



**Table 5.5a Innovative techniques used**

| Sr. No. | Innovative techniques used                    | Remarks   | Google drive links  |
|---------|---|---|---|
| 1.      | Mini projects                                 | Encouraged hands-on learning; students demonstrated a practical understanding of concepts.<br>Outcome: Improved hands-on skills   | <a href="https://drive.google.com/drive/folders/1f_pfr18IR8dJkTsQo1OeCfCMM8jBRnWR?usp=drive_link">https://drive.google.com/drive/folders/1f_pfr18IR8dJkTsQo1OeCfCMM8jBRnWR?usp=drive_link</a>   |
| 2.      | YouTube videos                                | Faculty members create their own videos and share them with students. Faculties also look for top-quality videos and share them with students to enhance their understanding.<br>Outcome: Enhanced concept clarity                                      | <a href="https://docs.google.com/document/d/1_088gs-OcANsuxIkypVVjp5snwZqWIT/edit?usp=drive_link&amp;ouid=100032385488623796920&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/1_088gs-OcANsuxIkypVVjp5snwZqWIT/edit?usp=drive_link&amp;ouid=100032385488623796920&amp;rtpof=true&amp;sd=true</a> |
| 3.      | Use of Virtual laboratories                   | Virtual Lab provided a flexible platform for experiments.<br>Outcome: Practical exposure  | <a href="https://docs.google.com/document/d/1_088gs-OcANsuxIkypVVjp5snwZqWIT/edit?usp=sharing&amp;ouid=100032385488623796920&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/1_088gs-OcANsuxIkypVVjp5snwZqWIT/edit?usp=sharing&amp;ouid=100032385488623796920&amp;rtpof=true&amp;sd=true</a>       |
| 4.      | Google Classroom                              | Streamlined communication regarding notes, tests, video material and assignments.<br>Outcome: Better organization and participation   | <a href="https://drive.google.com/drive/folders/1v8MzCbWxKf83vSOTb-mkLDkxgD1jTLC?usp=sharing">https://drive.google.com/drive/folders/1v8MzCbWxKf83vSOTb-mkLDkxgD1jTLC?usp=sharing</a>   |
| 5.      | Cut section/ Turbo machine model Explanation  | Helped visualize mechanisms; improved understanding of machine construction.<br>Outcome: Better theoretical grasp   | <a href="https://drive.google.com/drive/folders/119naWSLtQuw6yeklayYh1KLvr89i0-Md?usp=sharing">https://drive.google.com/drive/folders/119naWSLtQuw6yeklayYh1KLvr89i0-Md?usp=sharing</a>   |
| 6.      | MOOCs developed by faculties                  | Faculties shared Udemy MOOCs prepared by them as well as by others with students.<br>Outcome: Enhanced learning flexibility and self-study skills   | <a href="https://docs.google.com/document/d/12X5uyEINDHmG8RUDBM2OU1bJsnWxAQG4/edit?usp=sharing&amp;ouid=100032385488623796920&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/12X5uyEINDHmG8RUDBM2OU1bJsnWxAQG4/edit?usp=sharing&amp;ouid=100032385488623796920&amp;rtpof=true&amp;sd=true</a>     |
| 7.      | Learning Management System (LMS) and LearniCo | Use of LMS -Quality objectives for enhancing the quality of outcome-based education and in making the learning environment engaging and joyful.<br>Facilitated progress tracking; and organized resources.<br>Outcome: Increased efficiency in learning | <a href="https://drive.google.com/drive/folders/145JH8xf99wWM_-9Tsl1qy_fLl1vuwxhQ?usp=sharing">https://drive.google.com/drive/folders/145JH8xf99wWM_-9Tsl1qy_fLl1vuwxhQ?usp=sharing</a>   |

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| Sr. No. | Innovative techniques used                         | Remarks   | Google drive links  |
|---------|--|---|---|
| 8.      | Use of Mathworks                                   | Used for simulations and understanding electrical topics; faculties uploaded simulations and programs for practice.<br>Outcome: Improved analytical and practical skills.   | <a href="https://docs.google.com/document/d/1us75jokwYdO7J1rSTGrbUmCM5skK9IrR/edit?usp=sharing&amp;oid=100032385488623796920&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/1us75jokwYdO7J1rSTGrbUmCM5skK9IrR/edit?usp=sharing&amp;oid=100032385488623796920&amp;rtpof=true&amp;sd=true</a>   |
| 9.      | Course delivered by Industry Experts (Co-teaching) | Industry experts provide industry insights and practical exposure for some topics in the curriculum.<br>Outcome: Improved employability and awareness   | <a href="https://docs.google.com/spreadsheets/d/11yqEhxKyA9El-PCnPrNDYBW8JLXF1uy8/edit?usp=sharing&amp;oid=100032385488623796920&amp;rtpof=true&amp;sd=true">https://docs.google.com/spreadsheets/d/11yqEhxKyA9El-PCnPrNDYBW8JLXF1uy8/edit?usp=sharing&amp;oid=100032385488623796920&amp;rtpof=true&amp;sd=true</a>   |
| 10.     | Internship   | Valuable experience and apply theoretical knowledge in industry.<br>Outcome: Real-world problem-solving skills  | <a href="https://drive.google.com/drive/folders/1ac1V4x6Vgh9eS2w8Ubrlh2Jo2UB3Ggrw?usp=sharing">https://drive.google.com/drive/folders/1ac1V4x6Vgh9eS2w8Ubrlh2Jo2UB3Ggrw?usp=sharing</a>   |
| 11.     | Case Studies                                       | Promoted critical thinking and analysis through case studies.<br>Outcome: Better decision-making and application  | <a href="https://drive.google.com/drive/folders/1Lfv4zraIgDANtND5IHNrdaCuhfoyLWve?usp=sharing">https://drive.google.com/drive/folders/1Lfv4zraIgDANtND5IHNrdaCuhfoyLWve?usp=sharing</a>   |
| 12.     | NPTEL Courses<br>Mathwork course                   | Faculties shared quality courses for self-paced learning.<br>Outcome: Improved understanding and certifications   | <a href="https://drive.google.com/drive/folders/1_e20Uju8eBUKRW36-IIoypUHS3pVYeqv?usp=sharing">https://drive.google.com/drive/folders/1_e20Uju8eBUKRW36-IIoypUHS3pVYeqv?usp=sharing</a>   |
| 13      | Publications on Engineering Educations             | The faculty's publications on Engineering Education reflect a commitment to innovative teaching and learning practices. These contributions highlight research-driven methodologies that enhance student engagement, conceptual understanding, and practical skill development.<br>Outcome: This activity includes the adoption of evidence-based teaching strategies, improved student learning experiences, and enhanced academic credibility | <a href="https://www.jetir.org/view?paper=JETIR2303611">https://www.jetir.org/view?paper=JETIR2303611</a><br><br><a href="https://www.researchgate.net/publication/369493198_New_Approach_for_Providing_Adaptable_Curriculum_Enrichment_through_Teaching-Learning_and_Evaluation">https://www.researchgate.net/publication/369493198_New_Approach_for_Providing_Adaptable_Curriculum_Enrichment_through_Teaching-Learning_and_Evaluation</a><br><br><a href="https://journaleet.in/articles/project-based-learning-teaching-methodology-to-impart-knowledge-and-skills">https://journaleet.in/articles/project-based-learning-teaching-methodology-to-impart-knowledge-and-skills</a> |