



Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)

Date: 21.11.2019

Department of Mechatronics

Circular

The Department of Mechatronics, BIHER is glad to conduct a 5 - day Value Added Program on “**Smart Materials and Intelligent System Design**” dated from 28.11.2019 to 04.12.2019 for a period of 30 hours. Those who are interested to participate do register your name with the program coordinator mentioned below.

Resource persons:

Dr.P. Sengottuvel,
Professor,
BIHER

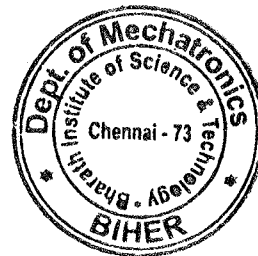
Mr. Mohammed Basha
CADDAM Technologies Pvt. Ltd
Tambaram West
Chennai .

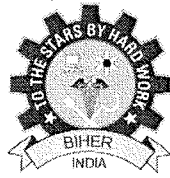
Maximum No. of registration Allowed – 30

***First come first serve basis.**

Program Coordinator:

Mr. DHANASEKAR
Assistant Professor
Mrs.G. VASUMATHI
Assistant Professor
E-Mail: arun08v@gmail.com
Mobile: 9962133365





Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)

Department of Mechatronics

SMART MATERIALS AND INTELLIGENT SYSTEM DESIGN

OBJECTIVES:

This course will show in this field is multi-disciplinary in nature involving materials, composites, basic electronics, control system and informatics.

[DAY: 1]

MODULE I

Introduction to smart materials (6 Hrs)

[DAY: 2]

MODULE II

Piezo electric material (6Hrs)

[DAY: 3]

MODULE III

Active smart Polymer (6 Hrs)

[DAY: 4]

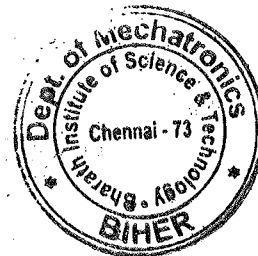
MODULE IV

Active smart Polymer (6 Hrs)



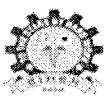


[DAY: 5]

MODULE V :

Classification of Composites (6 Hrs)



Model Certificate

   **Bharath**  

BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY

CERTIFICATE OF PARTICIPATION

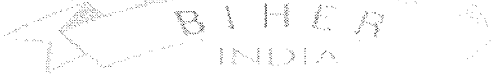
This is to certify that

Prof./Dr./Mr./Ms.

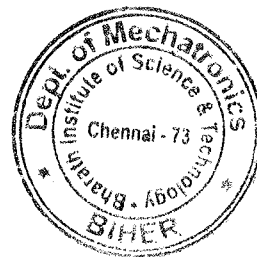
of

BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY, BIHER, CHENNAI.

He /She has Participated in a Value Added Program on "Course on Smart Materials and Intelligent System Design" organized by the School of Mechanical Sciences, Department of Mechatronics, on 28th November to 04th December 2019.



Coordinator Mr.J.Dhanasekar	Convener Dr.P.Sengottuvel	Dean-Engineering Dr.J.Hameed Hussain
---------------------------------------	-------------------------------------	--





Sharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)

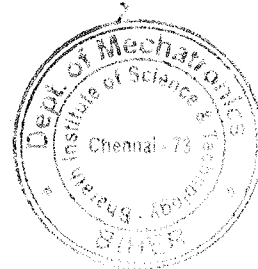
Department of Mechatronics

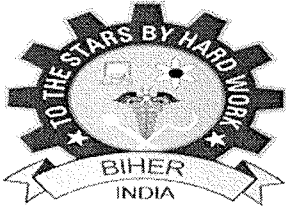
Value Added Course - SMART MATERIALS AND INTELLIGENT SYSTEM DESIGN

PARTICIPANTS LIST

S.No	Reg.No	Name	Department
1.	U17MT056	SURYA PRAKASH	Mechatronics
2.	U17MT055	YOKESH RAJ	Mechatronics
3.	U17MT054	VASANTH	Mechatronics
4.	U17MT053	GOKULAKRISHNAN	Mechatronics
5.	U17MT052	SATHISH KUMAR	Mechatronics
6.	U17MT051	BOLLEDDU RAVI TEJA	Mechatronics
7.	U17MT050	THIRUMURUGAN	Mechatronics
8.	U17MT049	NIKHILANTONY	Mechatronics
9.	U17MT048	PALANIYAPPAN	Mechatronics
10.	U17MT046	VIGNESHWARAN	Mechatronics
11.	U17MT045	ABDUL RAHAMAN	Mechatronics
12.	U17MT044	BADDITI	Mechatronics
13.	U17MT042	METHIL KRISHNAN	Mechatronics
14.	U17MT040	NIZAMUDEEN	Mechatronics
15.	U17MT039	SAGADEVAN	Mechatronics
16.	U17MT038	DHARANIDHARAN	Mechatronics
17.	U17MT037	DINESH	Mechatronics

18.	U17MT036	SUSHIL KUMAR	Mechatronics
19.	U17MT035	HARIHARAN	Mechatronics
20.	U17MT061	MOHAMMED ABBAS	Mechatronics
21.	U18MT705	SHALISHWARAN T	Mechatronics
22.	U18MT706	TIRUMANI BULLI RAJU	Mechatronics
23.	U19MT010	DRISHNA MYTHREYAN C S	Mechatronics
24.	U19MT011	GODWIN ALEXANDER J	Mechatronics
25.	U19MT012	GOKUL T	Mechatronics
26.	U19MT013	GOKULKRISHNAN A	Mechatronics
27.	U19MT014	IMMANUEL H N	Mechatronics
28.	U19MT015	IMRAN KHAN K	Mechatronics
29.	U19MT016	JAGADESHWAR S	Mechatronics
30.	U19MT017	JAGADESWARAN R	Mechatronics



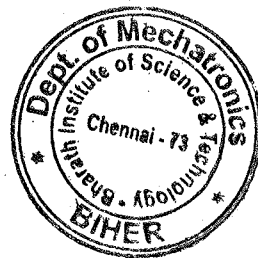


Bharath

INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)

Department of Mechatronics

Value added course on SMART MATERIALS AND INTELLIGENT
SYSTEM DESIGN





Bharath

INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)

Date:11.06.2019

From

The HOD,
Department of Mechanical Engineering,
Bharath Institute of Higher Education and Research,
Selaiyur, Chennai.

To

The Dean Engineering,
Bharath Institute of Higher Education and Research,
Selaiyur, Chennai.

Respected Sir,

Sub: Requisition for conducting Value added course – reg.

School of Mechanical Sciences has planned to conduct Value added course entitled “The Arduino and Robotics “from 17.6.2019 to 21.06.2019. In this regard we kindly request you to grant permission for the same.

Thanking You



HOD/MECH



Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)

Date:5.06.2019

Department of Mechanical Engineering

Circular

The of Department of Mechanical Engineering, BIHER glad to conduct on five days value added program on “**The Arduino and Robotics**” from 17.06.2019 to 21.06.2019 for 30 hours. Those who are interested to participate do register your name to the program coordinator.

All reregistered students must attend all the classes without fail. The students who are completed the course successfully with good score will get the course completion certificate from the institute/Department.

Resource person: Dr.R.Hariharan, Mr.N.Lenin Rakesh

Maximum no. of registration Allowed – 60.

Program coordinator


Mr.V.P.DuraiRaj



Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)

The Arduino and 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.

MODULE 1

(6 Hrs)

Introduction to Arduino

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.

MODULE II

(6 Hrs)

Basic Concepts of Arduino

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

MODULE III

(6 Hrs)

Robotics Introduction

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

MODULE IV

(6 Hrs)

Drives and control systems

Hydraulic systems, power supply, servo valve, sump, hydraulic motor, DC servo motors, stepper motors, operation.

MODULE V

(6 Hrs)

Making it a reality (Arduino & Robotics based Projects)

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.



Bharath

INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)

Department of Mechanical Engineering

One Week Value added Program on “TheArduino and robotics”

Date	Morning Session (9 AM – 12 PM)	Afternoon Session (1:30 PM – 4:30 PM)
17.6.2019 Monday	Dr.R.Hariharan Introduction to Arduino, Pin configuration and architecture, Device and platform features	Mr.N.Lenin Rakesh learn Arduino basics as well as the characteristics of different types of motors used in robot
18.6.2019 Tuesday	Mr.N.Lenin Rakesh Arduino data types, Variables and constants, Operators, Control Statements, Arrays	Dr.R.Hariharan Arduino i/o Functions, Arduino Time, Arduino sensors, Arduino Display.
19.6.2019 Wednesday	Dr.R.Hariharan Robotics, Introduction, Basic Structure, Classification of robot and Robotic systems	Mr.N.Lenin Rakesh laws of robotics, robot motions, work space, precision of movement
20.6.2019 Thursday	Mr. N.Lenin Rakesh Hydraulic systems, power supply, servo valve, sump, hydraulic motor	Dr.R.Hariharan DC servo motors, stepper motors, operation.
21.6.2019 Friday	Dr.R.Hariharan This will involve designing, developing, coding and implement Arduino project. Projects will include but not limited to Fingerprint Based Car Ignition System	Mr.N.LeninRakesh Obstacle avoiding robot using an ultrasonic sensor and Arduino, Arduino Uno based Robotic Arm.



Bharath

INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)

Sl.No	NAME	Registrations No	Department
1	RAGUL KUMAR S	U16ME040	Mechanical Department
2	AAKASH KAVIN T	U16ME043	Mechanical Engineering
3	DINESH C	U16ME044	Mechanical Engineering
4	MUSTAQ AHMED M	U16ME045	Mechanical Engineering
5	GOWTHAM S	U16ME047	Mechanical Engineering
6	HEMANTH RAJ R	U16ME048	Mechanical Engineering
7	SHRIKHANTH R	U16ME052	Mechanical Engineering
8	SANTHOSH R	U16ME071	Mechanical Engineering
9	MOHAMMED SHAJI B	U16ME079	Mechanical Engineering
10	MUKANTHAN T	U16ME081	Mechanical Engineering
11	SAMPADARAO ASHOK	U16ME084	Mechanical Engineering
12	GODWIN PRABHU G	U16ME088	Mechanical Engineering
13	YERRAMSETTI MAHESH BABU	U16ME108	Mechanical Engineering
14	REDDYVARI TEJESH	U16ME114	Mechanical Engineering
15	ABHIJITH A R	U16ME123	Mechanical Engineering
16	BEENAGONI ANILKUMAR	U16ME124	Mechanical Engineering
17	SUJITH H	U16ME125	Mechanical Engineering
18	JAKKAMSETTI BHANU CHAITANYA	U16ME126	Mechanical Engineering
19	VENKATASRINIVAS M	U16ME130	Mechanical Engineering
20	ASHWIN S	U16ME132	Mechanical Engineering
21	RAGUL KUMAR S	U16ME135	Mechanical Engineering
22	AAKASH KAVIN T	U16ME136	Mechanical Engineering
23	DINESH C	U16ME137	Mechanical Engineering
24	MUSTAQ AHMED M	U16ME141	Mechanical Engineering
25	GOWTHAM S	U16ME142	Mechanical Engineering
26	HEMANTH RAJ R	U16ME502	Mechanical Engineering
27	SHRIKHANTH R	U16ME040	Mechanical Engineering
28	SANTHOSH R	U16ME043	Mechanical Engineering
29	MOHAMMED SHAJI B	U16ME044	Mechanical Engineering
30	MUKANTHAN T	U16ME045	Mechanical Engineering
31	SAMPADARAO ASHOK	U16ME047	Mechanical Engineering
32	GODWIN PRABHU G	U16ME048	Mechanical Engineering
33	YERRAMSETTI MAHESH BABU	U16ME052	Mechanical Engineering
34	REDDYVARI TEJESH	U16ME071	Mechanical Engineering
35	ABHIJITH A R	U16ME079	Mechanical Engineering
36	BEENAGONI ANILKUMAR	U16ME081	Mechanical Engineering
37	VEERANKI NAGA PRAMOD	U16ME084	Automobile Engineering
38	JABANESH SG	U17AM051	Automobile Engineering
39	LA WANBHA GYMPAD	U17AM701	Automobile Engineering
40	NEIKHOZO KHAMO	U17AM702	Automobile Engineering

41	SINGIREDDY HARSHITH REDY	U17AM703	Automobile Engineering
42	STEVE CASTONE CHYNE	U17AM704	Automobile Engineering
43	MUGILAN M	U16MT501	Mechatronics Engineering
44	VIGNESHWAR C B	U16MT502	Mechatronics Engineering
45	KARUPHIN KAWIN J	U16MT503	Mechatronics Engineering
46	CHANDRASEKAR D G	U16MT701	Mechatronics Engineering
47	CHIRANJEEVI A	U16MT702	Mechatronics Engineering
48	VIGNESH.A	U16MT703	Mechatronics Engineering



Bharath

INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1955)

FEEDBACK FORM

- ❖ As part of a continuing improvement process, our college appreciates suggestions and inputs regarding the institution. We request you to sincerely answer these questions under assurance of complete confidentiality. Your interest in making our institution better is greatly appreciated.

Name of Department : Mechanical

Date : 21.06.2019

Event / Speaker Name : Value added Course on the Arduino and Robotics
Pr. R. Venkatesh, Mr. N. Lenin Reddy

- Please rate the session on the scale indicated. Your comments are most appreciated.

S.No	Parameters	Below Average	Average	Good	Excellent	Outstanding
1.	The Topic					✓
	The choice of topic was relevant to me					✓
2.	The Lecturer / Speaker				✓	
	Self-confidence					✓
	Communication skills					✓
	Doubts/ queries were answered satisfactorily				✓	
3.	The Content (Topic)					✓
	Refers to latest developments in the field					✓
	Career oriented				✓	
	Innovative learning, if any					✓

- Overall, how would you rate this Guest Lecture / Workshop / Seminar / Event/Value added course?

1. Below Average	2. Average	3. Good	4. Excellent	5. Outstanding
				✓

- Comments (If any):

It very good, very interesting

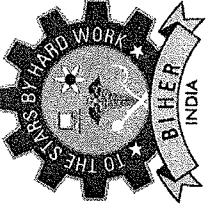
Bharath Institute of Higher Education and Research

CERTIFICATE OF PARTICIPATION

This certificate goes to

RAGUL KUMAR.S

for successfully completing the Value Added Course on
"The Arduino and Robotics" conducted by the School of
Mechanical Engineering during the month of June 2019.



mx

VAC CO-ORDINATOR

[Signature]

HOD MECHANICAL

