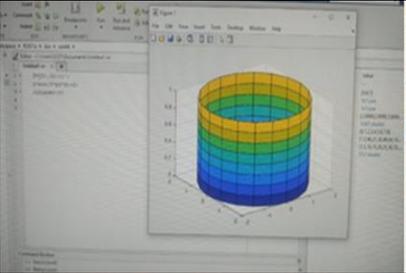


Student Centric methods

- Explicit Teaching
- Flipped Learning
- Demonstration
- Problem Solving
- Case Study based Learning
- Interactive Instruction
- Independent Study
- Experiential Learning
- Project Based Learning
- Learning Management System (LMS) materials, NPTEL videos
- Virtual lab
- Online Courses – NPTEL Class
- One Credit Courses
- Webinars

Student centric methods

S.No	Student Centric methods	Photo
1	Demonstration	
2	Problem Solving	
3	Model based learning	

4	Experiential Learning		
5	Project Based Learning		
6	Virtual Lab		
7	Webinars		

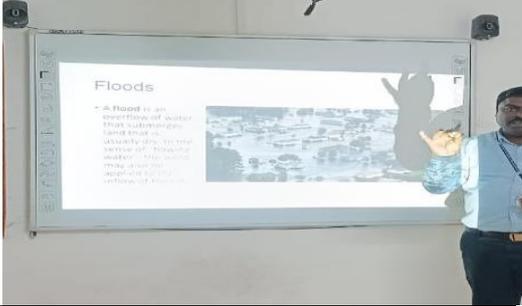
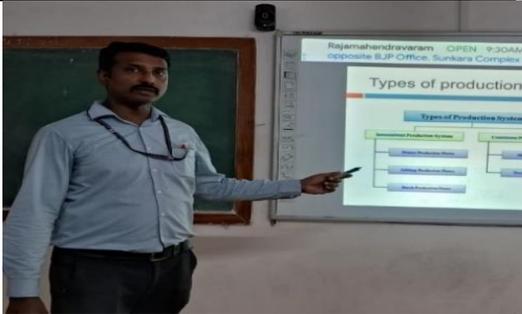
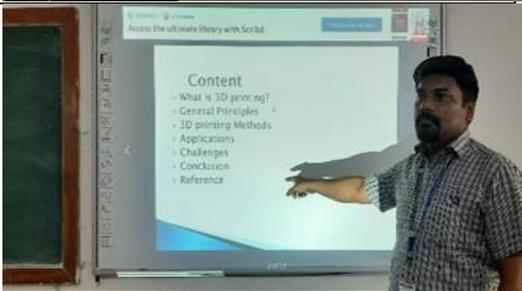
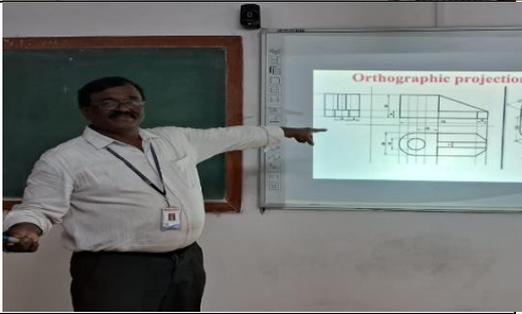
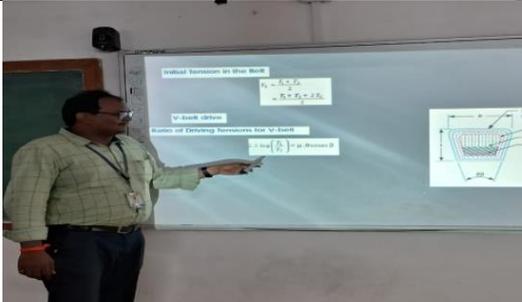
Lecture method and Interactive learning:

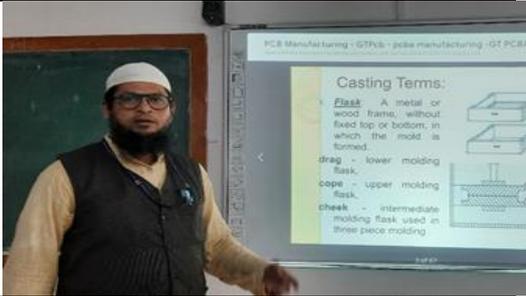
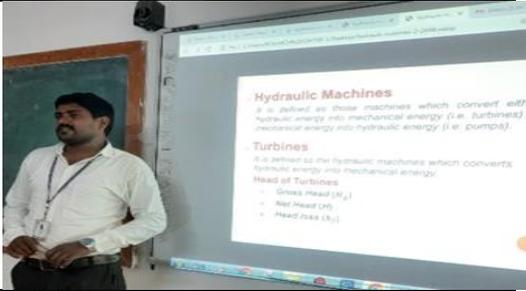
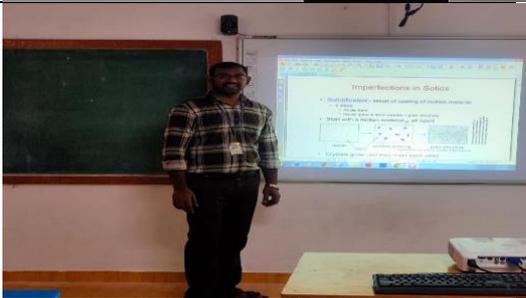
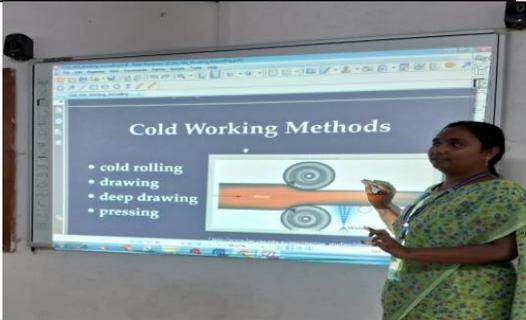
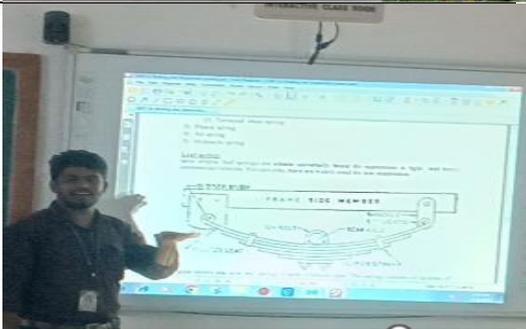
Faculty use chalk and board and audio-visual aids in the classroom. During class, students are encouraged to ask questions and get answers from their professors in real time. Faculty using models charts for interactive teaching.

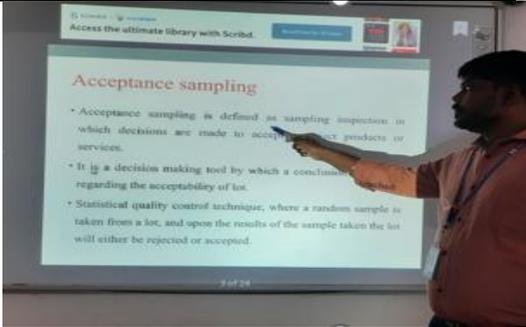
Smart Class Rooms and ICT Usage:

Use of smart learning systems increases the interaction of teachers and students, as they follow each other in the process and it becomes easy for teachers as well, to keep a track using WiFi facility that enables demonstration of real time applications and access online content in the classrooms.

Smart Class rooms and ICT usage

S.No	Name of the Course	Name of the Faculty	Photo
1	Disaster Management	Dr. G Robert Singh	
2	Production Planning and Control	Dr R Sanjeevkumar	
3	3D Printing	Dr. Francis Luther King M	
4	Engineering Drawing	Patchamatla Satyanarayana Raju	
5	Design of Machine Elements	Mr.Chitti Harish Kumar	

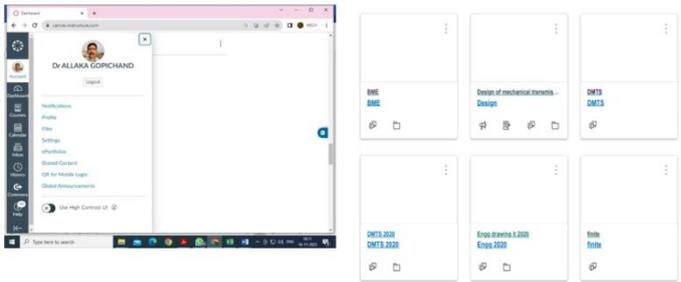
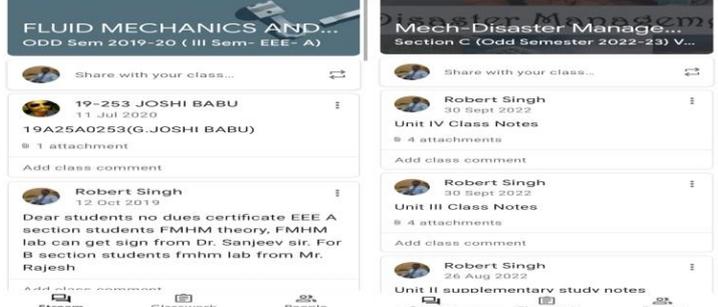
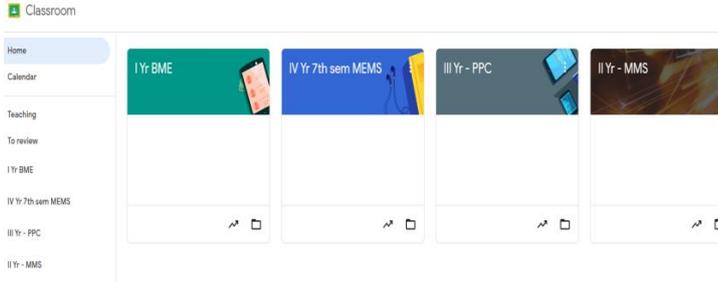
6	Production Technology	Mr.Abdul Azeez	 <p>Mr. Abdul Azeez is presenting on Casting Terms. The slide lists: Casting Terms: Flask: A metal or wood frame, without fixed top or bottom, in which the mold is formed. drag - lower molding flask. cope - upper molding flask. cheek - intermediate molding flask used in three piece molding.</p>
7	Fluid Mechanics & Machinery	Mr.V Rambabu	 <p>Mr. V Rambabu is presenting on Hydraulic Machines. The slide lists: Hydraulic Machines It is defined as those machines which convert with hydraulic energy into mechanical energy (i.e. pumps). Turbines It is defined as the hydraulic machines which converts hydraulic energy into mechanical energy. Head of Turbines - Gross Head (H_g) - Net Head (H_n) - Head loss (H_f)</p>
8	Thermal Engineering	Mr.G Veerendra Kumar	 <p>Mr. G Veerendra Kumar is presenting on I.C Engine. The slide shows a diagram of an internal combustion engine with various components labeled.</p>
9	Engineering Materials	Mr.M Saravanan	 <p>Mr. M Saravanan is presenting on Imperfections in Solids. The slide lists: Imperfections in Solids • Substitution: result of casting of different materials • Point Defects • Line Defects • Surface Defects • Volume Defects</p>
10	Production Technology	Ms.B Harita	 <p>Ms. B Harita is presenting on Cold Working Methods. The slide lists: Cold Working Methods • cold rolling • drawing • deep drawing • pressing</p>
11	Automobile Engineering	Mr.Ravi Kishore L	 <p>Mr. Ravi Kishore L is presenting on Automobile Engineering. The slide shows a diagram of a vehicle chassis with labels: FRONT END MEMBER, CHASSIS, REAR END MEMBER, and WHEELS.</p>

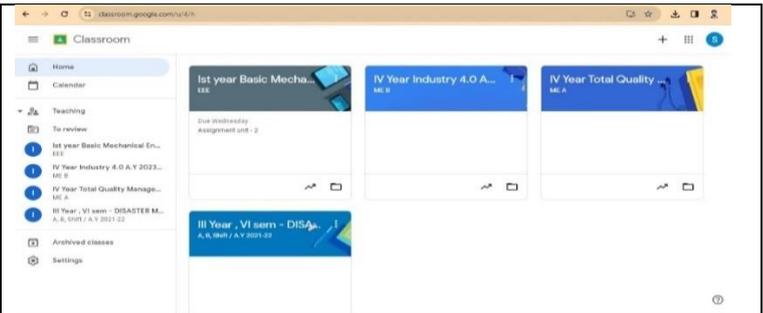
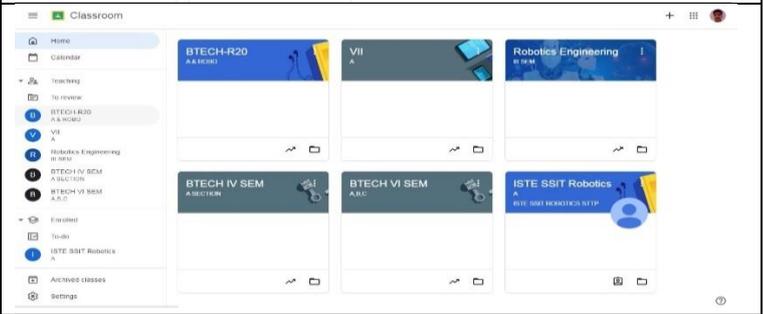
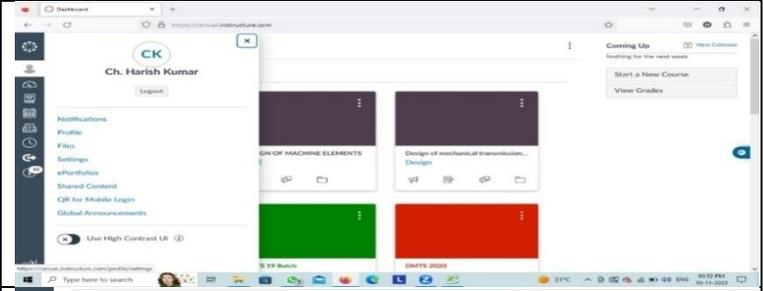
12	Statistical Quality Control	Mr.S Surendar	
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Google ClassRooms

Google Classroom is an application designed to enhance the learning experience which is incorporated in our teaching learning process. It helps to interact with students anytime. Course faculty creates a Google class room for every class and all the students in the class are invited to join this Google class. Faculty posts syllabus, lesson plan, course materials.

Google class room usage for various courses

S. No	Name of the Faculty	Course title	Photo
1	Dr A Gopichand	Design of Mechanical Transmission System, Kinematics of Machinery, Engineering Drawing	
	Dr. G Robert Singh	Fluid Mechanics & Machinery, Disaster Management	
2	Dr R Sanjeev kumar	Production Planning & Control, Micro Electro Mechanical System, Metallurgy and Material Science	

3	Dr. Francis Luther King M	Industry 4.0, Total Quality Management, Disaster Management	
4	B Mahesh Krishna	Theory of Machinery, Robotics	
5	Chitti Harish Kumar	Design of Machine Element, Design of Mechanical Transmission System	
6	N Bulliraju	Machine Tools, Robotics	

Google classrooms

Seminars:

The Seminars are being organized in the institute on course and contemporary topics to enrich their knowledge and enhance their learning experience.

Massive Open Online Courses (MOOCs):

The students are being encouraged to do MOOCs through NPTEL, SWAYAM and have got access to video lectures for effective teaching-learning practice.

Problem-based Learning:

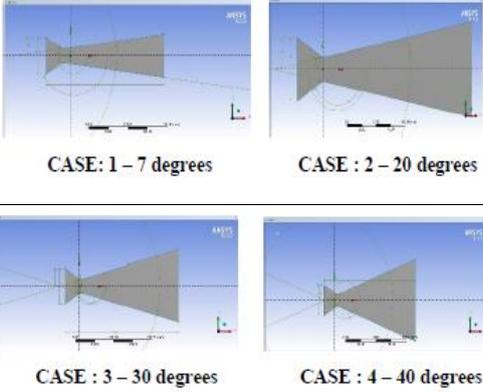
Students are being given problems from prescribed books and reference books as an assignment. The faculty members interact with the students in a friendly way and explain the difficult topics whenever required and improve their performance.

Project-based learning:

During the period of study in the 4th semester, students are introduced with basic concepts of project related activities. In 7 and 8 semester of program, students work on real world projects and they are guided by both faculty and Industry/Research personnel. Students are motivated to work on interdisciplinary projects.

Project based learning

S.No	Project Title	Faculty Name	Photo
1	Design and Fabrication of Solar bike	Dr. R. Lalitha Narayana	
2	Design and Fabrication of E-Kart	Dr. A. Gopichand	
3	Design and Fabrication of Go-Kart	Dr A Gopichand	
4	Design and fabrication of foldable Helmet	Dr. R Sanjeev Kumar	

5	Experimental Investigation of passive solar still	Dr. R LalithaNaryana	
6	CFD Analysis on Rocket Nozzle using Ansys	Mr V John Bunyan	

Virtual Labs:

Virtual labs are online platforms that simulate physical experiments, allowing users to interact with and manipulate virtual apparatus, collect data, and observe outcomes. A virtual lab lies in their ability to enhance and complement traditional laboratory experiences.

Virtual Labs usage in student centric learning

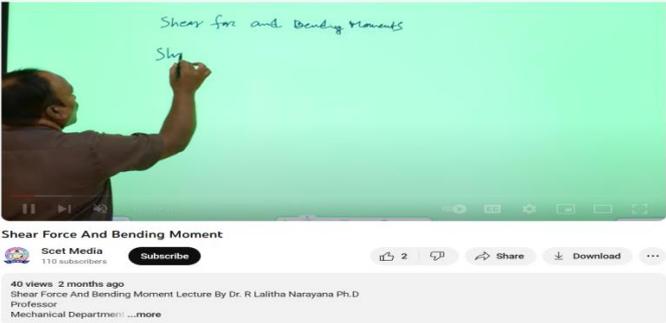
S. No	Faculty Name	Lab Name	Link	Photos
1	Mr B Mahesh Krishna	Mechanisms and Robotics Lab	https://mr-iitkgp.vlabs.ac.in/exp/forward-kinematics/index.html	
2	Mr G Veerendra Kumar	Heat Transfer	https://vlab.amrita.edu/index.php?sub=1&brch=194	

Video Capturing System:

YouTube is a social platform, and building a community around your content is crucial.

Faculty prepares the Video content using the digital studio which can used to teach content effectively and communicate message clearly.

Digital studio usage in student centric learning

S.No	Course	Faculty Name	Picture
1	Strength of Material	Dr. R Lalitha Narayana	
2	Micro Electro Mechanical System	Dr.D. Bhanu Prakash	