D.K.M.COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1

REPORT

FACULTY DEVELOPMENT PROGRAM

ON

"HANDS-ON WORKSHOP ON MATLAB, AND ITS APPLICATIONS"

11.09.2023-16.09.2023

REPORT

FOR

FACULTY DEVELOPMENT PROGRAM ON

"Hands-on Workshop on MATLAB, and its Applications"

11.09.2023-16.09.2023

The one-week Faculty Development Program "Hands-on Workshop on MATLAB, and its Applications" from 11.09.2023 to 16.09.2023 was organised by Internal Quality Assurance Cell, D.K.M College for Women. Dr. T. Bharathi, IQAC Coordinator, Assistant Professor, Department of Commerce, D.K.M College for Women, welcomed the participants and the resource person of the program, Dr.R.Banumathy, Principal D.K.M. College for Women(Autonomous), felicitated the gathering. Dr. Vasumathy acted as a resource person for this Hands-on Training session. 25 faculties participated in this FDP. This FDP mainly focused on the significance of MATLAB tools and their applications, which enable the participants to use them as a tool for their research in their respective field. Topics such as MATLAB on Ramp, MATLAB fundamentals, MATLAB programming techniques, AI, Machine learning and Deep Learning using MATLAB were discussed. Participants actively participated in this workshop and learned MATLAB concepts. They also earned certificates from the Math Work website. The valedictory session was conducted on 16.09.2023. Feedback was collected from the participants.

INVITATION

Program Content

- Introduction on MATLAB onramp and MATLAB fundamentals
- MATLAB mobile application
- Image processing onramp
- Image processing with MATLAB
- MATLAB for data processing and visualization
- MATLAB programming techniques
- Introduction to statistical methods with MATLAB
- Computer vision onramp
- AI, Machine Learning, and Deep Learning
- App Building Onramp
- Object-Oriented programming onramp
- Optimization onramp
- Introduction to symbolic math with MATLAB
- Solving nonlinear equations with MATLAB
- Solving ordinary differential equations with MATLAB
- Introduction to linear algebra with MATLAB
- Introduction to statistical methods with MATLAB

Program Delivery:

1. Lectures and Demonstrations: Use presentations, live coding, and demonstrations to introduce concepts and techniques.
2. Hands-on Exercises: Provide participants with coding exercises and assignments to reinforce learning.
3. Resources: Provide access to online tutorials, documentation, and forums for continuous learning.
4. MATLAB Mobile Application Introduction
5. Self faced course Certificate from MathWorks Company

Certificates

E-CERTIFICATE WILL BE PROVIDED TO ALL THE REGISTERED PARTICIPANTS ATTENDING THE PROGRAM AFTER SUBMISSION OF & FEED BACK

Who can attend the workshop

This FDP is offered for Teaching Faculty, and Research scholars

Need and Motivation

Academicians and Researchers require platforms that allow them to explore and generate new ideas, solve complex problems, and leveraging a robust and flexible computational framework. MATLAB and its applications are widely used across industries worldwide for research and as a tool for their product development, which enables them to apply their results to interesting and challenging real-world examples.

MATLAB (MATrix LABoratory) is a multi-paradigm numerical computing environment and proprietary programming language developed by MathWorks. MATLAB allows matrix manipulations, plotting of functions and data implementation of algorithms, interfacing with programs written in other languages, including C, C++, C#, Java, Fortran and Python.

Registration Fess : Rs. 50/-

D.K.M. COLLEGE FOR WOMEN
(AUTONOMOUS)
Accredited by NAAC with 'A' Grade
Affiliated to Thiruvalluvar University
Sainathapuram, Vellore – 632 001
Website:www.dkmcollege.ac.in

One week Faculty Development Program On
"Hands-on Workshop on MATLAB, and Its Applications"
11th – 16th September 2023
Time: 12.30 pm to 1.30 pm
Venue: MATLAB, DST-FIST LAB
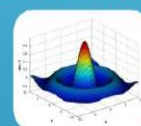
Organized by :
Internal Quality Assurance Cell (IQAC)

Objectives

This Faculty Development Program (FDP) aims at deliberation, sharing knowledge to the target audience about the significance of MATLAB Tools and its application, which can enable them to use it as a tool for their research in their respective field. The discussion shall foster applications in Mechanical Engineering through MATLAB. Also this program provides an excellent opportunity to exchange ideas on the topics of importance along with thought provoking technical sessions.

PROGRAM SCHEDULE

 "Hands-on Workshop on MATLAB, and Its Applications"

11th – 16th September 2023

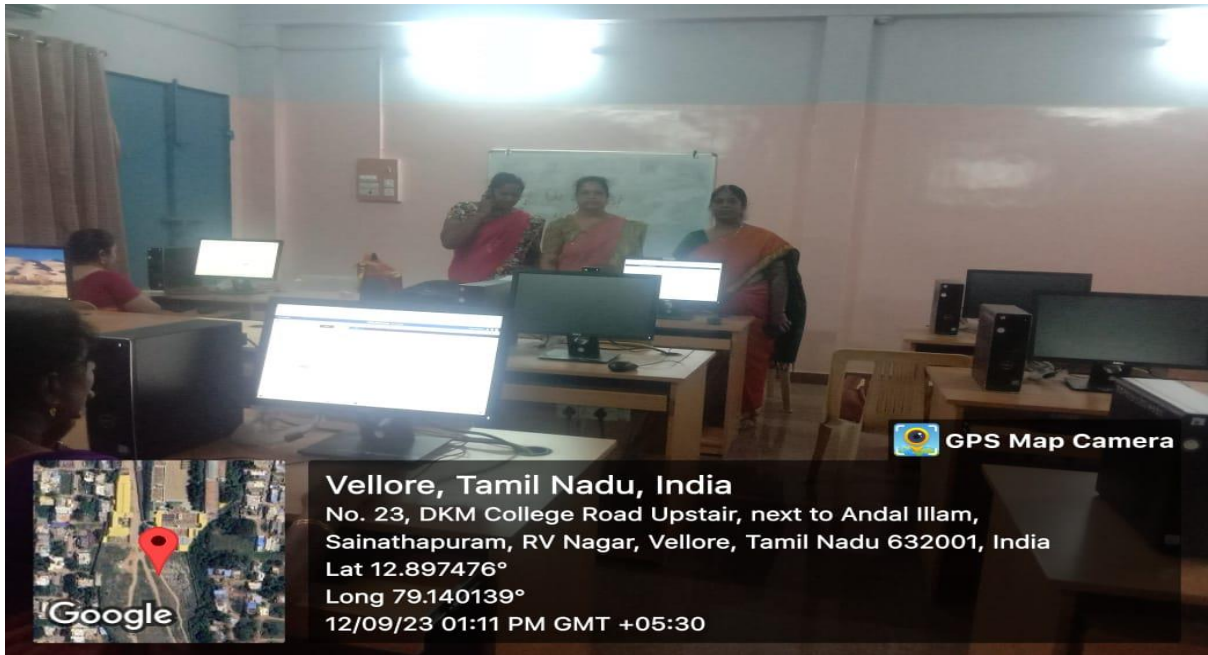**Time: 12.30 pm to 1.30 pm**

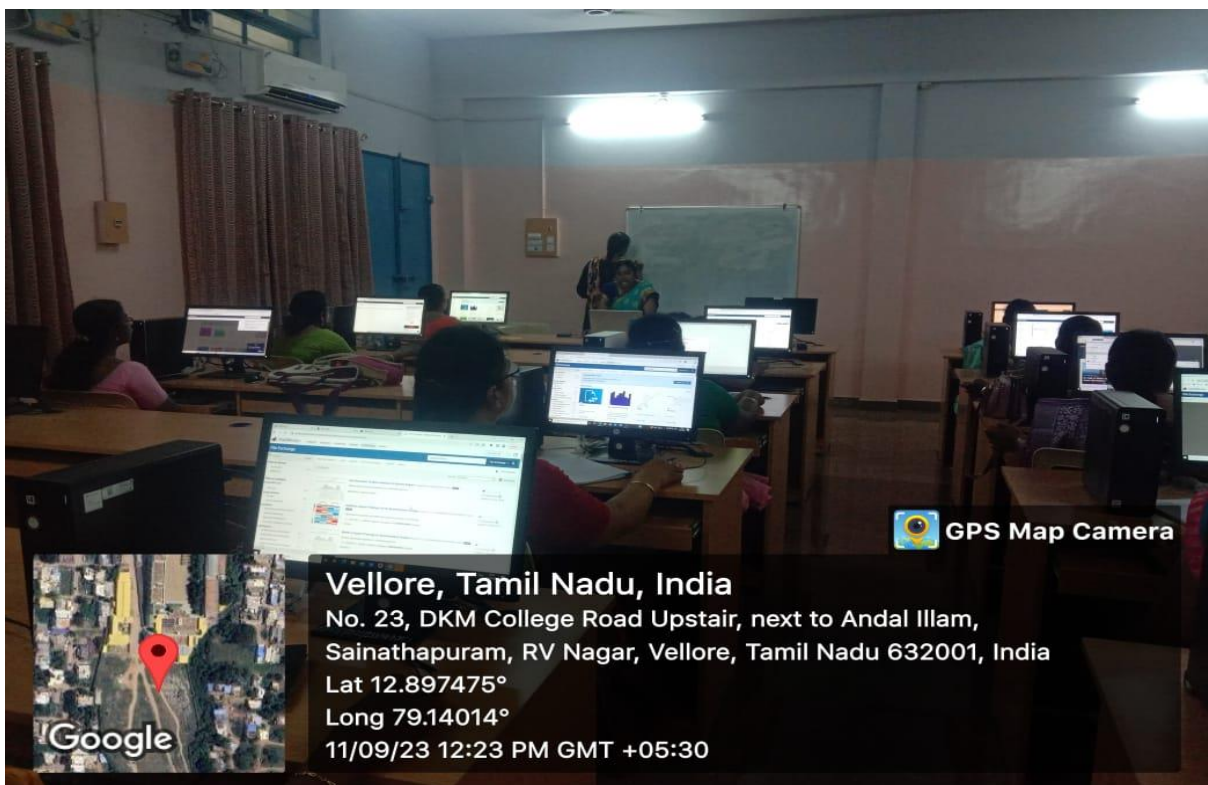**Venue: MATLAB, DST-FIST LAB**

Program Content

- Introduction on MATLAB onramp and MATLAB fundamentals

- MATLAB mobile application

- Image processing onramp

- Image processing with MATLAB

- MATLAB for data processing and visualization

- MATLAB programming techniques

- Introduction to statistical methods with MATLAB

- Computer vision onramp

- AI, Machine Learning, and Deep Learning

- App Building Onramp

- Object-Oriented programming onramp

- Optimization onramp

- Introduction to symbolic math with MATLAB

- Solving nonlinear equations with MATLAB

- Solving ordinary differential equations with MATLAB

- Introduction to linear algebra with MATLAB

- Introduction to statistical methods with MATLAB

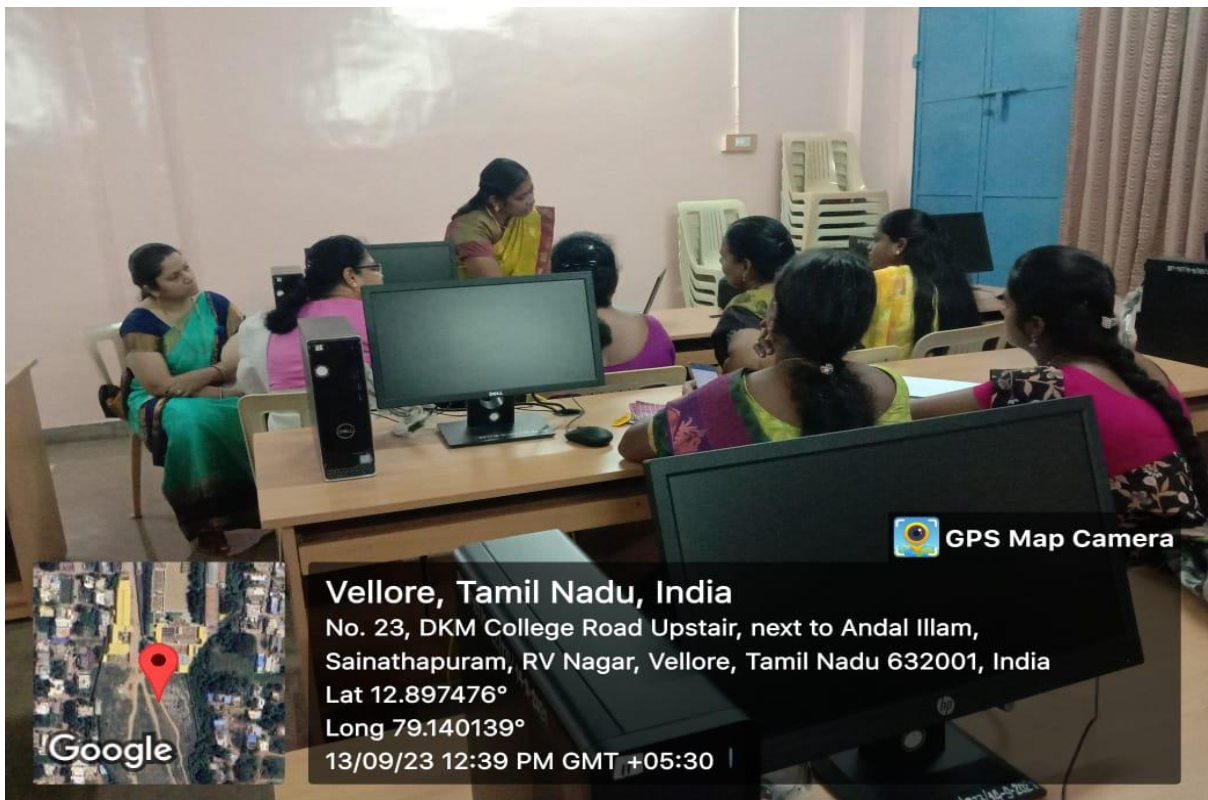# PHOTOGRAPHIC EVIDENCES

Principal Felicitation

DAY 1-11.09.2023

DAY 2-12.09.2023

Vellore, Tamil Nadu, India
No. 23, DKM College Road Upstair, next to Andal Illam,
Sainathapuram, RV Nagar, Vellore, Tamil Nadu 632001, India
Lat 12.897476°
Long 79.140139°
12/09/23 12:35 PM GMT +05:30

DAY 3-13.09.2023

Vellore, Tamil Nadu, India
No. 23, DKM College Road Upstair, next to Andal Illam,
Sainathapuram, RV Nagar, Vellore, Tamil Nadu 632001, India
Lat 12.897476°
Long 79.140139°
13/09/23 12:39 PM GMT +05:30

DAY 4 -14.09.2023

Vellore, Tamil Nadu, India
No. 23, DKM College Road Upstair, next to Andal Illam,
Sainathapuram, RV Nagar, Vellore, Tamil Nadu 632001, India
Lat 12.897476°
Long 79.140139°
14/09/23 01:08 PM GMT +05:30

DAY 5 - 15.09.2023

Vellore, Tamil Nadu, India
No. 23, DKM College Road Upstair, next to Andal Illam,
Sainathapuram, RV Nagar, Vellore, Tamil Nadu 632001, India
Lat 12.897476°
Long 79.140139°
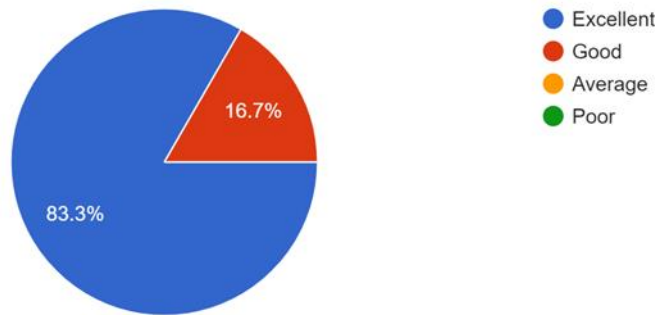15/09/23 12:20 PM GMT +05:30

FEEDBACK ANALYSIS

Feedback was collected from the participants through Google form about FDP on Resource person's presentation, participant's motivation level and participant's satisfaction level.
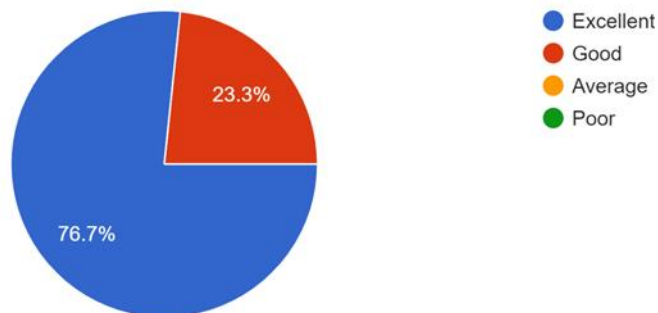
Resource person presentation about the MATLAB workshop
30 responses

- ● Excellent
- ● Good
- ● Average
- ● Poor

Your Motivation Level Through this FDP
30 responses

- ● Excellent
- ● Good
- ● Average
- ● Poor

Overall how satisfied with this FDP
30 responses

- ● Excellent
- ● Good
- ● Average
- ● Poor