



NEWSLETTER

EVENTS ORGANIZED IN THE DEPT

CLASS COUNSELLING SESSION – II B.TECH

Dr. A. Ravi Raja, Class Teacher for II B.Tech (ECE) Section D, organized a class counselling meeting with active participation from students, course teachers, and fellow counsellors. The session focused on addressing academic progress, student well-being, and enhancing engagement through collaborative efforts. Dr. D. Venkata Rao, Head of the Department of ECE, and the Dean of V R Siddhartha School of Engineering graced the meeting with their valuable insights and guidance.



The meeting fostered an open platform for constructive dialogue, aiming to support students' academic and personal development.

PARENT-TEACHER MEETING – II B.TECH



A Parent-Teacher Meeting for II B.Tech was held on June 26, 2025, with the active involvement of class counsellors. The session was graced by Dr. D. Venkata Rao, Head of the Department of ECE, who addressed the gathering and emphasized the importance of parent-faculty collaboration in student development. Discussions focused on academic performance, attendance, and student well-being, with parents engaging positively and sharing constructive feedback. The meeting reflected the department's commitment to creating a supportive academic environment through continuous interaction with parents and stakeholders.

TESSOLVE SEMICONDUCTOR PRE-PLACEMENT TALK – JULY 23, 2025

On July 23, 2025, a team from Tessolve Semiconductors visited our college to deliver a highly informative pre-placement talk. The session provided valuable insights into the rapidly growing semiconductor industry, emphasizing the increasing investments by both government and private sectors. These developments are expected to significantly expand job opportunities, especially in domains such as test engineering, design validation, and system-level testing. The speakers highlighted the importance of industry-academic collaboration in preparing students for evolving technology trends. They also shared details about internship and career opportunities available at Tessolve, which offer students hands-on exposure to real-world semiconductor testing and development environments.



This interactive session served as a great opportunity for students to understand current industry expectations and align their skills accordingly. The visit reflects Tessolve’s ongoing efforts to engage with academic institutions and support the development of a future-ready engineering workforce.

ECE DISTINGUISHED ALUMNI LECTURE SERIES ON “ALUMNI CHRONICLES: CAMPUS TO C-SUITE”

The ECE Distinguished Alumni Lecture – “Alumni Chronicles: Campus to C-suite” was held on 16th July 2025, featuring Mr. Satya Prasad Sayala, CEO of Vajra IOT Pvt. Ltd., Hyderabad, and a distinguished alumnus from the 1984–1988 batch. Mr. Sayala shared his inspiring journey from his days as an engineering student to his current role as a corporate leader. He emphasized the importance of a strong technical foundation, continuous learning, and adaptability.



Highlighting his transition from technical roles to leadership, he spoke on the significance of strategic thinking and people management skills. He encouraged students to explore emerging technologies like IoT, consider entrepreneurship, and actively build their networks, while embracing challenges and learning from failures. The talk was highly motivational and offered valuable insights for students planning their career paths.



ECE DISTINGUISHED ALUMNI LECTURE SERIES ON “CAREER OPPORTUNITIES IN VLSI”

**SIDDHARTHA**
ACADEMY OF HIGHER EDUCATION
An Institution DEEMED TO BE UNIVERSITY
(Recognized by Ministry of Education, Government of India, New Delhi)

Department of **Electronics & Communication Engineering**

ECE Distinguished Alumni Lecture Series on

CAREER OPPORTUNITIES IN VLSI

Date:
19th July 2025

Time:
11.30AM

Venue: ECE - 328

Invited Speaker:
Ms. VADLAMUDI URMILA
Silicon Design Engineer-II, AMD
Hyderabad, Telangana, India
(2015-2019) Alumnus



Targeted Audience:
III/IV B.Tech ECE Students

Conveners:

Dr. D. Venkata Rao
Dean-VRS School of Engineering
HOD-ECE

Dr. M. Padmaja
Professor, ECE, VRSSE

Faculty Coordinators:

Mrs. K. V. Ratna Prabha
Assistant Professor, ECE, VRSSE
Dept. Alumni Coordinator

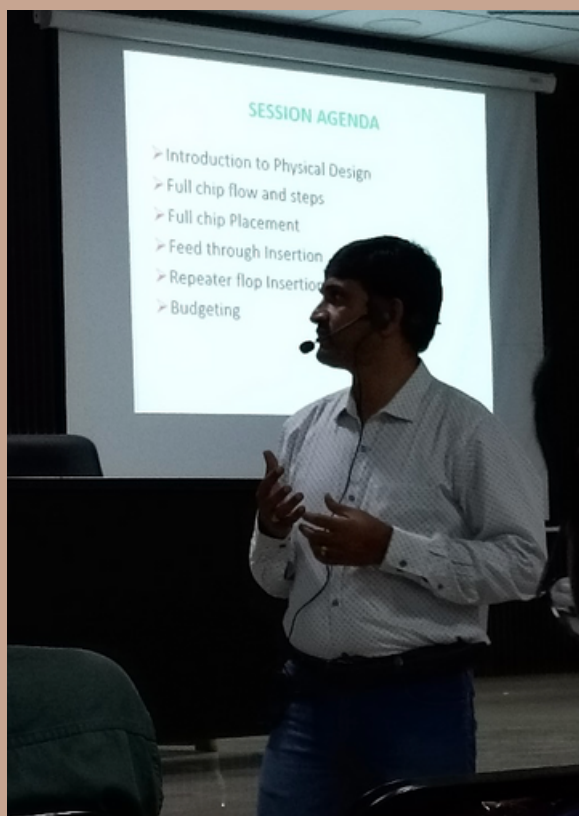
Ms. B. Alekya
Assistant Professor, ECE Dept

The ECE Distinguished Alumni Lecture series on “Career Opportunities in VLSI” was held on 19th July 2025, featuring Ms. Vadlamudi Urmila, Silicon Design Engineer-II at AMD, Hyderabad, and a proud alumna from the 2015–2019 batch. In her insightful session, Urmila highlighted the critical role of VLSI in modern electronics

and explained the complete design flow—from RTL design and verification to synthesis and physical design. She emphasized the importance of programming skills in Verilog/SystemVerilog and familiarity with industry-standard EDA tools. Urmila discussed diverse career roles within VLSI, including front-end and back-end design, functional verification, and physical layout, while also addressing trends like AI hardware integration and low-power chip design. She encouraged students to build strong foundations in digital electronics, take up internships and mini-projects, and stay current with technological advancements. The session provided students with valuable guidance and a clear roadmap to pursue careers in the VLSI industry.

GUEST LECTURE ON “DESIGNING SMART CHIPS: INTRODUCTION TO TIMING, PLACEMENT & ROUTING”

The Department of Electronics and Communication Engineering at VR Siddhartha School of Engineering, Siddhartha Academy of Higher Education (Deemed-to-be University), organized a guest lecture on “Designing Smart Chips: Introduction to Timing, Placement & Routing” on 19th July 2025. The session was delivered by Mr. D. Srikanth, Principal Member of Technical Staff at Advanced Micro Devices India Pvt. Ltd., Hyderabad. The event aimed to provide students with a comprehensive understanding of physical design flows in VLSI, focusing on core concepts such as Static Timing Analysis (STA), floor planning, placement, routing, and design rule checks. Students were introduced to industry-standard tools like Cadence and Synopsys, along with scripting languages like Shell and TCL used for tool automation. Key topics covered included RTL to GDSII backend flow, clock tree synthesis (CTS), power optimization techniques, and timing closure using Prime Time. The session offered practical insights into real-time industrial workflows, with detailed discussions on critical design issues like negative skew, setup and hold violations, and the constraints involved in 3nm technology. Students gained clarity on technical terms such as netlist, .lib, .def, and .lef files, and their roles in the chip design process. The lecture not only bridged academic learning with industry practices but also supported the Outcome-Based Education (OBE) framework, contributing to graduate attributes like technical competence, problem-solving, and lifelong learning in alignment with NEP 2020 and NBA outcomes. The event was well-received and proved to be a valuable knowledge-sharing platform for students aspiring to pursue careers in VLSI design.



WELCOME TO THE DEPARTMENT



Dr. Polasi Phani Kumar, who holds a Ph.D. in Speech Signal Processing from JNTUH (2017) and recently completed a Post-Doctoral Fellowship in Disruptive Technology at City University of London (2024), has joined V R Siddhartha School of Engineering as a Professor in the Department of ECE, bringing with him 22 years of experience.

Dr. Binay Binod Kumar has joined the Department of Electronics and Communication Engineering at Velagapudi Ramakrishna Siddhartha Engineering College as an Assistant Professor. He holds a Ph.D. in VLSI Design from NIT Jamshedpur, with research interests in semiconductor device simulation, ZnO-based TFTs, and AI neural networks for image processing.



INDUSTRY VISIT BY FACULTY

Faculty members from the Department of Electronics and Communication Engineering visited M/s Eletronics Systems India Pvt. Ltd., Guntur as part of ongoing efforts to strengthen industry-academia collaboration. The visit focused on the extension of the existing Memorandum of Understanding (MoU) between the institution and Eletronics, with discussions cantered around planning joint activities, such as internships, guest lectures, student projects, and faculty development programs. Additionally, the team participated in the Department Advisory Board (DAB) Meeting, where industry insights were shared to align academic programs with current industry needs and expectations.

YOUNG FACULTY LAUREATE PROGRAM

Dr Nagini presented her research titled “THz Devices for SPace, Aerospace, and defenCE Applications” at the Young Faculty Laureate Program (YFLP), a special session under IEEE SPACE 2025, held during 22nd,23rd July 2025 at the Sheraton Grand Hotel & Convention Centre, Whitefield, Bengaluru. This initiative aimed to recognize and encourage promising early-career researchers in the fields of Space, Aerospace, and Defence, providing a national platform for young faculty from premier Indian institutions to showcase their innovations.



PUBLICATIONS

- Dr.Pratikhya Raut, Deepak Kumar Panda, Amit Kumar Goyal, A Comprehensive Review on Next-Generation Modeling and Optimization for Semiconductor Devices, IEEE Access,10 July 2025 Vol-13, Page No- 123724 - 123742,2169-3536,10.1109/ACCESS.2025.3587721, SCIE, Q1.
- Dr.Pratikhya Raut,T Sikhamani, Deepak Kumar Panda, Performance analysis of nanoscale organic field-effect transistors with respect to different device parameters, Microsystem Technologies,11 July 2025,1432-1858, <https://doi.org/10.1007/s00542-025-05901-5>,SCIE,Q3.

- Dr. Vanka Saritha,V.N. Koteswara Rao Devana, M. Bhagya Lakshmi Md. Ahsan Halimi , GS K.Gayatri Devi, Nageswara Rao Lavuri, Ahmed J.A. Al-Gburi g,Low-profile four-port MIMO antenna realizing penta-band notches for UWB systems, Optik - International Journal for Light and Electron Optics ,September 2025 ,Volume336,<https://doi.org/10.1016/j.ijleo.2025.172454>, Scopus,Q1.
- Ketavath Kumar Naik, Chirukuri P, T Addepalli, A J.A. A Gburi,Quad-port wheel-shaped MIMO patch antenna system deployed at UWB application for 6G terahertz communications, Photonics and Nanostructures - Fundamentals and Applications, 22 July 2025, Vol 66, 101430, 1569 4429, <https://www.sciencedirect.com/Science/article/abs/pii/S156944102500080X>, SCIE,Q2.
- Phani Kumar, P., Chen, T. M., Mithileysh, S. (2025). Improved dDQL: A Double Deep Q-Learning Enabled Localization for Internet of Underwater Things. Transactions on Emerging Telecommunications Technologies, 36(7), e70207.
- M Padmaja, Mariyadasu M,"Heuristic-based cascaded convolutional neural network for enhanced artifacts removal from EEG signal", Signal Image and Video Processing,25 July 2025,19-911,PP 1863-1711,<https://doi.org/10.1007/s11760-025-04501-0>,SCIE,Q2

CONFERENCES

- PhanDr M Padmaja, Sneha Reddy Kotha Kota, Kowshik Thulluru, Lahari Vanga,AI Powered Technology Integration for Sustainability (AI-PTIS-2024), Enhancing signal integrity for terrestrial mobile service through compact interdigital band pass filter optimisation, AIP Conference Proceedings, GMRIT, Rajam,9 July 2025; 3298 (1)2003, SCOPUS, <https://doi.org/10.1063/5.0279571>.

BOOK CHAPTERS

- B. Alekhya, K Varaprasad, K.Vasubabu, Neelaveni Ammal Murugan, Millimeter Wave and Terahertz Devices for 5G and 6G systems, Part of the book series: Signals and Communication Technology ((SCT)), "Band Switching Reconfigurable Antenna for Wireless 5G Applications", 10 July 2025, Scopus, Springer.

MOUS

On July 2, 2025, V R Siddhartha School of Engineering entered a Memorandum of Understanding with Enthi Technology Solutions India Pvt Ltd, marking a significant milestone in industry-academic collaboration. The MoU signing ceremony was graced by Dr. D. Venkata Rao, then Dean of the School, and Mr. Prakash V. Anandan, Head of Academic Solutions at Enthi Technology. The partnership aimed to promote hands-on learning, research, and skill development opportunities for both students and faculty through workshops, internships, and collaborative projects in the areas of embedded systems and IoT.



V R Siddhartha School of Engineering Siddhartha Academy of Higher Education (An Institution Deemed to be University) Department of ECE News Letter Editorial Board

CHIEF EDITOR
DR D VENKATA RAO
HEAD OF THE DEPT
ECE

EDITOR
Y SARADA DEVI
ASSISTANT PROFESSOR
ECE

STUDENT EDITOR
Y HIMASRI
24EU05197
ECE