

Innovations by the Faculty in Teaching and Learning

The department also encourages the faculty to exhibit innovative teaching, on par with the academic standards and modern tool usage of the e-content in the web- sites of reputed institutions. On par with the above faculty also strengthens the traditional teaching learning process by improving the delivery and effective transfer of data utilizing all modern technological methods.

Innovative Methods Used in the Department of ECE

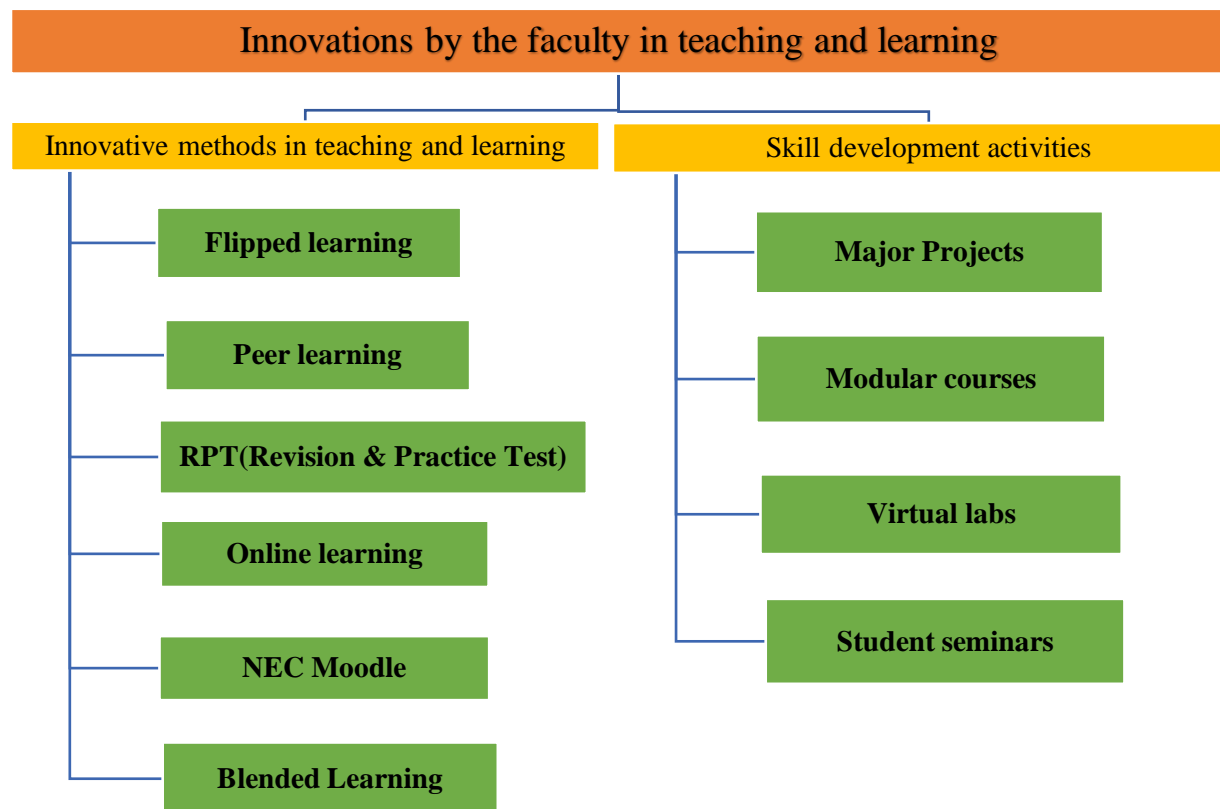

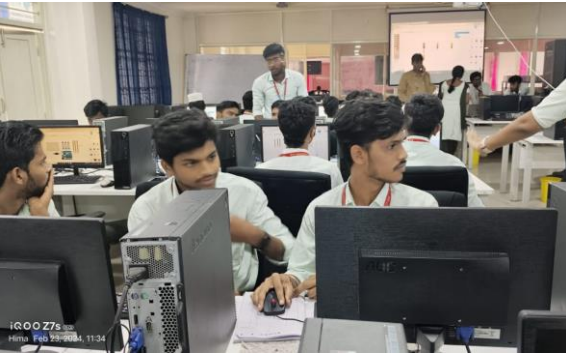



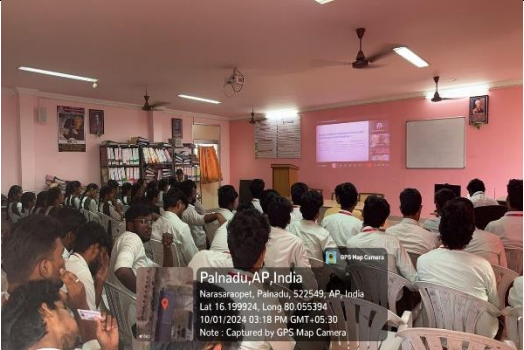






Figure 5.6 Innovative Methods in Teaching Learning Process

The following are the methodologies are used by our faculty members in the department in teaching Learning Process.

Innovative method	Process	Outcomes	Supporting Information
Flipped Class rooms	<ul style="list-style-type: none"> • This process includes a pre-Learning, Participator Approach (PA) and demands maximum focus and involvement of the learners. • Relevant materials are provided in advance and students are asked to participate during the delivery of the topic. 	<ul style="list-style-type: none"> • Students are able to apply the knowledge in real time applications. • Focus and participation of the students in learning is ensured. 	 <p data-bbox="1518 938 2007 970">Students are involved in Flipped Class</p>
Peer Learning	<ul style="list-style-type: none"> • Identification of student mentors based on Academic performance. • Mentors support mentee, who are lagging in their academics. 	<ul style="list-style-type: none"> • The academic levels of the mentees are improved. • Leadership quality is enhanced among the mentors. 	 <p data-bbox="1503 1337 2007 1402">Active participation of ECE students in Peer Learning.</p>

<p>RPT (Revision, Practice & Test)</p>	<ul style="list-style-type: none"> • Revising the topics unit wise while stressing on important areas. • Providing students a chance to recap their preparation with focus. • Conducting a test in-line with university end examination. 	<ul style="list-style-type: none"> • Students find it a cakewalk to face university end examination. • It promotes pass percentage in the respective subjects. 	 <p>Students Involved in RPT</p>
<p>Online learning</p>	<ul style="list-style-type: none"> • Students are encouraged to learn through online platforms like NPTEL, Coursera etc., • So that they are evaluated on a common platform-learning environment. 	<ul style="list-style-type: none"> • The aspirants are globally competitive. 	 <p>NPTEL Certificate</p>
<p>NEC Moodle</p>	<ul style="list-style-type: none"> • Moodle is a learning platform designed to provide educators, administrators and learners with a single robust, secure and integrated system to create personalized learning environment to share course content. 	<ul style="list-style-type: none"> • It provides a unique platform for sharing of knowledge a converged motivation for all levels of learners. 	 <p>Accessing course materials using Moodle</p>

<p>Blended Learning</p>	<ul style="list-style-type: none"> ● Blended Learning is an integrated online education to imbibe conventional and virtual learning methods. 	<ul style="list-style-type: none"> ● Provides access to global resources and materials that meet the students' level of knowledge and interest. ● Self-pacing for slow or quick learners reduces stress, increases satisfaction and information retention. 	 <p>Students are actively participating in Blended Learning</p>
<p>Major projects</p>	<ul style="list-style-type: none"> ● Students are motivated to identify a problem in and around their surroundings and identify a solution to it with apt resource management. 	<ul style="list-style-type: none"> ● It creates an opportunity to transform theoretical knowledge into working models and prototypes. ● In the process they identify available resources, negotiate with authorities and pool-up the required resources. 	 <p>Home Automation System</p>
<p>Modular Courses</p>	<ul style="list-style-type: none"> ● Summer vacation is grabbed and utilized to expose the students to industry oriented elite courses. 	<ul style="list-style-type: none"> ● The process makes the students industry ready. ● It fills the gap between industry and academics ● Students bag hands on exposure and advanced learning 	 <p>Students Involved in Modular Courses</p>

<p>Virtual Labs</p>	<ul style="list-style-type: none"> ● A virtual lab is an online platform that simulates a physical laboratory environment, allowing students to conduct experiments, investigations, and research remotely. ● Virtual labs provide a safe, accessible, and cost-effective way to engage in hands-on learning experiences. 	<ul style="list-style-type: none"> ● By leveraging virtual labs, educators can create immersive, interactive, and effective learning experiences that prepare students for success in various fields. 	 <p style="text-align: center;">Virtual Lab Workshop</p>
<p>Student Seminars</p>	<ul style="list-style-type: none"> ● The overall objective of this activity is to motivate students for Self-Study and Group Study. 	<ul style="list-style-type: none"> ● The team building and leadership abilities among students are fostered. ● The Oral communication skills of the students are honed. ● The Individual responsibility and team spirit of the students are fostered. ● The knowledge up- lift happens as an outcome of knowledge sharing. ● The time management, conflict management, and oral presentation skills of the students are enhanced. 	 <p style="text-align: center;">Students Seminar Presentation</p>