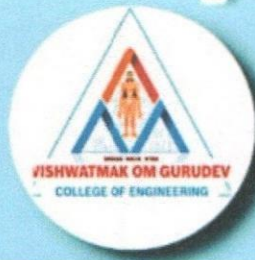


4 Days Workshop on Arduino

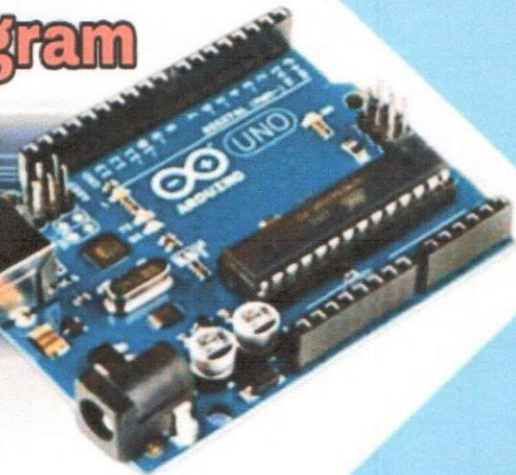
**FOUR Days
Hands On
Program**



Organised by
Vishwatmak Om Gurudev
College Of Engineering

- Introduction to Arduino
 - Arduino IDE
 - Library Addition
- 30 Hrs. Add
On Program**

Arduino



- Serial Communication
- Creating Functions
- Interfacing With IR Sensors
- Serial Interface
- More than 25 Projects/ Case studies

**Hurry Up!
Confirm Your
Seat**

**Just-
750 Rs
Per Student**



Guest Speaker

Mr. Chittaranjan P. Mahajan
Owner , Dolphin Labs
Founder President, Dolphin
Educational and
Research Society.(DEARS,
Pune)



Event Coordinator
Ass. Prof. Ganesh Sonawane



**Certificate Will be
Provided**

Scan For More
Details



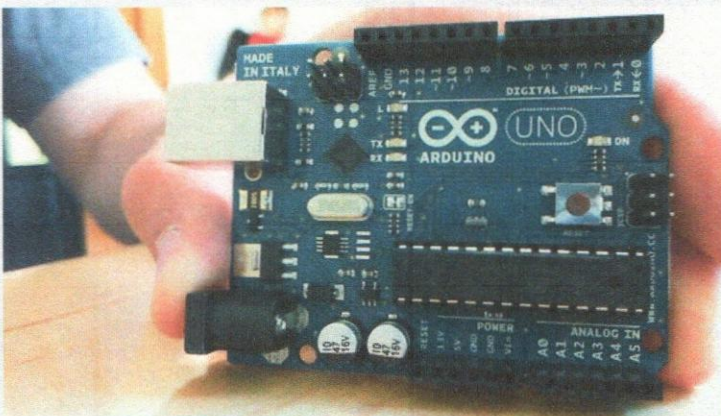
Date : 7 to 11 April 2022

Venue : VOGCE

List of Experiments:

Following is the list of experiments will be carried out using Arduino boards and other peripheral devices:

- Digital Input & Digital Output
Experiments on digital input and digital output on Arduino Mega board and using LED and Buzzer.
- Analog Input & Analog Input
Experiments on analog input and analog output on Arduino Mega board using PWM. Different outputs on LED.
- LCD Display
Experiment on LCD display:-Print numbers, Name, Time etc.
- Serial Port
Serial Communication between Arduino board and PC:-character send and received, Read and display voltage
- DC Motor Control
Experiments on DC Motor to control motor speed and direction of rotation.
- Servo Motor Control
Experiments on servo Motor to rotate servo motor.
- Stepper Motor Control
Experiments on Stepper Motor to rotate bidirectional.
- TV Remote
Experiments on TV Remote with LCD.
- Timer
Experiments with Timer:-play tones, time interval measurement etc.
- Ethernet
Experiment on Ethernet with web page static IP
- Bluetooth & Wi-Fi
Experiments on Blue tooth and Wi-Fi



Learning Objectives: To provide knowledge of different Smart System applications. To familiarize students with Arduino as IDE, programming language & platform. To provide knowledge of Arduino boards and basic components. Develop skills to design and implement various smart system application.

Learning Outcomes:

Upon completing the course, students will be:

- Familiar with Arduino environment and its applications.
- Able to understand Arduino programming with C++.
- Able to Design Smart systems applications.
- Learn and understand about any new IDE, compiler, and MCU chip in Arduino compatible boards or similar types.

Table of contents

Chapter 1: Exploring the Arduino Board and the IDE (1hr)
Chapter 2: Building Blocks (1hr)
Chapter 3: Working with Functions (1hr)
Chapter 4: Numbers, Variables, and Arithmetic (1hr)
Chapter 5: Expanding Your Arduino (2hr)
Chapter 6: LED Numeric Displays and Matrices (2hr)
Chapter 7: Liquid Crystal Displays (3hr)
Chapter 8: Creating your own Arduino Libraries (1hr)
Chapter 9: Numeric Keypads (2hr)
Chapter 10: Accepting User Input with Touchscreens (1hr)
Chapter 11: Meet the Arduino Family (2hr)
Chapter 12: Motors and Movement (3hr)
Chapter 13: Using GPS with Your Arduino (3hr)
Chapter 14: Wireless Data (2hr)
Chapter 15: Infrared Remote Control (3hr)
Chapter 16: Reading RFID Tags (3hr)
Chapter 17: Data Buses (1hr)



Vishwatmak Jangli Maharaj Ashram Trust's
Vishwatmak Om Gurudev College of Engineering

DATE: 05/04/2022

NOTICE

Greetings from the Electronics and Telecommunication Department!!!!!!!!!!!!!!

All the students of VOGCE are hereby informed that the hands on program on **5 DAY ADD ON COURSE ON "ARDUINO BASED AUTOMATION"** has been organized for all branches of engineering degree and diploma.

The contents of the workshop are attached.

Registration fee: **750/- per student.**

Date : **7th April 2022 - 11th April 2022**

Time : **09:30 pm to 6:00 pm**

Guidelines for students:

- Group of five students will be made. Each group should have a laptop.
- All the components, training board will be provided by Dolphin Labs and then to be returned back to them.
- 85% ATTENDANCE IS COMPULSORY FOR CERTIFICATE.


EVENT ORGANIZER


HOD EXTC


PRINCIPAL



Vishwatmak Om Gurudev College of Engineering

Department of Electronics and Telecommunication Engineering

WORKSHOP ON ARDUINO BASED AUTOMSTION (Attendance sheet)

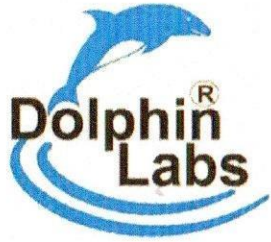
SR NO.	GROUP NO.	NAME OF GROUP MEMBERS	CLASS	DAY 1 (8/4/2022)	DAY 2 (9/4/2022)	DAY 3 (10/4/2022)
1	G01	Madhav Pawar	FE	<u>Pawar</u>	<u>Pawar</u>	<u>Pawar</u>
2		Tejas Khairnar	FE	<u>Khairnar</u>	<u>Khairnar</u>	<u>Khairnar</u>
3		Abhijeet Gavit	FE	<u>Abhijeet</u>	<u>Abhijeet</u>	<u>Abhijeet</u>
4		Suraj Jadhav	FE	<u>Jadhav</u>	<u>Jadhav</u>	<u>Jadhav</u>
5		Viraj Kadam	FE	<u>Kadam</u>	<u>Kadam</u>	<u>Kadam</u>
6		Harshad Bhoir	SY ME	<u>Bhoir</u>		
7						
1	G02	Shivam Gupta	FE ⁰²	<u>Shivam</u>	<u>Shivam</u>	<u>Shivam</u>
2		Sairaj Patil	FE	<u>Patil (03)</u>	<u>Patil</u>	<u>Patil</u>
3		Sakshi Tambe	FE	<u>Tambe (03)</u>	<u>Tambe</u>	<u>Tambe</u>
4		Nilam Chaudhari G01	FE	<u>Chaudhari</u>	<u>Chaudhari</u>	<u>Chaudhari</u>
5		Sakshi Pawar G01	FE	<u>Pawar</u>	<u>Pawar</u>	<u>Pawar</u>
6						
1	G03	Sarthak Dadhekar	FE	<u>Dadhekar</u>	<u>Dadhekar</u>	<u>Dadhekar</u>
2		Om Vekhande	FE	<u>Vekhande</u>	<u>Vekhande</u>	<u>Vekhande</u>
3		Suraj Jadhav	TE EXTC	<u>Jadhav</u>	<u>Jadhav</u>	<u>Jadhav</u>
4		Ishwar Bagul	TE EXTC	<u>Bagul</u>	<u>Bagul</u>	<u>Bagul</u>
5		Amit Nipurte	TE EXTC	<u>Nipurte</u>	<u>Nipurte</u>	<u>Nipurte</u>
6		Aniket Toke	BE Mech	<u>Toke</u>	<u>Toke</u>	<u>Toke</u>



7						
1	G04	Prashant Nikande	BE EXTC	Nikande	Nikande	Nikande
2		Saurabh Pawar	BE EXTC	Pawar	Pawar	Pawar
3		Rutik Raut	BE EXTC	Raut	Raut	Raut
4		Jidnyasa Poul	BE EXTC			
5		Rohit Toke	BE EXTC	Toke	Toke	Toke
6		Sugan S. Shelar	SY-Mech	Shelar	Shelar	Shelar
7		Sameer Boradhi	TE-Mech	Boradhi	Boradhi	Boradhi
1	G05	Hemraj More	BE EXTC	More	More	More
2		Ramesh Bagul	BE EXTC	Bagul	Bagul	Bagul
3		Ayurshi Singh	BE EXTC	Singh	Singh	Singh
4		Madhuri Kadam	BE EXTC	Kadam	Kadam	Kadam
5						
6						
1	G06	Rohit Morankar	SE COMP	Morankar	Morankar	Morankar
2		Sunny Desale Sanj Desale	SE COMP	Desale	Desale	Desale
3		Mayur Jadhav	FE MECH (G05)	Jadhav	Jadhav	Jadhav
4		Dhanjay Patil Dhananjay Patil	SY MECH	Patil	Patil	Patil
5		Paresh Pandey Pravesh	BE MECH	Pandey	Pandey	Pandey
6		Shreyash Dhokate	SY MECH	Dhokate	Dhokate	Dhokate
7						
1	G07	Rohit Gawit Cravit	TY MECH	Gawit	Gawit	Gawit
2		Moreshwar Bombade	TY MECH	Bombade	Bombade	Bombade
3		Sushil Dhakol	TY MECH	Dhakol	Dhakol	Dhakol
4		Suraj Singh	TY MECH	Singh	Singh	Singh
5		Shilpa Kadu	TY MECH	Kadu	Kadu	Kadu
6		Gitesh Patil	TY MECH	Patil	Patil	Patil
7						



Creetesh



CERTIFICATE



This is to certify that

Mr./Miss. Aniket Toke

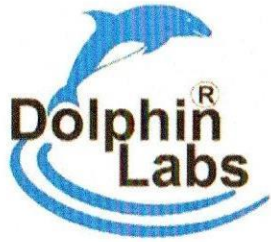
of BE (MECH) of Vishwatmak Om Gurudev College of Engineering has successfully completed 30 Hours Add on Program on "Arduino Based Automation", from 07/04/2022 to 10/04/2022.

Mr. Chittaranjan Mahajan
CEO, Dolphin Labs

Prof. Ganesh Sonawane
Event Co Ordinator

Prof. Sumit Kumar
HoD. E & TC

Dr. Dnyandeo Shinde
Principal



CERTIFICATE



This is to certify that

Mr./Miss. Jidnyasa Paul

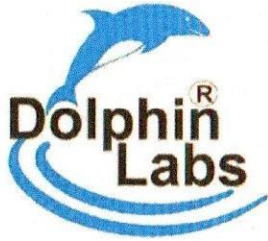
of BE (EXTU) of Vishwatmak Om Gurudev College of Engineering has successfully completed 30 Hours Add on Program on "Arduino Based Automation", from 07/04/2022 to 10/04/2022.

Mr. Chittaranjan Mahajan
CEO, Dolphin Labs

Prof. Ganesh Sonawane
Event Co Ordinator

Prof. Sumit Kumar
HoD. E & TC

Dr. Dnyandeo Shinde
Principal



CERTIFICATE



This is to certify that

Mr./Miss. Rohit Toke

of BE (EXTC) of Vishwatmak Om Gurudev College of Engineering has successfully completed 30 Hours Add on Program on

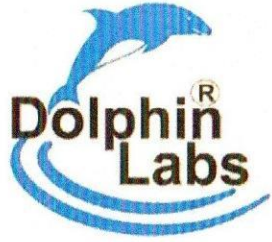
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CEO, Dolphin Labs

Prof. Ganesh Sonawane
Event Co Ordinator

Prof. Sumit Kumar
HoD. E & TC

Dr. Dnyandeo Shinde
Principal



CERTIFICATE



This is to certify that

Mr./Miss. Rohit Moreankar

of SE (COMP) of Vishwatmak Om Gurudev College of Engineering has successfully completed 30 Hours Add on Program on

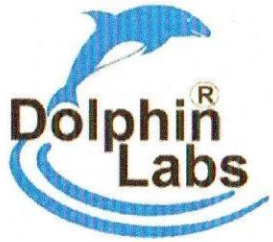
"Arduino Based Automation", from 07/04/2022 to 10/04/2022.

Mr. Chittaranjan Mahajan
CEO, Dolphin Labs

Prof. Ganesh Sonawane
Event Co Ordinator

Prof. Sumit Kumar
HoD. E & TC

Dr. Dnyandeo Shinde
Principal



CERTIFICATE



This is to certify that

Mr./Miss. Amit Nipurte

of TE (EXTC) of Vishwatmak Om Gurudev College of Engineering has successfully completed 30 Hours Add on Program on

"Arduino Based Automation", from 07/04/2022 to 10/04/2022.

Mr. Chittaranjan Mahajan
CEO, Dolphin Labs

Prof. Ganesh Sonawane
Event Co Ordinator

Prof. Sumit Kumar
HoD. E & TC

Dr. Dnyandeo Shinde
Principal