

Date: 15/3/2023

To

Registrar
SGT University, Gurugram

Subject: To organize a one day hands on training workshop on "Use of MATLAB & Simulink in Electrical Vehicle Design" under the aegis of TORQUE Club, SGT University in Faculty of Engineering & Technology, SGT University- Gurugram.

Respected Sir,

TORQUE Club, SGT University requests you to allow organizing of a one day hands on training workshop on "Use of MATLAB & Simulink in Electrical Vehicle Design" on 25th March, 2023, E-BLOCK, FEAT.

Officials from Mathworks education team will visit SGT University to spread awareness of MATLAB & Simulink workflows amongst the students in the engineering branches. Objective of this workshop will be as follows:

1. Introduction to MathWorks
2. Use of MATLAB & Simulink in the industry
3. Campus-Wide License Access at SGT University
4. Introduction to Modeling and Simulation of Electrical Vehicles
5. Teaching & Learning with MATLAB & Simulink
6. Hand-On Exercises and Certificate Course


Also we will be planning for a second session probably in April 2023, in which we would like to focus on applications of MATLAB tools for different aspects of electrical vehicle design like: Battery management system, simulation of electrical vehicles, etc. This will help us in developing an Electrical Vehicle Design course here in our University for which we have already set up a dedicated Electric Vehicles Lab.


The details of estimated expenditure and various other requirements are as under:


Sr. No.	Particulars	Rate	Quantity	Total
1	E- Banner	nil	1	nil
2	Seminar room 308, E-Block	On 25 th March, 2023 from 10:00 am to 12:00 pm		



So you are kindly requested to allow the administrative approval for the workshop.

Submitted for your kind consideration and approval, please.


(Mr. Asad Habeeb)
Assistant Professor
MED, FEAT

*Forwarded to Dean,
for kind approval.*

15/03/2023
HoD
Mechanical Engg. Deptt.

forwarded to Registrar.

25/03/23
DEAN
Faculty of Engineering and Technology



15/3/23
Registrar
SGT University,
Gurugram



SGT UNIVERSITY

SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY
(UGC Approved)
Gurugram, Delhi-NCR

Budhera, Gurugram-Badli Road, Gurugram (Haryana) - 122505 Ph. : 0124-2278183, 2278184, 2278185

IQAC REPORT

On

Event on use of Matlab

Held on

13 April 2023



SGT UNIVERSITY

SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY
(UGC Approved)

Gurugram, Delhi-NCR

Budhera, Gurugram-Badli Road, Gurugram (Haryana) – 122505 Ph. : 0124-2278183, 2278184, 2278185

Organizer:

- Mr. Dinesh Deshwal, HOD & Assistant Professor, Department of Mechanical Engineering, FEAT
- Mr. Asad Habeeb, Assistant Professor, Department of Mechanical Engineering, FEAT
- Ms. Monika Deshwal, Assistant Professor, Department of Mechanical Engineering, FEAT

Objectives:

The objectives of the "Use of Matlab and Simulink in EV Design" workshop by MathWorks may include:

- Introducing participants to the use of MATLAB and Simulink software in Electric Vehicle (EV) design.
- Providing participants with an overview of the EV design process and the role of simulation in it.
- Demonstrating the use of MATLAB and Simulink tools for designing EV powertrains, batteries, and other components.
- Teaching participants how to model and simulate EV components and systems using MATLAB and Simulink.
- Providing hands-on experience to participants through guided exercises and practical examples.

About the Speaker/Guest:

Mr Pratyush from Math works.

Audiences:

15 students from the Department of Mechanical Engineering, 3 students from Department of Civil Engineering and 20 students from Department of Computer Science Engineering FEAT, SGTU, attended the sessions.

Brief Report:

Torque Club, Department of Mechanical Engineering conducted an event on "Use of Matlab and Simulink in EV Design" by "MathWorks" on 13th April 2023 for Engineering students, with Mr. Pratyush as the resource person. The event was aimed at providing an overview of how Matlab and Simulink can be used in the design of electric vehicles (EVs).

During the event, Mr. Pratyush gave a presentation on the basics of how Matlab and Simulink can be used to design and test different components of an EV. He also demonstrated various features and tools of Matlab and Simulink that can be used in the design process, such as powertrain modeling, battery management, and control system design.

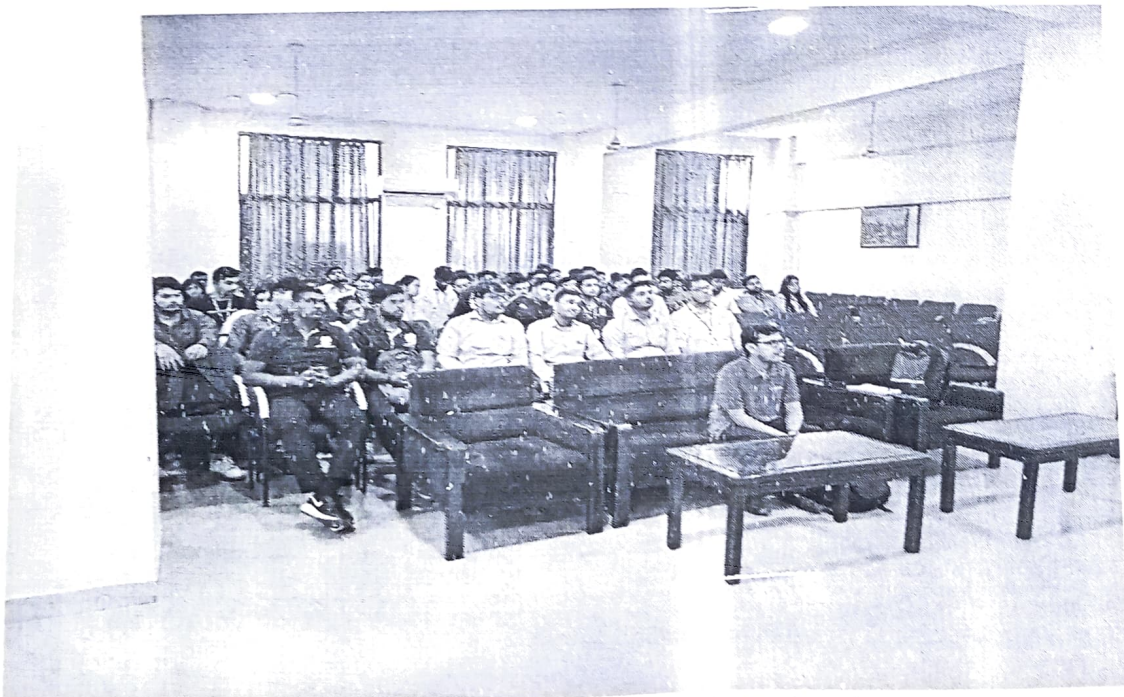
The event provided an opportunity for the students to learn about the latest tools and techniques used with Matlab and Simulink and gain hands-on experience. The students asked questions and interacted with Mr. Pratyush to better understand the concepts and applications.

Overall, the event was a success in providing valuable insights into the use of Matlab and Simulink in EV design and helping the students gain a better understanding of the practical applications of their academic knowledge.

Learning Outcomes:

The learning outcomes of the "Use of Matlab and Simulink in EV Design" workshop by MathWorks may include:

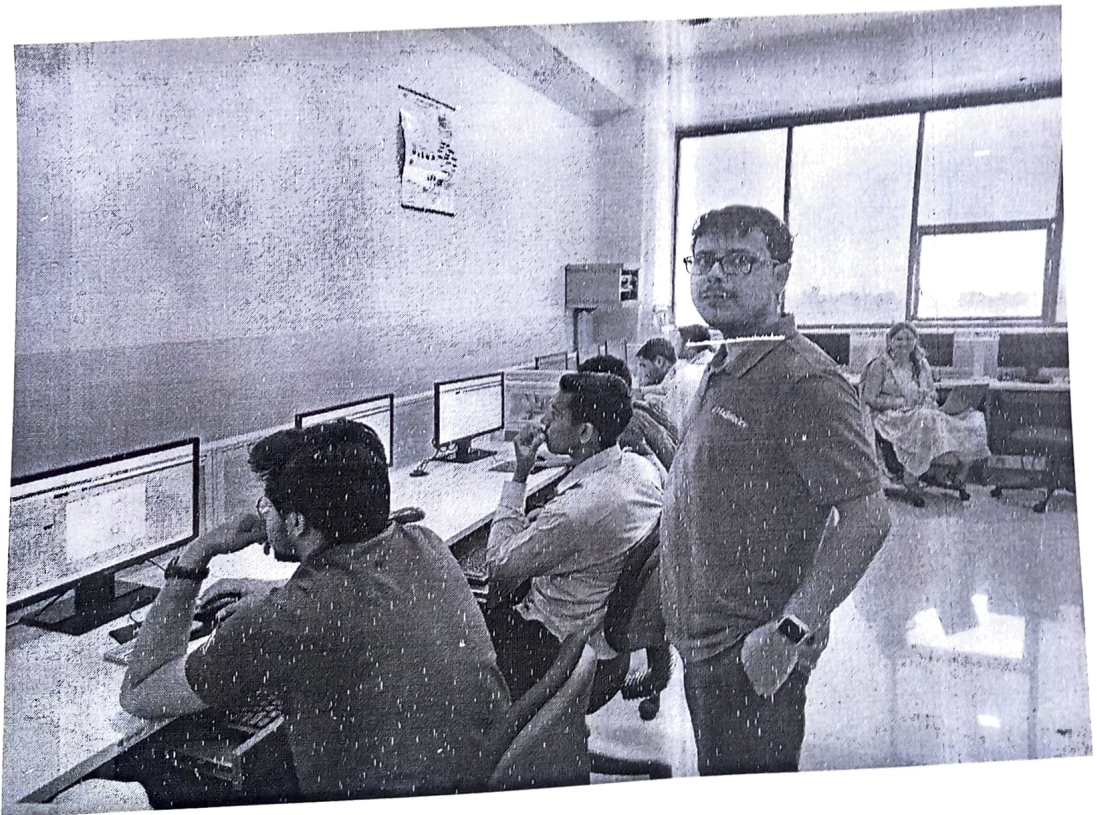
- Understanding the basics of Electric Vehicle (EV) design process and the role of simulation in it.
- Acquiring knowledge of the MATLAB and Simulink software and their tools for designing EV powertrains, batteries, and other components.
- Being able to model and simulate EV components and systems using MATLAB and Simulink software.
- Learning how to analyze and optimize EV designs using simulation.
- Understanding the challenges faced in EV design and how simulation can help overcome them.
- Gaining exposure to real-world applications of MATLAB and Simulink in EV design and development.
- Developing problem-solving skills and critical thinking abilities.
- Acquiring resources and support for continued learning and use of MATLAB and Simulink in EV design beyond the workshop.



Welcome speech by Prof. Monika Deshwal



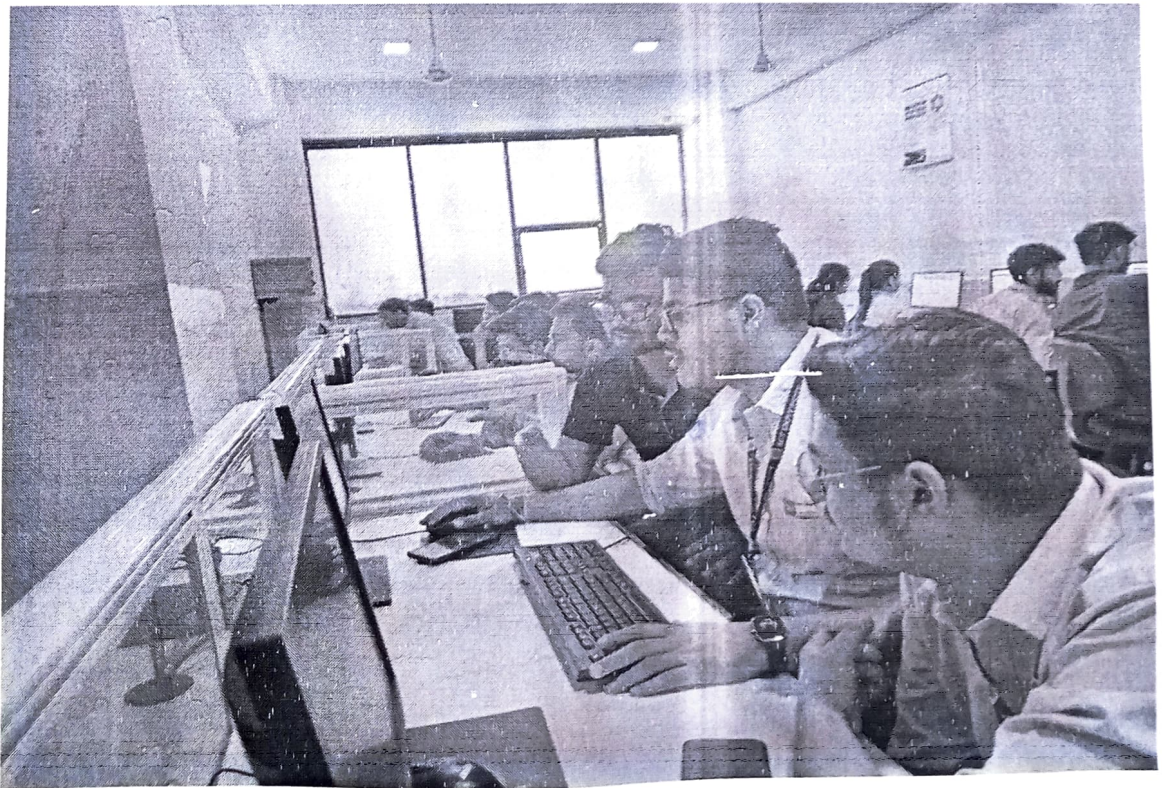
Training by Mr. Pratyush from Math works



Practical Session to the students

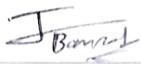





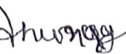
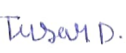


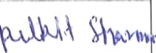
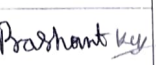


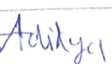
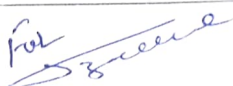


Practice Session by the Students



Practice Session by the Students

Mechanical Engineering

Shree Guru Gobind Singh Tricentenary University Haryana				
Faculty of Engineering and Technology				
Department: Mechanical Engineering, CE, CSE			Date: 13 April 2023	
Event Title: Use of Matlab and Simulink in EV Design" workshop by MathWorks				
S.No	Enrollment No.	Name	Course/Semester	Signature
1.	221303002	Tanish Bansal	B.Tech (Mechanical)	
2.	221303003	Rohit Yadav	B.Tech (Mechanical)	
3.	221303004	Yatin Kumar	B.Tech (Mechanical)	
4.	221303005	Harsh	B.Tech (Mechanical)	
5.	221303007	Sai Satya Dhanush	B.Tech (Mechanical)	
6.	221303008	Chirag	B.Tech (Mechanical)	
7.	221303009	Anurag	B.Tech (Mechanical)	
8.	201303001	Tushar Dhanker	B.Tech (Mechanical)	
9.	201303002	Vinay	B.Tech (Mechanical)	
10.	201303004	Naman Sharma	B.Tech (Mechanical)	
11.	201303006	Pulkit Sharma	B.Tech (Mechanical)	
12.	201303009	Prashant Kumar	B.Tech (Mechanical)	
13.	211303009	Yash	B.Tech (Mechanical)	
14.	211303001	Vicky	B.Tech (Mechanical)	
15.	211303002	Aditya Negi	B.Tech (Mechanical)	
Mr. Dinesh Deshwal Head Mechanical Engineering SGTU, Gurugram				

Dean
Faculty of Engineering & Technology
SGT University
Gurgaon (Haryana)

HOD - ME
Faculty of Engineering & Technology
SGTU, Gurugram (Haryana)

Civil Engineering

- 16. 201301001 Sumukh Vats
- 17. 221301004 Rishabh
- 18. 221301005 Rahul

Computer Science Engineering

- 19. 211302066 Lakshay Arora
- 20. 211302044 Pooja
- 21. 201302060 Arien
- 22. 201302054 Kartik Yadav
- 23. 201302006 Jai
- 24. 201302015 Mahima
- 25. 201302030 Rohit
- 26. 201302063 Ritika Negi
- 27. 201302056 Sonal Kumari
- 28. 201302066 Aman Agarwal
- 29. 201302030 Harsh
- 30. 201302077 Tushar
- 31. 201302028 Pratham Dagar
- 32. 201302048 Vineet Thakran
- 33. 201302049 Kunal Saini
- 34. 201302065 Neeraj Chander
- 35. 201302041 Sagar
- 36. 201302050 Dipak Kumar
- 37. 201302026 Gaurav Bhatt
- 38. 201302032 Abhishek Bhardwaj