

### NALLA NARASIMHA REDDY

n Society's Group of Institutions - Integrated Campu (UGC AUTONOMOUS INSTITUTION)



**SCHOOL OF ENGINEERING** 

**DEPARTMENT OF** 

**ELECTRONICS AND COMMUNICATION ENGINEERING** 

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# RECTOR

NRG EC ECHNOCRATS RNATE REPORT



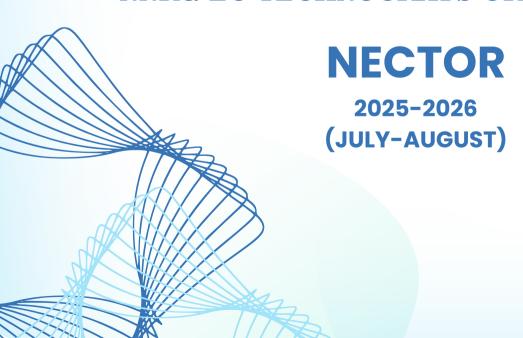




### **ELECTRONICS AND COMMUNICATION ENGINEERING**



### NNRG EC TECHNOCRATS ORNATE REPORT



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## SCHOOL OF ENGINEERING DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

### INSTITUTE's VISION AND MISSION

### **VISION:**

 To be a premier institution ensuring globally competent and ethically strong professionals.

### MISSION:

- To provide higher education by refining the traditional methods of teaching to make globally competent professionals.
- To impart quality education by providing the state-of-the-art infrastructure and innovative research facilities.
- To practice and promote high standards of professional ethics, transparency and accountability.

### **DEPARTMENT'S VISION AND MISSION**

### VISION:

To produce creative Electronics and Communication
 Engineering graduates with cutting edge technology and

 Research to meet Industry and societal needs.

### MISSION:

- To provide innovative learning environment to enable the students to face the challenges.
- To provide value-based education by promoting activities addressing societal needs.
- To enable graduates to develop the skills to solve complex problems in multidisciplinary activities.

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### 1.SALIENT FEATURES

### ABOUT ECE DEPARTMENT

Electronics is the branch of study that has revolutionized the life style of humanity. It is a pace setter and a prime mover behind the transition to a technological society. The field of Electronics and Communication Engineering encompasses all areas of human life. Radio, television, telephones, computers, automobiles, office machinery and house-hold appliances, lifesaving medical equipment and space vehicles represent a mere sample in the wide spectrum of application of Electronics.

In the age of satellite transmitted television and transcontinental computer network, the challenge and opportunities in this profession continue to mushroom. Electronics and Communication Engineering graduates have unlimited opportunities in the field of terrestrial and extra-terrestrial communication systems like telephones, cellular phones, television, optical fiber communication, consumer and entertainment devices. Highly rewarding and greatly satisfying opportunities await the Electronics and Communication Engineers in the field of satellite space programs, embedded technologies etc.

The Department of Electronics and Communication was started in the year 2009. It is a full-fledged academic department for emerging ECE engineers. B.Tech. (ECE) program was duly approved by the AICTE and affiliated to JNTU, Hyderabad. An intake of 60 was sanctioned initially and then it is raised to 180 from the year 2019. PG Program (M.Tech.) with specialization in "Embedded Systems &VLSI" is approved by AICTE for the academic year 2013-14 with an approved intake of 18. For the academic year 2024-25, there are 11 students enrolled in the booming M.Tech Program successfully.

There are 33 Faculty members in the department which includes 8 doctorates from various reputed institutions, and 12 faculty members pursuing their Ph.D. The department is equipped with 8 spacious and well-developed laboratories. Seminars, Workshops and Technical Symposia are regularly conducted in the department to keep faculty and students updated with latest developments in various fields. The department is committed to provide opportunity to embark on a rewarding and exciting learning journey in preparation for a future career.

The Electronics & Communication Engineering (ECE) Department has built a reputation for excellence in teaching and service. Electronic engineers are changing the world to a comfortable global home. The information and technology revolution has been built on the advances of Electronics.

ECE is making exhilarating progress in areas ranging from microelectronics, mobile communications to VLSI Design Automation. The students are inspired by the expertise and knowledge of our faculty, integrating practical with challenging and interesting course-work

# The software's and major Equipment that are available in the department are:

- Cadence EDA Tool
- MATLAB-2014b and Tool Boxes (Simulink, Image Processing, Communication, Signal Processing and Digital Signal Processing System)
- Spectrum Analyzer and Signal Generator
- OFDM trainer kit
- Digital Signal Processors Kits (TMS320C6713)
- MPMC COTEX M3 Kit
- Advanced RISC Machine Processor Kits (LPC2148)
- Xilinx SPARTAN 3E FPGA Boards
- Artix-7 FPGA kit, Zynq-7000 SoC kit
- Xilinx Vivado tool

### 2.DEPARTMENTAL ACTIVITIES

### 2.1 ELITE GATHERING

### 2.1.1 II YEAR ELITE GATHERING - I

### **PURPOSE OF GATHERING:**

The Department of Electronics & Communication Engineering of Nalla Narasimha Reddy Education Society's Group of Institution, Hyderabad with the support of college management and H&S Department had organized an Elite Gathering program (1-day program) for B.Tech students of II Year, I-Sem all sections attended on 22nd August, 2025 (Friday).

The topic is on "Unity in Diversity: The Heartbeat of India"





S. No.	Roll No.	Year & Section	Name of the Student
1	247Z1A0414	II ECE A	BANDIRALA JAVANA
2	247Z1A04C2	II ECE B	MULA AKSHAYA
3	247Z1A04H2	II ECE C	TANGALLAPALLY SRAVANTHI
4	247Z1A0444	II ECE A	DARIPELLI JOSHNAVI
5	247Z1A0481	II ECE B	KANUGANTI SANJANA
6	257Z5A0404	II ECE C	CHAMAKURA SRUTHI
7	247Z1A0426	II ECE A	BOLLEPALLY SATYANARAYANA RAJU
8	247Z1A04C8	II ECE B	NAKKA HIRANMAYEE RAJESWARI
9	247Z1A04F4	II ECE C	RESHAM RAKSHITA
10	247Z1A0410	II ECE A	BADDIPADIGA POOJITHA
11	247Z1A0477	II ECE B	KANDIKANTI HARSHA VARDHAN GOUD
12	247Z1A04F8	II ECE C	SANKURI PALLAVI
13	247Z1A04I7	II ECE C	VITTA SANDEEP REDDY

### **GATHERING PARTICULARS:**

Date: 22nd August 2025 (Friday) Venue: AuditoriumIII Floor, NNRG

Attendees: B. Tech II Year ISem (ECE) A,B & C Sections (12 Students)

### **GATHERING OUTCOME:**

- Students will develop greater confidence, clarity, and effectiveness in public speaking
- Students will learn to maintain composure and deliver impactful speeches in front of formal or high-profile audiences.

### **INCHARGES:**

Mr. Aravind, Assistant Professor

Mrs. K. Shiva Prasanna, Assistant Professor

### "The Art Of Communication is the language of leadership"

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### 2.1.2 ELITE GATHERING -III YEAR

### **PURPOSE OF GATHERING:**

The Department of Electronics & Communication Engineering of Nalla Narasimha Reddy Education Society's Group of Institution, Hyderabad with the support of college management and H&S Department had organized an Elite Gathering program (1-day program) for B.Tech students of III Year, I-Sem all sections attended on 29th August, 2025 (Friday).

The topic is on "Heartbeat of the Nation: Tradition, Triumph, and Togetherness"



### **Incharges**

1. Mr. A. Aravind, Assistant Professor

**2.** Mrs. K. Shiva Prasanna, Assistant Professor









S. No.	Roll No.	Year & Section	Name of the Student
1	237Z1A0420	III-A	B.MEGHANA
2	237Z1A04D0	III-B	N.SIDDHARTHA
3	237Z1A0402	III-A	A.DEVIKA
4	237Z1A0429	III-A	C.KRANTHI
5	237Z1A0490	III-B	K.SARIKA
6	237Z1A04A0	III-B	K.INDHU
7	237Z1A04B2	III-B	M.BHAVYA SREE
8	247Z5A04B0	III-B	M.JYOTHSNA

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## 2.2 NPTEL E-WORKSHOP

15 JULY 2025

ONLINE(VIRTUAL PLATFORM)



### "NPTEL AWARENESS E-WORKSHOP"

The Nalla Narasimha Reddy Educational Society's Group of Institutions conducted an Online NPTEL Awareness E-Workshop on 15th July 2025 in partnership with NPTEL, IIT Madras. We held the workshop virtually at 10:00 AM to encourage extensive participation from both faculty and students.

Madhavi K, SPOC for NPTEL, introduced the workshop. Director Dr. C. V. Krishna Reddy then addressed the gathering, sharing insights and encouragement. Following his address, the SPOC invited the resource person to share their expertise. The event set the stage for an engaging and informative session, fostering collaboration and learning among attendees.



### IN ASSOCIATION WITH: NPTEL, IIT MADRAS

The Resource person Mr. Shib Shankar Das from IIT Madras delivered the lecture, providing a comprehensive overview of the NPTEL platform. Overview of the National Programme on Technology Enhanced Learning (NPTEL) and the advantages of NPTEL online courses for students and staff. The lecture included a synopsis of the SWAYAM platform, the certification process, and guidelines for enrolling in NPTEL courses, obtaining credits, and gaining access to internships. Local chapters and faculty mentors play a crucial role, and a Q&A session facilitates the resolution of participant questions.

# 2.3 VISIT TO CAPART INDUSTRISS

An Industrial Visit to CAPART Industries Limited, Jeedimetla, Hyderabad was planned on 22nd July, 2025 (Tuesday) by Industry Institute Interaction Cell (IIIC) initiated and headed by Dr. G. Janardhana Raju sir, Dean SOE and Convener, IIIC for the main purpose of knowing their work flow, ECE interns working over there, what all future opportunities exist in terms of getting Memorandum of Understanding (MoU), Guest Lectures and Industrial Visits to benefit engineering students, especially of electronics domain as the industry relies on lighting, Optical, and other electronic based concepts for their manufacturing, quality and verification processes.

Date (Day)	Company/Industry Details	Visited by
22 <sup>nd</sup> July, 2025 (Tuesday)	CAPART INDUSTRIES PVT LTD,- LED Lighting Manufacturers, Plot No 17/B, Phase I, IDA Jeedimetla, Hyderabad, Telangana 500055.	Dr. G.Janardhana     Raju, Dean,SoE &     Convener, IIIC,
		<ol> <li>Koustubh Kulkarni, Asst.Prof, ECE</li> </ol>





# VISIT OUTCOME:

The outcome was visit held to CAPART Industries was a very significant one, as the Vice-President of company interacted and had discussion for long to make mutual cooperation and understanding between the institute and industry through IIIC agenda and activities. Students will surely have some space for learning and doing their domain work in terms of internships or jobs in future.

During our visit to Capart Industries located in Jeedimetla, Hyderabad, we had the opportunity to gain practical insights into modern manufacturing processes and industrial operations. The facility is well-equipped with advanced machinery used for precision fabrication and component manufacturing, particularly catering to sectors such as automotive and heavy engineering. We observed various stages of production, from raw material handling to quality control, and interacted with experienced engineers who explained the workflow and safety protocols followed within the plant. This visit provided valuable exposure to real-world industrial practices and enhanced our understanding of how theoretical knowledge is applied in a practical setting.



# 2.4 INDUSTRIAL VISIT

LOCATION OF INDUSTRY: 1094, B N REDDY NAGAR, CHERLAPALLI, HYDERABAD, SECUNDERABAD, TELANGANA 500051



# RAINBOW ENGINEERING & MANUFACTURING

DATE: 29/JULY/2025

VISITED BY: K.RAMBABU (ECE)
P.SRINIVAS (MECH)
N.SURESH (ECE)
G.KIRAN (MECH)

DEPARTMENT:ECE & MECH

#### 1. Purpose of the Visit

The primary purpose of this industrial visit was to:

- Understand the current industry practices, technologies, and workflow relevant to the faculty's teaching domain.
- Explore opportunities for collaboration between industry and academia, such as internships, guest lectures, industrial training, and student projects.

### 2. About Company

Rainbow Engineering & Manufacturing is a leading provider of integrated engineering and manufacturing solutions with over a decade of experience and more than 450 completed projects. Specialized in delivering high-quality mechanical designs, prototyping (mechanical, electronics, and software), CNC milling, turning, Fabrication, Sheet Metal, 3D printing, and full-scale manufacturing services.

Company comprehensive approach includes product development and R&D, covering electronics, mechanical systems, and software integration. From concept to completion, our dedicated team excels in bringing innovative ideas to life, supporting our clients with end-to-end solutions across various industries. Whether it's designing a product from scratch, refining prototypes, or scaling up for production, we deliver reliable, precise, and high-performance results.

### 3. Key Observations:

During the Visit, the following areas and systems were observed:

- Infrastructure & Facilities: Layout of production/work areas, equipment, labs, or tools used.
- Technology in Use: Software platforms, machines, or processes relevant to academic disciplines.
- Process Workflow: From design to delivery or from development to deployment.
- Quality & Safety Protocols: Procedures for testing, inspections, certifications, and worker safety.
- Human Resource Interaction: Skillsets required, roles and responsibilities, and team dynamics.

### 4. Interactions and Discussions

- Met with Mr. Rajesh (Design Manager) and Mr. Santhosh (Product Designer) who shared insights about industry expectations from fresh graduates.
- Discussed the feasibility of student internships, industry-based miniprojects, and mutual cooperation.

### 5. Conclusion:

The industry visit provided a valuable opportunity to understand the latest industrial practices and align academic strategies accordingly. Such visits are essential for faculty development, ensuring that classroom teaching stays relevant and application-oriented. Continued engagement with industry is highly encouraged.



### NALLA NARASIMHA REDDY

Education Society's Group of Institutions - Integrated Campus



(UGC AUTONOMOUS INSTITUTION)

2.5 Orientation Program
I-B.Tech2025

## ECE ON 20TH AUGUST 2025

The Director, **Dr. C. V. Krishna Reddy,** welcomed the dignitaries, faculty, parents, and students, and congratulated parents for choosing NNRG. He highlighted that the institute, established in 2009 on a 16-acre green campus, is committed to producing globally competent and ethically strong professionals, with a special focus on advanced fields like semiconductors and emerging technologies.

**Dr. Ravi Bolimera,** Head of ECE, addressed first-year B.Tech ECE students and their parents, highlighting the department's state-of-the-art labs and equipment. He emphasized opportunities in hardware, software, and government sectors like ISRO and defense. **Dr. Ravi Bolimera** noted the department's 10 Ph.D. scholars and over 80% placement rate in hardware companies. He also discussed the growing demand for ECE graduates in the future.



# REPORT OF ORIENTATION PROGRAMME 2025

The ECE department, with a B.Tech intake of 180 students (M.Tech in VLSI System Design offered as well), was formally introduced. Students were oriented about departmental facilities, lab access, faculty support, and the structure of their academic curriculum





Freshers were encouraged to connect with senior batches, participate in departmental events, and explore technical and leadership opportunities ahead. The announcement of studentrun groups like technical associations, clubs, and student forums (including IETE or IEEE branches) further emphasized hands-on engagement

The Electronics and Communication Engineering (ECE) orientation programme at Nalla Narasimha Reddy Engineering College (NNRG) was a thoughtfully curated event that successfully combined essential administrative guidance, motivational insights from industry leaders, and a comprehensive introduction to the department's academic landscape. The session provided students and their families with a clear understanding of the college's academic expectations, support systems, and future opportunities within the ECE discipline.

By blending inspiration with information, the orientation helped ease the transition from school to engineering college, instilling a strong sense of purpose and direction among the freshers. It encouraged them to pursue academic excellence, actively participate in student clubs and technical forums, and begin envisioning their professional goals from the very start of their journey. The overall tone of the programme was one of ambition, encouragement, and inclusivity—laying a strong foundation for a successful and enriching academic life at NNRG for every new ECE student.

20-AUG-2025

### 3. INSTITUTIONAL EVENTS

13-08-2025

"Industry Institute Interaction (IIIC) and Institution's Innovation Council (IIC)"

# **"3.1 Issues, Problems and Solutions of Ground Water Management"**

Groundwater is a vital natural resource that supports drinking water needs, agriculture, and industrial processes across the globe. However, in recent decades, its management has become a pressing concern due to overextraction, pollution, and climate change. One of the major issues is the unsustainable withdrawal of groundwater, especially in regions heavily dependent on irrigation, leading to rapid depletion of aquifers. Compounding this are problems such as contamination from agricultural runoff, industrial discharge, and improper waste disposal, which degrade water quality and pose serious health risks. Additionally, lack of proper regulation, insufficient data, and weak implementation of policies further exacerbate the crisis. Addressing these challenges requires an integrated approach that combines scientific research, community participation, and strong governance. Solutions include promoting water-efficient irrigation techniques like drip and sprinkler systems, rainwater harvesting, artificial recharge of aquifers, and strict enforcement of groundwater extraction norms. Public awareness and stakeholder collaboration are also key to ensuring the sustainable use and long-term protection of groundwater resources.



Memento presentation to the Resource person by Pharmacy and ECE faculty members

## Over-Exploitation of Ground Water

The session concluded with a recap of the key concepts like Aquifers role in Ground Water Management, solutions for water problems etc. The session provided a comprehensive understanding of Ground Water Management to foster the solutions. The session ended by vote of thanks by civil engineering student.



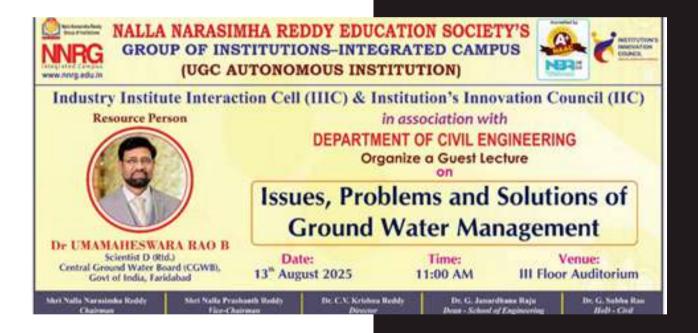
ECE students with the Resource person Dr Uma Maheswara Rao

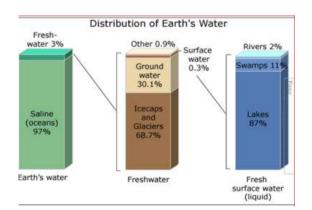
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# Expert talk on "Issues, Problems and Solutions of Ground Water Management"

The Department of Civil Engineering organized an expert talk on Ground Water Management, a crucial topic in today's world. The Resource Person Dr. Uma Maheswara Rao B shared his expertise, providing students with valuable insights and real-world examples. The event was open to students from Civil, ECE, and Pharmacy, highlighting the importance of groundwater management across disciplines. A total of 147 engg and pharmacy students (Civil 68, ECE 45 and Pharmacy 34) as well as 12 Faculty members joined the expert talk.





Learning Outcomes: The session likely helped students to understand:

- Issues and problems related to groundwater management
- Potential solutions and strategies for sustainable groundwater management
- Practical applications and case studies

Such events can spark interest, foster knowledge sharing, and inspire students to explore careers in water management and sustainability. The session began at 11AM with an introduction of the Resource Person Dr Uma Maheswara Rao and his experiences in various fields. Dr Uma Maheswara Rao addressed about the distribution of Earth's water, rainfall information of certain selected states,

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# 3.2 MSME IDEA

**HACKATHON 5.0** 

## MSME IDEA HACKATHON 5.0

**IDEAS EVALUATION REPORT-2025** 

### REPORT ON MSME 5.0 IDEA HACKATHON's

The Government of India (GoI) with its 2025 edition of MSME 5.0 has kicked off with huge response. MSME 5.0 initiative, specifically the MSME Idea Hackathon 5.0, is a national program by India's Ministry of Micro, Small, and Medium Enterprises (MSME) to encourage innovation and technology adoption by Indian citizens.

Nalla Narasimha Reddy Education Society's Group of Institutions (NNRESGI)- an Integrated campus, is the Host Institute (HI) under MSME 5.0 Idea Hackathon Contest, for considering and applying the ideas from various participants of different categories (like Students/Faculty/Others). The idea hackathon participants had applied through an online portal application under different 5 themes. The HI had received the total of 43 ideas (8 ideas from ECE) in applied at Level 1.



### MSME IDEA HACKATHON 5.0

Launched in 2025, it provides a platform for individuals, startups, and students to develop innovative solutions in key areas like low-carbon tech, cyber defense, and Industry 4.0/5.0. The initiative provides winners with funding up to ₹15 lakh, incubation support, mentorship, and a pathway to scale their ideas into successful MSME ventures, aligning with national goals like Aatmanirbhar Bharat and Make in India.



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### **HACKATHON CHALLANGE**

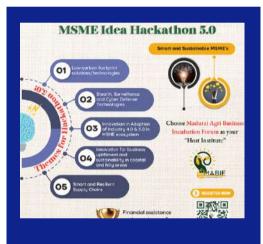
The Hackathon Challenge comprises of the following levels:

**Level 1**: Application of Ideas to MSME 5.0 Portal (last date was 31st July, 2025)

Level 2: Host Institute (HI) with Expert Team should review and evaluate ideas submitted.

**Level 3**: The ideas shortlisted at Level-2, have to be submitted for Final Uploading to next stage. (last date is 08th September, 2025)





### MSME IDEA HACKATHON 5.0 IS HERE!

The HI had constituted a team of qualified experts (Expert team) from various domains based on the type of theme to evaluate the ideas submitted. The evaluation process with the format and guidelines as given by MSME5.0 was conducted on 19th August, 2025 (Tuesday).

		LIST OF IDEAS SUBMITTED TO MSM	E FROM ECE DEPAR	TMENT, NNRESGI	
5.No.	Idea No.	Team Lead	Team Lead Category	Idea Theme	Idea Title
1	INC25ET51172S1	Dr. Reicha S. Associate Professor, ECE	Faculty	Innovation in IR 4.0 & IR 5.0	Al-driven Dally Care Fetal Reminder, Monitor, and Stillbirth Prevention System
2	INC25ET\$119858	B Ravi Teja, B,Tech IV ECE A	Student	Innovation in IR 4.0 & IR 5.0	FarmASSURE Sytem
3	INC25ETS118539	Ch Shivani, B.Yech IV ECE A	Student	Stealth Surveillance Cyber Defence Technologies	StampedeShieldAl: intelligent alert system for panic and stampede prevention
4	INC2SETS116943	B Ravi Yeja, B. Tech IV ECE A	Student	Innovation in IR 4.0 & IR 5.0	Al-enabled Smart Stick for visually impaired
5	INC25ET5120307	D Valshnavi, B.Tech IV ECE A	Student	Stealth Surveillance Cyber Defence Technologies	infected animal alert system for public health safety in cities
6	INC25ET\$317642	Allamaneni SaiChandhana, B.Tech IV ECE A	Student	Smart Resilient Supply Chains	SafeFlood All: smart detection of submerged manholes with instant alerts
7	INC25ETS115997	P.Vimal Koushik, B.Tech IV ECE B	Student	Smart Resilient Supply Chains	Smart Rice Transplating Machine
8	INC25ETS116075	P.Vimal Koushik, B.Tech IV ECE B	Student	Innovation in IR 4.0 & IR 5.0	Al-based Automated Vehicle for Accident prevention

### INSTITUTION'S INNOVATION COUNCIL (IIC)

Of the total 43 ideas evaluated, 17 ideas (3 from ECE) had qualified or were eligible to be forwarded as 'Recommended Ideas' to the next stage processing. The proposal and block diagram of these ideas are being sorted out, and will be ready for final uploading shortly.

There were 3 ideas selected at Level-2 from the 8 ideas applied in Level-1. The ideas selected were :

- 1. INC25ETS117251-Dr.S.Rekha, Assoc. Prof. and team.
- 2. INC25ETS119858-Mr.Ravi Teja and team (B.Tech-ECE-IV Year-A)
- **3.** INC25ETS118539-Ms.Ch.Shivani and team (B.Tech-ECE-IV Year-A)

The window for Host Institutes for submitting the final recommended ideas is open till **08th September**, **2025**.

### 4. FACULTY ACHIEVEMENTS

# 4.1 FACULTY R & D ACHIEVEMENTS 2025-26

### Journals:

• Sravan K. Vittapu, P Michael Preetam Raj, N. Divya, Manu Gupta, Pinapati Lakshmana Rao, & Yallamati PrakasaRao. (2025). "Artificial Intelligence Powered Memristive Average Value Calculator and its Real-time Applications". Kronika Journal Vol. 25 (8), pp. 187-192. doi.org/10.5281/zenodo.16793359 (SCOPUS)

### **Conferences:**

- Gurijala Srija, Goundi Sagar, Guddeti Yashwanth, K. Anuradha, and B. Ravi "5.8 GHz Patch Antenna Design for Vehicular Communication Systems". In 2025 International Conference on Computing Technologies & Data Communication (ICCTDC), Hassan, India. July, pp. 1-4. IEEE
- S. Chintagunta, and **Karthick Subramaniam**, "Unitary-ESPRIT for 2D-DOD and 2D-DOA Estimation with EMV Sensors in MIMO Radar" In 2025 International Conference on Microwave, Optical, and Communication Engineering (ICMOCE), Bhubaneswar, India, July, pp. 1-5. **IEEE** doi:10.1109/ICMOCE64100.2025.110768

### **Patents:**

- Mohammed Razia Alangir Banu, Dr Diana Moses, Dr. Bachu Laxman Raju, Dr. Vijaykumar Shivaling Bidve, Sandhya Vani kurra, Nitesh Gaikwad, Dr. Sunil Tekale (2025). "AI Based Camera Device for Traffic Law Violation Detection". (6458032, UK Patent Office) (Granted).
- Mr. Ananda Babu Kancherla, Ms. C. Fatima Selvi, Ms. E. Denisha, Mrs. M. Elza Melif, Ms. P. Ponmalar, Mrs. J. Gold Beulah Pattruose, **Mrs. Shetty Sravanthi**, Dr. P. Edwin Dhas (2025). "SMART IOT EDGE NODE WITH ON-DEVICE AI FOR ENERGY-EFFICIENT ENVIRONMENTAL MONITORING" (India, Patent No. 202541071701 A, The Patent Office Journal No. 31/2025), (Published).
- Dr. Telugu Maddileti, Dr. A. Pulla Reddy, Dr. Kammara Bharath Kumar, Ms. Anmol Rajput, Dr. Masthan Basha Shaik, Dr. Vijaykumar R Urkude, Dr. Ambala Pradeep Kumar, Dr. B. VenkataKrishnaveni, Dr. Munipareeena Rela, Ms. K. Shiva Prasanna (2025) "Autonomous Solar-Powered UAV Swarm for Cooperative Obstacle Mapping in GPS-Denied Environments" (India, Patent No. 202541071681 A, The Patent Office Journal No. 31/2025), (Published).

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# 4.2 FACULTY DEVELOPMENT PROGRAMS

30th August, 2025

### July 2025- August 2025 Achievements-Faculty Participation

S.No	Name of the Faculty	Title	Place/Organization	Date(s)
1	DR. RAVI BOLIMERA	GENERATIVE AI AND LARGE LANGUAGE MODELS:INNOVATIONS FOR THE FUTURE OF EDUCATION AND RESEARCH	BHOJ REDDY ENGINEERING COLLEGE FOR WOMEN(ATAL)	28-07-2025 to 02-08-2025  18-08-2025 to 23-08-2025  07-07-2025 to 12-07-2025
	BOLIMERA	REVOLUTIONIZING HEALTH CARE: AI AND ROBOTICS IN NEXT - GEN MEDICAL TECHNOLOGIES	B V RAJU INSTITUTE OF TECHNOLGY (ATAL).	
	DR. REKHA	IOT APPLICATIONS POWERED BY AI	SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY (ATAL).	1
2	SHANMUGAM	NEP2020 ORIENTATION AND SENSITIZATION PROGRAMME -14	UGC MALAVIYA MISSION TEACHER TRAINING CENTRE	19-07-2024 to 27-08-2024
		RESEARCH TRAINING	MSME TECHNOLOGY DEVELOPMENT CENTER, MINISTRY OF MSME	18-06-25 to 19-07-25
3	MS. K. MADHAVI	EMERGING TRENDS IN GREEN ENERGY FOR A SUSTAINABLE FUTURE	AURORA HIGHER EDUCATION AND RESEARCH ACADEMY (ATAL).	30-06-2025 to 05-07-2025
		IOT APPLICATIONS POWERED BY AI	SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY (ATAL).	07-07-2025 to 12-07-2025
4	MR. A ARAVIND	QUANTUM COMPUTING:BUILDING A RAPID & SECURE INFORMATION	SIDHARTHA INSTITUTE OF TECHNOLOGY & SCIENCES(ATAL).	20-08-2025 to 22-08-2025

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		EMERGING TRENDS IN GREEN ENERGY FOR A SUSTAINABLE FUTURE	AURORA HIGHER EDUCATION AND RESEARCH ACADEMY (ATAL).	30-06-2025 to 05-07-2025
5	MS. N.LAVANYA	QUANTUM COMPUTING:BUILDING A RAPID & SECURE INFORMATION TOMORROW IN TELUGU	SIDHARTHA INSTITUTE OF TECHNOLOGY & SCIENCES(ATAL).	20-08-2025 to 22-08-2025
		NPTEL E-AWARENESS WORKSHOP	NNRG,IIT, MADRAS.	25-07-2025
6	MS. K. ANURADHA	SEMI-TECH: SEMICONDUCTOR INNOVATION & TECHNOLOGY FOR NEXT-GEN ELECTRONICS	SRM INSTITUTE OF SCIENCE AND TECHNOLOGY(ATAL).	18-08-2025 to 23-08-2025
		SECURE AND EXPLAINABLE GENERATIVE AI FOR MEDICAL IOT DATA ANALYTICS	NATIONAL INSTITUTE OF TECHNOLOGY PUDUCHERRY(ATAL).	25-08-2025 to 30-08-2025
7	MR. NITESH GAIKWAD	AI & ML-DRIVEN ROBOTICS: PERCEPTION, PLANNING, AND AUTONOMOUS CONTROL SYSTEM	MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT (ATAL).	28-07-2025 to 02-08-2025
8	MS. V V NANDINI	AI & ML-DRIVEN ROBOTICS: PERCEPTION, PLANNING, AND AUTONOMOUS CONTROL SYSTEM	MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT (ATAL).	28-07-2025 to 02-08-2025
9	MRS. SHIVA PRASANNA KANNAGULLA	AI AND CYBERSECURITY FOR A SUSTAINABLE FUTURE: INNOVATIONS IN	HINDUSTHAN COLLEGE OF ARTS AND SCIENCE(ATAL)	18-08-2025 to 23-08-2025

		HEALTH, AGRICULTURE		
	el el	NEXT-GEN COMMUNICATION AND IOT: ADVANCING THE CONNECTED FUTURE	SHADAN COLLEGE OF ENGINEERING AND TECHNOLOGY(ATAL).	25-08-2025 to 30-08-2025
		EMERGING TRENDS IN VLSI DESIGN FOR SIGNAL PROCESSING AND COMMUNICATION SYSTEMS	BRILLIANT INSTITUE OF ENGINEERING AND TECHNOLOGY(ATAL).	25-08-2025 to 30-08-2025
10	MR. ABRAHAM THOMAS	NEP 2020 ORIENTATION & SENSITIZATION PROGRAMME	NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL, MALAVIYA MISSION TEACHER TRAINING PROGRAMME OF UNIVERSITY GRANTS COMMISSION	23-07-2025 to 31-07-2025
11	MR. K. SRINIVAS	NPTEL E-AWARENESS WORKSHOP	NNRG,IIT MADRAS.	25-07-2025
		RECENT TRENDS IN VLSI DESIGN AND MODELING USING CADENCE TOOLS	VIGNANA BHARATHI INSTITUTE OF TECHNOLOGY (ATAL).	16-06-2025 to 21-06-2025
		NEP 2020 ORIENTATION & SENSITIZATION PROGRAMME	NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL, MALAVIYA MISSION TEACHER TRAINING PROGRAMME OF UNIVERSITY GRANTS COMMISSION	23-07-2025 to 31-07-2025
	8	NPTEL E-AWARENESS WORKSHOP	NNRG,IIT MADRAS	25-07-2025
12	PRASANNA ROBOTICS: IN	MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT (ATAL).	28-07-2025 to 02-08-2025	
		SECURE AND EXPLAINABLE GENERATIVE AI FOR MEDICAL IOT DATA ANALYTICS	NATIONAL INSTITUTE OF TECHNOLOGY PUDUCHERRY(ATAL).	25-08-2025 to 30-08-2025

	NEP 2020 ORIENTATION & SENSITIZATION PROGRAMME	NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL,MALAVIYA MISSION TEACHER TRAINING PROGRAMME OF UNIVERSITY GRANTS COMMISSION	23-07-2025 to 31-07-2025
	NPTEL E-AWARENESS WORKSHOP	NNRG,IIT MADRAS	25-07-2025
MS. SHETTY SRAVANTHI	AI & ML-DRIVEN ROBOTICS: PERCEPTION, PLANNING, AND AUTONOMOUS CONTROL SYSTEM	MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT (ATAL)	28-07-2025 to 02-08-2025
	SECURE AND EXPLAINABLE GENERATIVE AI FOR MEDICAL IOT DATA ANALYTICS	NATIONAL INSTITUTE OF TECHNOLOGY PUDUCHERRY(ATAL).	25-08-2025 to 30-08-2025
	NEP 2020 ORIENTATION & SENSITIZATION PROGRAMME	NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL,MALAVIYA MISSION TEACHER TRAINING PROGRAMME OF UNIVERSITY GRANTS COMMISSION	23-07-2025 to 31-07-2025
	NPTEL E-AWARENESS WORKSHOP	NNRG,IIT MADRAS	25-07-2025
MS. K. ROBOTICS: IN	MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT (ATAL)	28-07-2025 to 02-08-2025	
	SECURE AND EXPLAINABLE GENERATIVE AI FOR MEDICAL IOT DATA ANALYTICS	NATIONAL INSTITUTE OF TECHNOLOGY PUDUCHERRY(ATAL).	25-08-2025 to 30-08-2025
	MS. K.	& SENSITIZATION PROGRAMME  NPTEL E-AWARENESS WORKSHOP  AI & ML-DRIVEN ROBOTICS: PERCEPTION, PLANNING, AND AUTONOMOUS CONTROL SYSTEM  SECURE AND EXPLAINABLE GENERATIVE AI FOR MEDICAL IOT DATA ANALYTICS  NEP 2020 ORIENTATION & SENSITIZATION PROGRAMME  NPTEL E-AWARENESS WORKSHOP  AI & ML-DRIVEN ROBOTICS: PERCEPTION, PLANNING, AND AUTONOMOUS CONTROL SYSTEM  SECURE AND EXPLAINABLE GENERATIVE AI FOR MEDICAL IOT DATA	& SENSITIZATION PROGRAMME  TECHNOLOGY WARANGAL,MALAVIYA MISSION TEACHER TRAINING PROGRAMME OF UNIVERSITY GRANTS COMMISSION  NPTEL E-AWARENESS WORKSHOP  AL & ML-DRIVEN ROBOTICS: PERCEPTION, PLANNING, AND AUTONOMOUS CONTROL SYSTEM  SECURE AND EXPLAINABLE GENERATIVE AI FOR MEDICAL IOT DATA ANALYTICS  NATIONAL INSTITUTE OF TECHNOLOGY PUDUCHERRY(ATAL).  NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL,MALAVIYA MISSION TEACHER TRAINING PROGRAMME OF UNIVERSITY GRANTS COMMISSION  NPTEL E-AWARENESS WORKSHOP  AL & ML-DRIVEN ROBOTICS: PERCEPTION, PLANNING, AND AUTONOMOUS CONTROL SYSTEM  NATIONAL INSTITUTE OF TECHNOLOGY AND MANAGEMENT (ATAL)  SECURE AND EXPLAINABLE GENERATIVE AI FOR MEDICAL IOT DATA  NATIONAL INSTITUTE OF TECHNOLOGY PUDUCHERRY(ATAL).

		NEP 2020 ORIENTATION & SENSITIZATION PROGRAMME	NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL,MALAVIYA MISSION TEACHER TRAINING PROGRAMME OF UNIVERSITY GRANTS COMMISSION	23-07-2025 to 31-07-2025
		NPTEL E-AWARENESS WORKSHOP	NNRG,IIT MADRAS	25-07-2025
15	MS.MH SUSHMA MERCILIN	AI & ML-DRIVEN ROBOTICS: PERCEPTION, PLANNING, AND AUTONOMOUS CONTROL SYSTEM	MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT (ATAL).	28-07-2025 to 02-08-2025
		SECURE AND EXPLAINABLE GENERATIVE AI FOR MEDICAL IOT DATA ANALYTICS	NATIONAL INSTITUTE OF TECHNOLOGY PUDUCHERRY(ATAL).	25-08-2025 to 30-08-2025
	MS. K	NPTEL E-AWARENESS WORKSHOP	NNRG,IIT MADRAS	25-07-2025
16	HEMALATHA	MACHINE LEARNING	BITS PILANI	17-07-2025 to 18-07-2025

### JULY-AUGUST 2025 MONTH ACHIEVEMENTS

### **5.STUDENTS ACHIEVEMENTS**

### **IV YEAR'S**

S.N o	Roll No and Student Name	Name of the Organization	Date(s)	Topic Name
1	227Z1A0492 K.ANVARSHA	IBM SKILLSBUILD	24-JULY- 2025	WEB DEVELOPMENT FUNDAMENTALS
2	227Z1A0498 M.SRAVIKA	IBM SKILLSBUILD	24-JULY- 2025	WEB DEVELOPMENT FUNDAMENTALS
3	227Z1A04A8 MD.AFREEN	IBM SKILLSBUILD	24-JULY- 2025	WEB DEVELOPMENT FUNDAMENTALS
4	227Z1A04B1 NALLA VIGNESH REDDY	IBM SKILLSBUILD	25-JULY- 2025	WEB DEVELOPMENT FUNDAMENTALS
5	227Z1A04B4 N.MANIDEEP REDDY	IBM SKILLSBUILD	25-JULY- 2025	WEB DEVELOPMENT FUNDAMENTALS
6	227Z1A04B5 N.YASHWANTH REDDY	IBM SKILLSBUILD	31-JULY- 2025	CLICK,CODE,CREATE: BEGINNER'S GUIDE TO WEB DEVELOPMENT 2025-26
7	227Z1A04B6 N.RATISH	IBM SKILLSBUILD	24-JULY- 2025	WEB DEVELOPMENT FUNDAMENTALS
8	227Z1A04B7 N.SRINU	INFOSYS LMTED	23-JULY- 2025	BASICS OF PYTHON
9	227Z1A04F0 U.BHARGAVAI	IBM SKILLSBUILD	25-JULY- 2025	MASTERING THE ART OF PROMPTING

10	227Z1A04I2 V.VAISHNAVI	IBM SKILLSBUILD	25-JULY- 2025	MASTERING THE ART OF PROMPTING
11	227Z1A04G9 T.REVATHI	IBM SKILLSBUILD	25-JULY- 2025	MASTERING THE ART OF PROMPTING
12	227Z1A04J0 J.MADHAVI	IBM SKILLSBUILD	12-JULY- 2025	FROM LEARNER TO BUILDE:AN AI AGENT ARCHITECT
13	227Z1A04J1 V.RAMYA REDDY	FORAGE FOUNDATIONS	26-JULY- 2025	CAREER EXPLORER JOB SIMULATION
14	227Z1A04J1 V.RAMYA REDDY	FORAGE FOUNDATIONS	28-JULY- 2025	DATA SCIENCE JOB SIMULATION
15	227Z1A04J1 V.RAMYA REDDY	DELOITTE	28-JULY- 2025	DATA ANALYTICS JOB SIMULATION
16	227Z1A04J1 V.RAMYA REDDY	IBM SKILLSBUILD	25-JULY- 2025	MASTERING THE ART OF PROMPTING
17	237Z5A0401 AKKALA SRUTHI	IBM SKILLSBUILD	24-JULY- 2025	MASTERING THE ART OF PROMPTING
18	237Z5A0403 CHATRAGADDA SWETHA	IBM SKILLSBUILD	25-JULY- 2025	MASTERING THE ART OF PROMPTING
19	237Z5A0404 DUMMU KOWSIK	IBM SKILLSBUILD	25-JULY- 2025	MASTERING THE ART OF PROMPTING
20	237Z5A0409 I CHAITHANYA RAO	IBM SKILLSBUILD	10-JULY- 2025	FROM LEARNER TO BUILDE: AN AI AGENT ARCHITECT
21	237Z5A0408 INDRAKANTI ANU	IBM SKILLSBUILD	24-JULY- 2025	MASTERING THE ART OF PROMPTING
22	237Z5A0409 I CHAITHANYA RAO	IBM SKILLSBUILD	10-JULY- 2025	GETTING STARTED WITH ARTIFICIAL INTELLGENCE

23	237Z5A0410 K.VIDYA SAGAR	IBM SKILLSBUILD	24-JULY- 2025	MASTERING THE ART OF PROMPTING
24	237Z5A0411 LAKKAM SRIVIDYA	IBM SKILLSBUILD	24-JULY- 2025	MASTERING THE ART OF PROMPTING
25	237Z5A0412 NALLA HARSHITHA	IBM SKILLSBUILD	24-JULY- 2025	MASTERING THE ART OF PROMPTING
26	237Z5A0415 RANGA DEEPSHIKA	IBM SKILLSBUILD	23-JULY- 2025	MASTERING THE ART OF PROMPTING
27	237Z5A0419 SINGAPAGA BHARATH	IBM SKILLSBUILD	24-JULY- 2025	MASTERING THE ART OF PROMPTING
28	237Z5A0420 TUMMA VIKRAM REDDY	IBM SKILLSBUILD	24-JULY- 2025	MASTERING THE ART OF PROMPTING

### **III YEAR'S**

S.No	Roll No and Student Name	Name of the Organization	Date(s)	Topic Name
1	237Z1A04B7 M.AISHWARYA	IBM SKILLSBUILD	05-AUG-2025	MASTERING THE ART OF PROMPTING
2	237Z1A04B9 M.GURUNATH REDDY	IBM SKILLSBUILD	22-JULY-2025	MASTERING THE ART OF PROMPTING
3	237Z1A04B9 M.GURUNATH REDDY	TO THE STREET ST		PYTHON
4	237Z1A04B9 M.GURUNATH REDDY	RELIANCE FOUNDATION	23-JULY-2025	IOT NETWORK SPECIALIST CERTIFICATE PROGRAMME
5	237Z1A04B9 M.GURUNATH REDDY	INFOSYS	26-JULY-2025	IOT EDGE COMPUTING AND IOT ANALYTICS
6	237Z1A04B9 M.GURUNATH REDDY	INFOSYS	26-JULY-2025	VLSI DIGITAL DESIGN -CHIP DESIGN AND VERILOG PROGRAMMING
7	237Z1A04B9 M.GURUNATH REDDY	IBM SKILLSBUILD	06-AUG-2025	WEB DEVELOPMENT FUNDAMENTALS
8	237Z1A04B9 M.GURUNATH REDDY	RELIANCE FOUNDATION	25-JULY-2025	PYTHON PROGRAMMING
9	237Z1A04B9 M.GURUNATH REDDY	INFOSYS	28-JULY-2025	BASICS OF PYTHON
10	237Z1A04C2 N.SAI RAM	MICROSOFT	22-JULY-2025	PYTHON PROGRAMMING
11	237Z1A04C2 N.SAI RAM	INFOSYS	01-AUG-2025	IOT PLATFORMS OVERVIEW
12	237Z1A04C2 N.SAI RAM	INFOSYS	31-JULY-2025	BASICS OF PYTHON
13	237Z1A04C2 N.SAI RAM	RELIANCE FOUNDATION	03-AUG-2025	PYTHON FOR DATA SCIENCE
14	237Z1A04C2 N.SAI RAM	RELIANCE FOUNDATION	27-JULY-2025	IOT DOMAIN SPECIALIST CERTIFICATE COURSE
15	237Z1A04C2 N.SAI RAM	IBM SKILLSBUILD	22-JULY-2025	MASTERING THE ART OF PROMPTING
16	237Z1A04D0 N.SIDDHARATHA	IBM SKILLSBUILD	22-JULY-2025	MASTERING THE ART OF PROMPTING
17	237Z1A04D9 MADHURI P	IBM SKILLSBUILD	24-JULY-2025	MASTERING THE ART OF PROMPTING

18	237Z1A0465 G.DILIP RAGHU RAM	IBM SKILLSBUILD	4-JULY TO 7-AUG 2025	AGENTIC AI:FROM LEARNER TO BUILDER-BECOME AN AI AGENT ARCHITECT
19	237Z1A0404 A.SUSMITHA	IBM SKILLSBUILD	4-JULY TO 7-AUG 2025	AGENTIC AI:FROM LEARNER TO BUILDER-BECOME AN AI AGENT ARCHITECT
20	237Z1A0499 K.HARSHAVARDHAN REDDY	IBM SKILLSBUILD	25-JULY-2025	MASTERING THE ART OF PROMPTING
21	237Z1A04A8 LONKA BHARATH	IBM SKILLSBUILD	25-ЛИЦҮ-2025	MASTERING THE ART OF PROMPTING
22	237Z1A04D0 N.SIDDHARATHA	INFOSYS	28-ЛИЦҮ-2025	IOT EDGE COMPUTING AND IOT ANALYTICS
23	237Z1A04D0 N.SIDDHARATHA	NSDC	24-JULY TO 25-JULY 2025	AUTOMATE YOUR LIFE WITH AI
24	237Z1A04B9 M.GURUNATH REDDY	IBM SKILLSBUILD	20-JULY-2025	FISHY AI:GENERATING AI IMAGES
25	237Z1A04D4 OBALLOJU MAHIPAL	IBM SKILLSBUILD	05-AUG-2025	ARTIFICIAL INTELLIGENCE TUTORIAL
26	237Z1A0489 PRAVALIKA KATHULA	IBM SKILLSBUILD	24-JULY-2025	MASTERIMG THE ART OF PROMPTING
27	237Z1A04B2 BHAVYA SREE MARAGOWNI	IBM SKILLSBUILD	24-JULY-2025	MASTERIMG THE ART OF PROMPTING
28	237Z1A04D1 N.SRUJAN	IBM SKILLSBUILD	24-JULY-2025	MASTERIMG THE ART OF PROMPTING
29	237Z1A04C9 N.SHANKAR	EDU SKILLS ACADEMY	16-AUG-2025	ETHICAL HACKINGS
30	237Z1A04C9 N.SHANKAR	EDU SKILLS ACADEMY	04-AUG-2025	ARTIFICIAL INTELLIGENCE TUTORIAL

## 6.Campus and Recruitment Training Report



TheCampus and Recruitment Training (CRT) program Python Programming was conducted from 14th 2025 to 19th July Thetraining aimed to equip students with essential Python coding skills required for placement preparation. The sessions covered fundamental concepts such as variables, data types, operators, conditional statements, functions, arrays, strings, file handling, Lists. Tuples, Sets. Dictionaries. Python modules and Packages. Practical demonstrations were given, and students actively participated in coding exercises to strengthen their problem-solving skills.

Details of the Event: Trainers: PythonProgramming (9:15 AM to 12.50 PM)

1.Mrs.K.Hemalatha
2.Mrs.P.Kiranmayee
3.Mr.A.Aravind

Aptitude(9:15 AM to 12.50 PM)

Alongside programming training, aptitude sessions were conducted to enhance students' quantitative, logical, and verbal reasoning skills. These sessions included practice problems on arithmetic, algebra, probability, data interpretation, puzzles, and English comprehension. Special focus was given to solving problems within a limited time frame to prepare students for competitive placement tests.



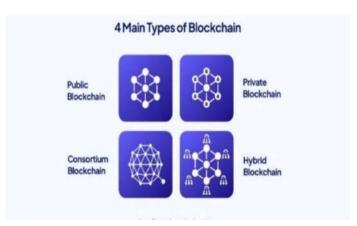
# Campus and Recruitment Training Report

It is Nalla Narasimha Reddy Engineering Education Society's Group of Institution's customary to conduct Campus Recruitment Training (CRT) every year for B. Tech III year students to enhance their skills in alignment with industry requirements. NNRG offers top-notch training, utilizing the Knowledge of experienced industry professionals. This training covers essential areas such as demanded Coding proficiencies by Multinational Corporations, Communication skills, Logical thinking, Problem solving, Interview preparation, Resume building and understanding employer expectations. TheCRT session conducted by ECE Department as follows: Forenoon: Coding (Python Programming programming) Afternoon: Aptitude In this regard, Python Programming training under CRT from 14/07/2025 to 19/07/202

# 7. FACULTY EDITORIAL COLUMN BLOCK CHAIN TECHNOLOGY

-BY MS.BINDHU THUSHARA, Assistant professor ECE DEPARTMENT

In today's advanced era, security becomes an important entity for all technical aspects and applications. From data transmission to accessing, reliability builds on security, hence making it a key feature for development. "BLOCKCHAIN TECHNOLOGY" is one such emerging mechanism that allows transparent information sharing within a business network. It has the potential to transform the engineering industry by improving security, transparency, and efficiency across various applications. In a simpler form, this technology is a centralized digital record maintaining system with constant sharing and updating of information for users in a network without giving control access. Each piece of information is added to the chain in the form of Blocks which cannot be altered, making it more secure and transparent way to track data. It is a Digital Ledger Technology (DLT) in which data is shared across multiple locations and participants.



### TYPES OF BLOCKCHAIN

There are four types of block chain networks: public, private, hybrid and consortium.

Public Blockchains: Open to anybody to take an interest and approve exchanges.

Private Blockchains: Restricted to particular members, frequently utilized by organizations for inside purposes.

Consortium Blockchains: A crossover show where a gather of organizations oversees the blockchain. It combines components of both open and private blockchains.

To begin with, let us have a glance on its evolution. Blockchain technology began with the introduction of Bitcoin in 2008, created by an anonymous figure or group known as Satoshi Nakamoto. It was designed as a decentralized digital currency to enable peer-to-peer transactions without the need for a trusted intermediary like a bank.

### BENEFITS OF BLOCKCHAIN

There are few benefits of using this blockchain technology which includes:

- \* Trust
- \* Security
- \* Traceability
- \* Efficiency

### **KEY FEATURES:**

Blockchain technology contains several key features that enhance security, transparency and efficiency in transactions and data management:

- \* Distributed ledger technology- all network users have access to the technology and transactions thus eliminating the duplication of data.
- \* Immutable records- once the transaction is recorded, no user can change or tamper the information. If any error occurs in the data, new transaction is created and then both transactions are then visible.
- \* Smart contracts- Smart contracts are self-executing agreements stored on the blockchain, where the terms are written in code and automatically executed when predefined conditions are met.
- \* Public key cryptography- It is a method used to secure transactions and data on the blockchain by leveraging two cryptographic keys: a public key and a private key. The public key serves as an address for receiving data, while the private key is a confidential key that grants control over the associated digital assets. The private key holder can authorize transactions, provide security and verify ownership, while the public key allows others to send funds or data to the correct address.

transactions as blocks, connecting the blocks, building irreversible chain and ensuring trust and immutability.

### 7.1 STUDENT EDITORIAL COLUMN

# Impact of Technology on Education

Technology plays a vital role in every sphere of life and Education. The advent of technology has deeply impacted the Educational scenario of the World. Technology is a gift of God. After the gift of life, it is perhaps the greatest of god's gifts. It is the mother of civilization, of arts.

It Technology has certainly changed the way has impacted the different facts of life. and redefined living. undoubtedly, technology plays an important role in every sphere of life. several mundare manual tasks can be automated, thanks to technology. Also many of the complex and critical processes can be carried out with ease and Efficiency with the help of modern technology. Thanks to the manifold positive effects of technology, the fields of Education and industry have undergone changed for major change a the better.

Computers and internet technology have revolution the field of education. The importance of technology in schools cannot be ignored. In fact, with the onset of computers in educattoo, it has become Easter for the teachers to render knowledge and for the students to grasp it computer technology is used to add a fun element to Education. An. And it goes without saying that the internet has endowed Education with interactiufty, interacthitty The computers offer interactive audio-visual media Powerpoint presentations and students in an interactive manner. The visual Effects provided by the animation and presentation software result in inviting provided by the animation and presentation software result in inviting greater interest from the students!. Moreover, these soft wards serve as visual alds to the teachers overhead projectors and screen facilitate simultaneous viewing of of 1 information by mary students These audio visual teaching alds have brought about marked improvements in Student attendence and attentiveness.

-Mr.MUKESH SALPALA 237Z1A04C0 III-ECE-B

## 8. ALMA CORNER

Organized by: Nalla Narasimha Reddy Education Society's Group of Institutions – Integrated Campus

Department: School of Engineering, Department of Electronics & Communication Engineering

Event Name: Alma Connect

Date: 26th August 2025 Time: 11:30 AM Venue: ECE Seminar Hall

The Department of Electronics & Communication Engineering at Nalla Narasimha Reddy Group of Institutions (NNRG) hosted the "Alma Connect" event on 26th August 2025. This event aimed to foster interaction between senior and junior students, enabling knowledge exchange, networking, and career guidance. Total 97 Fourth Year ECE Students were attended this program.

As part of this program, our alumnus

Mr. Veeramreddy Mahith Reddy (207Z1A04D3), currently working as a Process Associate at Genpact, was invited to interact with the present students. He has been associated with Genpact since June 20, 2024 The session started at 11:30 AM, where Mr. Mahith and shared his professional journey, experiences, and Reddy addressed the gathering and emphasized the valuable insights with the students.







has been associated with Genpact since June 20, 2024 The session started at 11:30 AM, where Mr. Mahith and shared his professional journey, experiences, and Reddy addressed the gathering and emphasized the importance of skill development, adaptability, communication skills, and industry exposure. He also motivated students to make the best use of academic opportunities and guided them on preparing for the transition from campus to corporate life.

The interaction was highly engaging and beneficial, as students had the opportunity to clarify their queries regarding career growth, interview preparation, and workplace expectations. The alumni's success story and practical advice inspired the students to work with dedication and confidence.

The department expresses its gratitude to Mr. Mahith Reddy for taking time from his professional commitments to support and motivate his juniors. The event was coordinated smoothly and concluded on a positive note, fostering a stronger bond between alumni and the institution.

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## **8.1 ALMA REFLECTION**



I, Ibrahim, graduated in 2023 and am presently working as an Associate Java Developer at Tech Mahindra. Being an alumnus of this prestigious institution fills me with immense pride. My time at college was instrumental in shaping my technical knowledge and professional outlook.

The curriculum, combined with practical exposure, helped me build confidence and adaptability in the corporate world. I truly value the continuous guidance, motivation, and support provided by the faculty members. The encouraging environment inspired me to explore, innovate, and strive for excellence. I am sincerely grateful to the Department of Electronics and Communication Engineering for providing the knowledge and guidance that shaped my professional journey.