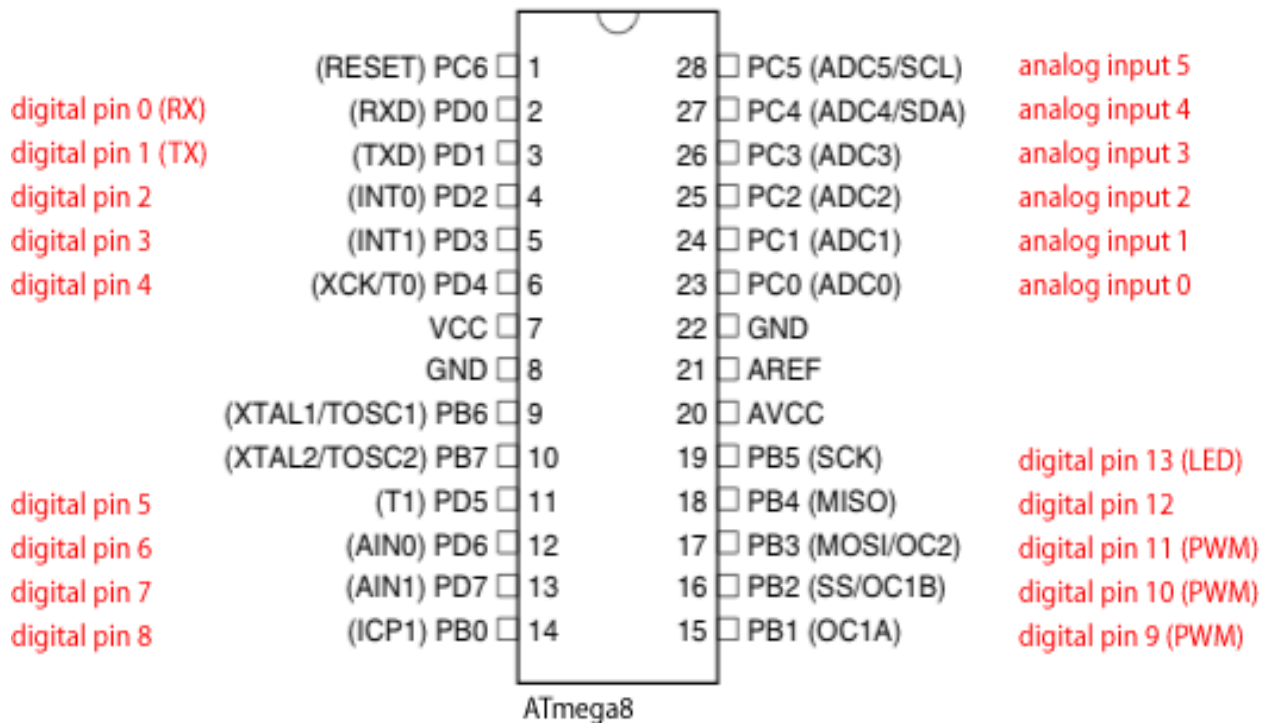
Cross-platform - The Arduino Software (IDE) runs on Windows, Macintosh OSX, and Linux operating systems. Most microcontroller systems are limited to Windows.

Simple, clear programming environment - The Arduino Software (IDE) is easy-to-use for beginners, yet flexible enough for advanced users to take advantage of as well. For teachers, it's conveniently based on the Processing programming environment, so students learning to program in that environment will be familiar with how the Arduino IDE works.

Open source and extensible software - The Arduino software is published as open source tools, available for extension by experienced programmers. The language can be expanded through C++ libraries, and people wanting to understand the technical details can make the leap from Arduino to the AVR C programming language on which it's based. Similarly, you can add AVR-C code directly into your Arduino programs if you want too.

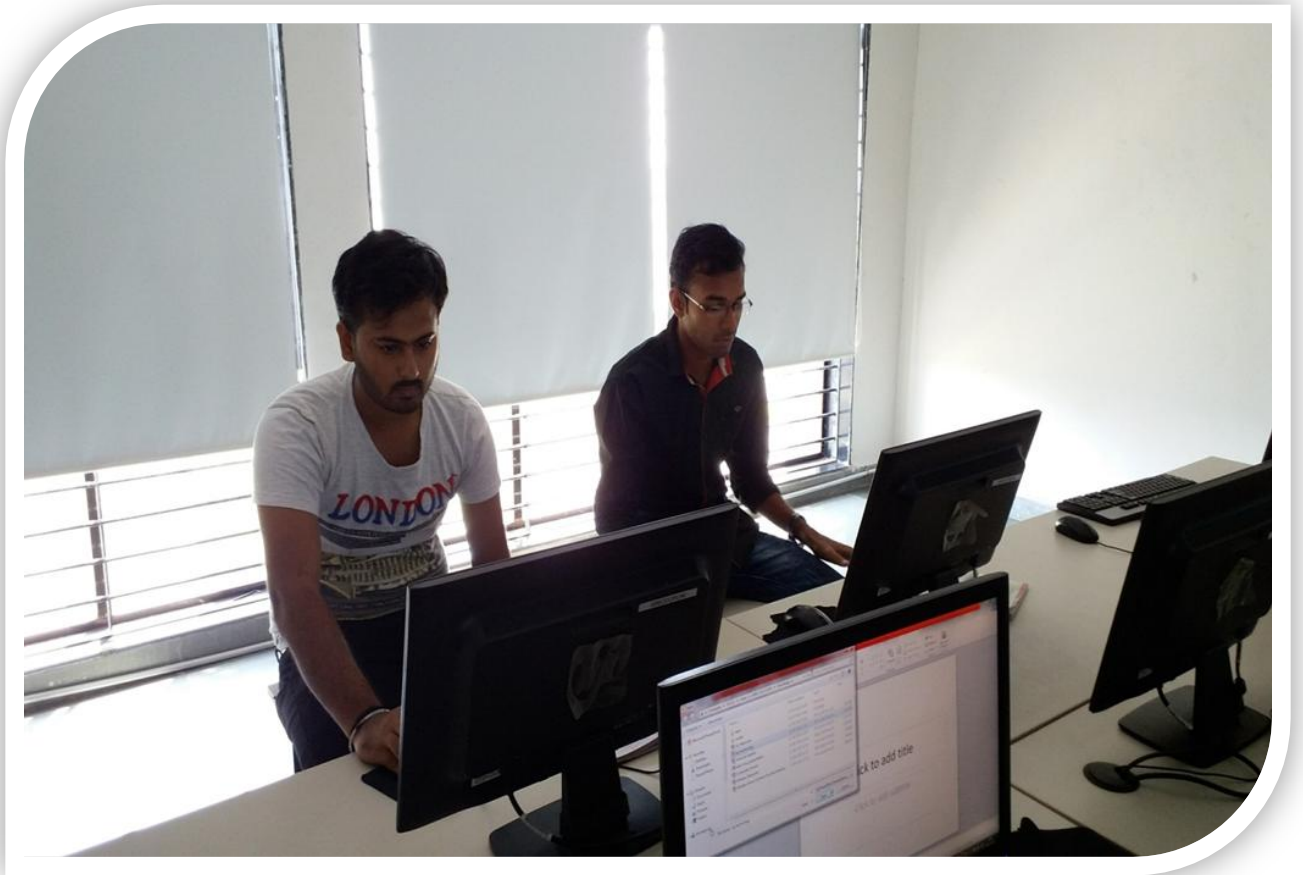
Arduino Pin Mapping

www.arduino.cc



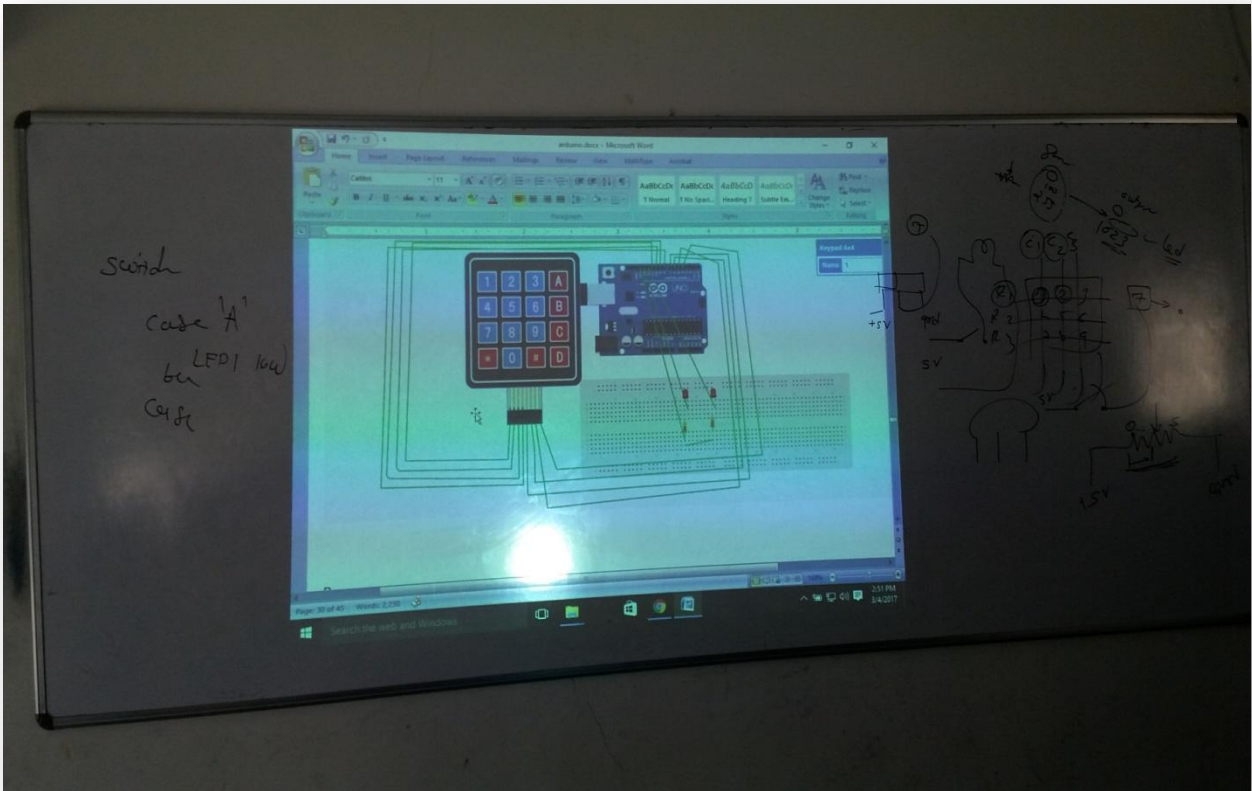
The Arduino Software (IDE) allows you to write programs and upload them to your board. In the Arduino Software page you will find two options:

1. If you have a reliable Internet connection, you should use the online IDE (Arduino Web Editor). It will allow you to save your sketches in the cloud, having them available from any device and backed up. You will always have the most up-to-date version of the IDE without the need to install updates or community generated libraries.
2. If you would rather work offline, you should use the latest version of the desktop IDE.

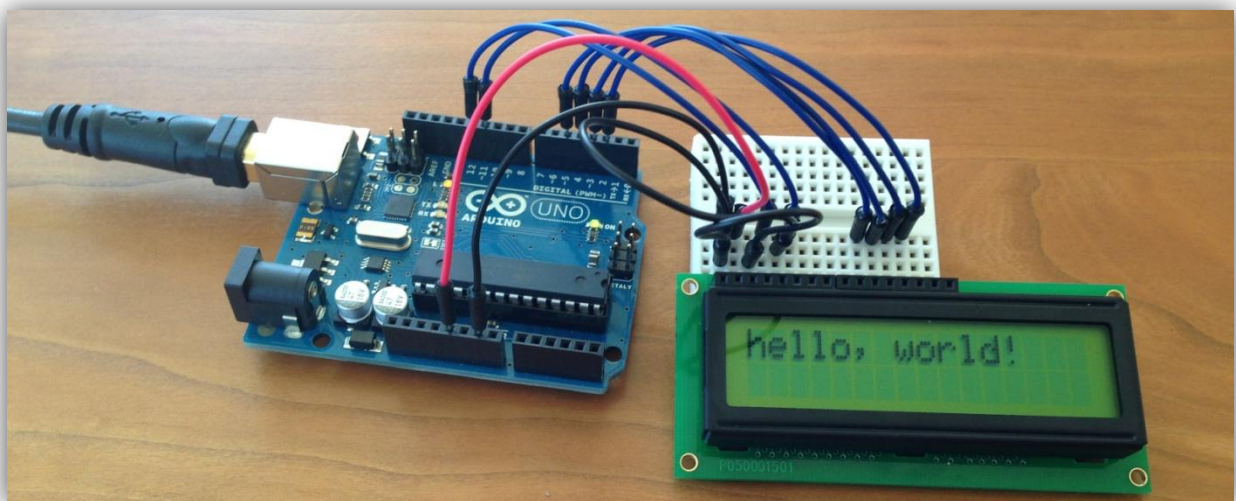












Workshop Co-Ordinators:-

Mr.Ankur P Desai (Assistant Professor)

Mrs.Chetna Patel (Lab Assistant)

Mrs.Apexa Desai (Lab Assistant)

Student's details:

42 (Pre Final Year and Final Electrical)

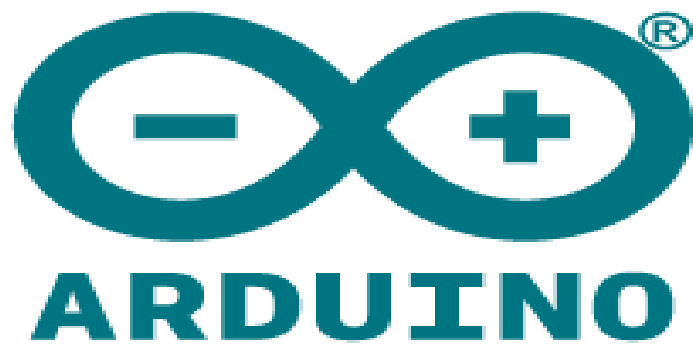
Date: 3.3.2017 to 4.3.2017

Venue:

Centre Lab.

GIDC Degree Engineering College,Abrama

Snapshot at time of Demonstration held by Deputy Engineer, Shri Rana sir of Switchyard, GECTCO



Report Compiled and edited by,

Ankur P Desai

Assitant Professor,

Electrical Engineering Department

GIDC Degree Engineering College,Abrama

Annexure-1



The certificate is set against a light blue background with a faint image of an Arduino Uno board. At the top left is the GIDC Degree Engineering College logo, and at the top right is the Arduino logo. The main text is centered and includes the college name, management details, workshop title, and the word 'Certificate' in red. Below this is a paragraph certifying attendance, followed by three columns for signatures: Co-ordinator, HOD, and Principal.

GIDC DEGREE ENGINEERING COLLEGE
(Managed by GIDC Education Society, Gandhinagar)
Abrama, Navsari

ARDUINO

A two day workshop on
"ARDUINO AND ITS PROGRAMMING"

Certificate

*This is to certify that Mr./Ms. of
Electrical Department has Attended workshop in "ARDUINO AND ITS PROGRAMMING" organized
by Electrical Engineering Department, GIDC Degree Engineering College dated
3rd March 2017 - 4th March 2017.*

Co-ordinator	HOD	Principal
<i>Prof. Ankur Desai</i>	<i>Prof. Rajesh Patel</i>	<i>Dr. K. N. Mistry</i>

**GIDC Degree Engineering
College, Abrama,
Navsari (Gujarat)**

**Two Day
Workshop**

On



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Block No 997, Village Abrama,
Ta.:Jalalnore

About Institute

In the present scenario, Engineering is still in demand for the students who want to avail a technical degree/diploma. The Government of Gujarat has decided for setting up 12 Degree and 09 Diploma Engineering institutes under PPP mode. Under this scheme, along with other organizations, Gujarat Industrial Development Corporation (GIDC) has been selected by the State Government as a partnering organization for Engineering College in Navsari District and Polytechnic in Anand District.

The GIDC Education Society, has set up the Engineering College named as "GIDC Degree Engineering College at Village Abrama, Taluka Jalalpore, District Navsari, which is on the pattern of Public Private Partnership.

The mission of the GIDC Education Society is to endow with technical education at the Degree as well as Postgraduate levels to enrich the people of the country in present technical scenario. The GIDC Education Society is dedicated to uplifting and empowering humanity through the three jewels of seva (service), shiksha (education) and sadhana (sustained efforts, i.e. dedication).

About Navsari

Nestled in the coastal lowland along the Purna river in the western Indian state of Gujarat is Navsari, which has an inspiring history of over 2000 years. It is the birthplace of Jamsedji Tata, the founder of the Tata Group of Companies. The house in which he was born is maintained in its real condition today also in Dasturvadi area. Dadabhai Navroji, the "Grand Old Man of India," was originally from Navsari. Dandi, the place from where actually the

The city is situated on the main western railway route between Ahmadabad/Vadodara and Mumbai, at distance of 251 km from Mumbai and 281km from Ahmedabad. The Institute is located on the Navsari -Amalsad road in Abrama village at distance of 13 km from Navsari railway station.

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Resource Person

Expert will be from Faculty of host institute (Mr.Ankur P Desai, Assistant Professor, Electrical Engineering).

Petron

Dr. K. N. Mistry
Principal, GIDC Degree Engineering
College, Navsari

Prof. Rajesh T Patel
H.O.D (Electrical)

GIDC Degree Engineering College,
Navsari

Coordinator

Mr. Ankur P Desai
Assistant Professor Electrical
Engineering, GIDC Degree
Engineering College, Navsari.

Committee Member

Mrs. Chetana Patel

Mrs. Apexa Desai

Contact Details

Mr. Ankur P Desai

Mo.no. 8511224911

Email:- apd.eed@gdec.in

Eligibility for Participant

The training program is open for

- UG students
- Faculties of Engineering
- Faculties of Polytechnic
- Industrial persons
- Research scholars/PG Students.

Registration Fees

There are no registration fees of this workshop.

Late Date of Registration

Hard copy of registration form along Should reach the Coordinator on or before 01/3/2017. The candidate can send their duly signed scanned copy of registration form on

apd.eed@gdec.in

How to Reach GIDC

Navsari is the nearest station from the institute from Navsari station you can easily get public transport facilities. The distance between Navsari railway station to the institute is 13 Km.



GIDC Degree Engineering College,
Abrama, Navsari

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03.March.2017 to 04.March.2017

Full Name:-.....

.....(Block Letter)

Gender:- Male/Female.....

Education Qualification:-.....

.....

Designation:-.....

Teaching Experience:-.....

Affiliation Office Address (if any):-.....

.....

Email:-.....

Phone No.:-.....

Date:- Sign of Applicant

Place