## Innovations by the Faculty in Teaching and Learning (20)

The Department of ECE uses a number of cutting-edge teaching techniques that grab students' attention in the classroom, pique their interest in the material, inspire a desire to learn more, stimulate their minds, help them comprehend the material rather than just memories it, encourage student interaction, and enhance their capacity to apply what they have learned. Also, the new assignments boost students' participation in the class.
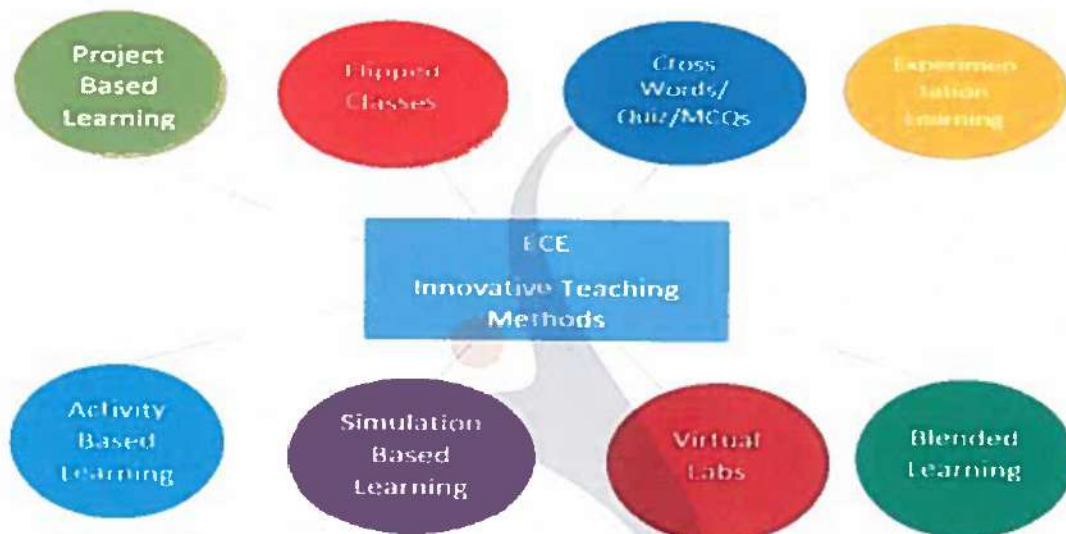
The Innovative teaching methods followed for various courses

1.the work must be made available on institution website:

Teaching & Learning methodologies followed by our department is found at our college website in the following:

1. https://www.samskruti.ac.in/engineering/ece_course_content_handout

2. https://www.samskruti.ac.in/engineering/ece_course_content_handout.php

3. https://www.youtube.com/@ravindarn8052

4. https://www.youtube.com/watch?v=oAJs4IW4MS4

5. https://www.youtube.com/watch?v=Ea0M7PG2uCc

6. https://www.youtube.com/watch?v=2CTMJqwvAo4

7. https://www.powtoon.com/account/info/

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2.Availability of work for peer review and critique

Peers (students & faculties) of our institute are allowed to give feedback on the teaching and learning methodologies followed by our department. This can be found at the URL
https://www.samskruti.ac.in/engineering/ece_course_content_handout/teaching-and-learning

methodologies/

S.NO	NAME OF FACULTY	PLATFORM LINK
1	Dr.Vanisree	https://scholar.google.com/citations?user=gIsCp4cAAAAJ&hl
1	Y.Jalajakshi	**https://www.youtube.com/@ravindarn8052**
2	V.Shankar	**https://www.youtube.com/watch?v=oAJs4lW4MS**
3	M.Swapna	**https://www.youtube.com/watch?v=Ea0M7PG2uCc**
4	M.Swapna	**https://www.youtube.com/watch?v=2CTMJqwvAo4**
5	N.Ravindar	**https://www.webofscience.com/wos/author/record/JRX-2409-2023**
6	K Ganesh	**https://scholar.google.com/citations?hl=en&user=0mkCrtkAAAAJ**

140 Comments

@abcdshikor998

2 years ago

This lesson is a complete group of whole information. We search and found part by part information but here it's totally in a package. Thanks Mam

13

Reply

3 replies

@RaviPatel-bi2wq

2 years ago

Amazing, your teaching style is very good and explanation of each topic is better than my college professor . I will recommend this channel to my friends.

😊

Thanks

2

Reply

1 reply

@rrrealqueen

3 years ago

This lesson was amazing! Keep it up

6

Reply

1 reply

S

@samking9504

2 years ago

you r the best on this subject, no one can batter explain then you...... my whole year-mates are depending upon your videos, "thank you" , this word is not capable to give you an idea of our expressions... all we wanna say is we love you so much mam,

3

Reply

@107_faizanalam2

5 months ago

Great lecture thanks a lot for this type of content

1

Reply

1 reply

@prakhargoel7166

2 years ago

Thanks mam for these lectures. Saved many lives

😇😇

2

Reply

1 reply

S

@shafiullah8105

2 years ago

Mashallah may Allah give you more success

3

Reply

1 reply

A

@aparnadesh4056

3 years ago

It was easy to understand with animation and example

2

Reply

1 reply

S

@sujatasapte5959
2 years ago

Mam, in based indexed mode, we can use only (BX+SI) Or (BP+DI), so as to get same segment register, because we know, for SI we have DSR and also for BX we have DSR. So there combination will also have DSR. Is it correct? Or can we use (BX+DI) or (BP+SI), is it possible?

Dr.K.Vanisree

Professor of Wireless Communication,
Samskruti college of Engineering Technology
Signals and Systems
Digital Signal processing
Electronics Circuits

	All	Since 2018
Citations	124	94
h-index	6	5
i10-index	3	3

TITLE	CITED BY	YEAR
Effect of newer insecticides against chilli thrips, Scirtothrips dorsalis (Hood) K Vanisree, S Upendhar, P Rajasekhar, G Ramachandra Rao J Entomol Zool 5 (2), 277-284	25	2017
Field evaluation of certain newer insecticides against chilli thrips, Scirtothrips dorsalis (Hood) K Vanisree, S Upendhar, P Rajasekhar, GR Rao, VS Rao Science park research journal 1 (20), 1-13	24	2013
Studies on mycosis of Metarhizium (Nomuraea) rileyi on Spodoptera frugiperda	18	2020

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3.Reproducibility and Reusability by other scholars for further development

Dept. of ECE focuses on reproducibility and reusability of the work performed by the Doctorates of the Department. Doctorates present their Ph.D. research works to the students and faculties. The same would be reproduced by our faculties

and students to validate the results obtained by Doctorates. Also they will check for any scope that can be expanded as a future work.

Supporting materials for teaching and learning methodologies prepared by our faculties are subject to enhancement throughout the academic year at any time. A better version of the learning material is always aimed for the betterment of

our student's learning experience. In this regard, course materials like lecture notes, mind maps, lesson plans, course files are always being prepared by keeping reusability and reproducibility aspects in mind.

List of Research scholars Reusable & Reproducibility of Existing Work

S. N O	NAME OF RESEARCH SCHOLAR	Platform Link	Platform	REUSABILTY WORK
1	V.Shankar	https://drive.google.com/file/d/1UetUzHijMq1QGzybkE55h9hBcjl1_bZA/view?usp=sharing	UGC CARE	WIRELESS SENSOR NETWORKS
2	V.Shankar	https://drive.google.com/file/d/16BjiJhfl-DPyVw8xVRf2dlbhh3ovrfST/view?usp=sharing	IJMERT	ANTENNA DESIGN
3	N.Ravindar	https://www.scopus.com/dashboard.uri?origin=&zone=TopNavBar	SCOPUS	Internet of things
4	N.Ravindar	https://ugccare.unipune.ac.in/Apps1/User/WebA/Submission	UGC CARE	Computer Organization

Statement of clear goals, use of appropriate methods, significance of results, effective presentation and reflective critique.

Statement of clear goals:

To motivate the students towards attentive learning and active participation.

To Make them get their hands on the latest technology.

To make them understanding the lessons and improve their performance considerably.

use of appropriate methods:

4.TEACHING AND LEARNING METHODOLOGIES

The Contributions made by CSE Department Faculty towards inculcating innovative methods 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 opened to be enhanced or reproduced.

Some of our inclusive ways are listed below:

1. Video Lectures

2. Google Class Room

3. Flipped Class Room

4. Activity based Learning

5. Learning by Doing

6. Digital Library

7. Content Delivery by Official College Website

8. Reproducibility of Ph.D. Work

9. Strategic Lesson Plan

10. Life Skills at SMSK

11. NPTEL and other Online Learning

12. Methodologies to Support Weak Students and Encourage Bright Students

13.Mind Map

14.Quiz

15 .https://www.powtoon

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Proofs of the above stated are comprehensively documented.

Below are the Short Descriptions on above Innovative means in Teaching and Learning:

1.Mind Map:

A mind map is a diagram used to visually organize information. A mind map is hierarchical and shows relationships among pieces of the whole. It is often created around a single concept, drawn as an image in the center of a blank page, to

which associated representations of ideas such as images, words and parts of words are added. Major ideas are connected directly to the central concept, and other ideas branch out from those.

Mind Map for Ensemble Classifier in Machine Learning

Objectives:

1.To generate, visualize, structure, and classify ideas, and as an aid to studying and organizing information, solving problems, making decisions, and writing.

2.To help students with critical and creative thinking and improve their problem-solving ability at the same time.

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Outcomes:

1.The study ability of both students and faculty will get accelerated by improving and enhancing their retention with the combination of photography and information.

2. Problem Solving ability of students will get improved.

2. Flipped Classroom

A flipped classroom is an instructional strategy and a type of blended learning (https://en.wikipedia.org/wiki/Blended_learning), which aims to increase student engagement and learning by having students complete readings at their home

and work on live problem-solving during class time.

It moves activities, including those that may have traditionally been considered homework, into the classroom. In a flipped classroom, students watch online lectures (https://en.wikipedia.org/wiki/Online_lecture), collaborate in online

discussions, or carry out research at home while engaging in concepts in the classroom with the guidance of a mentor.

Objectives:

1. To promote flexible learning among students.

2. To facilitate increased engagement between students and faculty.

3. To provide prompt and timely feedback to students based on their out of class assessment performance.

Outcomes:

Resonate well with those who are high performers and those who tend to underperform.

Enhance Faculty interaction with students by scheduled class meetings for dialogue.

Activity Based Learning

Activity method is a technique adopted by a teacher to emphasize his or her method of teaching through activity in which the students participate rigorously and bring about efficient learning experiences. Learning by doing

is the main focus in this method. Activity based learning is imperative in successful learning since it is well proved that the more the senses are stimulated, the more a person learns and longer he/she retains. Activity based

learning includes Gamification, Role plays, Skits, Debates, Group Discussion, Participation in Seminars/ Workshops.

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Objectives:

1. To enhance creative aspect of experience.

2. To build the student's self-confidence and to develop understanding through work in their group.

Outcomes:

1. Happy relationship between students and students, teachers and students will be developed.

4. Learning by Doing:

Our ECE department has one dedicated lab for implementing "Learning by Doing" methodology. The lab is located at first floor of SMSK. In these labs, students are provided with hands on training on various technologies for

better learning experience. Labs and classes are held together to implement "Learning by Doing". Also, curriculum is equipped with industry oriented Mini project, Major project and Internships to implement "Learning by

Doing" pedagogy method.

Objectives:

1. To present real-life problems to the students and then guide the students to solve the problem by providing them with a hands-on activity to learn the solution.

2. To curate, develop, use, and share appropriate educational resources.

3. To discern the possibilities and limitations of technology to support teaching and learning.

4. Outcomes:

5. Making more engaging and motivating activities for students.

6. Pulsing the real state of the knowledge students have acquired.

7. Expediting students to interact with their environment in order to adapt and learn.

5. National Digital Library:

SMSK is registered as a NDLI Club under the National Digital Library of India. So, students can access the contents available on National Digital Library website anytime.

Objectives:

1. To make quality digital educational resources available to all citizens of the country to empower, inspire an encourage learning.

2. To search for content using various parameters like subject matter, source, content type and more.

3. To enable single window platform that collects and collates metadata from premier learning institutions in India and abroad, as well as other relevant sources.

Outcomes:

1. Integrating contents from different Indian Institutional Repositories.

2. Availing Educational materials for users ranging from primary to post-graduate levels.

3. Information can be personalized based on the education level, choice of language, difficulty level, media of content and such other factors.

6. Content Delivery by Official College Website:

Study materials related to any ECE department Course are made available online in our **official web site**. Refer **https://www.samskruti.ac.in/engineering/ece**

Objectives:

1. To enable students to download all course related materials from the college website.

2. To assist flipped class learning.

3. To ensure that students receive the same levels of support that they would receive on campus.

4. To promote learning remotely.

Outcomes:

1. Making students to connect with course content in a consistent format.

2. Navigation of the course content will be simplified to keep students stay focused.

7. Extension of Ph.D. work.

The Reproducibility and Reusability define the ability of any researcher to refer the previous results achieved by the original investigator. Dept. of CSE focuses on reproducibility and reusability of the work performed by the

Doctorates of the Department. Doctorates present their Ph.D. research works to the students and faculties. This in the future helps the students as well as faculties to decide their research areas for further studies. They can

carry out further extension of the work if they feel interested in the topic. Data reproducibility is significant to create more opportunities for new insights in research. It helps a researcher to achieve a better outcome of any

research which was initiated by the previous researcher.

Objectives:

1. To confirm that the original results of past research works are indeed correct

2. To give step by step process for reproducing the research.

3. To enable students to follow the process themselves and come to their own conclusions.

Outcomes:

1. Data reproducibility is achieved

2. Various experiments can be identified to arrive at the same conclusion.

Reproducibility from the PhD Thesis:

1. Designing an Energy Efficient Scheduling using Mac Protocol in Wireless Sensor Network

2. A Hybrid Approach in autonomic service-oriented delivery platform for next generation network

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8. Strategic Lesson Plan:

• Course content's delivery method is properly planned prior to the commencement of course.

• This information on instruction delivery is maintained in course file.

• Instruction delivery is done through Blackboard, ppts, videos, website references, interactive activities, and also through social media.

Objectives:

1. To plan a specific outline of teaching goals, learning objectives, and means to accomplish them.

2. To create a realistic timeline.

3. To plan for a lesson closure.

Outcomes:

1. A meaningful learning experience with students is achieved.

2. Analysis can be made on what worked well and why, and what we could have done differently.

9. Life Skills at SMSK , we are imparting skills (life & professional skills) to the students through Experiential Learning/ Activity Based Learning methodologies.

• Life Skills are those skills which enable an individual to be more competent in dealing with the day to day challenges in a positive way.

• Essentially, these skills must be acquired by observing, doing, feeling and thinking for effective learning, retention and future application.

• Professional skills are the core specialization skills and refers to Technical Skills/ Management Skills/ Pharmaceutical Skills, etc.

• Along with good technical understanding and subject knowledge, employers often outline a set of skills that they want from an employee. The skills like Working in Teams, Problem Solving, Self-Management, Organization Behaviour,

Literacy and Numeracy relevant to the post, ICT Knowledge, Good Interpersonal and Communication Skills, Ability to Use Own Initiative and as well to follow instructions and Leadership Skills are necessary.

• UNICEF defines Life Skills as Behaviour Change or Behaviour Development Approach designed to address the balance of three areas – Knowledge, Attitude & Skills and they lead to Outcome Based Education System which is very

much different from Traditional Education System.

• Life Skills are essentially those abilities that help to promote physical, mental and emotional well-being and competence to face realities of life.

• WHO also defines Life Skills as 'abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life'.

• Life Skills bring greater acceptance, better relationships and a healthy, positive life and enables individuals to translate knowledge (what one knows), attitudes and values (what one believes and feels) into actual skills/ abilities/ actions

(what to do and how to do it?).

Objectives:

1. To promote confidence and well-being in young people and adults.

2. To make students more assertive, communicate effectively with others by developing good listening skills and learn to handle stress and deal with disappointments and setbacks.

3. To explore student's beliefs and attitudes through group discussions and confidence building techniques such as positive visualization.

4. To play to their strengths by engaging in creative activities and following a healthy lifestyle.

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Outcomes:

1. Every student is equipped with appropriate knowledge on risk taking behaviours and develop skills such as communication, assertiveness, self-awareness, decision-making, problem solving, critical and creative thinking.

2. Students can be able to apply known knowledge in new contexts.

10. NPTEL AND OTHER ONLINE COURSES

The National Programme on Technology Enhanced Learning (NPTEL) was initiated by seven Indian Institutes of Technology (Bombay, Delhi, Kanpur, Kharagpur, Madras, Guwahati and Roorkee) along with the Indian Institute of Science,

Bangalore in 2003. Five core disciplines were identified, namely, Civil Engineering, Computer Science and Engineering, Electrical Engineering, Electronics and Communication Engineering and Mechanical Engineering and 932 courses in

web/video format were developed in this phase.

NPTEL Online Certification

The objective of enabling students obtain certificates for courses is to make students employable in the industry or pursue a suitable higher education programme. Through an online portal, 4-, 8-, or 12-week online courses, typically on

topics relevant to students in all years of higher education along with basic core courses in Sciences and Humanities with exposure to relevant tools and technologies, are being offered. The enrolment to and learning from these courses

involves no cost. Following these online courses, an in-person, proctored certification exam will be conducted and a certificate is provided through the participating institutions and industry, when applicable.

Use of the NPTEL Course/Certificate

• SMSK is actively encouraging faculties and students to attend NPTEL courses.

• Many students are using these to prepare for GATE exams and higher studies too.

• 20% of the applicants is faculty members in various colleges across the country. The advanced courses are being recommended to AICTE to be approved as Faculty development programs (FDP) so that they can get the points for the

same.

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Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

NUNAVATH RAVINDAR

for successfully completing the course

Introduction to Internet of Things

with a consolidated score of **83** %

Online Assignments	24.38/25	Proctored Exam	58.5/75

Total number of candidates certified in this course: 25880

Jul-Oct 2023

(12 week course)

Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

swayam

Roll No NPTEL23CS83S737408076   To verify the certificate   No. of credits recommended 3 of 4

NPTEL Coordinator-SMSK

Mr V.Shankar

Asst. Prof , ECE - NPTEL Local Chapter,

SMSK, Ghatkesar -501301.

E-Mail: shankarvuyyala88@gmail.com

NPTEL Ongoing Process in SMSK:

• Students are encouraged to do the various online Courses like NPTEL, coursera, etc. at no/low cost to go adequate to self-learning process. Once the student learns to study through online mode, it builds the students to get

empowered through career subject interest-based learning process.

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11. Methodologies to Support Weak Students and Encourage Bright Students:

Mentor dairies have been maintained by the department for all the students. Faculty have been assigned to completely monitor students and take the necessary actions. The Counsellor regularly conduct meetings regarding progress of their

mentees and are responsible to identify students who scored less than 50% marks in their internals. Under the HOD's direction, the Student Counsellor evaluate the progress of those students who score below 50% marks in three or more

subjects. They are considered as academically weak students and same is also intimated to their parents. For each student one dairy along with the previous internal and external marks allotted is maintained also necessary measures are

taken if they secure less marks and counselling is given to score more in the next exams.

Objectives of Mentoring System:

• The scheme is adapted for the value additions to the students like:

• Bridging the gap between the teachers and students.

• Creation of a better environment in college, where students can approach teachers for both educational and personal guidance.

• Enhancement of knowledge base for both teachers and students alike, due to effective two-way communication.

• Awareness and support to students for GATE, GRE, CAT, ISRO, SAIL, NAL, HAL, NTPC, BSNL, DRDO, BARC, and other Govt. & PSUs examinations.

• Motivation for higher studies and entrepreneurship.

• Advice and support for improvement in academic performance.

Outcomes of Mentoring:

• Regular meetings are held between mentor and mentee.

• Each mentor has been allocated with a number of 15-20 mentees.

• A mentor diary is maintained for each student.

• The mentor diary has both personal and academic data.

• Students are allowed to approach the mentor for both academic & personal problems.

• Personalized professional /career advice is given to the mentee.

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FEEDBACK FROM STUDENTS

Department of Electronics and Communication Engineering

"A GUEST LECTURE ON Insights of VLSI design"

26ª March 2022

Feedback/Evaluation Form

PROGRAMME : B.TECH (ECE)   NAME OF THE SPEAKER: Mr. N. Ravinder

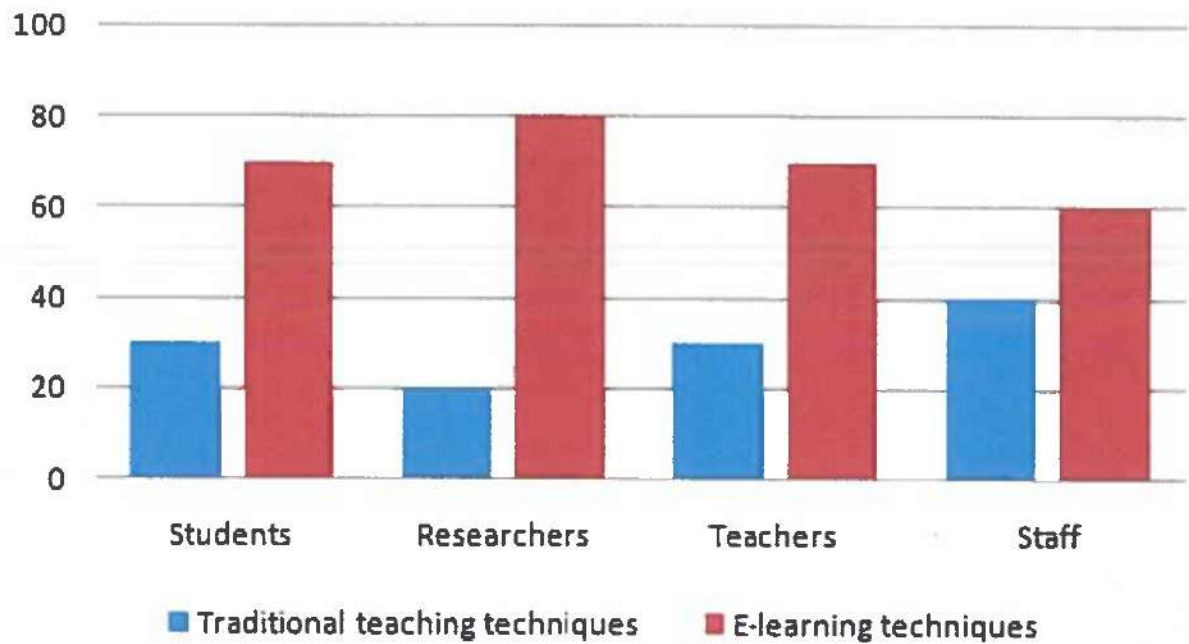NAME OF STUDENT: MD. Sajeeth prasad H.T NO: 8101110468   Year/Sem: III / I^st

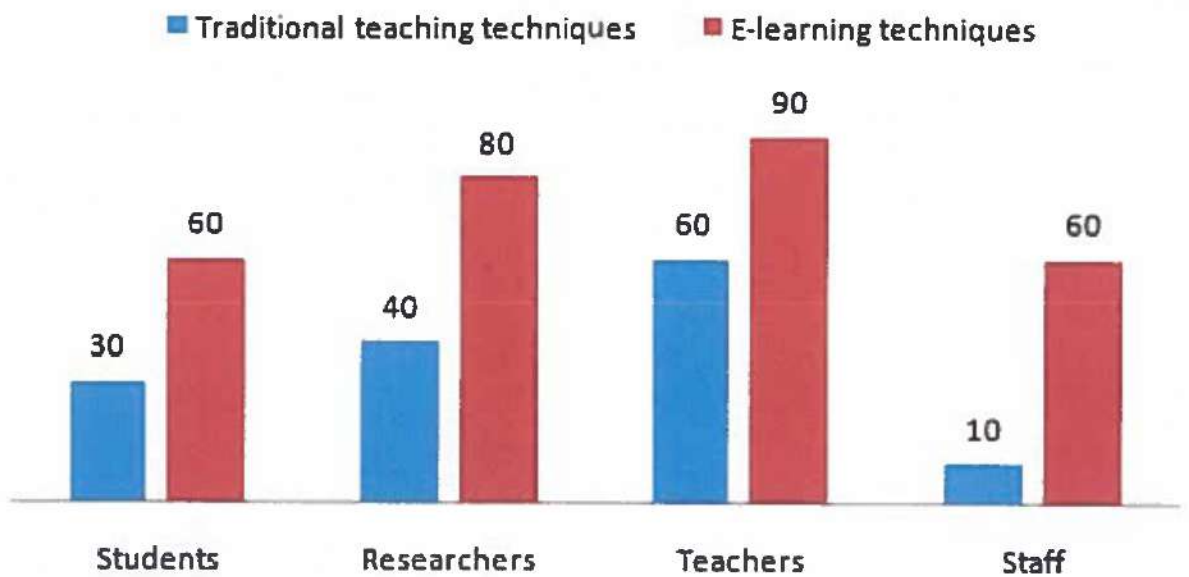|	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1. The instructor(s) was/were knowledgeable in the field of study represented by this course		✓			
2. The structure of the course reflected			✓		
3. Course content is relevant and current		✓			
4. Course objectives were clearly communicated to students		✓			
5. The instructor(s) made effective use of lecture time (audio/video, reading)	✓				
6. The instructor(s) was/were available to students for assistance during the hours	✓				
7. Any suggestions/ comments	Excellent				

THANK YOU VERY MUCH FOR YOUR FEEDBACK!

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Feedback (in %)

Bar chart comparing Traditional teaching techniques (blue) and E-learning techniques (red) across Students, Researchers, Teachers, and Staff. Y-axis ranges from 0 to 100.

- Students: Traditional ≈ 30, E-learning ≈ 70
- Researchers: Traditional ≈ 20, E-learning ≈ 80
- Teachers: Traditional ≈ 30, E-learning ≈ 70
- Staff: Traditional ≈ 40, E-learning ≈ 60

Legend: ■ Traditional teaching techniques ■ E-learning techniques

Conceptual understanding (in %)

Legend: ■ Traditional teaching techniques ■ E-learning techniques

Bar chart comparing Traditional teaching techniques (blue) and E-learning techniques (red) across Students, Researchers, Teachers, and Staff.

- Students: Traditional 30, E-learning 60
- Researchers: Traditional 40, E-learning 80
- Teachers: Traditional 60, E-learning 90
- Staff: Traditional 10, E-learning 60

Actual learning (in %)

Traditional teaching techniques — E-learning techniques

	Students	Researchers	Teachers	Staff
Traditional teaching techniques	20	35	65	10
E-learning techniques	65	80	90	60
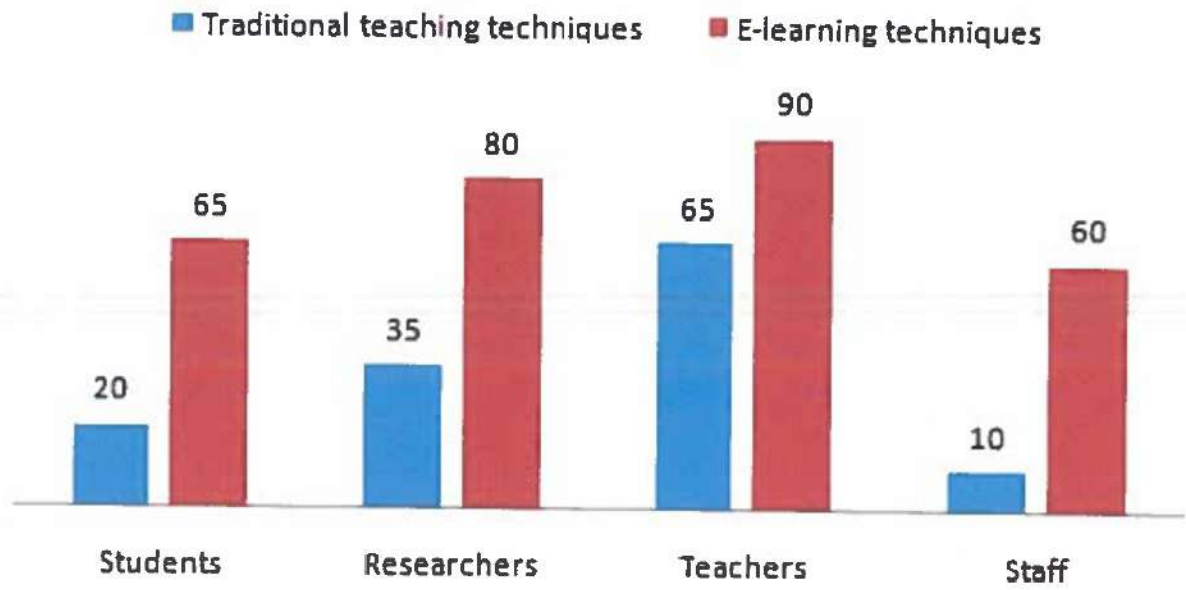
Department of Electronics and Communication Engineering

Innovative Teaching Methods by Faculty

A. Y : 2022-23

Sl. No.	Name of Faculty	Course	Semeste	Innovative method	PLATFORM /LINK
1	Dr.MUDE SREENIVASULU	Digital Image Processing	IV-1	Quiz	https://www.samskruti.ac.in/engineering/ece
2	Dr.TEJAVATH RAMAKRISHNA	Digital Signal Processing	IV-I	Experiential Learning	https://www.samskruti.ac.in/engineering/ece
3	DIVYA SESHABATTAR	VLSI System Design	III-I	Flipped Class based	https://www.samskruti.ac.in/engineering/ece
4	M.PAVANI	DSP Algorithms & Architecture	IV-I	Activity based Learning	https://www.samskruti.ac.in/engineering/ece
5	CHANDRASEKHAR PATTEM	Embedded Systems	IV-II	Project Based learning	https://www.samskruti.ac.in/engineering/ece
6	Mrs.KVL DEEPTHI	AWP	III-II	GEUST LECTURE	
7.	JAWAHARLAL	STUDY OF DIFFERENT TRANSMISSION LINES	II-II	INDUSTRIAL VISITS	

Department of Electronics and Communication EngineeringInnovative Teaching Methods

Title of Innovation method/activity: **Quiz**

Faculty / Inventor: Dr.MUDE SREENIVASULU

Course Name: **Digital Image Processing**

Goals / objective of method: **To evaluate the student's awareness of the course and their progress.**

Topic covered through activity: **Basics of DIP, Enhancement Methods**

Description of method (8 – 10 lines):

The quiz was conducted using the quizzes platform. It was an instructor led method, where in the instructor chooses when the next question is to be displayed. The questions are displayed on the classroom screen, whereas the student answers on his mobile. The student just gets the options that he/she has to choose. Each question is given a certain time limit depending on the complexity of the question. Here it was set to 10 seconds and 20 seconds. After the end of each question, the name of the person who has answered correctly first is displayed on the screen. This repeats after every question. All the while background music plays in an attempt to distract the students, which makes choosing the correct answer all the more difficult. All in all, it is a fun method of evaluating the self-awareness and self-assessment.

Students of ECE IV-1 attending the quiz

Department of Electronics and Communication Engineering

Innovative Teaching Methods

Title of Innovation method/activity: **Experiential Learning**

Faculty / Inventor: Designation: Dr.TEJAVATH RAMAKRISHNA,

Associate Professor

Course Name: **Digital Image Processing**

Goals / objective of method: **The main objective of this method is to give a hands-on to the students on the tools that can be used to implement the Digital Image Processing Algorithms. The other goal is to encourage self-learning.**

Topic covered through activity: **Image Processing Toolbox of MATLAB, Enhancement Methods, Restoration Methods**

Description of method (8 – 10 lines):

MATLAB (Online and installed version) is used to implement lab-based learning. Here the students are given a problem statement (based on enhancement methods and restoration methods. In order to implement the algorithms and get the outputs, the students have to start with understanding the basic syntax of MATLAB for images. This is a part of self-learning component. The theoretical explanation of the algorithms is explained to the students in the class. The students have to map this theoretical knowledge to the coding domain and get the results. Finally, the students are asked to share the results with the students and are evaluated subjectively.

Benefits of method: This method is a way of bridging the gap between the theoretical knowledge and the coding domain. This also encourages self-learning among the student community

Students gaining knowledge about the Matlab simulation PRINCIPAL

Department of Electronics and Communication Engineering

Innovative Teaching Methods

Title of Innovation method/activity: Flipped Class Teaching

Faculty / Inventor: DIVYA SESHABATTAR

Designation: Associate Professor

Course Name: Satellite Communication

Goals/objective of method: To create interactive learning among students.

Topic covered through activity: Weather Forecast and Remote Sensing satellite

Description of method (8 – 10 lines): This method adds a new element to help students learn with each other. The class starts with a student explaining the concept covered before class. In a flipped classroom, the teacher does not give direct instruction but provides all the help and material for students to present their work. The flipped class creates a learning space that students can explore.

Benefits of method: The students will be able to learn at their own pace with more one-to-one interaction between teacher and student. This method provides more collaboration time for students. Moreover, flipped classroom changes the traditional learning culture into a learner-centeredclass.

Student giving seminar in the class room

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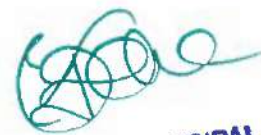# Department of Electronics and Communication Engineering
InnovativeTeachingMethods

Title of Innovation:	Activity Based Teaching
Faculty:	M.PAVANI
Designation:	Assistant Professor
Course Name:	DSP Algorithms & Architecture
Objective of the method:	To make students understand Register sub addressing technique used for configuring the DMA registers.
Topic covered through activity:	DMA-Register Sub addressing

Description of the method :

In this activity, all students are made to sit in a circle & represent a stack of DMA registers..2 students represent special register of DMA (DMSDI or. DMSDN). A message is given to the first student & a signal is given to second student, according to message & signal the appropriate stack register is loaded with the information. This activity will make them understand the configuration of DMA registers.

Innovative Methods like this are used to make students understand and remember concepts easily.

Benefits of method:	This activity allows students to initialization & loadingof DMA Registers

DMA-Register Sub addressing through activity based learning

Department of Electronics and Communication Engineering

Innovative Teaching Methods

Title of Innovation:	Network Analysis using Tina Tool
Faculty:	**CHANDRASEKHAR PATTEM**
Designation:	Assistant Professor
Course Name:	Network Theory

Objective of the method:

- To understand the concepts of electrical circuit analysis using the simulation software.
- To design circuits using the simulation software and measure the required voltages/currents and also verify the circuit theorems.

Topic covered through activity:

- Introduction to Tina tool for network analysis
- Fundamental concepts of circuit analysis using Tina Tool
- Mesh analysis and Node analysis concepts by designing circuits in Tina tool.
- Concepts of Thevenin's Theorem and Superposition Theorem by designing circuits in Tina tool.

Description of the method :

In this method, the importance of simulation software to learn the concepts associated with a course is explained. The basic features of the Tina tool are explained and followed by how to make circuit connections in Tina tool. Concepts such as Mesh Analysis, Node Analysis, Thevenin' Theorem, and Superposition theorem are verified by designing the circuits in the Simulation tool.

Benefits of method:

- Become familiar with the use of Simulation tool.
- Design the circuits in simulation tools, and verify the answers calculated using manual approach.
- Better understanding of the concepts associated with the course.

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Students knowing about the new tool

Department of Electronics and Communication Engineering

Innovative Teaching Methods

Title of Innovation:	Guest lecture on antenna and propagation
Faculty:	Mrs.KVBL Deepthi
Designation:	Assistant Professor, MVSR College
Course Name:	AWP
Objective of the method:	• To understand the concepts of Antennas and its propagation. • To know the different types of antenna and their radiation patterns
Topic covered throughactivity:	• The types of antennas and its propagation • to design an antennas and its measures of an antenna • Designing and principles microwave and micro strip antennas

Description of the method :

This method, is part of a single course,the lecture topic being relevant to the contents and learning goals of the course being the primary audience,it supplements the regular curriculam for the students.they provide additional information,practica; insights and relevant industry practices that the students can use to enhance their basic understanding.

Benefits of method:

- The experts share their real life experiences
- The expertsenlighten students beyond the theorical knowledge.
- Better understanding of the concepts associated with the course.

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Welcoming our Guest lecturer

Students attending the Guest lecturer

Our Guests saying about the different types of Antennas