



LENDI INSTITUTE OF ENGINEERING AND TECHNOLOGY

An Autonomous Institution

(Approved by A.I.C.T.E & Permanently Affiliated to JNTUGV, Vizianagaram)

Accredited By NAAC with 'A' Grade & NBA

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DEPARTMENT OF MECHANICAL ENGINEERING

INNOVATIONS BY FACULTY IN TEACHING LEARNING



1. Use of ICT Tools

Integrating technology into teaching enhances visualization, understanding, and interactivity.

- **Video Lectures/Animations:** These provide dynamic explanations of complex topics, making learning more engaging and accessible.
- **PowerPoint Presentations:** These enable a structured and visually enriched delivery of content, facilitating better retention of information.



Use of ICT tools in the class room

2. Experiential Learning

This initiative focuses on hands-on and real-world experiences to solidify theoretical knowledge.

- **Industrial Visits:** Students observe real-world applications and industrial processes.
- **Internships:** Practical exposure allows students to apply their academic learning in professional settings.
- **Laboratory Learning:** Experiments reinforce theoretical concepts and encourage exploration.
- **Model-Based Learning:** Physical or digital models enhance understanding of abstract ideas through tangible representations.



Industrial Visits



Model-Based Learning



Laboratory Learning

3. Participative Learning

This approach fosters active involvement and collaboration among students and educators.

- **Guest Lectures:** Industry experts provide insights into specialized topics, bridging the gap between academia and industry.
- **Student Seminars:** Students improve their communication and critical thinking skills by presenting on topics of interest.

- **Group Learning:** Group activities encourage teamwork, idea exchange, and peer-to-peer learning.



Student Seminars



Group Learning

4. Learning Through Problem Solving

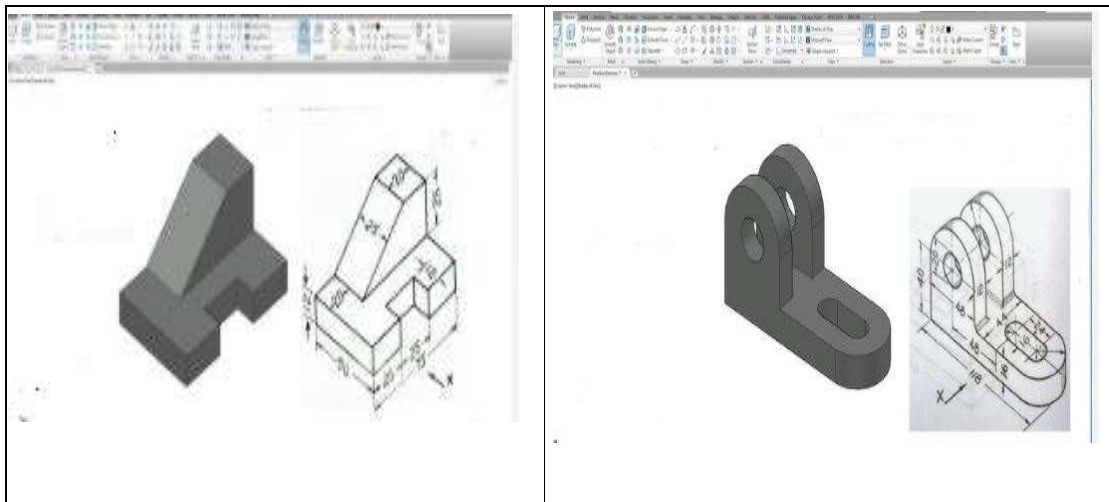
This initiative emphasizes application and innovation.

- **Minor/Mini Projects:** These projects introduce students to practical problem-solving within a limited scope, building foundational skills.
- **Major Projects:** Larger-scale projects allow students to work on complex, multidisciplinary problems, fostering creativity, critical thinking, and technical expertise.
- **Case Studies/Real Life Examples:** Case Studies involve analysing real or hypothetical scenarios to apply theoretical knowledge, enhancing critical thinking and decision-making skills. Bridge the gap between theory and practice and prepare students for real-world challenges to making them effective in engineering field.



CAD Tool Practice

Practiced Diagrams



5. Demonstration based visual learning:

In this approach, instructors provide live, step-by-step demonstrations—often on blackboards or using physical props and tools—to illustrate concepts in real time.

- **Blackboard Drawing Tools**

Large-scale Ruler, compasses, or protractors allow precise sketches, improving clarity and engagement.

- **Physical Props**

Simple models or mock-ups help students visualize abstract theories more concretely.

- **Interactive Demonstrations**

Students can ask questions and see immediate adjustments, facilitating active learning and clear conceptual understanding.




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