GEETHANJALI COLLGE OF ENGNEERING & TECHNOLOGY

INTERNAL QUALITY ASSURANCE CELL (IQAC)

Department of Electronics and Communication Engineering

Department's Monthly Report

Name of the Department: ECE

Date from: **01-12-2025 to 31-12-2025**

1. Student Development Programs/Value Added Courses Conducted

S. No	Name of the program	Target Audience	Date(s) conducted	No. of students attended	CO / PO attainment	Remarks
1	Analog and Digital Design Flow using Cadence Tools(Skill Development Program)	Polytechnic Students. Govt. polytechnic College ,Ramanthapur	11.12.2025 to 15.12.2025	45	-	-

2.Details of the Seminars/ Conferences / Workshops /Refresher Courses / Orientation Courses/ FDPs attended by faculty

S.No	Name of the Faculty	Nature of program attended: conference/workshop/ FDP etc.	Title of the Program	Date(s) attended	Sponsored body/institute
1	Mrs. Amirineni Rama L Padmaja	FDP(Atal)	Shaping the Future: AI in Quantum, Photonics, Nanotechnology and Intelligent Signal Processing	01.12.2025 to 06.12.2025	Vijaya Institute of Technology for Women
2	Mrs. Amirineni Rama L Padmaja	FDP(Atal)	Advanced AI Tools for IIOT Frame Work	24.11.2025 to	CMR Technical Campus

				29.11.2025	
3	Mr.M Chathar Singh	FDP	Emerging Quantum and AI Technologies in Engineering Innovation	24.11.2025 to 29.11.2025	Sri Indu College of Engineering and Technology, Hyderabad
4	Mr.Meghavath Chathar Singh	FDP(Atal)	Shaping the Future: AI in Quantum, Photonics, Nanotechnology and Intelligent Signal Processing	01.12.2025 to 06.12.2025.	Vijaya Institute of Technology for Women
5	Mrs. S.Jyothirmaye	FDP(Atal)	Shaping the Future: AI in Quantum, Photonics, Nanotechnology and Intelligent Signal Processing	01.12.2025 to 06.12.2025.	Vijaya Institute of Technology for Women
6	Mr.Anjaneyulu Nangunuri	FDP(Atal)	Shaping the Future: AI in Quantum, Photonics, Nanotechnology and Intelligent Signal Processing	01.12.2025 to 06.12.2025	Vijaya Institute of Technology for Women
7	Mr. K.Victor	FDP	Advanced Hardware Architectures for Image Processing using FPGA and ASIC Technologies.	08.12.2025 to 13.12.2025	CMR Technical Campus
8	Mrs.N Nagalakshumma	FDP	Advanced Hardware Architectures for Image Processing using FPGA and ASIC Technologies.	08.12.2025 to 13.12.2025	CMR Technical Campus
9	Mrs. B.Sumithra	FDP(Atal)	AI-Driven IoT for Smart and Sustainable Systems	01.12.2025 to 06.12.2025.	Motilal Nehru National Institute of Technology Allahabad
10	Mrs.V.Savthri Padmapriya	FDP(Atal)	Multi Carrier-Modulation Techniques for 6G Wireless Communications	08.12.2025 to 13.12.2025.	Aditya College of Engineering and Technology, Kakinada
11	Mrs.L.Uma Maheshwari	FDP(Internship)	Embedded systems- Real time Hands -on Experience on Microchip platforms	12.12.2025 to 29.12.2025.	Multibyte Technologies
12	Mrs.B.Sumitra	FDP(Internship)	Embedded systems- Real time Hands -on Experience on Microchip platforms	12.12.2025 to 29.12.2025.	Multibyte Technologies

13	Mr.P Chandra Prakash Reddy	FDP(Internship)	Embedded systems- Real time Hands -on Experience on Microchip platforms	12.12.2025 to 29.12.2025.	Multibyte Technologies
14	Dr. M.Anand	FDP(Internship)	Embedded systems- Real time Hands -on Experience on Microchip platforms	12.12.2025 to 29.12.2025.	Multibyte Technologies
15	Mrs. Amirineni Rama L Padmaja	FDP(Internship)	Embedded systems- Real time Hands -on Experience on Microchip platforms	12.12.2025 to 29.12.2025.	Multibyte Technologies
16	Mr.P Chandra Prakash Reddy	Webinar	Integrated Circuit RF Reliability Engineering	29.11.2025.	KLH University
17	Ms.J Mrudula	Workshop	NEP 2020 Orientation and Sensitization Programme (Malaviya Mission Teacher Training Programme)	21.07.2025 to 30.07.2025.	Coimbatore Institute of Technology

Interaction with Outside World:

S. No	Name of the faculty	Designation	Date	Role	Topic	Name of the hosting organization
1	Dr.Ganti Sreelakshmi	Associate Professor	29.11.2025	Conference Reviewer	2026 IEEE International Symposium on Circuits and Systems (ISCAS 2026)	IEEE Circuits an Systems Society,Shanghai, China

3.Details of Research Publications.

Journal Papers:

S. No	List of Authors	Title of the Paper	Journal Name	Year of Publication	ISBN/ ISSN/	Scopus Index / SCI
1	Dr. Vallathan G	Leveraging DenseNet-ABiLSTM for Effective Jamming Attack Detection in	Intellegent Engineering and System	2025	DOI: 10.22266/ijies2025. 1231.18	Scopus-indexed

		VANETs: A Hybrid Model with DRA-driven Feature Optimization				
2	Dr.B.Ramu	Accurate Brain Tumor Classification Using GoogLe Net and Extreme Learning Machine (ELM) With Multiple Features	Intellegent Engineering and System	2025	DOI: 10.22266/ijies2025.1231.22	Scopus-indexed
3	Dr.Appala Raju Uppala	Field Programmable Gate Array Implementation of High-Performance Huffman Encoder for Image Processing Applications	international Journal of Reconfigurable and Embedded Systems (IJRES)	Accepted on 09-12-2025	ISSN: 2089-4864	Scopus-indexed

Conference Papers:

S. No	List of Authors	Title of the Paper	Conference Name	Year of Publication	ISBN/ ISSN	Indexing
1	Mr.K.Satish Babu	A Privacy and Integrity Protected Framework for Secure Telemedicine Applications	4th International Conference on Innovative Mechanisms for Industry Applications (ICIMIA-2025)	16-11-2025	ISBN: 979-8-3315-5386-9	Scopus-indexed
2	Dr.G. Vallathan	A Privacy and Integrity Protected Framework for Secure Telemedicine Applications	4th International Conference on Innovative Mechanisms for Industry Applications (ICIMIA-2025)	16-11-2025	ISBN: 979-8-3315-5386-9	Scopus-indexed
3	Mr. G.Venkateshwarlu	A Privacy and Integrity Protected Framework for Secure Telemedicine Applications	4th International Conference on Innovative Mechanisms for Industry Applications (ICIMIA-2025)	16-11-2025	ISBN: 979-8-3315-5386-9	Scopus-indexed
4	Dr. M Anand	Deep Learning-based Time Frequency Attention Network	The 6th International Electronic Conference on Applied Sciences	Published online(2025)		

		Model for Water Body Segmentation				
5	Dr. M Anand	Design and Analysis of a 9 GHz Inset FED MicroStrip Patch Antenna for X Band Apllications	The 6th International Electronic Conference on Applied Sciences	Published online(2025)		
6	Mr.A.Shanker	Emotion Prediction Using Deep Learning	2025 International Conference on Intelligent and Secure Engineering Solutions (CISES)	05-12-2025	ISBN:979-8-3315-7349-2	Scopus-indexed
7	Mr.Vellala Amareswar	Clinical And Imaging Fusion For Maternal And Fetal Health Prediction	International Conference on Smart Technologies & Systems For Next Generation Computing (ICSTSN 2025) – Fourth Edition	20-11-2025 to 21-11-2025	Presented	
8	Prof.B.Hari Kumar	Hybrid LSTM–CNN Model for Real-Time Anomaly Detection in IoT-Enabled Smart Solar Energy Networks	2025 5th Asian Conference on Innovation in Technology (ASIANCON)	18-11-2025	ISBN:979-8-3315-8623-2	Scopus-indexed
9	Ms.S. Jyothirmaye	Quantum Style Transfer for Creative Image Synthesis	7th International Conference on Innovative Data Communication Technologies and Application (ICIDCA-2025)	16-12-2025	ISBN: 979-8-3315-1413-6	Scopus-indexed

4. Details of Patent/ Ongoing Projects / Consultancy

S.No.	Title/ Description	Principal investigator/Author Name	Duration/ time period/Publis hed Journal Name	Sponsoring Organization	Funding Amount	Start date/Month of Publishing	Remarks / Present Status
1	Performance enhancement of SRM drive using Schmitt predictor and firefly optimization	Dr.M.Jagan Mohan Rao	12 Months	GCET (Seed Funding money scheme)	Rs. 2,00,000/-	December 2024	Ongoing

5.Student Publications

S No	Roll Number	Name of the Student	Title	Date of Publication	Name of the Publisher
1.	22R11A0470, 22R11A0485, 22R11A0488	Kalangi Bhargavi,P. Srinivas Vardhan, R.Sardar, (under the Guidence of A.R.L. Padmaja, G.Vallathan)	Intelligent Appliances Management through Google Assistant and Real time sensors	2nd International Conference on Emerging Technologies in Electronics and Communications Engineering (ICETE-2025),	**Presented** (The paper has been accepted at CBIT, and the conference is scheduled to be held on 12–13 December 2025.)
2	22R11A04F3, 22R11A04F5, 22R11A04G7	B.Sanjusha,G. Krishna Vamsi Varma, K. Karthik Reddy, (under the Guidence of D. Ramya, G. Vallathan)	Deep Learning based Gradient Boosting Model for Telecom Customer Churn Prediction		
3	22R11A04J0, 22R11A04F8 22R11A04J5	P.Greeshma, G. Bharath, N. Sai Kiran, (under the Guidence of U. Appala Raju, G. Vallathan, B. Sumithra)	Automatic Baby Cradle Using Raspberry Pi and Deep Learning		
4	22R11A0450, 22R11A0469, 22R11A0455	Ruchika Akkela,Ganesh Bharadwaj Jangam, Jamuna Banoth, (under the Guidence of D. MadhaviLatha, G. Vallathan, G. RamachandraKumar)	Design and Noise Analysis of 3-Stage CMOS Inverter using Cadence Virtuoso		

5	22R11A0484, 23R15A0410, 22R11A0461	Pannala Jhansi, Male Chiranjeevi Goud , Chanchala Pruthvi Raj, (under the Guidence of G.Ramachandra Kumar, G.Vallathan , M.Chathar Singh)	Design and Analysis of a Low Power Edge Triggered Johnson Counter Using Transmission Gate D-Flipflops and Integrated Clock Gating		
6	22R11A0419, 22R11A0405, 23R15A0406	K Uma Maneendra,Angadi Vinay, Ravela Praveen Kumar, (G under the Guidence of .Ramachandra Kumar, Kondapally Madhavara , G.M.Chathar Singh)	Design and Implementation of Finite State Machine(FSM) based Smart Parking Meter		
7	22R11A0478, 22R11A0464, 22R11A0495	Mohana Boddapu G. Srujan Chandra, T. Akhila, (under the Guidence of N. Nagalakshumma,G. Vallathan,L.Uma Maheshwari)	Smart Mining Helmet using Tinyyolov5n Lightgbm Fusion		
8	22R11A04J4, 22R11A04A0, 22R11A04F0	P. Sreeja, N. Nikhil, B. Pramod, (Under the Guidance of K.Victor, G.Vallathan, N.Nagalakshumma)	Deep CNN Feature Extraction with Ensemble Synergy for Accurate Fracture Diagnosis	International Conference on Research in Intelligent Computing in Engineering	**Presented** The paper has been accepted at Stanley College of Engineering and Technology for Women, and the conference is scheduled to be held on December 19 – 20, 2025
9	22R11A04C4, 22R11A04B1, 22R11A04A7	K. Nikitha, G. Rasmi Sree, Ch. Sanjith, (Under the Guidance of P. Vijai Bhasker, G. Vallathan,Dorsela Venkata Rami Reddy	SegFormer-SAC Framework for Safe Landing and Adaptive Exploration in Hazardous Terrains		
10	22R11A04G3, 22R11A04G1, 23R15A0420	K.Manasa, H.Vishnu Teja, K.Komal Kiran, (Under the Guidance of G.Vallathan, ,P. Vijai Bhaskar, T.V. Chandra Sekhar)	Speak Sign: ISL to Multilingual Speech using Deep Learning Framework	Smart Technologies and Systems for Next Generation Computing	Presented on 20–21 November 2025 at IFET College of Engineering

11	22R11A04E6, 22R11A04E9, 22R11A04H4	A. Kaivalya Harshini, Bhagyanagar Sriya,M. Vamshi, (Under the Guidance of G.Vallathan, G. Venkateshwarlu, Vellala Amareswar)	Clinical and Imaging Fusion for Maternal and Fetal Health Prediction		
12	22R11A04J7, 23R15A0419	T.Punith, A. Yasovardhan, (Under the Guidance of K.Victor, G.Vallathan, L.Uma Maheshwari, V.V.S.V.S. Ramachandram)	Symmetric Bit Stacking: A High-Speed, Low-Power Design Paradigm for Binary Counters		
13	22R11A04A5, 22R11A04B9, 22R11A04J8	B. Lahari, K.Varshitha, Ch.Pranav, (Under the Guidance of M.Laxmi,G.Vallathan, K.Mamatha)	Optimized YOLOv8n with Convolutional Block Attention Mechanism for Vision based Systems		

6. Action plan for new MoUs, if any

7. Any other relevant/significant information:

☐ Mr. Anirudh Konduri, a 2020 alumnus and currently working as a System Engineer at TCS, delivered an insightful presentation on

"From Classrooms to innovations : Alumni insights" to II and III ECE students on 30th December 2025. The session was successfully coordinated by Ms. M. Umarani

Faculty Achievements:

☐ Dr. Appala Raju Uppala was ratified as Associate Professor by JNTUH, Hyderabad (Lr. No. JNTUH/DAAC/SCM/Associate Professor/Orders/R1/2025, dated 15-12-2025).

The following faculty members were recognized for their achievements in NPTEL courses during the July–December 2025 period:

1. Mrs. M. Laxmi has been awarded the title of NPTEL Superstar for the term July-December 2025.
2. Mrs. M. Laxmi has been awarded awarded the title of NPTEL Discipline Star in Computer Science Engineering for the term Jul-Dec 2025.
3. Mrs. V Savithri Padma Priya has been awarded the title of NPTEL Superstar for the term July-December 2025.

4. Mr. P.Chandra Prakash Reddy has been awarded awarded the title of NPTEL Discipline Star in Computer Science Engineering for the term Jul-Dec 2025.

5. Mrs. M. Sowjanya has been awarded the title of NPTEL Believer for the term July-December 2025.

6. Dr.M.Anand has been awarded awarded the title of NPTEL Discipline Star in Computer Science Engineering for the term Jul-Dec 2025.

7. Mrs. Amirineni Rama L Padmaja has been awarded awarded the title of NPTEL Discipline Star in Computer Science Engineering for the term Jul-Dec 2025.

8. Mrs. B.Sreelatha has been awarded awarded the title of NPTEL Discipline Star in Computer Science Engineering for the term Jul-Dec 2025.

9. Mrs. B.Sreelatha has been awarded the title of NPTEL Believer for the term July-December 2025.

10. Mr. K.Satish Babu has been awarded the title of NPTEL Motivated Learner for the term July-December 2025.

11. Dr.Y.Naga lakshmi has been awarded awarded the title of NPTEL Discipline Star in Computer Science Engineering for the term Jul-Dec 2025.

Faculty member in-charge   Overall Coordinator   Head of the Department
Mr.A.Shankar   Dr. Appala Raju Uppala   Dr.G.Sreelakshmi
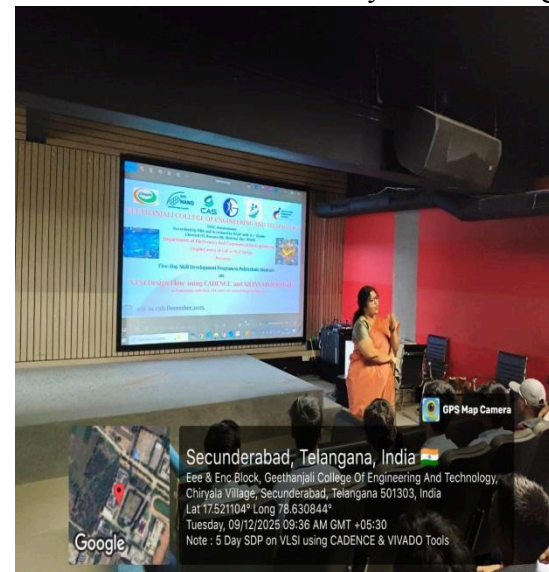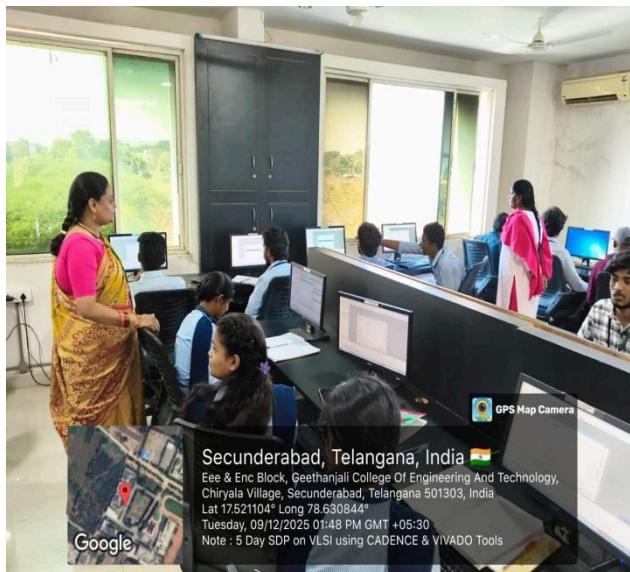
Academic Audit on 06/12/2025

45 students and 6 faculty are attending Talent Taiwan Expo @T-Works today

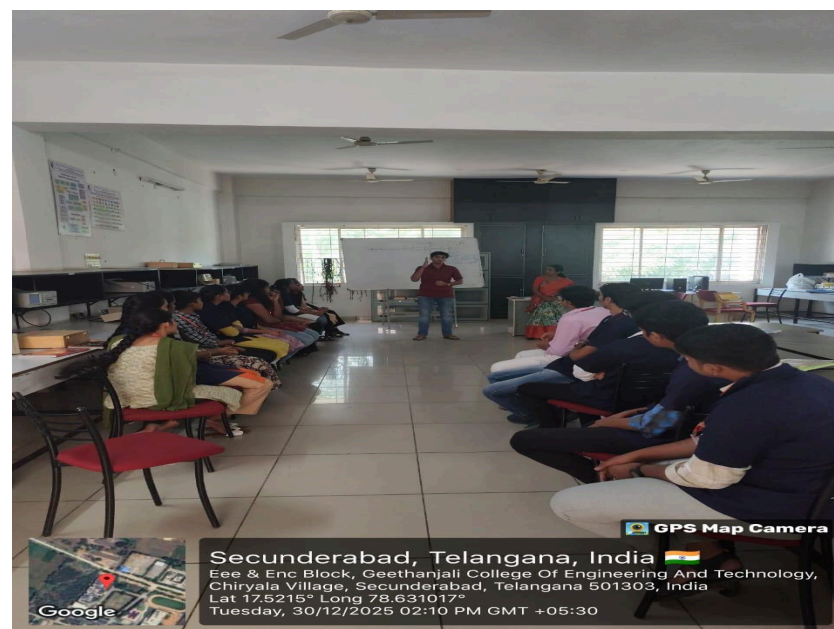Briefing Session by Dr. G Sreelakshmi to Polytechnic Students.

Five Days Skill Development Program on VLSI DESIGN FLOW using CADENCE & XILINX VIVADO.

Alumni meet-25th December'2025

Alumni interaction with K. Anirudh(2016-20) on 30/12/2025

Professional skill development program conducting by Career Guidance Cell, GCET on 30/12/2025