



DADI INSTITUTE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E., New Delhi & Affiliated to JNTUK, Kakinada)

A NAAC Accredited Institute

An ISO 9001:2008; ISO 14001:2004 & OHSAS 18001:2007 Certified Institution
NH-5, Anakapalle – 531002, Visakhapatnam, A.P.

Mobile: +91 9963981111, Website: www.diet.edu.in, E-mail: info@diet.edu.in

CIRCULAR

Anakapalle

Dt: 18-11-2019

Department of Electronics & Communication Engineering is hereby informed that, in view of the feedback received from III B.Tech. students of ECE branch regarding skill enhancement and to improve the expertise of students in MatLab, HOD is advised to depute a faculty from ECE to design and develop a suitable course structure in line with advanced topics of Signal processing using MatLab for working on real time applications III B.Tech. students of ECE branch with over 30 working hours. Please ensure that this Add-on course helps them to understand the basic data operations in MatLab & to develop basic projects on MatLab, in the signal processing domain. Make arrangements to deliver the course from next week onwards.

PRINCIPAL

Dadi Institute of Engineering & Technology



Approved by AICTE & Permanently Affiliated to JNTUK
NAAC Accredited Institute & Inclusion under Section 2(f) & 12(B) of the UGC Act
NH-16, Anakapalle, Visakhapatnam, Andhra Pradesh
9963694444, 9963981111, www.diet.edu.in, info@diet.edu.in

Department of Electronics and Communication Engineering

Presents
**A four Week Training
Program**
on

**“MatLab for Signal
Processing”**

**25/11/2019 to 21/12/2019
(Twice a Week)**

**Course Instructor
Mr. K Someshwar Rao
Assoc. Prof., Department of ECE**

Venue:

Computer Lab 8, 3rd Floor, DIET



About the Institute

Dadi Institute of Engineering & Technology is a top ranked Engineering and Management College affiliated to Jawaharlal Nehru Technological University, Kakinada. The Institute is NAAC Accredited, ISO Certified and also associated with many professional bodies in the field of Engineering, Technology and Management. It strives to promote the highest standards among the students and enable them to Build a New World. Dadi Institute of Engineering & Technology is distinctive among institutions of higher learning. Founded in 2006 by Sri Dadi Veerabhadra Rao, an academician and former Minister as the first multicultural and co-educational college in Anakapalle which admits only academically promising students.

About ECE Department

The Department of ECE was established in the year 2006. It offers B.Tech. Program with an initial intake of 120. It also offers M.Tech. Program in Systems and Signal Processing. The department has good infrastructural facilities with full fledged laboratories equipped with adequate hardware and software. The faculty members are actively involved in research and are publishing papers in reputed national and international journals/conferences.

About the course

Students will be able to learn the MatLab and its Basic Tool box, Signal Processing Toolbox, which are useful to operate on the real-time Signaling projects. These Two of the basic Toolboxes that mathematically describe the performance of Systems.



Electronics and Communications Engineering

MatLab for Signal Processing

Course Instructor:

K Someshwar Rao
Assoc. Prof.,
Department of ECE

Duration:

4 Weeks: (25/11/2019 – 21/12/2019) - Twice a Week

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.

- 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

Student Attendance Sheet - MATLAB for Signal Processing Addon Course [2019-20]

S N	Roll No	Name of the Student	25/11/2019	26/11/2019	2/12/2019	3/12/2019	9/12/2019	10/12/2019	20/12/2019	21/12/2019
1	17U41A0401	AMULOJU NAVEEN KUMAR	A kumar	A kumar	A kumar	A kumar	A kumar	A kumar	A kumar	A kumar
2	17U41A0402	ARSI ROHIT NAIDU	A naidu	A naidu	A naidu	A naidu	A naidu	A naidu	A naidu	A naidu
3	17U41A0403	BADDI NARENDRA ASHOK	B. ashok	B. ashok	B. ashok	B. ashok	B. ashok	B. ashok	B. ashok	B. ashok
4	17U41A0404	BALIJI DIVYA MAHIMA	B. divya	B. divya	B. divya	B. divya	B. divya	B. divya	B. divya	B. divya
5	17U41A0405	BODDANA SAI CHARAN	B. sai	B. sai	B. sai	B. sai	B. sai	B. sai	B. sai	B. sai
6	17U41A0406	BONGARALA DHARANI	B. dharani	B. dharani	B. dharani	B. dharani	AB	B. dharani	B. dharani	B. dharani
7	17U41A0407	BUDIREDDI LAVANYA	B. lavanya	B. lavanya	B. lavanya	B. lavanya	B. lavanya	B. lavanya	B. lavanya	B. lavanya
8	17U41A0408	C. SRITHA RAMALAKSHMI	C. lakshmi	C. lakshmi	C. lakshmi	C. lakshmi	C. lakshmi	C. lakshmi	C. lakshmi	C. lakshmi
9	17U41A0409	DADI ALEKHYA	D. alekhya	D. alekhya	D. alekhya	D. alekhya	D. alekhya	D. alekhya	D. alekhya	D. alekhya
10	17U41A0410	DADI VANI	D. vani	D. vani	D. vani	D. vani	D. vani	D. vani	D. vani	D. vani
11	17U41A0412	DODDI DEDEEPIYA	D. deepiya	D. deepiya	D. deepiya	D. deepiya	D. deepiya	D. deepiya	D. deepiya	D. deepiya
12	17U41A0413	D. SEETARAMAMURTHY	D. murthy	D. murthy	D. murthy	D. murthy	D. murthy	D. murthy	D. murthy	D. murthy
13	17U41A0414	ELUSURI BHOGESH	E. bhogesh	E. bhogesh	E. bhogesh	E. bhogesh	E. bhogesh	E. bhogesh	E. bhogesh	E. bhogesh
14	17U41A0415	GANDIBOYANA SAI GANESH	G. Sai	G. Sai	G. Sai	G. Sai	G. Sai	G. Sai	G. Sai	G. Sai
15	17U41A0418	JALAGADUGULA PRAVALIKA	J. pravalika	AB	J. pravalika	J. pravalika	J. pravalika	J. pravalika	J. pravalika	J. pravalika
16	17U41A0419	KANCHIPATHI SATISH	K. satish	K. satish	K. satish	K. satish	K. satish	K. satish	K. satish	K. satish
17	17U41A0420	KANDREGULA PAVAN SAITEJA	K. Sai	K. Sai	K. Sai	K. Sai	K. Sai	K. Sai	K. Sai	K. Sai
18	17U41A0421	KANNAM ROOPA	K. roopa	K. roopa	K. roopa	K. roopa	K. roopa	K. roopa	K. roopa	K. roopa
19	17U41A0423	B. DEEPAK SRINIVAS KUMAR	B. kumar	B. kumar	B. kumar	B. kumar	B. kumar	B. kumar	B. kumar	B. kumar
20	17U41A0425	KATTAMURI BHARATH KUMAR	K. kumar	K. kumar	K. kumar	K. kumar	K. kumar	K. kumar	K. kumar	K. kumar
21	17U41A0426	KAYALA CHANDRA HARSHA	K. harsha	K. harsha	K. harsha	K. harsha	K. harsha	K. harsha	K. harsha	K. harsha
22	17U41A0427	KETIREDDI SRINIVAS	K. srinivas	K. srinivas	K. srinivas	K. srinivas	K. srinivas	K. srinivas	K. srinivas	K. srinivas
23	17U41A0428	KILLADA SATISH KUMAR	K. kumar	K. kumar	K. kumar	K. kumar	K. kumar	K. kumar	K. kumar	K. kumar
24	17U41A0429	KOLLI SRAVANI	K. sravani	K. sravani	K. sravani	K. sravani	K. sravani	K. sravani	K. sravani	K. sravani
25	17U41A0431	MADDIMSETTY SAI KRISHNA	M. Sai	M. Sai	M. Sai	M. Sai	M. Sai	M. Sai	M. Sai	M. Sai
26	17U41A0432	MANAYAM BABY SUMA LATHA	M. Baby	M. Baby	M. Baby	M. Baby	M. Baby	M. Baby	M. Baby	M. Baby
27	17U41A0433	MANNEM NANI BABU	M. babu	M. babu	M. babu	M. babu	M. babu	M. babu	M. babu	M. babu
28	17U41A0434	MOSURI SRINU	M. srinu	M. srinu	M. srinu	M. srinu	M. srinu	M. srinu	M. srinu	M. srinu
29	17U41A0435	G. VENKATA SAI ARUN KUMAR	G. kumar	G. kumar	G. kumar	G. kumar	G. kumar	G. kumar	G. kumar	G. kumar
30	17U41A0436	MURUKURTI ASHOK	M. ashok	M. ashok	M. ashok	M. ashok	M. ashok	M. ashok	M. ashok	M. ashok
31	17U41A0437	NAGULAKONDA ALEKHYA	N. alekhya	N. alekhya	N. alekhya	N. alekhya	AB	N. alekhya	N. alekhya	N. alekhya
32	17U41A0438	KADAVALA MADHURI	K. madhuri	K. madhuri	K. madhuri	K. madhuri	K. madhuri	K. madhuri	K. madhuri	K. madhuri
33	17U41A0439	NARLA KUSAL KUMAR	N. kumar	N. kumar	N. kumar	N. kumar	N. kumar	N. kumar	N. kumar	N. kumar
34	17U41A0440	NEERUKONDA SIRISHA	N. sirisha	N. sirisha	N. sirisha	N. sirisha	N. sirisha	N. sirisha	N. sirisha	N. sirisha
35	17U41A0441	NITTA MOHAN RAO	N. rao	N. rao	N. rao	N. rao	N. rao	N. rao	N. rao	N. rao
36	17U41A0442	PAKKURTI JANARDHANRAO	P. rao	P. rao	P. rao	P. rao	P. rao	P. rao	P. rao	P. rao
37	17U41A0443	PALAKA TEJA	P. teja	P. teja	P. teja	P. teja	P. teja	P. teja	P. teja	P. teja
38	17U41A0444	PALAKURTHI CHANDRIKA	P. chandrika	P. chandrika	P. chandrika	P. chandrika	P. chandrika	P. chandrika	P. chandrika	P. teja
39	17U41A0445	PALLA JANARDHAN	P. janardhan	P. janardhan	P. janardhan	P. janardhan	P. janardhan	P. janardhan	P. janardhan	P. teja
40	17U41A0446	P. HEMANTH KUMAR	P. kumar	P. kumar	P. kumar	P. kumar	P. kumar	P. kumar	P. kumar	P. janardhan
41	17U41A0447	PREETI SAH	P. sah	P. sah	P. sah	P. sah	P. sah	P. sah	P. sah	P. kumar
42	17U41A0448	PUDI SIRISHA	P. sirisha	P. sirisha	P. sirisha	P. sirisha	P. sirisha	P. sirisha	P. sah	P. sah
43	17U41A0450	RAVULA LAXMI VINEETHA	R. laxmi	R. laxmi	R. laxmi	R. laxmi	R. laxmi	R. laxmi	R. laxmi	P. sah
44	17U41A0451	SANIVADA SRINIVASA RAO	S. rao	S. rao	S. rao	S. rao	S. rao	S. rao	S. rao	S. rao
45	17U41A0452	SIDDA BHAVANI	S. bhavani	S. bhavani	S. bhavani	S. bhavani	S. bhavani	S. bhavani	S. bhavani	S. rao
46	17U41A0453	SIRIGIRISETTI NAGAMANI	S. nagamani	S. nagamani	S. nagamani	S. nagamani	S. nagamani	S. nagamani	S. bhavani	S. bhavani
47	17U41A0454	SIRIGIRISETTY RAJITHA	S. rajitha	S. rajitha	S. rajitha	S. rajitha	S. rajitha	S. rajitha	S. nagamani	S. nagamani
48	17U41A0455	SIRISOLLA SAIRAM	S. sairam	S. sairam	S. sairam	S. sairam	S. sairam	S. sairam	S. rajitha	S. rajitha
49	17U41A0456	SUNKARA SANTHOSHI	S. santhoshi	S. santhoshi	S. santhoshi	S. santhoshi	S. santhoshi	S. santhoshi	S. sairam	S. sairam

Classroom:

The screenshot displays the MATLAB R2014a environment. The main window is titled 'Editor - C:\Users\IMALLA KISHORE KUMAR\Desktop\Matlab\mytask_2.m'. The code in the editor is as follows:

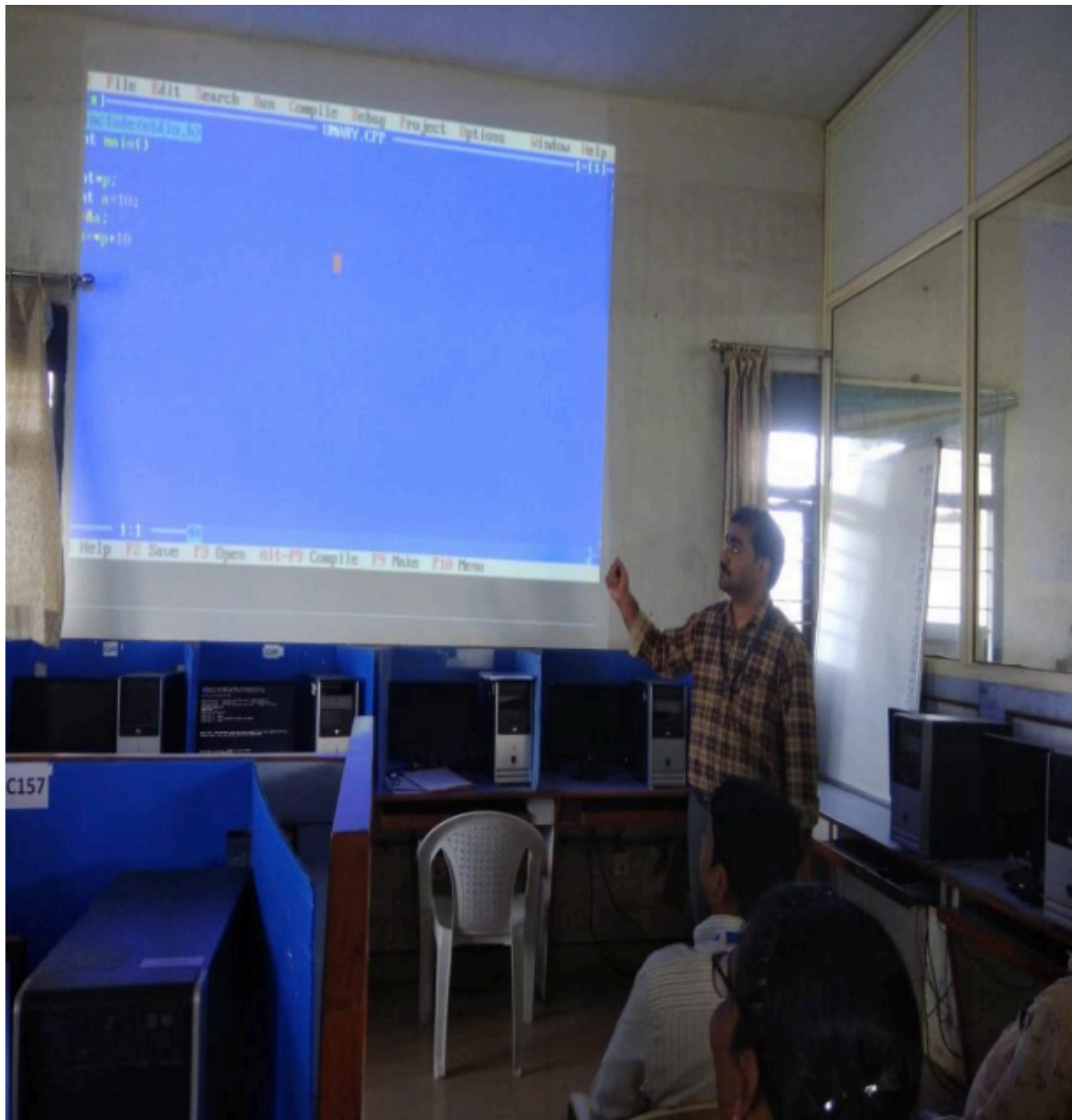
```
1 - clear;
2 - clear all;
3 - close all;
4 - img = imread('boston_night.JPG');
5 - % Enter your code below
6 - img1=rgb2gray(img);
7 - imshow(img1);
8 - img2=double(img1);
9 - img3=img2.^1.5;
10 - figure
11 - imshow(img3);
12 - img4=imrotate(img3,-1);
13 - figure
14 - imshow(img4);
15 - img5=cast(img4,'uint8');
16 - %imgAdjusted=img(1:3456,1:5184);
```

The Command Window shows the following output:

```
In mytask_2 at 7
Warning: Image is too big to fit on screen; displaying at 12%
> In imshowtools\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 imshowtools\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 ...





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COURSE COMPLETION CERTIFICATE

This Certificate is given to

KOLLI SRAVANI



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

Mr. K Someshwar Rao
Course Instructor

Dr. Ch S Naga Prasad
Principal

Mr. Dadi Ratnakar
Chairman



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This Certificate is given to

PALAKA TEJA



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Mr. K Someshwar Rao
Course Instructor

Dr. Ch S Naga Prasad
Principal

Mr. Dadi Ratnakar
Chairman



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COURSE COMPLETION CERTIFICATE

This Certificate is given to

KARRI GANESH



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

Mr. K Someshwar Rao
Course Instructor

Dr. Ch S Naga Prasad
Principal

Mr. Dadi Ratnakar
Chairman





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COURSE COMPLETION CERTIFICATE

This Certificate is given to

N SIRISHA



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

Mr. K Someshwar Rao
Course Instructor

Dr. Ch S Naga Prasad
Principal

Mr. Dadi Ratnakar
Chairman





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STUDENT FEEDBACK FORM

Dear Candidate,

Your feedback is critical for the Institute to ensure that we are meeting your educational needs. We would appreciate if you could take a few minutes to share your opinions with us so that we can serve you better.

Title of the Activity: MAT Lab for Signal Processing

Date/Duration: 4 weeks 25/11/2019 to 21/12/2019 Instructor/Coordinator: Mr. K. Someshwar Rao

- | | | | | | |
|---|---|---|---|---|---|
| 1. The content was as described in Publicity Material | 1 | 2 | 3 | 4 | 5 |
| 2. The program was helpful in practical understanding | 1 | 2 | 3 | 4 | 5 |
| 3. I will recommend this course workshop program to relevant conservators across our campus | 1 | 2 | 3 | 4 | 5 |
| 4. The program was well placed within allotted time | 1 | 2 | 3 | 4 | 5 |
| 5. The instructor was an effective communicator | 1 | 2 | 3 | 4 | 5 |

Feedback/Suggestions

Please return this form to the Course Instructor/Organizer/Coordinator at the end of the workshop/add-on course/Training Program



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- | | | | | | |
|---|---|---|---|---|---|
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| 3. I will recommend this course workshop program to relevant conservators across our campus | 1 | 2 | 3 | 4 | 5 |
| 4. The program was well placed within allotted time | 1 | 2 | 3 | 4 | 5 |
| 5. The instructor was an effective communicator | 1 | 2 | 3 | 4 | 5 |

Feedback/Suggestions

Need more Hands on Teaching

Please return this form to the Course Instructor/Organizer/Coordinator at the end of the workshop/add-on course/Training Program