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

NAAC

<u>Requisition Letter</u>   02.11.2020

FROM

THE HOD

Department of Mechatronics

Bharath Institute of Higher Education and Research

Selaiyur-Chennai- 73

TO

THE DEAN ENGINEERING

Bharath Institute of Higher Education and Research

Selaiyur-Chennai- 73

Sir,

Subject: Requisition for online conducting Value Added course reg.

The school of Mechanical sciences had planned to conduct a 5 day value added course on the topic **"COURSE ON SIXTH SENSE ROBOTICS FOR ENGINEERING"** dated from **4.11.2020 to 8.11.2020.** In this regard, I request you to kindly grant permission for conducting the same.

Thanking You

HOD   Dean Engineering

(Dr. Sengottovel)

Dept. of Mechatronics   (Dr.J.Hameed Hussain)

Department of Mechatronics

<u>Circular</u>

Date: 2.11.2020

The Department of Mechatronics, BIHER is glad to conduct a 5 - day Value Added Program on **"COURSE ON SIXTH SENSE ROBOTICS FOR ENGINEERING"** dated from 4.11.2020 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. Chandrasekar.R,
Prag Robotics,
Chennai.

Maximum No. of registration Allowed – 38

*First come first serve basis.

Program Coordinator:
Mrs.VASUMATHI
Assistant Professor
Mr.J.DHANASEKAR
Assistant Professor,
E-Mail: dhanasekar81@gmail.com
Mobile: 9841259514

HOD

Department of Mechatronics

COURSE ON SIXTH SENSE ROBOTICS FOR ENGINEERING OBJECTIVES:

This course introduces you to the amazing world of sixth sense technology and its fascinating applications. Using an Arduino board and other electronic components, you will develop a robot that can be controlled through digital information. The digital information is processed using the image processing technique which takes the input data from the user who can give commands using hand gestures.

[DAY: 1]

- **MODULE I Introduction to Sixth sense Technology (5 Hrs)**

Sixth Sense' is a wearable gesture interface that augments the physical world around us with digital information and lets us use natural hand gestures to interact with that information. This technology will definitely give the user a new way of seeing the world with information at their fingertips it has been classified under the category 'wearable computing'.

[DAY: 2]

- **MODULE II Introduction to Image Processing and application (5 Hrs)**

Image processing is a method to perform some operations on an image, in order to get an enhanced image or to extract some useful information from it. It is a type of signal processing in which input is an image and output may be image or characteristics/features associated with that image.

[DAY: 3]

- **MODULE III Open CV and Python programming (5 Hrs)**

OpenCV is a huge open-source library for computer vision, machine learning, and image processing. OpenCV supports a wide variety of programming languages like Python, C++, Java, etc.

[DAY: 4]

- **MODULE IV** Edge detection and image enhancement **(5 Hrs)**

Edge detection includes a variety of mathematical methods that aim at identifying points in a digital image at which the image brightness changes sharply or, more formally, has discontinuities. The points at which image brightness changes sharply are typically organized into a set of curved line segments termed edges

[DAY: 5]

- **MODULE V :** Programming the Robot using Python Open CV and Arduino **(5 Hrs)**

You can use OpenCV, Python, and Arduino to detect and track faces. Face tracking can be used in a variety of robotics projects and applications.

Department of Mechatronics

Value Added Course - ONLINECOURSE ON SIXTH SENSE ROBOTICS FOR ENGINEERING

PARTICIPANTS LIST

S.No	Reg.No	Name	Department
1.	U16AM015	PARIMI SAI SURYA VAMSI .	Automobile Engineering
2.	U16AM017	AMAL PHILIP GEORGE .	Automobile Engineering
3.	U16AM018	ROSHAN ROMARIO FRANCIS	Automobile Engineering
4.	U16AM019	ANTHAM JEEVAN REDDY .	Automobile Engineering
5.	U16AM001	RAMACHANDRAN M	Automobile Engineering
6.	U16AM002	LIBIN BOBBY	Automobile Engineering
7.	U16AM004	NANDA KUMAR K	Automobile Engineering
8.	U16AM005	VASANTHKUMAR R	Automobile Engineering
9.	U16ME012	MOHANRAJ R	Automobile Engineering
10.	U16ME014	RAVIRAJAN S	Mechanical Engineering
11.	U16ME023	ARAVINDAN K	Mechanical Engineering
12.	U16ME029	DINESH KUMAR M	Mechanical Engineering
13.	U16ME031	ZHAKIRHUSSAIN S	Mechanical Engineering
14.	U16ME101	VIJAY M	Mechanical Engineering
15.	U16ME104	MULLAGURA BHARATH KUMAR .	Mechanical Engineering
16.	U16ME105	CHALLA CHARANKUMAR .	Mechanical Engineering

17.	U16ME106	RAJEEV KUMAR .	Mechanical Engineering
18.	U16ME107	MANOJ .	Mechanical Engineering
19.	U16MT001	PRADEEPAN S	Mechanical Engineering
20.	U16MT002	RAAHUL GANESH R	Mechanical Engineering
21.	U16MT003	DINESH J	Mechatronics
22.	U16MT004	SRINATH B	Mechatronics
23.	U16MT005	DHANASEKAR R	Mechatronics
24.	U16MT006	GOUTHAM M	Mechatronics
25.	U16MT007	SATHIYASEELAN S	Mechatronics
26.	U16MT008	RAKESH P	Mechatronics
27.	U16MT009	ABDUL FAHEEM S	Mechatronics
28.	U16MT010	SAKTHI R	Mechatronics
29.	U16MT011	MELVINE ROHAN R	Mechatronics
30.	U16MT014	SARATHKUMAR D	Mechatronics
31.	U16MT015	SOMENDRAN A	Mechatronics
32.	U16MT018	RATHISH KRISHNAN R	Mechatronics
33.	U16MT501	MUGILAN M	Mechatronics
34.	U16MT502	VIGNESHWAR C B	Mechatronics
35.	U16MT503	KARUPHIN KAWIN J	Mechatronics
36.	U16MT701	CHANDRASEKAR D G	Mechatronics
37.	U16MT702	CHIRANJEEVI G	Mechatronics
38.	U16MT703	VIGNESH A	Mechatronics

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BHARATH INSTITUTE OF SCIENCE & TECHNOLOGY
Selaiyur, Chennai – 73.
DEPARTMENT OF MECHATRONICS

VALVE ADDED COURSE
FEEDBACK FORM

Date: 8/11/20

NAME	CHIRANJEEVI.U				
REGISTER.NO	U16MT702				
COURSE TITLE	SIXTH SENSE ROBOTICS FOR ENGU				
	POOR	FAIR	GOOD	VERY GOOD	EXCELLENT
OVERALL PROGRAM		✓			
THE SPEAKER			✓		
AUDIO,VISIAL AIDS,TECHNOLOGY USED					✓
PRESENTATION HAND OUTS				✓	

Chiranjeevi 8/11

BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF MECHATRONICS

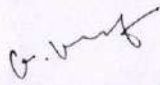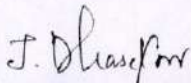## CERTIFICATE OF PARTICIPATION

This is to certify that

MOHANRAJ

of **Bharath Institute of Science and Technology**

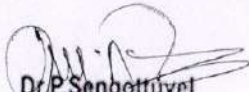had attended the 5 day Value Added Program on *COURSE ON SIXTH SENSE ROBOTICS FOR ENGINEERING*

organized by the Department of Mechatronics-
Bharath Institute of Higher Education and Research,Chennai on *4/11/2020 TO 8/11/2020*

G.VASUMATHI/J.DHANASEKAR
Coordinators

Dr.P.Sengottuvel
Resource Person