

Department of Mechanical Engineering

Academic year 2024-25 (Even)

Guest Lecture Report

Topic : CAD in Mechanical Engineering

Resource Person: Mr. R. Omprakashan,

Product Manager, CADD Centre,

Thanjavur.

Date &Session : 24.03.2025&01.30 PM

Venue : Smart Class Room – S & H

Co-Ordinators :Mr. S. Nelson Raja, AP/MECH &

Mr. M. Vivekananthan, AP/MECH

Convener :Dr. T. Pushparaj, HoD/Mech.

Objectives of the Event:

• To enlighten the students about the theoretical and practical aspects.

- To bring conceptual knowledge, corporate experience and help students choose the right career path according to their skills and interest.
- To make the students aware about the latest trends in DesignEngineering.
- To provide a forum for students to interact with external experts.

Department of Mechanical Engineering, Kings College of Engineering (Autonomous), Punalkulam, organized a Guest Lecture on "CAD in Mechanical Engineering" for students from II and III Mechanical Engineering department on 24th March 2025. There were 72 students actively participated in this guest lecture and gained information on the CAD. The guest lecture began with welcome address was given by Mr. M. Vivekananthan, AP/MECH. He also introduced the resource person Mr. R. Omprakashan. He gave the lecture to the participants with various ICT tools and the session was organized with the focus to transfer the knowledge to the students.

The session provided an in-depth exploration of CAD applications, emphasizing its significance in modern engineering and technological applications.

The lecture also covered various softwareused in Industrial Sectorwhich are crucial for understanding and optimizing design problems.

Key Aspects discussed in the Guest Lecture:

- ✓ Definition and evolution of CAD tools and software.
- ✓ Functions: sketching, modeling, simulations, drafting.
- ✓ Importance of CAD in Mechanical Engineering.
- ✓ Early design methods (manual drafting, mechanical drafting).
- ✓ Key milestones in CAD development (e.g., AutoCAD, SolidWorks, CATIA, etc.).
- ✓ Conceptualization and modeling of mechanical parts and assemblies.
- ✓ AR and VR technologies in Mechanical Engineering.

- ✓ Using CAD to replicate parts from existing components.
- ✓ CAD Workflow in Mechanical Engineering
- ✓ Role of CAD in Product Lifecycle Management (PLM).
- ✓ Design Optimization Using CAD.
- ✓ Challenges and Limitations of CAD.
- ✓ Future Trends in CAD for Mechanical Engineering.

In his speech he presented the scope of those technologies in current situation and talked about the opportunities in design engineering area for young engineers. He also suggested & encouraged to students to do projects in the field of design.

The session ended with vote of thanks given by Mr. S. Nelson Raja, AP/MECH. Mr. R. Omprakashan thanked the Management, Principal and Head of the Department for providing the platform to organize guest lectures on CAD in Mechanical Engineering. He appreciated faculty members, students for the silent listening and useful interaction in the guest lecture. After the session participants gave their feedback through feedback link.









Glimpses of the event

Feedback Analysis:

How engaging was the speaker's presentation?



Was the speaker knowledgeable about the subject?



How relevant was the topic to your interests or academic/professional goals?



Did you gain new insights or learn something valuable?



Was the event well organized?



Was the technology (audio & video) working properly throughout the event?



Overall, how satisfied were you with the guest lecture?



Outcomes of the Event:

- Interactive elements encouraging the students to actively participate and gained the knowledge.
- Know the various opportunities regarding the area of design engineering.
- Learned the new trends in the design field and also have to implement in real situations.

Co-Ordinator

HoD/Mech.

Principal