



5.5 Innovations by the Faculty in Teaching and Learning

Table 5.5.1 Teaching Learning Methods

Table 5.5.1 Teaching Learning Methods

Sr. No	Teaching Learning Methods	Mode of Teaching/Learning Process	Outcome
1	ICT Class Room	Live Demonstration using Software Tools/Video	Easy to Understand the concept
2	E-Learning	NPTEL, MOOCS	Enhance the learning experience, using audio-visual aids. On tip compatibility & resources
3	Presentations	LCD Presentation	Enrich Subject Knowledge and Improve the better Presentation Skills.
4	Assignment Practices	Preparation	Improving the Cognitive Skills
5	Technical Events	Competition	Enhance the Technical Skill
6.	Self-Learning Sessions	SLS sessions are added in academic time Tables so that students are actively involved in academic study.	Clears the Doubts in the Class itself
7.	Webinars, workshops, Symposiums and Exhibitions	Online / offline	Develops the skills, improves the connectivity, and Gains cutting edge technology knowledge
8	Virtual Labs	Online mode of Practical Conductions	Able to do the Practical's according to specific course through virtual platform from IIT Bombay.



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9.	Use of Digital Library	Availability of e-Books, e- journal, e-shodh ganga, e-shodh sindhu, e-pathshala, Moodle service etc.	Helpful to enhance the knowledge.
10	Quiz	Presentation	To test the student understanding level at the end of each course topic



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Table 5.5.2 Use of ICT tools by faculty

SR No	Name of Faculty	ICT Tools Used	Subject	Link
1	Dr. Rahul Bachute	Virtual Lab	Dynamics of Machinery	https://sites.google.com/view/drrahulbachute/profile
2	Dr. Sandip kamble	Subject Website	Mechatronics and AIML	https://sites.google.com/view/sandipkamble
3	Dr. Sarange Shreepad	You Tube Chanel	Mechatronics and AIML	https://www.youtube.com/@shreepadsarange5952
		Google Classroom	Robotics	https://classroom.google.com/c/NzUzNzcwODkwODQ3
		Google Classroom	AIML	https://classroom.google.com/c/NzQzOTIzMzIwMDU3
4	Prof. Sudarshan Martande	You Tube Chanel	Machining Science and Technology and Digital Manufacturing Laboratory	https://youtube.com/@sudarshanmartande587?si=0vcjuz5EXGVB8uQ5
5	Department	ERP	All	Lesson plan, Attendance

Weblink: <https://adypsoe.in/UG/Mechanical/Criteria-5-5.pdf>

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Figure 5.5.1: Learning material distribution module in ERP



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Table 5.5.2 Use of Virtual Labs by faculty

Sr.No	Name of Faculty	ICT Tools Used	Subject	Link
1	Prof. Sudarshan Martande	You Tube Chanel	Turbo machines	https://youtube.com/@sudarshanmartande587?si=0vcjuz5EXGVB8uQ5
2	Dr.Amol Gaikwad	Virtual labs	CAM	Virtual Lab - Simulation
3	Prof. Ujwal Gawai	Virtual labs	Heat Transfer	Virtual Lab - Heat Transfer Lab
4	Dr.Amol Patil	Virtual labs	3D Printing	Virtual Labs
5	Dr.Dilip More	Virtual labs	Manufacturing	Virtual Labs
6	Prof. Umaji Kolekar	Virtual labs	DOM	Virtual Labs Virtual Labs Welcome to Virtual Labs Virtual Labs
7	Prof. Sachin Rahinj	Virtual labs	Graphics Lab	Virtual Labs Welcome to Virtual Labs
8	Dr. Santosh Jadhav	Virtual labs	KOM	Virtual Labs Virtual Labs
9	Dr. Sarange Shreepad	Virtual labs	Robotics	mr-iitkgp.vlabs.ac.in/exp/forward-kinematics/simulation/forward-kinematics-of-puma-560.html
10	Dr. Sarange Shreepad	Virtual labs	MTX	Virtual Labs Welcome to Virtual Labs
11	Dr. Sarange Shreepad	Virtual labs	Control Engg	Welcome to Virtual Labs

5.7.3 Development Activities:

Table 5.7.1 Use of Virtual Labs by faculty

SR No	Name of Faculty	Tools Used	Subject	Link
1	Dr. Rahul Bachute	Gamification	Thermodynam ics	https://sites.google.com/view/drrahulbachute/technical-games



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			Manufacturing Processes Design Engineering	
2	Prof.Sudarshan Martande	Mobile App	Exam Seating Arrange Ment	https://play.google.com/store/apps/details?id=com.adypsoe.exam
3	Prof. Dipak Shelke	MESA App	Mechanical staff and Students	Event management