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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Volume - 02, Issue- 01 * ECE NEWS * (Half yearly News Letter Jan - June 2021

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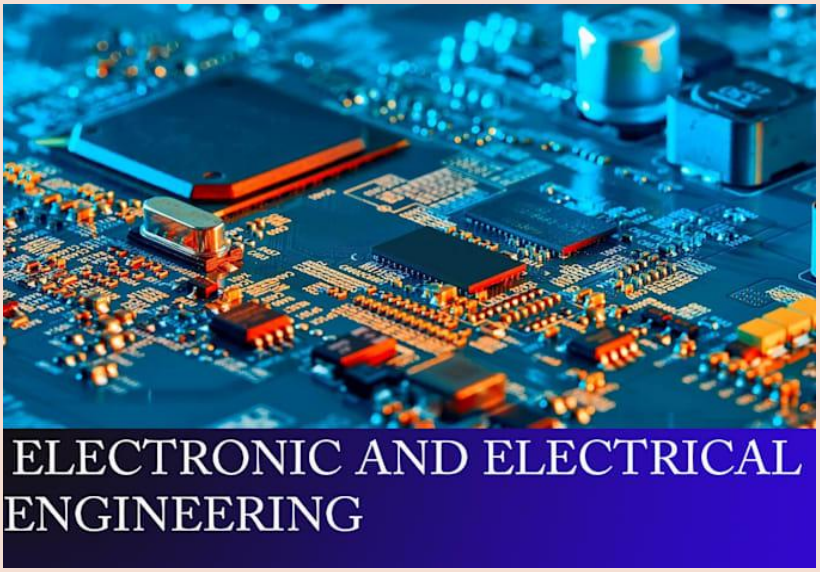
NEWS LETTER

ECE NEWS



Department of

Electronics and Communication Engineering

January - June 2021 **Volume - 02, Issue - 01**

ABOUT ECE DEPARTMENT

The Department of Electronics & Communication Engineering aims to impart value-based technical education and train students to become well-rounded engineers. Since its inception in the academic year 2008-09 with an initial intake of 60 students, the department has grown significantly. The current intake of the ECE department is 180 students. The department boasts faculty strength of 53 well-qualified, experienced, and dedicated postgraduates, including 11 doctorates, with some faculty members currently pursuing Ph.D.s in various streams.

VISION OF THE DEPARTMENT

To be a pioneer in Electronics and Communication Engineering and research, promoting entrepreneurship and delivering innovative solutions to societal needs

MISSION OF THE DEPARTMENT

M1: To provide a strong foundation in Electronics and Communication Engineering, preparing students to tackle emerging technological challenges.

M2: To drive research in Electronics and Communication Engineering that delivers innovative solutions to societal needs.

M3: To promote lifelong learning, empowering students to adapt to the evolving technological advancements

Program Educational Objectives (PEO's):

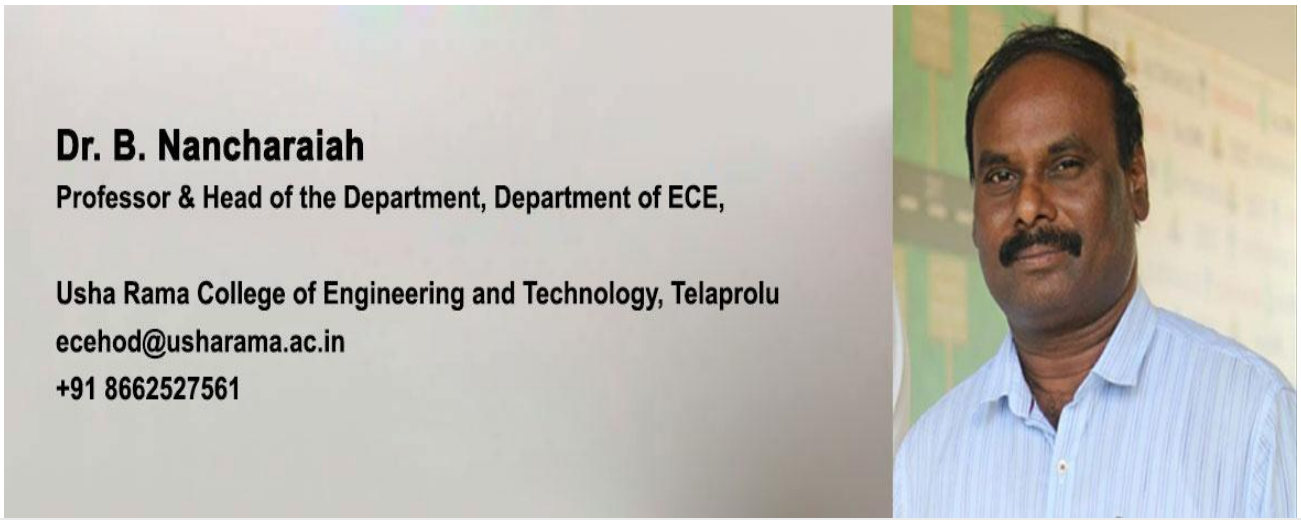
The following are the Programme Educational Objectives (PEO's) for Electronics & Communication Engineering Under-Graduate Programme.

PEO 1: Exhibit continuous growth in technical expertise and leadership within the engineering field, while upholding professional ethics.

PEO 2: Communicate effectively and manage resources skillfully as members and leaders of the profession

PEO 3: Commit to continuous learning and adapt to emerging technologies to meet the evolving needs of society.

MESSAGE FROM HOD



Dr. B. Nancharaiah received his B.E. degree in Electronics and Communication Engineering in 1999 from SRKR Engineering College, Bhimavaram, affiliated to Andhra University, India. He obtained his M.Tech degree in Electronics and Communication Engineering in 2003 from Pondicherry Engineering College, Pondicherry Central University, India. He earned his Ph.D. degree in Wireless Communications and Networks in 2017 from JNTUH, Hyderabad, India.

Dr.B.Nancharaiah has been working as Professor and HOD in the Department of Electronics and Communication Engineering at Usha Rama College of Engineering and Technology, Telaprolu, Andhra Pradesh, India, since June 2018. With 23 years of teaching experience, he is a Life Member of ISTE and Fellow of IETE. He has published over 70 papers in reputable national and international journals and conferences. He is the author of two textbooks: Metaheuristic Algorithms in Wireless and Mobile Ad Hoc Networks and Antenna and Wave Propagation. His research interests include wireless communications, networks, and IoTs.

Our department is committed to providing quality education and training to our students, enabling them to excel in their chosen careers. We strive to create a stimulating learning environment that fosters innovation, creativity, and critical thinking. Our faculty members are dedicated professionals with expertise in their respective areas, and we are proud of our strong industry partnerships that provide opportunities for internships, projects, and placements.

Best regards,
Dr.B.Nancharaiah
Head, Department of Electronics and Communication Engineering

Program Specific Outcomes (PSOs):

PSO1: Develop electronics and communication systems in VLSI, embedded systems, signal processing, and RF communications using advanced tools.

PSO2: Apply ECE knowledge to design, develop, and test systems, considering societal, environmental, ethical, and economic factors.

Program Outcomes (POs):

Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary setting

Research paper publications

SCI/SCIE	Web of Science	Scopus	UGC	Others
		2	-	-

1. Dr. B. Nancharaiah, Professor, published a paper titled "Efficient MOSFET Utilization of ALU for High Speed Applications" in the Turkish Journal of Computer and Mathematics Education (Scopus indexed, international) in June 2021.
2. K. Babu Rao, Associate Professor, presented a paper titled "Latency Based Re-Enforcement Learning over Cognitive Software Defined 5G Networks" at the 7th International Conference on Advanced Computing and Communication Systems (ICACCS), 2021 (Scopus indexed, international) in June 2021.

FDP/Seminars/Webinars/workshops/STTP Attended/ Conducted

Faculty Development Programs Conducted

Artificial Intelligence and Machine Learning

The week-long virtual workshop on "Artificial Intelligence and Machine Learning," held from January 18 to January 23, 2021, attracted 107 participants eager to deepen their understanding of these transformative technologies. The sessions were conducted by esteemed professors Dr. P. Ammi Reddy from Vasireddy Venkatadri Institute of Technology, Dr. K. Sriharirao from NRI Institute of Technology, and Dr. Rambabu Busi from Lakireddy Bali Reddy College of Engineering. The program covered foundational concepts and practical applications of AI and ML, equipping attendees with essential knowledge and skills to explore advanced topics and real-world implementations in the field of electronics and communication engineering.

Emerging Trends in Nano technology and its Applications:

The week-long offline workshop on "Emerging Trends in Nanotechnology and its Applications," held from February 23 to March 1, 2021, was attended by 77 participants. The program featured expert speakers including Dr. Poornaiah Billa from Lakireddy Bali Reddy College of Engineering, Dr. K. Naga Prakash from Gudlavalleru Engineering College, and Dr. B. Saidaiah from NRI Institute of Technology.

The workshop provided a comprehensive overview of the latest advancements in nanotechnology, focusing on its applications across various engineering fields, thereby equipping attendees with a deeper understanding of the technology's potential and practical uses.

Internet of Things (IoT): Fundamentals, Applications, and Challenges:

Conducted virtually from March 3 to March 30, 2021, this one-week workshop on "Internet of Things (IoT): Fundamentals, Applications, and Challenges" attracted 147 participants. The sessions were led by Dr. Rambabu Busi and Dr. Poornaiah Billa from Lakireddy Bali Reddy College of Engineering, along with Dr. Ch. Bala Swamy from Gudlavalleru Engineering College. The program covered foundational IoT concepts, explored diverse applications, and addressed key challenges, helping participants gain valuable insights into the evolving IoT ecosystem and its impact on modern technology.

FDP(Online)On Obe And Nep 2020:

The six-day online Faculty Development Program on "Outcome-Based Education (OBE) and National Education Policy (NEP) 2020," held from May 24 to May 29, 2021, was attended by 89 participants. The program featured distinguished faculty including P. Suresh Varma from Adi Kavi Nannaya University, Dr. P. S. Rama Srikanth from Acharya Nagarjuna University, and Dr. Ch. Santhi Rani from Usharama College of Engineering & Technology. This FDP aimed to familiarize educators with the principles of OBE and the reforms introduced by NEP 2020, empowering them to effectively implement these frameworks to enhance teaching quality and student outcomes.

Faculty Development Programmes Attended

1. Dr. Nitya Kanakamedala, Professor, attended the Faculty Development Programme on "Internet of Things" organized by E&ICT Academy, IIT Guwahati, from 24th to 30th January 2022 (6 days).
2. Ms. Raja Kumari Motupalli, Assistant Professor, successfully completed the Faculty Development Programme on "Machine Learning Algorithms for Dead Time Systems" organized by Geethanjali College of Engineering, Hyderabad, from 24th to 29th January 2022 (6 days), and also participated in the Short-Term Training Programme on "Design Thinking and Innovations" conducted by NRI Engineering College, Agiripalli, from 7th to 13th January 2022 (7 days).

3. Mr. Suresh Pothuraju, Assistant Professor, participated in the Faculty Development Programme on "Machine Learning Algorithms for Dead Time Systems" organized by Geethanjali College of Engineering, Hyderabad, from 24th to 29th January 2022 (6 days).

Students Participation in Inter College Competitions

Student	Name of the Event	Name of the Organization	Date of the Event	Prize
Aarumilli Chaitanya Kumar	Project expo	NRI Institute of Technology	4 June 2021	First place
Golla Chandra Sekhar	Coding	NRI Institute of Technology	4 June 2021	Second place
Movva Naga Vaishnavi	Paper Presentation	SRK Institute of Technology	4 June 2021	Third place
Reddy Srinu	Project expo	NRI Institute of Technology	4 June 2021	Third Place
J Ram Charan	Project expo	NRI Institute of Technology	4 June 2021	Second Place

Editorial Members

Chief Editors

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