

## SCHOOL OF ELECTRICAL ENGINEERING

Value Added Courses (2021 -2022)

### Applications of Signal Processing Using MATLAB

#### Course Objective

Signal processing is an electrical engineering subfield that focuses on analyzing, modifying, and synthesizing signals such as sound, images, and scientific measurements. MATLAB is a high-performance language for technical computing. It integrates computation, visualization, and programming environment. Furthermore, MATLAB is a modern programming language environment; it has sophisticated data configurations, contains built-in editing and debugging tools, and supports signal processing. These factors make MATLAB an excellent tool for teaching and research. MATLAB has many advantages compared to conventional computer languages (e.g., C, FORTRAN) for solving signal processing problems. The software package has been commercially available since 1984 and is now considered as a standard tool at most universities and industries worldwide.

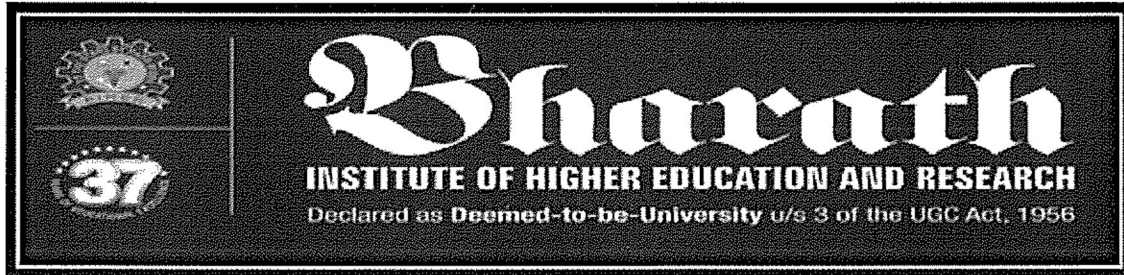
#### **Resource Persons:**

1. Ms. M. Jasmin
2. Mr. B. Karthik
3. Ms. S. Philomina

Convener

**Dr. M. Sundararajan**

HOD/ECE



**CIRCULAR**

**SCHOOL OF ELECTRICAL ENGINEERING**

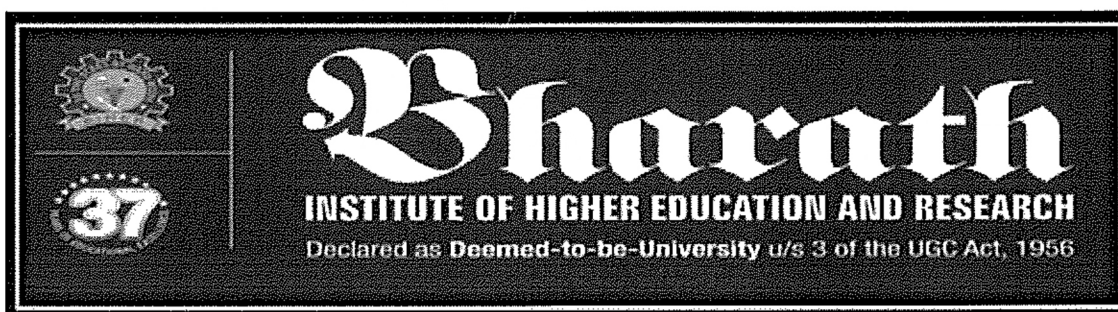
**Date: 19.09.2021**

The course on Applications of Signal Processing Using MATLAB planned by School of Electrical Engineering which commences on 17-10-2021. In this regard the students are requested to give their willingness to Course Coordinator. It is instructed to actively participate and get benefitted for the certified course.

Course Coordinator: Ms. M. Jasmin  
Contact No: 9445240930  
Email id : jasmine.ece@bharathuniv.ac.in

**Dr. M. Sundararajan**  
HOD/ECE

To,  
Copy to ECE Department,  
Copy to EEE Department,  
Department Notice Board



## SCHOOL OF ELECTRICAL ENGINEERING

### Applications of Signal Processing Using MATLAB

#### SCHEDULE

**Contact Hours: 31hrs**

DATE	SESSION	Contact Hours	TOPICS	Resource person
17-10-2021	FN	9.00 am to 12.30 pm	Introduction to Signal Processing Techniques	Mr. B. Karthik
	AN	1.30 pm to 4 pm	Introduction to MATLAB software Command window Workspace Working with the MATLAB GUI	Ms.S.Philomina
18-10-2021	FN	9.00 am to 12.30 pm	Matrix operations Crating rows and columns Finding transpose and inverse matrix	Mr. B. Karthik
	AN	1.30 pm to 4 pm	Plotting vector and matrix data Plot labeling, curve libeling and editing Graphing Imaginary and Complex Data	Ms.M.Jasmin
19-10-2021	FN	9.00 am to 12.30 pm	Generation of various signals Correlation of signals	Ms.S.Philomina
	AN	1.30 pm to 4 pm	Convolution of signals Fast Fourier Transform(FFT) analysis of audio signals	Ms.M.Jasmin
20-10-2021	FN	9.00 am to 12.30 pm	Digital filter design techniques	Mr. B. Karthik
	AN	1.30 pm to 4 pm	Multi-rate digital signal analysis	Ms.S.Philomina
21-10-2021	FN	9.00 am to 12.30 pm	Speech signal processing	Ms.M.Jasmin
	AN	1.30 pm to 5 pm	Implementation of speech signal processing algorithms as GUI & Execution file	Ms.S.Philomina

## VALUE ADDED COURSE

### SCHOOL OF ELECTRICAL ENGINEERING

### Applications of Signal Processing Using MATLAB

#### List Of Participants

Date:17.10.2021

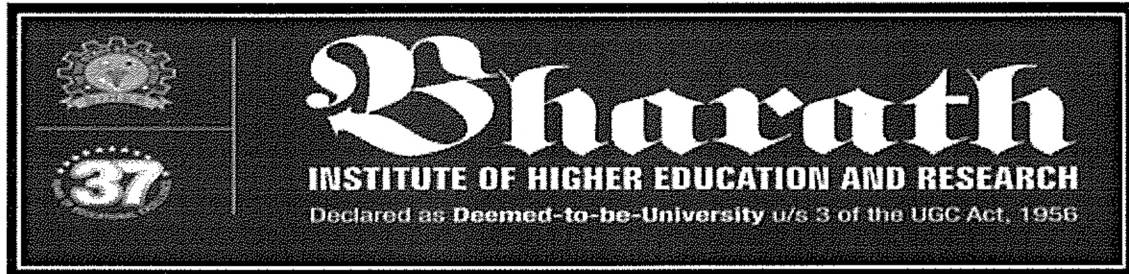
Sl.no	REG.NO.	NAME OF THE CANDIDATE
1	U12EC001	ABHISHEK KUMAR
2	U12EC002	AMARAVATHI S
3	U12EC003	AMIT KUMAR
4	U12EC004	ANKUR PANDEY
5	U12EC005	ARSHIYA MIZBA
6	U12EC006	AVANI RANJAN
7	U12EC007	BALAJI P
8	U12EC008	BLESSNI VASANTHA N S
9	U12EC009	BODDU KOUSIK REDDY
10	U12EC010	CHANDESHWAR KUMAR
11	U12EC011	CHINNA ANKANNAGARI ARUNA
12	U12EC012	DHAMODARAN N
13	U12EC013	DHINESHKUMAR N
14	U12EC014	DINESH KUMAR P
15	U12EC015	GHATTAMANENI LEKHA
16	U12EC016	GUNTAKA CHENNA REDDY
17	U12EC017	JANAKI RAMAN S
18	U12EC018	JEBIN SAM B
19	U12EC019	JOTHI KRISHNAN R
20	U12EC020	KAVITHA S
21	U12EC021	KUMAR GAURAV
22	U12EC022	KUMARI AYAGAT
23	U12EC023	KUMBAKONAM KARTHIK
24	U12EC024	KURAPATI SRIHARIREDDY
25	U12EC025	M NAVEENKUMAR GOUD
26	U12EC026	MAHAKASH BOSE
27	U12EC027	MANAB JYOTI BARUAH
28	U12EC028	MANIRATNAM KUMAR
29	U12EC029	MANJIT RAY CHOWDHURY
30	U12EC030	MOHAMED KASIM N
31	U12EC031	MONISHA M

32	U12EC032	NAMRTA KUMARI
33	U12EC033	PETETI DINESH
34	U12EC034	PETETI SRI TEJA
35	U12EC035	PRINCE PORWAL
36	U12EC036	PUSHKIN
37	U12EC038	RAJ
38	U12EC039	RANJITHKUMAR M
39	U12EC040	RAVINDRA KUMAR RAUSHAN
40	U12EC041	RODDA HEMANTH KUMAR
41	U12EE015	JITENDRA PRASAD NUNIA
42	U12EE016	KUMAR GAURAV
43	U12EE026	NAGARAJ M.
44	U12EE027	NEERAJ KUMAR



**Dr.M.Sundararajan**

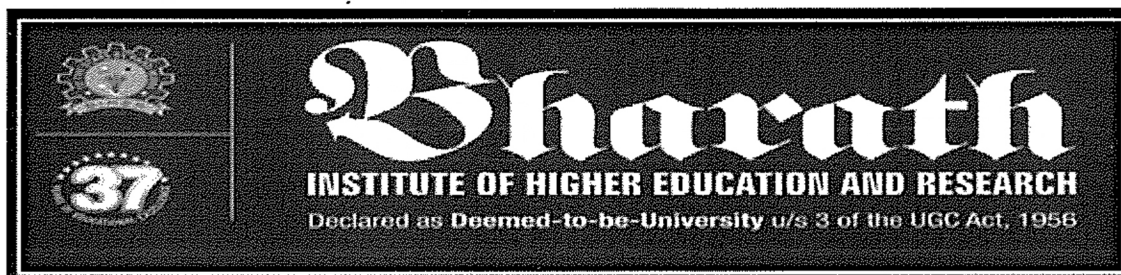
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## SCHOOL OF ELECTRICAL ENGINEERING

Course on Applications of Signal Processing Using MATLAB dated on 17.10.2021 conducted by School of Electrical Engineering





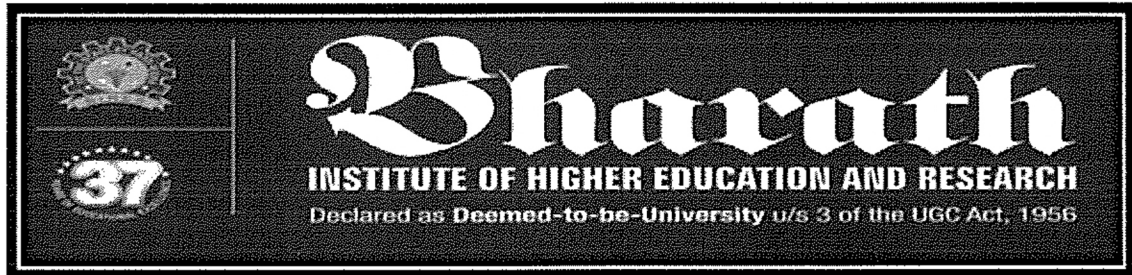
**SCHOOL OF ELECTRICAL ENGINEERING**

**VALUE ADDED COURSE**

**Applications of Signal Processing Using MATLAB**

FEED BACK FORM		Date:21/10/2021			
Name	MONISHA M				
Register number	U12EC031				
Phonenumber					
Email address					
	Poor	Fair	Good	Very Good	Excellent
Overall Program				✓	
TheSpeaker					✓
Audio, Visual Aids Technology used				✓	
Presentation hand outs			✓		

  
**Student Signature**



**SCHOOL OF ELECTRICAL ENGINEERING**

**VALUE ADDED COURSE**

**Applications of Signal Processing Using MATLAB**

FEED BACK FORM		Date:21/10/2021			
Name	Neeraj Kumar				
Register number	U12EE027				
Phonenumber					
Email address					
	Poor	Fair	Good	Very Good	Excellent
Overall Program					✓
TheSpeaker				✓	
Audio, Visual Aids Technology used			✓		
Presentation hand outs				✓	

  
 Student Signature





# Bharath

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



**SCHOOL OF ELECTRICAL ENGINEERING**

## CERTIFICATE OF PARTICIPATION

**BALAJI P (U12EC007)**

This is to certify that Mr/Ms.....

has attended Value added Course on “**Applications of Signal Processing Using MATLAB**” Organized by the school of Electrical Engineering, BIHER conducted from 17-10-2021 to 21-10-2021.

  
Ms. M. JASMIN  
COURSE COORDINATOR

  
Dr. M. SUNDARARAJAN  
CONVENOR