

DYNAMECH Club Activity on “Tech Tinker with MATLAB”

The department of **Mechanical Engineering** organised a **club activity** titled **Tech Tinker with MATLAB** on **09-08-2025** from **1.30 PM to 4.00 PM**, in **CIM Lab**.

This activity was conducted to influence students on the importance of MATLAB coding, including precision, timing of program execution, and calculation of frequency and amplitude of the sine wave as criteria for judging students in the event, for their career and future product development. 50 students from the ME and CSE departments had attended this event. **Dr Sanjeev Nayak, Product Manager Alstom, Pvt Ltd** was the Chief Guest and Judge for this event.

Objectives of the Event

- To introduce students to recent developments in the field of computational techniques using MATLAB
- Bridge the gap between academic learning and industry practices
- To foster technical curiosity and self-learning among participants
- To enhance communication, teamwork, and leadership abilities
- To promote critical thinking and problem-solving through experiential learning

Event Overview

The “Tech Tinker with MATLAB” provided an engaging, hands-on platform for students to explore MATLAB’s powerful applications in engineering and data analysis. With insights from Dean (Academics) Dr. Shinivas L Gombi, and Dr. Sanjeev Nayak from Alstom Pvt Ltd, the event emphasised bridging the gap between theory and practice. Participants tackled real-world challenges, enhanced their coding and debugging skills, and gained exposure to MATLAB’s versatile toolboxes. The initiative fostered innovation, computational thinking, and collaborative learning, preparing students for advanced research and industry roles while boosting their confidence in using MATLAB for multidisciplinary problem-solving.

An Autonomous Institute
Approved by AICTE, New Delhi
Affiliated to VTU, Belagavi
Recognized by UGC under 2(f) & 12(B)
Accredited by NBA & NAAC

Photographs from the Event

As shown in Figure 1, Dean (Academics), Dr. Shrinivas L Gombi Sir, inaugurated the club activity and delivered a keynote address highlighting the importance of MATLAB, especially for **Mechanical Engineering** students.

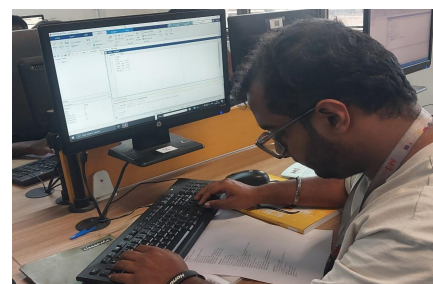


Figure 1: **Dr. Shrinivas L Gombi, Dean Academics, addressing the students about the Importance of MATLAB to students.**

Figure 2 shows the photographs of the students keenly involved in the activity by typing the MATLAB Script in the Compiler.



(a) Students coding in MATLAB



(b) A student keenly typing the MATLAB Script

Figure 2: Photographs of the students' participation in the activity

Schedule of the Event

The Table 1 gives the schedule of the event. Round 1 consisted of script writing for the mathematical functions in the MATLAB compiler, while Round 2 involved plotting the waveforms for the given functions and determining the frequency and amplitude of the waveforms.

An Autonomous Institute
Approved by AICTE, New Delhi
Affiliated to VTU, Belagavi
Recognized by UGC under 2(f) & 12(B)
Accredited by NBA & NAAC

Day	Time	Session Details
Saturday, August 9 2025	1.40 pm - 1.50 pm	Welcome Address
	1.50 pm - 2.00 pm	Introduction to the Rules
Saturday, August 9 2025	2.00 pm - 2.45 pm	Round 1
	2.45 pm - 3.45 pm	Round 2

Table 1: Schedule of the Event

Outcomes and Impact

- Participants developed specific skills related to scripting and compiling the code in MATLAB through the activity.
- Improved creativity, critical thinking, and problem-solving abilities.
- Fostered a spirit of cooperation and collaboration among students.
- Encouraged peer learning and mutual support.
- Provided opportunities for students to take initiative and lead tasks or teams.
- Enhanced organisational and time management skills.

Conclusions

The event bridged academic concepts with industry-relevant tools, fostering computational thinking and innovation. Pavan Patil (USN: 1MJ23ME011) secured the 1st Prize, while Vihaan S Bapuri (USN: 1MJ23ME013) was declared Runner-Up.

Report by: Dr. Rajesh Kumar P

Affiliation: Faculty in the Department of Mechanical Engineering,

MVJ College of Engineering