

DADI INSTITUTE OF ENGINEERING & TECHNOLOGY



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NAAC Accredited Institute & Inclusion u/s 2(f) & 12(B) of the UGC Act
NH-16, Anakapalle, Visakhapatnam-531002, Andhra Pradesh, diet.edu.in

Electronics and Communications Engineering

MatLab for Signal Processing

Course Instructor:

Malla Kishore Kumar
Assistant Professor, ECE Department
Dadi Institute of Engineering & Technology

Duration:

4 Weeks: (25/11/2019 – 21/12/2019)

Overview & Need for the Course:

Students are instructed to learn the basics of MatLab in this course. However they need to learn some advanced topics for working on real time applications. The course covers content required to develop basic projects on MatLab, in signal processing domain.

Course Objectives: To

- Understand the basic data operations in MatLab
- Provide knowledge on built in commands.
- Develop the skill required to handle large amounts of data.
- make the student handling real time sensor data.

Course Outcomes:

By the end of the course, the student will be able to

- Handle matrix operations.
- Generate and manipulate data as per the requirement.
- Develop real time projects using MatLab.

Requirements

- Basic Knowledge on C-Programming.
- A Computer with an Internet Connection.

Course Contents:

1. Course overview
2. Command
3. MatLab desktop and editor
4. Vector and matrix
5. Indexing into and modifying arrays
6. Array calculations
7. Calling function
8. Obtaining help
9. Plotting data
10. Logical arrays
11. Introducing Signal Processing Tool Box
12. Introducing Image Processing Tool Box
13. Programming
14. Final project
15. Conclusion

List of Participated students

S.NO	HT NO	NAME
1	17U41A0401	AMULOJU NAVEEN KUMAR
2	17U41A0402	ARSI ROHIT NAIDU
3	17U41A0403	BADDI NARENDRA ASHOK
4	17U41A0404	BALIJI DIVYA MAHIMA
5	17U41A0405	BODDANA SAI CHARAN
6	17U41A0406	BONGARALA DHARANI
7	17U41A0407	BUDIREDDI LAVANYA
8	17U41A0408	C. SRITHA RAMALAKSHMI
9	17U41A0409	DADI ALEKHYA
10	17U41A0410	DADI VANI
11	17U41A0412	DODDI DEDEEPPYA
12	17U41A0413	D. SEETARAMAMURTHY
13	17U41A0414	ELUSURI BHOGESH
14	17U41A0415	GANDIBOYANA SAI GANESH

15	17U41A0418	JALAGADUGULA PRAVALLIKA
16	17U41A0419	KANCHIPATHI SATISH
17	17U41A0420	KANDREGULA PAVAN SAITEJA
18	17U41A0421	KANNAM ROOPA
19	17U41A0423	B. DEEPAK SRINIVAS KUMAR
20	17U41A0425	KATTAMURI BHARATH KUMAR
21	17U41A0426	KAYALA CHANDRA HARSHA
22	17U41A0427	KETIREDDI SRINIVAS
23	17U41A0428	KILLADA SATISH KUMAR
24	17U41A0429	KOLLI SRAVANI
25	17U41A0431	MADDIMSETTY SAI KRISHNA
26	17U41A0432	MANAYAM BABY SUMA LATHA
27	17U41A0433	MANNEM NANI BABU
28	17U41A0434	MOSURI SRINU
29	17U41A0435	G. VENKATA SAI ARUN KUMAR
30	17U41A0436	MURUKURTI ASHOK
31	17U41A0437	NAGULAKONDA ALEKHYA
32	17U41A0438	KADAVALA MADHURI
33	17U41A0439	NARLA KUSAL KUMAR
34	17U41A0440	NEERUKONDA SIRISHA
35	17U41A0441	NITTA MOHAN RAO
36	17U41A0442	PAKKURTI JANARDHANRAO
37	17U41A0443	PALAKA TEJA
38	17U41A0444	PALAKURTHI CHANDRIKA
39	17U41A0445	PALLA JANARDHAN
40	17U41A0446	P. HEMANTH KUMAR
41	17U41A0447	PREETI SAH
42	17U41A0448	PUDI SIRISHA
43	17U41A0450	RAVULA LAXMI VINEETHA
44	17U41A0451	SANIVADA SRINIVASA RAO

45	17U41A0452	SIDDA BHAVANI
46	17U41A0453	SIRIGIRISETTI NAGAMANI
47	17U41A0454	SIRIGIRISETTTY RAJITHA
48	17U41A0455	SIRISOLLA SAIRAM
49	17U41A0456	SUNKARA SANTHOSHI
50	17U41A0457	SWAMY VASUNDHARA
51	17U41A0458	TEPPALA RAJASEKHAR
52	17U41A0459	VANAPALLI HARI CHANDANA
53	17U41A0460	V. NAGA DURGA NARASIMHA

S.NO	HT NO	NAME
1	17A61A0429	MUDDA SAI PRIYA
2	17U41A0461	VASADI YAMINI
3	17U41A0462	Y. L. SAI KRISHNA VENI
4	17U41A0463	LEKKALA SUNITHA
5	17U41A0464	TANAKALA K SUPRIYA
6	17U41A0465	PALLA KUMARASWAMY
7	17U41A0466	PANI UDAYA BHANU
8	17U41A0467	RAISETTY BHAVANI
9	17U41A0468	KARRI MOUNIKA
10	17U41A0469	VEERNI MADHU
11	17U41A0470	GANJI CHANDRAKALA
12	17U41A0471	CH. CHETAN SATYA
13	17U41A0472	KARRI GANESH
14	17U41A0473	KARRI MADHURI
15	18U45A0401	KONATHALA YAMINI
16	18U45A0402	MADDALA BHARATH

17	18U45A0403	MALLA BHAGYA SRI
18	18U45A0404	MUSADA MOUNIKA
19	18U45A0405	NADIGATLA ARUNASREE
20	18U45A0406	PATHARAPALLI SANTOSH
21	18U45A0407	SILAPARASETTI VARUN BHASKAR
22	18U45A0408	YEDURU HEMALATHA
23	18U45A0409	ALLAVARAPU TEJASWI
24	18U45A0410	ALLA V. HEMATNH KUMAR
25	18U45A0411	JAMI SATYAVATHI
26	18U45A0412	SAGURTHI DIVYA
27	18U45A0413	KARANAM SIRISHA
28	18U45A0414	RUGADA RAJYALAKSHMI
29	18U45A0415	K. JAGAN GANAVARDHAN
30	18U45A0416	KANTAPUREDDI KUSUMA
31	18U45A0417	K. VENKATA PRASANNA
32	18U45A0418	SUNKARI JAGADEESH
33	18U45A0419	KONATHALA CHANDRA MOULI
34	18U45A0420	PILLALA LAHARI PRIYA
35	18U45A0421	TUMMLAPALLI DIVYA
36	18U45A0422	DODDI DAMODARA DINESH
37	18U45A0423	KARRI BHAVANA SRI
38	18U45A0424	TURAKALAPUDI RAJU
39	18U45A0425	PEELA UDAY KUMAR
40	18U45A0426	KODA NAGARJUNA
41	18U45A0427	LALAM HARITHA
42	18U45A0428	ESARAPU SEKHAR

43	18U45A0429	TARRA BABA
44	18U45A0430	AINAMPUDI SAI KRISHNA
45	18U45A0431	TALARI SAI MENAKA
46	18U45A0432	RAJANA HYMA
47	18U45A0433	VEGI VENKATA SAI PREMIKA

Total: 100

Classroom:

The screenshot displays the MATLAB R2014a environment. The main window is titled 'Editor - C:\Users\MALLA KISHORE KUMAR\Desktop\Matlab\mytask_2.m'. The script contains the following code:

```

1 -   clc;
2 -   clear all;
3 -   close all;
4 -   img = imread('boston_night.JPG');
5 -   % Enter your code below
6 -   img1=rgb2gray(img);
7 -   imshow(img1);
8 -   img2=double(img1);
9 -   img3=img2.^1.5;
10 -  figure
11 -  imshow(img3);
12 -  img4=imrotate(img3,-1);
13 -  figure
14 -  imshow(img4);
15 -  img5=cast(img4,'uint8');
16 -  %imgAdjusted=img(1:3456,1:5104);

```

The Command Window shows the execution output:

```

In mytask_2 at 7
Warning: Image is too big to fit on screen; displaying at 13%
> In imitools\private\initSize at 71
In imshow at 282
In mytask_2 at 11
Warning: Image is too big to fit on screen; displaying at 13%
> In imitools\private\initSize at 71
In imshow at 282
In mytask_2 at 14

```

The Workspace window shows the following variables:

Name	Value	Min	Max
img	3456x3184x3 uint8	<Too ...	<Too ...
img1	3456x3184 uint8	<Too ...	<Too ...
img2	3456x3184 double	<Too ...	<Too ...
img3	3456x3184 double	<Too ...	<Too ...
img4	3549x3245 double	<Too ...	<Too ...
img5	3549x3245 uint8	<Too ...	<Too ...

Certificate

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Course Completion Certificate

THIS CERTIFICATE IS GIVEN TO

AMULOJU NAVEEN KUMAR

For successful completion of 4 week course on MatLab for
Signal Processing from 25-11-2019 to 21-12-2019.

Mr M Kishore Kumar
Coordinator

Prof. Dr. Ch. Narasimham
Principal

Sri Dadi Ratnakar
Chairman