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>   1.09.2020

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 conducting online Value Added course reg.

The school of Mechanical sciences had planned to conduct a value added course on the topic " Course on **"ARDUINO RTOS FROM GROUND UP BUILD REAL TIME"** dated from **5.9.2020 to 9.9.2020**. In this regard, I request you to kindly grant permission for conducting the same.

Thanking You

HOD

(Dr. Sengottavel)

Dept. of Mechatronics

Dean Engineering

(Dr.J.Hameed Hussain)

Date: **1.9.2020**

Department of Mechatronics

Circular

The Department of Mechatronics, BIHER is glad to conduct a 5 - day Value Added Program on **"ARDUINO RTOS FROM GROUND UP BUILD REAL TIME PROJECTS"** dated from 5.9.2020 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.R.RAJA,
UNIKERZ Technologies,
Chennai.

Maximum No. of registration Allowed – 53

*First come first serve basis.

Program Coordinator:
Mrs.G.VASUMATHI
 Assistant Professor
Mrs.V.G.VIJAYA
Assistant Professor,
E-Mail: vijayasaravanan84@gmail.com
Mobile: 8870136732

HOD

Department of Mechatronics

ARDUINO RTOS FROM GROUND UP BUILD REAL TIME PROJECTS

OBJECTIVES:

This course will show you how to his course teaches you the foundations of real-time systems and how to build real-time applications using FreeRTOS on Arduino boards. The course gives a detailed overview of the characteristics of the FreeRTOS real-time kernel, provides a detailed tutorial on the APIs required to implement the various features of **FreeRTOS** on Arduino and then goes on to build about **30 real-time projects** .

[DAY: 1]

- **MODULE I Build a Real-Time OS from scratch (5 Hrs)**

Build Your Own RealTime OS (RTOS) From Ground Up ™ on ARM 1 is the name of a training course from the Udemy site that teaches you how to create a Real-Time operating system with a variety of theoretical and practical exercises

[DAY: 2]

- **MODULE II Build collaborative timing (5 Hrs)**

In this course you will learn about all aspects of the Real-Time operating system, its different parts, how it works, and how to build it, and learn how to work with scheduling algorithms and interdisciplinary tools. .

[DAY: 3]

- **MODULE III Create alternate and rotating shift schedules (5 Hrs)**

you will be able to create your own operating system, create a turn-by-turn scheduler, calculate CPU utilization, and create an OS Kernel.

[DAY: 4]

- **MODULE IV Write assembly code (5 Hrs)**
- Having basic C programming skills is a plus point in this course.

[DAY: 5]

- **MODULE V : Build a Backup Package (5 Hrs)**

- Build a library and add custom palettes to share code and create add-ons. Calculates CPU usage Write assembly code

Department of Mechatronics

Value Added Course - ARDUINO RTOS FROM GROUND UP BUILD REAL TIME PROJECTS

PARTICIPANTS LIST

S.No	Reg.No	Name	Department
1.	U17ME001	MADHAVAN H	Mechanical Engineering
2.	U17ME006	STEPHEN CHITARANJAN B	Mechanical Engineering
3.	U17ME019	EDLA MANISH	Mechanical Engineering
4.	U17ME021	DARAM PRITHVI RAJ .	Mechanical Engineering
5.	U17ME035	DAMARLA SAI SANTHOSH .	Mechanical Engineering
6.	U17ME036	FEROZ AKHTAR M A	Mechanical Engineering
7.	U17ME038	HARIRAM K	Mechanical Engineering
8.	U17ME045	JEYABHARATHI R	Mechanical Engineering
9.	U17ME047	THIRUGNANA SAMMANDAM R	Mechanical Engineering
10.	U17ME056	KAMPARAJU RAM SRINIVAS RAJU .	Mechanical Engineering
11.	U17ME059	BALAJI P	Mechanical Engineering
12.	U17ME062	PAKAM SARATH KUMAR .	Mechanical Engineering
13.	U17ME066	YETTELLA BHUVANESWARA REDDY .	Mechanical Engineering
14.	U17ME068	CHALLA GIRREESH GIREESH	Mechanical Engineering
15.	U17ME069	VEMPULURU RAKESH	Mechanical Engineering
16.	U17ME075	VEDURUPARTHY KANAKA VENKATA SURESH .	Mechanical Engineering
17.	U17ME083	MOPURI RAMESH REDDY .	Mechanical Engineering

18.	U17ME089	KALLOL CHAKRABORTY	Mechanical Engineering
19.	U17ME090	LOKIREDDY VENKATA SHIVA KUMAR REDDY	Mechanical Engineering
20.	U17ME093	ANIPEDDI DEEKSHITH	Mechanical Engineering
21.	U17ME096	somasekhar kavati SOMASEKHAR	Mechanical Engineering
22.	U17ME099	DANGETI SATISH	Mechanical Engineering
23.	U17ME100	MARTHALA KARTHIK KUMAR REDDY .	Mechanical Engineering
24.	U17ME101	KATTA GOPI KRISHNA	Mechanical Engineering
25.	U17ME102	HARISH DEWANGAN	Mechanical Engineering
26.	U17ME103	SRIPAD SAMEER MUNGIKAR .	Mechanical Engineering
27.	U17ME104	BOMMU SATYA BHANU PRASADA REDDY	Mechanical Engineering
28.	U17ME105	AVULA SAI KUMAR REDDY .	Mechanical Engineering
29.	U17ME107	KOTAKONDA MANOJ MANOJ	Mechanical Engineering
30.	U17ME119	CHELLUBOINA SAI KUMAR .	Mechanical Engineering
31.	U17ME120	SUDDAPALLI JASWANTH SAI KUMAR .	Mechanical Engineering
32.	U17ME125	BURRAREDDYPALLE RAJU	Mechanical Engineering
33.	U17AM002	PRAVEEN KUMAR G	Automobile Engineering
34.	U17AM003	ALIHUSSAINMURTAZA	Automobile Engineering
35.	U17AM004	NAVEEN KUMAR U	Automobile Engineering
36.	U17AM004	NAVEEN KUMAR U	Automobile Engineering
37.	U17AM006	RANJITH R	Automobile Engineering
38.	U17AM007	YOGESHWARAN K	Automobile Engineering

39.	U17AM009	KARTHICK Y	Automobile Engineering
40.	U17AM011	GUTTULA DEEPAK	Automobile Engineering
41.	U17AM012	ABINASH N	Automobile Engineering
42.	U17MT018	DINESH	Mechatronics
43.	U17MT017	DINESHKUMAR	Mechatronics
44.	U17MT016	MANOJ KUMAR	Mechatronics
45.	U17MT015	BAGIYARAJ	Mechatronics
46.	U17MT014	MOHAN PIRASATH	Mechatronics
47.	U17MT013	ARUN KUMAR	Mechatronics
48.	U17MT012	TAMILSELVAN	Mechatronics
49.	U17MT010	HARI NI	Mechatronics
50.	U17MT009	SUDAKAR	Mechatronics
51.	U17MT008	ARAVINTHRAJ	Mechatronics
52.	U17MT007	SELVAKUMARI	Mechatronics
53.	U17MT003	SAGAR AMIRDHARAJ	Mechatronics

Bharath

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

BHARATH INSTITUTE OF SCIENCE & TECHNOLOGY

Selaiyur, Chennai – 73.

DEPARTMENT OF MECHATRONICS

VALVE ADDED COURSE
FEEDBACK FORM

Date: 5 / 9 / 2020

NAME	Ranjith				
REGISTER.NO	U17AM006				
COURSE TITLE	Arduino RTos From Ground up build Real Time Project				
	POOR	FAIR	GOOD	VERY GOOD	EXCELLENT
OVERALL PROGRAM			✓		
THE SPEAKER				✓	
AUDIO,VISIAL AIDS,TECHNOLOGY USED					✓
PRESENTATION HAND OUTS				✓	

Ranjith

BHARATH INSTITUTE OF SCIENCE & TECHNOLOGY

Selaiyur, Chennai – 73.

DEPARTMENT OF MECHATRONICS

VALVE ADDED COURSE

Date: 5.9.2020

FEEDBACK FORM

NAME	U17ME059				
REGISTER.NO	BALAJI . P.				
COURSE TITLE	ARDUINO RTOS FROM GROUND UP BUILD REALTIME PROJECTS				
	POOR	FAIR	GOOD	VERY GOOD	EXCELLENT
OVERALL PROGRAM			✓		
THE SPEAKER				✓	
AUDIO,VISIAL AIDS,TECHNOLOGY USED					✓
PRESENTATION HAND OUTS				✓	

Balaji.P
59

BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF MECHATRONICS

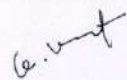## CERTIFICATE OF PARTICIPATION

This is to certify that

NAVEENKUMAR.U

of Bharath Institute of Science and Technology

had attended the 5 day Value Added Program on "**ARDUINO RTOS FROM GROUND UP BUILD REAL TIME** ,

organized by the Department of Mechatronics-   5/9/2020 TO 9/9/2020
Bharath Institute of Higher Education and Research,Chennai on

G.VASUMATHI/V.G.VIJAYA

Coordinators

Dr.P.Sengottuvel
Resource Person