

K. D. K. COLLEGE OF ENGINEERING

Department of Mechanical Engineering

Innovation in the Teaching Learning Process

Innovation in the Teaching Learning Process Transforms Traditional Passive Learning through lecturing in to active, student centered experiences using Technology(Smart Board, Smart Mobile, NPTEL) Collaboration and experiential learning.

Key approaches include Flipped classrooms, project based learning, virtual reality and AI Driven personalized learning to boost engagement critical thinking and retention.

Frequent Alumni Interaction: Topics of industrial importance such as Creo for Modelling By Mr. Aatish Bawankar, Alumni of batch 2006, Latest Industrial Scenario by Mr. Vishal Ninawe, Alumni of batch 2019 etc.

Technology Integration: Use of educational apps, stimulations, interactive experiences.

Flipped Classroom: Students reviews instructional contents through U-Tube videos, college website, NPTEL at home while class time (Some lectures) are dedicated to discussions problem solving and practical applications.

Project Based Learning: Students learn from the completed project displayed in the corridor, project lab etc. Students gain knowledge and skills by working for an extended period to investigate and responded to authentic, engaging and complex question or problems.

Blended Learning: Combines traditional face to face instruction with on line, Digital learning components offering more flexibility and personalization.

Collaborative based learning: Technical learning activities taken under MESA, Auto club, ROBO Club methods like think-pair-share and jigsaw encourage students to work together improving communication and peer to peer learning.

Gami-fication: Incorporating game design elements(Points, Leader boards, rewards) to increase motivation and engagement.

Kinesthetic Learning: Involves hands on , Physical activities such as Outreach and Extension activities such as Automated seed sowing machine at KEM, Ill effect of Drugs and Tobacco at Bhugaon role playing modeling or building to cater to divers learning styles.

Technical Skill Enhancement: Value added courses(In addition to Regular lectures) are carried out for students in collaboration with various outside agencies like CADD STEPPERS, Affordable AI.

Out comes: The outcomes of Above overall activities are displayed/indicated through the prizes received by the students at various platforms.



HEAD

Deptt. of Mech. Engg.
K.D.K. College of Engg., Nagpur-09.