Innovations by the Faculty in Teaching and Learning

Following are the best and innovative practices undertaken by the faculty members for improving teaching and learning experience.

- **Flip Learning:** Flip learning gives the teacher a better opportunity to deal with mixed levels, student difficulties, and differentiated learning preferences during in-class time. Our faculty members use the following tools for flip learning:
    - Video lectures
    - Group discussion
    - Teacher-student interaction (Mentor-mentee concept)

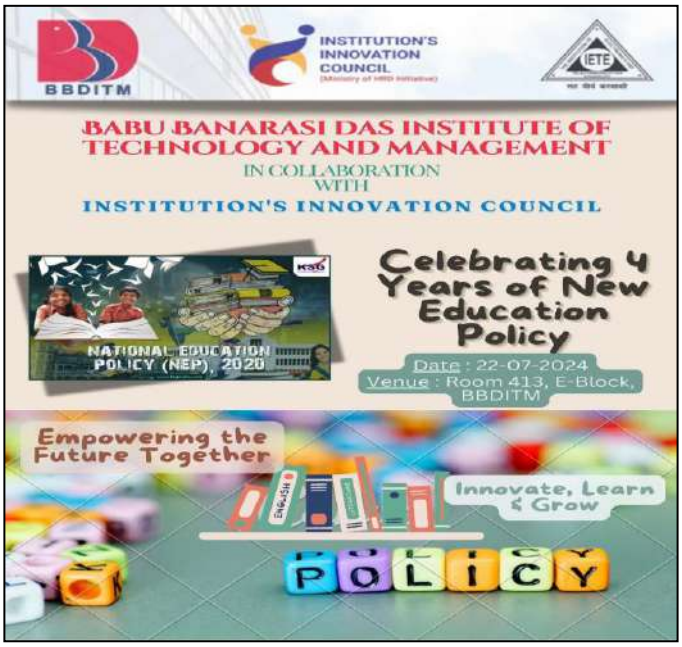
    ➢ **Video Lectures:** Our faculty members recorded many course related as well as interdisciplinary video lectures through their YouTube channel to give students better understanding about engineering concepts. Faculty members also recorded video lectures at AKTU campus studio which are telecasted on Swayam Prabha channel no. 15.

Faculty member	Faculty ID (AKTU)	Topics of Video Lectures	Links of Video Lectures for respective Topics
Dr Shailendra Tahilyani	684382616858	Analog Integrated Circuit	1. https://youtu.be/7m9nZByCkrc 2. https://youtu.be/MDmSI5n4UiI
Navneet Kumar Pandey	794228377032	Microcontroller for Embedded System	1. https://youtu.be/CC2mpM8Ugqw 2. https://youtu.be/NM9wqgtllok 3. https://youtu.be/jTMv7MyUsSc 4. https://youtu.be/McvB99ifRJA
Kalyan Krishna Awasthi	434028518693	Network Analysis and Synthesis, Signals and Systems	1. Network Analysis and Synthesis (BASIC ELECTRICAL ENGINEERING CONCEPTS): https://www.youtube.com/playlist?list=PLXbLuD5WNA3KnewZl2kkleJVsfbiiGdTt 2. Signals and Systems: https://www.youtube.com/playlist?list=PLXbLuD5WNA3J6HXu6LZVPcUJyTCOBh1f6
		Huffman Coding, Shannon's Theorem, Measure of Information,	https://youtu.be/U2cAJjXAuhw https://youtu.be/O0C3YGrGlnk https://youtu.be/3_pvOCd8Mw0 https://youtu.be/7fzzg0xgNrk
Dr. Abhimanyu Kumar Yadav	212713407288	Machine Learning	https://www.youtube.com/watch?v=AOdIcpzTgPg https://www.youtu.be/YmdYnfyiY_8 https://www.youtu.be/garqGNKS-B4

- **<u>Group Discussion:</u>** The main motive to conduct a group discussion is to observe their knowledge and ability on different topics.

  Date: 22nd July 2024

  Topic: "Celebrating 4 years of New Education Policy"



  Date: 21st October 2024
  Topic: "Human and Artificial Intelligence"

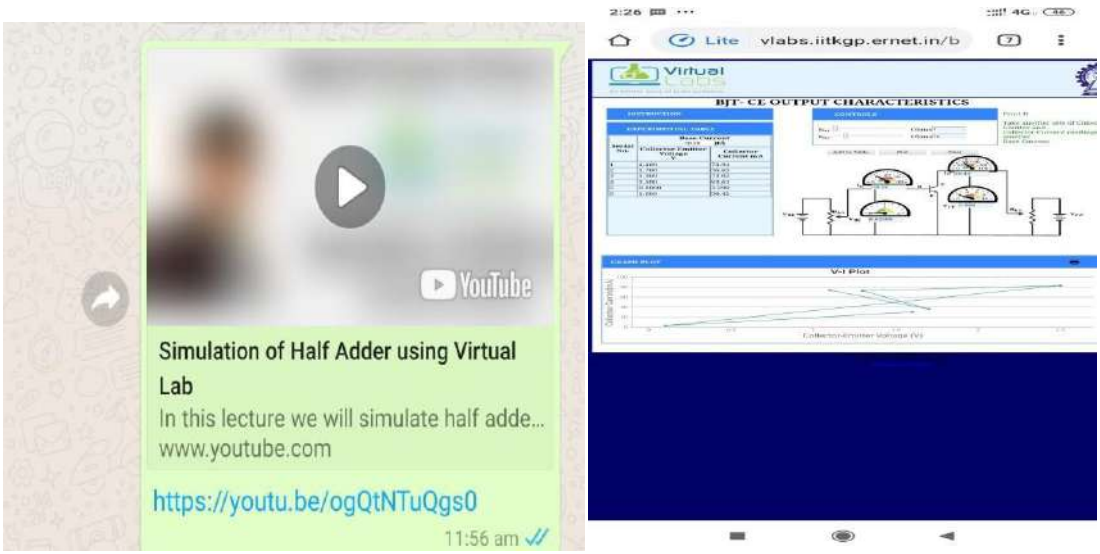


- **<u>Poster Presentation</u>**: Creating posters requires students to not only gain information about a specific topic but also to analyse information and disseminate it to others. Posters offer students to be creative in the delivery of information and to receive feedback from their peers and faculty.





- **<u>Virtual Labs</u>:** In the pandemic situation also our faculty members helped the students in learning basic and advanced concepts through remote experimentation.



- **<u>Innovation through Projects:</u>** Faculties in the department of Electronics and Communication provide continuous guidance to the students through multiple platforms. For giving more practical approach to learn theory, the department has developed "**Centre of Product Development & Innovation**" and "**Centre of Excellence and Training Room**".





<u>Innovation through Workshops:</u> Workshops provide the students, a setting to become involved and to interact with other students, thus leading to increased learning and enhanced development. **A Workshop on Arduino and Robot control though Bluetooth was organised by Infosys Campus Connect on 14th March 2026.**





Date: 9th April 2025 to 11th April 2025
Topic Name: 3 day Workshop on Hands-on Workshop Experience: Solar Installation, LED Light Technology, and IoT Automation"



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