

AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY

Tamaram, Makavarapalem, Anakapalli District



DEPARTMENT OF ELECTRONICS AND
COMMUNICATION ENGINEERING



Phronesis

Shaping Engineers. Inspiring Innovators.

HALF YEARLY
NEWSLETTER

ACADEMIC YEAR
2023–2024

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FROM THE DESK OF THE HOD — ECE

Dear Students, Colleagues and Well-Wishers,

It gives me immense pleasure to present the first semester issue of PHRONESIS, the newsletter of the Department of Electronics and Communication Engineering, covering June to November 2023. The opening half of the academic year laid a strong foundation. Our students carried classroom theory into the field through an industrial visit to the Andhra Pradesh MedTech Zone (AMTZ) at Visakhapatnam. I firmly believe that the foundation of a great engineer lies not only in technical excellence but also in curiosity, resilience and a commitment to ethical practice. I encourage every student to push the boundaries of what is possible and to make meaningful contributions to society through the power of technology.

Dr. E. Govinda — *Head of Department, Electronics & Communication Engineering*



Dr. E. Govinda
*Head of Department
Dept. of ECE*

Ph.D | '20+ Years Experience

INDUSTRIAL VISIT — Andhra Pradesh MedTech Zone, VISAKHAPATNAM

The Department of Engineering organized an industrial visit to the Andhra Pradesh MedTech Zone (AMTZ) on 3rd July 2023. The visit provided students with valuable practical exposure to advanced medical device manufacturing, precision engineering, quality testing, sterilization, and regulatory standards.

Students interacted with AMTZ experts and gained insights into modern medical technologies, indigenous manufacturing, and innovation in the healthcare sector. The visit successfully connected classroom learning with real-world engineering applications and inspired students to explore emerging opportunities in the MedTech field.

Key Learnings: Students gained practical insights into medical device manufacturing, precision engineering, testing, calibration, sterilization, and regulatory standards. The visit also highlighted the importance of indigenous MedTech innovation in strengthening healthcare and creating new opportunities in India.



Students with faculty outside the Andhra Pradesh MedTech Zone
Visakhapatnam

A
Group
photo
of the



III-year ECE students
Andhra Pradesh MedTech Zone
Visakhapatnam

Date	Location	Department	Students Participated
3rd July 2023	Andhra Pradesh MedTech Zone, Visakhapatnam	ECE	60 Students

GUEST LECTURES FOR ECE STUDENTS

GUEST LECTURE ON DATA STRUCTURES FOR III ECE STUDENTS



The Department of Electronics and Communication Engineering (ECE) at Avanthi Institute of Engineering & Technology organized an insightful guest lecture for III- ECE I Semester students as part of its academic activities for the year 2023.

The session was delivered by Mr. B. Ramprasad, Associate Professor at Vignan's Women's Engineering College, Visakhapatnam. He shared valuable insights into the fundamental concepts and practical applications of Data Structures, emphasizing their importance in modern computing and problem-solving.

His interactive and engaging teaching approach enabled students to develop a deeper understanding of the subject. The session also encouraged active participation, making it both informative and inspiring for the attendees.

Guest Lecture on Signals and Systems



The Department of ECE organized an insightful guest lecture on “Signals and Systems” on 26th October 2023 for ECE students. The session was delivered by K. Dhilli, Assistant Professor, Vignan’s Institute for Women, who shared valuable insights into the fundamentals and real-world applications of signals and systems. Through practical examples and interactive discussions, students gained a better understanding of signal classification, system analysis, and their applications in modern communication and electronic technologies. The session provided an enriching learning experience and encouraged students to connect their classroom knowledge with practical engineering applications.

Seminar on How to Build a Start-up



The Department of ECE organized an insightful seminar on “How to Build a Start-up” on 24th June 2023, exclusively for ECE students. S. Srisudha, Assistant Development Engineer, NRDC, Visakhapatnam, served as the resource person and shared valuable insights into entrepreneurship, innovation, idea generation, market opportunities, and start-up planning. The interactive session encouraged students to think innovatively, explore entrepreneurship, and transform their ideas into impactful solutions. The seminar was an inspiring and enriching experience, motivating students to explore entrepreneurial opportunities beyond conventional career paths.

Seminar on Wireless Communication and Sensors



The Department of ECE organized a seminar on “Wireless Communication and Sensors” on 14th September 2023, with Dr. G. V. Sridhar, Professor, Raghu Engineering College, as the resource person. The session introduced students to wireless networks, sensor technologies, data communication, and emerging applications in IoT, automation, healthcare, and smart systems. The interactive seminar enhanced students’ technical understanding and encouraged them to

Seminar on Wireless Communication and Sensors



A seminar on “FPGA-Based Signal Processing System” was organized by the **Department of Electronics Communication & Engineering** to provide students with practical insights into modern digital signal processing technologies. The session was delivered by **Dr. S. Srinivas, Associate Professor, ANITS**, who explained the fundamentals of FPGA technology, its architecture, and its applications in real-time signal processing. The seminar helped students understand how FPGA-based systems enable high-speed, flexible, and efficient implementation of signal-processing algorithms, while also highlighting their applications in communication, embedded systems, image processing, and other emerging engineering fields.

Faculty Journal Paper Publications

Name of the Author	Name of the Title	Publication Journal	Volume/ISSN
Mr.T.P.Naidu	Floor planning for optimizing area using sequence pair and hybrid optimization	Multimedia Tools and Applications	https://doi.org/10.1007/s11042-023-17575-0 Oct 2023 (SCI)
Dr.K.Ravi Kumar	Medical image segmentation using an optimized three-tier quantum convolutional neural network trained with hybrid optimization approach	Journal of Multimedia Tools and Applications	TTPS://DOI.ORG/10.1007/S11042-023-6980-9 , 03 October 2023