

Contributions of AVN Institute of Engineering & Technology, ECE Department Faculty towards inculcating innovative means in Teaching and Learning are clearly elucidated both in our Department Records and on the Institute Website for peer review and critique. Our work is open to be enhanced or reproduced. Some of our inclusive ways are:

Collaborative Learning: Collaborative learning is a group-based learning approach in which learners are mutually engaged in a coordinated fashion to achieve a learning goal or complete a learning task. Collaborative learning can increase learner engagement and promotes higher-order thinking, such as critical thinking. Collaborative learning is an umbrella term that covers a range of approaches in which learners achieve an academic goal together. It is a shift from traditional teacher-centered approaches to contemporary learning approaches, including student-centered, social learning, active learning, and constructivism.

Theory subjects and Lab:

- Groups comprising a maximum of five to six students are formed in each class to conduct the association activity.
- One from the group will be designated as the group leader.
- Each group may be assigned tasks by the faculty and a report on the activity will be provided by the respective group leader.
- An assessment on the report will be done by the faculty to analyze the expected outcome from the activity is achieved.
- The tasks assigned should be a minimum of three in each semester.
- The focus of the tasks should be on learning new technologies, enhance the knowledge on a particular topic, studying new tools to be in pace with the industry, doing some mini projects, etc.
- Faculty may encourage each group to disseminate the knowledge they have gathered to others.

Group Assignments:

- Description of the method– The students were asked to submit a group assignments in the form of unsolved problems from the Text Books, Old Question papers in each course. The objective is to develop technical and soft management skills of the Student.
- Significant results observed– The students develop soft management skills like teamwork, coordination, decision making, organizational behavior, leadership, time management and presentation skills along with the enhancement in technical skills, logical thinking, solving of tough problems.

Video / NPTEL/MOOCs Lecturers:

By utilizing various video lecturers like IIT video lecture sessions and NPTEL lecturers, the faculty makes the students to understand the tough subject concepts in interesting and easy way

Mentor-Mentee Faculty groups:

“Viewing teaching as scholarly work is essential. Teachers so often have to carry out their work in isolation from their colleagues. The result is that those who engage in innovative acts of teaching do not have many opportunities to build upon the work of others.”

Lee S. Shulman, president emeritus of The Carnegie Foundation for the Advancement of Teaching.

In continuing the process of Improvement in Teaching-Learning capabilities of the faculty, frequent meetings are to be conducted by the Department Committee to discuss the significant achievements and implementations of previous semester and improve further by taking new steps.

1. The faculties are grouped as per their specialization and their subjects teaching in each Semester. Each group is headed by the senior faculty in that group, who continuously mentoring and guiding the remaining faculty of that group to improve their Teaching-Learning capabilities.
2. Class Observations and Evaluations – Monitor the Lesson plan implementation video, listening of the class by senior faculty members, analyze the Student Feedback and suggestions are given by the respective Mentor to improve the Mentee faculty Teaching-Learning abilities.
3. Quality of Assignments and Mid questions are reviewed by the respective group Mentor before review of Department Assessment Committee and upgraded.
4. It was decided to give Letter of Appreciation to the faculty from each group by the Dept.

Communications Systems	<p>Dr. Sachin Sharma(Mentor) Dr. Yagesh kumar Mr. D. Santhosh Kumar Mr. S. Sasikiran Mr. C. Jagadeesh, Ms. D. Anusha Mr. Hunachappa Mrs. B.Mamatha Mrs. G. Mythili Mr. U. Naresh Mr.B.Sai ram</p>
Analog Systems	<p>Dr. Venkata Phani Kumar(Mentor) Mr. T. Ravichandra Mr. MD. Gandhi Babu Mr. G. Srinivas Mr.B.RamBhupal Reddy</p>
Signal processing	<p>Dr. G.Asa Jyothi(Mentor) Mr. J. Ramaiah Mr. Ch. Bhanu Prakash Mr. N. Dasharath Mr. G. Narasimha Mr.M.Ravi Raja</p>
VLSI &Embedded system	<p>Dr. S. Venkatesulu (Mentor) T.Mahesh K.Ramesh Mr.A. Chiranjeevi Mr.B.Hari Krishna Mr.R.Kishan</p>
Digital systems	<p>Dr. Neeraj Kumar Gautam(Mentor) Mr. B. BhagavatiRao Mrs. Jayasudha Reddy Mrs. B. Shilpa Mr. Somashekar</p>

Innovations by the Faculty in Teaching and Learning

Faculty blogs

Faculty are maintaining the blogs to provide lecture notes, Assignment Questions, Important Questions, Google classrooms , Mool resources ,course related video contents etc.... for students. They make the blog link public to all the students to access the content.

S No	Name of the Faculty	Blog URL
1.	Mr. J Ramaiah	https://ramaiah17.blogspot.com
2.	Mr . D Santhosh Kumar	https://santosheceavn.blogspot.com
3.	Mr. Somashekhar	https://somashekharavniet.blogspot.com
4.	Mr. S SasiKiran	https://sasikiran5706ece.blogspot.com
5.	Mr. G Narasimha	https://narasimha310.blogspot.com

NPTEL Lectures

Faculty encourages students to register themselves in NPTEL online courses for learning extra content beyond syllabus.

MOOC Resources

<https://www.coursera.org/>

<https://www.saylor.org/>

<https://www.edx.org/>

<https://www.kadenze.com/>

<https://www.openuped.eu/15-news/62-106-new-free-courses-by-uninettuno>

<https://www.udacity.com/>

<https://www.instreamia.com/class/>

<https://worldmentoringacademy.com/www/index.php>