Sandip Institute of Technology and Research Centre
At & Po – Mahirawani, Trimbak Road, Tal & Dist .– Nashik
Phone: (02594) 222552,53,54, Fax: (02594) 222555
website : www.sandipfoundation.org, e-mail : principal@sitrc.org
(Approved by-AICTE, New Delhi, & Govt. of Maharashtra and Permanently Affiliated to Savitribai Phule Pune University (Formerly Pune University), Pune.
Accredited with "A" grade by NAAC With CGPA Score of 3.11

DEPARTMENT OF ELECTRICAL ENGINEERING

(A.Y 2024-25)

NOTICE

Date:- 01/8/2024

All students of TE are hereby inform that the Department of Electrical Engineering is going to conduct free of cost VAP on **"Applications of MATLAB"** on date 06/8/2024 to 10/8/2024 for TE student's.

Interested students enroll their name to Prof. R. M. Patil before **03/08/2024.**

Resource Person: Prof. Sharmila M, EE Dept, SITRC, Nashik

Time: 10:00AM To 5.00PM

Venue: EE Dept .SITRC, Nashik

Dr. N. S. Patil
HOD
Electrical Engineering

Dr. Amol D. Potgantwar
Principal
SITRC, Nashik

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DEPARTMENT OF ELECTRICAL ENGINEERING

(A.Y 2024-25)

Theory Course Content- Topics covered during the Value Added Program-

Module 1: Introduction to MATLAB & Basics of Programming

Module 2: Data Analysis and Visualization in MATLAB

Module 3: Mathematical Computations and Advanced Operations

Module 4: Applications in Engineering and Control Systems

Module 5: Advanced Topics and Real-World Applications

Program Agenda-

Day	Time	Program	Topic
1	10 am To 1 pm	Morning session	Module 1: Introduction to MATLAB & Basics of Programming
	1 pm To 2 pm	**Lunch Break**	
	2 pm To 5 pm	Evening Session	Module 1: Introduction to MATLAB & Basics of Programming
2	10 am To 1pm	Morning session	Module 2 Data Analysis and Visualization in MATLAB
	1 pm To 2 pm	**Lunch Break**	
	2pm To 5 pm	Evening Session	Module 2: Data Analysis and Visualization in MATLAB
3	10 am To 1pm	Morning session	Module 3: Mathematical Computations and Advanced Operations
	1 pm To 2 pm	**Lunch Break**	
	2pm To 5 pm	Evening Session	Module 3: Mathematical Computations and Advanced Operations
4	10 am To 1pm	Morning session	Module 4: Applications in Engineering and Control Systems
	1 pm To 2 pm	**Lunch Break**	
	2pm To 5 pm	Evening Session	Module 4: Applications in Engineering and Control Systems
5	10 am To 1pm	Morning session	Module 5 : Advanced Topics and Real-World Applications
	1 pm To 2 pm	**Lunch Break**	
	2pm To 5 pm	Evening Session	Module 5: :Advanced Topics and Real-World Applications

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DEPARTMENT OF ELECTRICAL ENGINEERING

(A.Y 2024-25)

VAP Report

Name of the Event: VAP on "**Applications of MATLAB**"

Event Date: 06/8/2024 to 10/8/2024

Event Conduction Duration: 10.00 am to 5.00 pm

No of Participants: TE: 25 Students

Name of Resource Person: Prof. Sharmila M, EE Dept, SITRC, Nashik

Name of Event Coordinator: Prof. R. M. Patil (Asst. Prof, Electrical Dept., SITRC, Nashik)

By the end of this **Value Added Program on Applications of MATLAB**, participants will have a comprehensive understanding of MATLAB's capabilities, ranging from basic programming to advanced applications in engineering, control systems, signal processing, image analysis, and machine learning. They will also have practical experience through hands-on exercises and a capstone project to apply their knowledge to real-world problems.

Course Objectives:

1. **Introduce MATLAB Basics**: To provide participants with a comprehensive understanding of the MATLAB environment, including basic syntax, data types, and operations.
2. **Data Analysis and Visualization**: To teach participants how to manipulate, analyze, and visualize data using MATLAB's powerful tools for plotting and data visualization.
3. **Mathematical Computations**: To explore numerical methods, linear algebra operations,

and optimization techniques for solving complex engineering problems.

4. Applications in Engineering: To demonstrate how MATLAB can be applied to solve real-world problems in control systems, signal processing, image processing, and simulations.
5. **Hands-on Experience**: To provide participants with practical skills in using MATLAB for solving engineering challenges, with an emphasis on real-world applications.

Course Outcomes:

1. **Use MATLAB Effectively**: Proficiently navigate the MATLAB environment, perform basic and advanced operations, and write scripts and functions.
2. **Analyze and Visualize Data**: Import, manipulate, and visualize data using MATLAB's plotting functions and data analysis tools.
3. **Apply Mathematical and Numerical Methods**: Use MATLAB for matrix operations, numerical integration, optimization, and solving linear systems.
4. **Solve Engineering Problems**: Design and analyze control systems, process signals, and apply image processing techniques using MATLAB.
5. **Simulate and Model Systems**: Develop and simulate real-world systems, particularly in the fields of control engineering and system design using MATLAB and Simulink.

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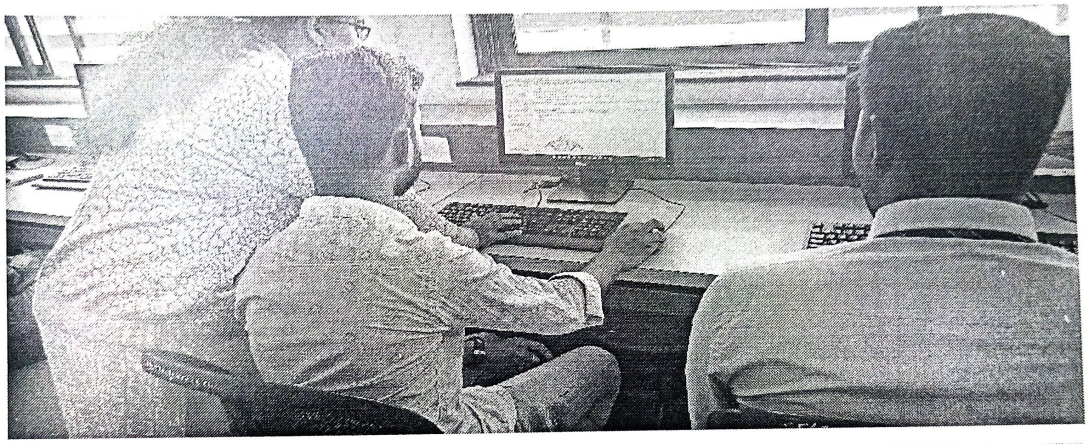
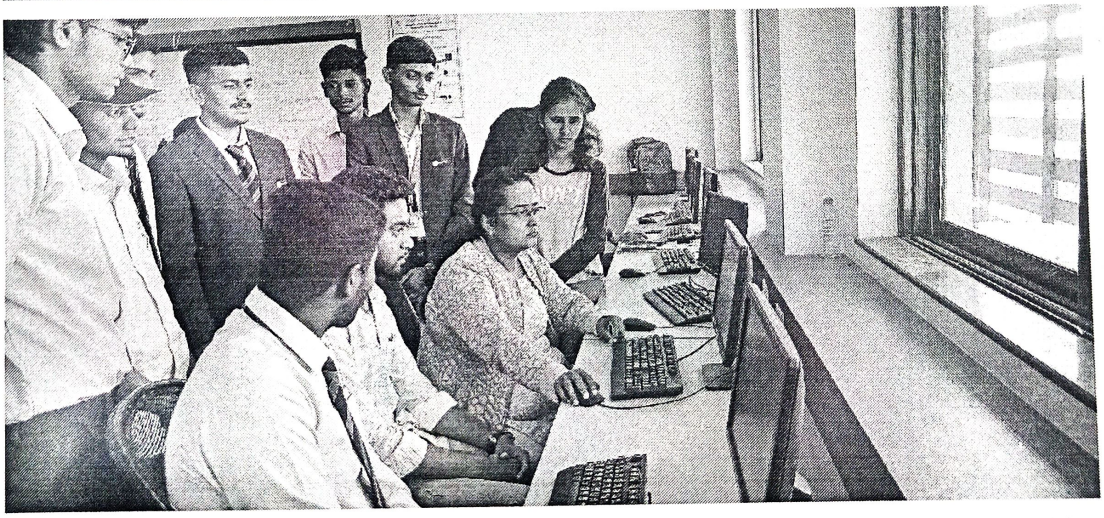
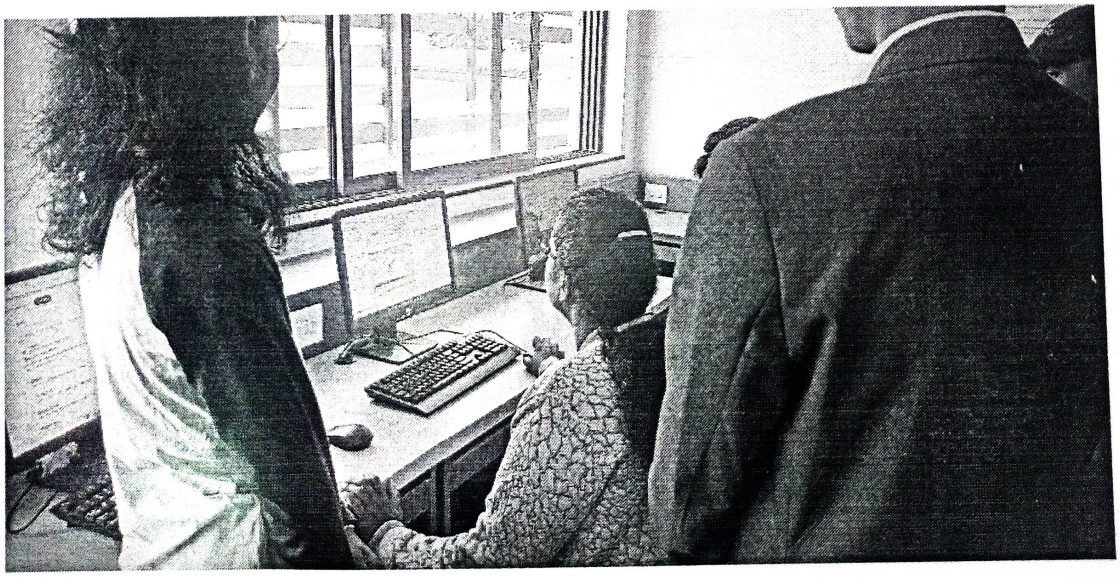
EVENT PHOTOS:







Prof. Sharmila M. explaining about MATLAB Programming