



VIGNAN'S LARA

INSTITUTE OF TECHNOLOGY & SCIENCE


Approved by AICTE New Delhi & Affiliated to JNTUK Kakinada
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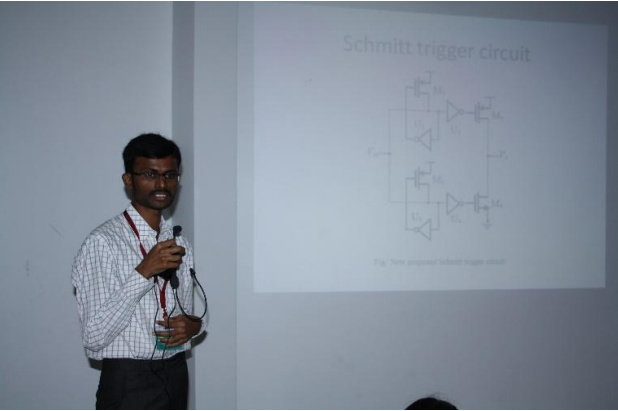
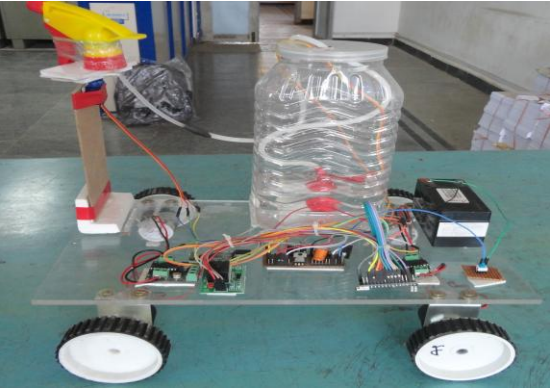
Department of Electronics and Communication Engineering




Innovative Methods in Teaching Learning Process



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

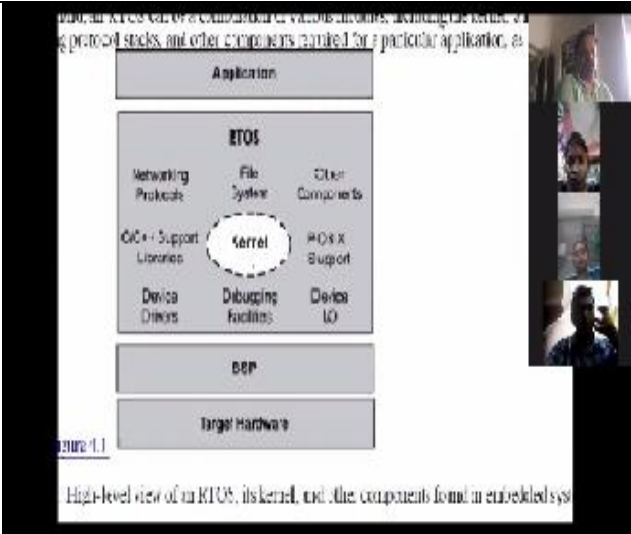

Table 5.5.1: Innovative Methods in Teaching Learning Process.

Innovative method	Process	Outcomes	Supporting Information
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>Active participation of ECE students in Peer Learning.</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>A student in a white shirt and glasses is standing in front of a projection screen. The screen displays a circuit diagram titled "Schmitt trigger circuit" with various electronic components and labels. The student is holding a microphone and appears to be giving a presentation.</p> <p style="text-align: center;">Student Seminar Presentation</p>
<p>Mini 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>A model of a pesticide spraying machine is shown on a green table. It consists of a clear plastic bottle with a spiral inside, mounted on a wooden base with two wheels. Various electronic components, including a microcontroller board and a motor, are connected to the machine.</p> <p style="text-align: center;">Pesticide Spraying Machine Model</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 style="text-align: center;">NPTEL Certificate</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 style="text-align: center;">Students Involved in Modular Courses</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 style="text-align: center;">Students Involved in RPT</p>

<p>Blends 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>Flipped Class rooms</p>	<ul style="list-style-type: none"> • This process includes a pre-Learning, Participatory 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>Students are involved in Flipped Class</p>

<p>Virtual Class Room</p>	<ul style="list-style-type: none"> ● Voluntarily a paradigm shift took place in the field of education and we flipped to online teaching and testing to fill the gap due to COVID-19 pandemic ● We have used the platforms like ZOOM and WebEx to interact with students of the entire class as a whole and led a virtual classroom. we have using google sheets to conduct examinations. 	<ul style="list-style-type: none"> ● The academic calendar was followed without any lapses. ● Both faculty and students experienced direct interaction, thus beat COVID-19. ● It is observed that absenteeism is minimized during these sessions. 	 <p>Students are participating in ZOOM class</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>