



Bharath Institute of Higher Education and Research

[Declared Under Section 3 of UGC Act, 1956]

Chennai – 600 073

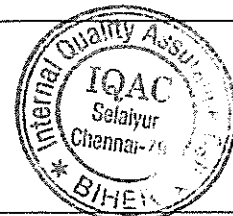
INTERNAL QUALITY ASSURANCE CELL (IQAC)

DOCUMENTS SUBMISSION FORM

Date of Submission	10/7/2018
Type of Documents	VALUE ADDED COURSE.
Description	4 - Days value added course in Arduino and Robotics.
Enclosures	a) Circular.
	b) Objective.
	c) Certificate
	d) Participants List
	e) Photos.
	f) Feedback forms
	g)
No. of Pages	08
Submitted By	Name : DR. P. SENGOTTUVEL.
	Designation : PROFESSOR & HOD
	Department : MECHATRONICS.
	Signature :

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Verified By:	Mysk. Saktivel	Sign:	Date: 10/7/2018
Uploaded By:	Senthil Kumar k.s	Sign:	Date: 10/7/2018
File Name:	SMEC - MT - VC - 2018 - 19 - 001		



Director
IQAC - BIHER



Bharath

INSTITUTE OF HIGHER EDUCATION AND RESEARCH
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Date: 01.07.2018

Department of Mechatronics

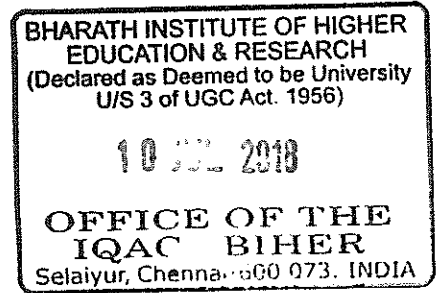
Circular

The Department of Mechatronics, BIHER is glad to conduct a 4 - day Value Added Program on “Arduino & Robotics” dated from 04.07.2018 for a period of 25 hours. Those who are interested to participate do register your name with the program coordinator mentioned below.

Resource persons:

Dr.P.Sengottuvel,
Professor,
BIHER

Mr. Shanthi lal
Skilled Teacher,
Jay Robotic tech-pvt Ltd-Tambaram



Maximum No. of registration Allowed – 40

***First come first serve basis.**

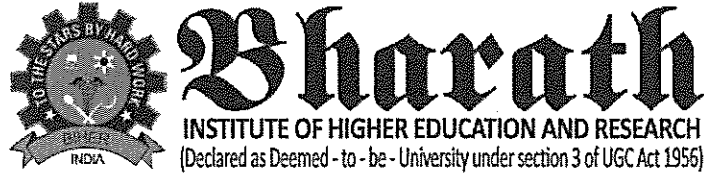
Program Coordinator:

Mrs.V.G.Vijaya
Assistant Professor
Mrs.G.Vasumathi
Assistant Professor,

E-Mail: vijayasaravan84@gmail.com@ / vasu.bala06@gmail.com

Mobile: 8870136732 / 9962133365

HOD



Department of Mechatronics

Arduino & Robotics

OBJECTIVES:

This course will show you how to use your Arduino to control a robot, while providing step-by-step instructions on the entire robot building process. You'll learn Arduino basics as well as the characteristics of different types of motors used in robotics.

[DAY: 1]

MODULE I Introduction to Arduino (5 Hrs)

Introduction to Arduino, Pin configuration and architecture, Device and platform features, Concept of digital and analog ports, Familiarizing with Arduino Interfacing Board, and Arduino platform.

[DAY: 2]

MODULE II Basic Concepts of Arduino (5 Hrs)

Arduino data types, Variables and constants, Operators, Control Statements, Arrays, Functions, Arduino i/o Functions, Arduino Time, Arduino sensors, Arduino Display.

[DAY: 3]

MODULE III Robotics Introduction (5 Hrs)

Robotics, Introduction, Basic Structure, Classification of robot and Robotic systems , laws of robotics , robot motions , work space, precision of movement

[DAY: 4]

MODULE IV Drives and control systems (5 Hrs)

Hydraulic systems, power supply, servo valve , sump , hydraulic motor , DC servo motors , stepper motors , operation. This will involve designing, developing, coding and implement Arduino project. Projects will include but not limited to Fingerprint Based Car Ignition System, Obstacle avoiding robot using an ultrasonic sensor and Arduino, Fire Fighting Robot using Arduino Automatic Home cleaning Robot, Arduino Uno based Robotic Arm.

Certificate

BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF MECHATRONICS
CERTIFICATE OF PARTICIPATION

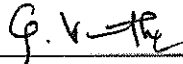
This is to certify that

NATARAJAN M A

of **Bharath Institute of Science and Technology**

had attended the 5 day Value Added Program on "Arduino & Robotics"
organized by the Department of Mechatronics-

Bharath Institute of Higher Education and Research, Chennai on July (4-5,9-10) 2018.



Mrs.V.G.Vijaya Mrs.G.Vasumathi
Coordinators



Dr.P.Sengottuvel
Resource Person



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Department of Mechatronics

Value Added Course - Arduino & Robotics

PARTICIPANTS LIST

S.No	Reg.No	Name	Department
1.	U17AM013	SURAKANI PAVAN SAI .	Automobile Engineering
2.	U17AM014	KUMBHAR RAHUL	Automobile Engineering
3.	U17AM015	KUTHE SOURABH SURESH .	Automobile Engineering
4.	U17AM502	KISHORE C	Automobile Engineering
5.	U17AM503	VEERANKI NAGA PRAMOD	Automobile Engineering
6.	U17AM701	JABANESH SG	Automobile Engineering
7.	U17AM702	LAWANBHA GYMPAD .	Automobile Engineering
8.	U17MT001	PRASANNA KUMAR R	Mechatronics
9.	U17MT002	NATARAJAN M A	Mechatronics
10.	U17MT012	TAMILSELVAN A	Mechatronics
11.	U17MT013	ARUN KUMAR C K	Mechatronics
12.	U17MT014	MOHAN PIRASATH M	Mechatronics
13.	U17MT015	BAGIYARAJ D	Mechatronics
14.	U17MT026	MADUGULA BALACHANDRA	Mechatronics
15.	U17MT027	ALEX ANTO	Mechatronics
16.	U17MT052	SATHISH KUMAR S	Mechatronics
17.	U17MT056	SURYA PRAKASH N	Mechatronics
18.	U17MT057	SREE MUKESH R V	Mechatronics

19.	U17MT058	NAGARAJ P	Mechatronics
20.	U17ME001	MADHAVAN H	Mechanical Engineering
21.	U17ME006	STEPHEN CHITARANJAN B	Mechanical Engineering
22.	U17ME019	EDLA MANISH	Mechanical Engineering
23.	U17ME021	DARAM PRITHVI RAJ .	Automobile Engineering
24.	U17ME035	DAMARLA SAI SANTHOSH .	Automobile Engineering
25.	U17ME036	FEROZ AKHTAR M A	Automobile Engineering
26.	U17ME038	HARIRAM K	Automobile Engineering
27.	U17ME045	JEYABHARATHI R	Mechanical Engineering
28.	U17ME047	THIRUGNANA SAMMANDAM R	Mechanical Engineering
29.	U17ME056	KAMPARAJU RAM SRINIVAS RAJU .	Mechanical Engineering
30.	U17ME059	BALAJI P	Mechanical Engineering
31.	U17ME062	PAKAM SARATH KUMAR .	Mechanical Engineering
32.	U17ME066	YETTELLA BHUVANESWARA REDDY .	Mechanical Engineering
33.	U17ME068	CHALLA GIREESH	Mechanical Engineering
34.	U17ME069	VEMPULURU RAKESH	Mechanical Engineering
35.	U17ME001	MADHAVAN H	Mechanical Engineering
36.	U17ME006	STEPHEN CHITARANJAN B	Mechanical Engineering
37.	U17ME019	EDLA MANISH	Mechanical Engineering
38.	U17ME021	DARAM PRITHVI RAJ .	Mechanical Engineering
39.	U17ME035	DAMARLA SAI SANTHOSH .	Mechanical Engineering
40.	U17ME036	FEROZ AKHTAR M A	Mechanical Engineering

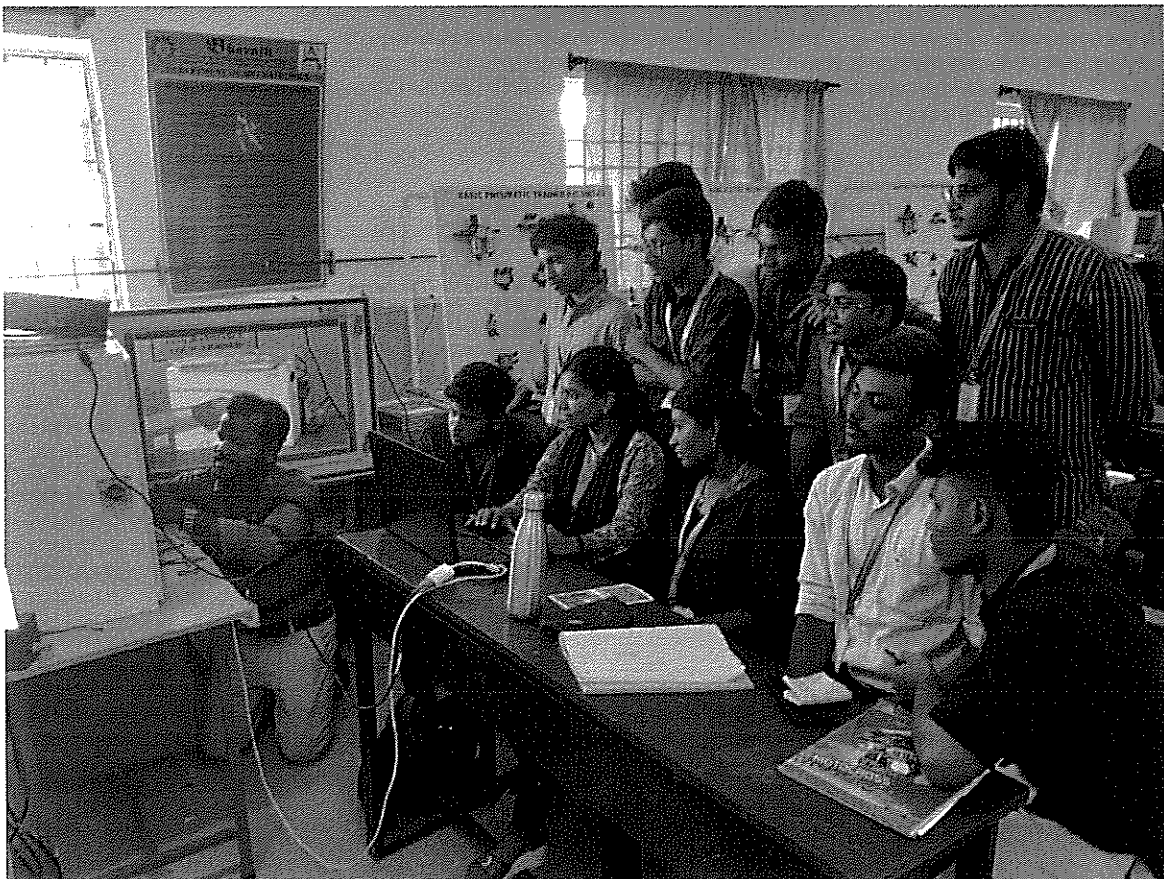


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Department of Mechatronics

Value Added Course – Arduino & Robotics





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**BHARATH INSTITUTE OF SCIENCE &
TECHNOLOGY**

Selaiyur, Chennai - 73.

DEPARTMENT OF MECHATRONICS

VALVE ADDED COURSE
FEEDBACK FORM

Date: 07/07/18.

NAME	U17ME038 / HARIRAM.K				
REGISTER.NO	U17ME038.				
COURSE TITLE	Arduino & Robotics				
	POOR	FAIR	GOOD	VERY GOOD	EXCELLENT
OVERALL PROGRAM					✓
THE SPEAKER				✓	
AUDIO,VISIAL AIDS,TECHNOLOGY USED				✓	
PRESENTATION HAND OUTS				✓	

K. Hariram

STUDENT SIGNATURE



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**BHARATH INSTITUTE OF SCIENCE &
TECHNOLOGY**

Selaiyur, Chennai - 73.

DEPARTMENT OF MECHATRONICS

VALVE ADDED COURSE
FEEDBACK FORM

Date: 07/07/2018

NAME	KISHORE.C				
REGISTER.NO	U17AM502				
COURSE TITLE	Arduino & Robotics				
	POOR	FAIR	GOOD	VERY GOOD	EXCELLENT
OVERALL PROGRAM				✓	
THE SPEAKER					✓
AUDIO,VISIAL AIDS,TECHNOLOGY USED				✓	
PRESENTATION HAND OUTS					✓

Kishore C.
STUDENT SIGNATURE



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Chennai - 600 073

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INTERNAL QUALITY ASSURANCE CELL (IQAC) DOCUMENTS SUBMISSION FORM

Date of Submission	27/7/2018
Type of Documents	Value Added Course Program Report
Description	Data management
Enclosures	a) Requisition Letter
	b) Circular
	c) Curriculum
	d) Schedule
	e) Attendance Sheet
	f) Feedback Form
	g) Certificate
	h) Image
No. of Pages	13
Submitted By	Name : Mr. V. P. Durairaj
	Designation : Asst Professor
	Department : Mechanical
	Signature : Vj

For Office Use Only

Verified By:	D. N. S. SENITHUR	Sign:		Date: 28/7/2018
Uploaded By:		Sign:		Date:
File Name:				

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