

PBR VISVODAYA INSTITUTE OF TECHNOLOGY AND SCIENCE



KAVALI, NELLORE (Dist.)

ELECTRONICA Newsletter

VOLUME 8

JUL - DEC 2022

DEPARTMENT OF

ELECTRONICS AND COMMUNICATION ENGINEERING Editorial Board Members

Editor-in-Chief

Mrs. R. Sravanthi, Assoc. Professor & Head of Dept., ECE

Faculty Editors

Dr. MD Hayath Rajvee, Professor Mr. Sk. Rasool, Assistant Professor

Student Editors

P. Meghana (19731A0431) G. Jagadeesh (20731A0470)



Department of Electronics And Communication Engineering ELECTRONICA

NEWSLETTER

JUL - DEC 2022

EDITORIAL BOARD

EDITOR-IN-CHIEF

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FACULTY EDITORS

Dr. MD Hayath Rajvee, Professor Mr. Sk. Rasool, Assistant Professor STUDENT EDITORS

P. Meghana (19731A0431)
G. Jagadeesh (20731A0470)

INSTITUTE: VISON & MISSION

Vision of the Institute:

To be a premier center of learning in Engineering and Management education that evolves the youth into dynamic professionals with a social commitment

Mission of the Institute:

M1: To provide quality teaching- learning practices in engineering and management education by imparting core instruction and state-of-the-art infrastructure.

M2: To engage the faculty and students in acquiring competency in emerging technologies and research activities through Industry Institute Interaction.

M3: To foster social commitment in learners by incorporating leadership skills and ethical values through value-based education

Program Educational Objectives (PEOs)

PEO-I: Graduates will have the capabilities to analyze, design and develop innovative solutions for the problems in the field of Electronics and Communication Engineering using core competencies.

PEO-II : Graduates will have the ability to engage themselves in research and lifelong learning to achieve professional excellence.

PEO-III: Graduates will have successful career with leadership qualities, ethics and good communication skills in Electronics and Communication Engineering and related fields.



DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

DEPARTMENT PROFILE

- * The Department of Electronics and Communication Engineering (ECE) was established in the years 1998–99 with an intake of 60 and currently running with an intake of 360. It is 24 years old now and one of the most well-established departments in our Institution. It is also offering one post graduate programme with the specialization of VLSI Design with an intake of 30 students.
- * The Department is known for its esteemed faculty members who are renowned for their path- breaking contributions in the field of electronics and communications. It is well equipped with laboratories, audio-visual facilities and software tools such as Multi Sim, Model Sim, Lab View, HFSS, MATLAB, and Xilinx.
- * We offer our students an excellent educational experience that combines intellectual rigor and cross-disciplinary breadth. The course contents are periodically updated to introduce new scientific and technological developments. Electronic design, communication technologies, hands-on programming, a research focus, and entrepreneurship skills are all part of our signature educational curriculum. The ECE domain is often regarded as a challenging culmination of hardware and software. Our curriculum focuses primarily on the knowledge and skills that emerging engineers need.

DEPARTMENT: VISON & MISSION

Vision:

To produce technically competent and research oriented Electronics and Communication Engineers to meet the Industrial and Social requirements.

Mission:

M1: To impart quality technical education in the field of Electronics and Communication Engineering through state-of-the art facilities and effective teaching learning process.

M2: To enrich the faculty and students with research and consultancy skills through Industry-Interaction and Training in Emerging areas of Electronics and Communication Engineering.

M3: To develop lifelong learning, leadership qualities and ethical values in learners to meet the societal and industrial needs.



PROGRAM OUTCOMES (POs)

- 1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

- 11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- 12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSOs)

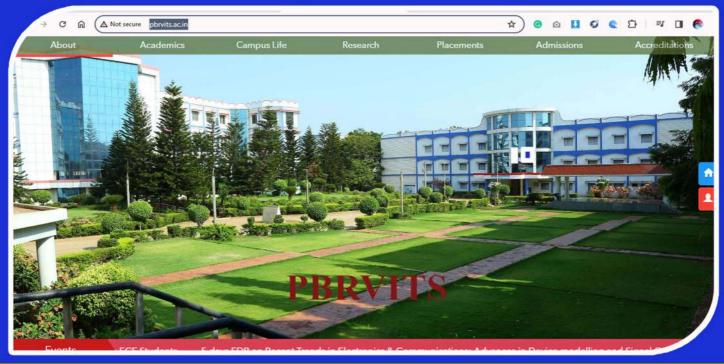
- PSO-1: Graduates will be able to design and analyze Image Processing and Communication Systems concepts using appropriate tools.
- PSO-2: Graduates will be able to design and develop solutions for real world problems by applying the concepts of VLSI and Embedded Systems.

P.B.R. VISVODAYA INSTITUTE OF TECHNOLOGY & SCIENCE



DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

College Website: www.pbrvits.ac.in



FACULTY DETAILS

S.No.	Name	Designation	Qualification
1	Dr. DODLA PRATHYUSHA REDDI	Professor	ME/M. Tech and PhD
2	Dr. AVULA MAHESWARA RAO	Professor	ME/M. Tech and PhD
3	Dr. S.V. SUBBA RAO	Professor	ME/M. Tech and PhD
4	Dr. A S VISWANADHA SARMA	Professor	ME/M. Tech and PhD
5	Dr. N. SATHEESH KUMAR	Professor	ME/M. Tech and PhD
6	Dr. V PAKASAM	Professor	ME/M. Tech and PhD
7	Dr. R M VENKATESEN	Professor	ME/M. Tech and PhD
8	Dr. MD HAYATH RAJVEE	Professor	ME/M. Tech and PhD
9	Dr. S M LAKSHMI	Professor	ME/M. Tech and PhD
10	Dr. S PENCHALA REDDY	Professor	ME/M. Tech and PhD
11	Mrs.RAVI SRAVANTHI	Associate Professor	M.E/M. Tech
12	Mr. DODLA LIKHITH REDDY	Associate Professor	ME/M. Tech and PhD
13	Mr. VEMURU PHANIBHSHAN	Assistant Professor	M.E/M. Tech
14	Mr. ARAVA SUMAN KUMAR REDDY	Assistant Professor	M.E/M. Tech
15	Mr. RAMRAJSINGH PRATHAP SINGH	Assistant Professor	M.E/M. Tech
16	Ms. MODI PAVITHRA	Assistant Professor	M.E/M. Tech
17	Ms. MUSALI SUREKHA	Assistant Professor	M.E/M. Tech
18	Mr. V BHARATH KUMAR	Assistant Professor	M.E/M. Tech
19	Mr. M RAMA MOHAN REDDY	Assistant Professor	M.E/M. Tech
20	Mr. VANTERU NARAYNA REDDY	Assistant Professor	M.E/M. Tech
21	Mr. AKURATHI SRINIVASA RAO	Assistant Professor	M.E/M. Tech
22	Mr. L.M.L. NARAYANA REDDY	Assistant Professor	M.E/M. Tech
23	Mr. LALLAM VASU	Assistant Professor	M.E/M. Tech
24	Mr. SK RASOOL	Assistant Professor	M.E/M. Tech
25	Mr. M VENKATA RATHNAM	Assistant Professor	M.E/M. Tech
26	Dr. RAYALA RANJIT KUMAR	Associate Professor	ME/M. Tech and PhD
27	Mr. ALLA VENKA REDDY	Assistant Professor	M.E/M. Tech
28	Mr. M SREEHARI	Assistant Professor	M.E/M. Tech
29	Ms. JAGANNADAM SUJITHA	Assistant Professor	M.E/M. Tech
30	Mr. GAJULAPALLE SIVANJANEYA REDDY	Assistant Professor	M.E/M. Tech
31	Ms. KAMEPALLI UMA	Assistant Professor	M.E/M. Tech
32	Mr. P SREENIVASULU	Assistant Professor	M.E/M. Tech
33	Mrs. A NAGAMALLI	Assistant Professor	M.E/M. Tech

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34	Mr. K PENCHALAIAH	Assistant Professor	M.E/M. Tech
35	Mrs. SHAIK NAZMA SULTHANA	Assistant Professor	M.E/M. Tech
36	Ms. SYED SHAMARSULTHANA	Assistant Professor	M.E/M. Tech
37	Mr. G V S BHARDWAJ	Assistant Professor	M.E/M. Tech
38	Mrs. SK JABEENA	Assistant Professor	M.E/M. Tech
39	Mr. G MALYADRI	Assistant Professor	M.E/M. Tech
40	Mrs. P SASITHA	Assistant Professor	M.E/M. Tech
41	Mr. V ANJAIAH	Assistant Professor	M.E/M. Tech
42	Mr. K RAVICHANDRA	Assistant Professor	M.E/M. Tech
43	Mr. CH PAVAN KUMAR	Assistant Professor	M.E/M. Tech
44	Mr. SHAIK JAGADEESH	Assistant Professor	M.E/M. Tech
45	Mrs. P SHALINI	Assistant Professor	M.E/M. Tech
46	Mr. K RAVI BABU	Assistant Professor	M.E/M. Tech
47	Mrs. SHAIK AFRIN	Assistant Professor	M.E/M. Tech
48	Mrs. K S BHANU REKHA	Assistant Professor	M.E/M. Tech
49	Mrs. V LAKSHMI	Assistant Professor	M.E/M. Tech
50	Mr. A PHANI KRISHNA SARMA	Assistant Professor	M.E/M. Tech
51	Mrs. P SWATHI	Assistant Professor	M.E/M. Tech
52	Mr. G MANGARAO	Assistant Professor	M.E/M. Tech
53	Mrs. C V KAVYA SUVARCHALA	Assistant Professor	M.E/M. Tech
54	Mr. P VENKATESWARLU	Assistant Professor	M.E/M. Tech
55	Mrs. M MADHULIKA	Assistant Professor	M.E/M. Tech
56	Mr. K ASHOK KUMAR	Assistant Professor	M.E/M. Tech

FACULTY PUBLICATIONS

S. No	Title of paper	Name of the author/s	Name of journal	ISSN number
1	Using DC Current and Distribution Factor to Identify Potential Breakdown Sources in Power Systems	A. Suman Kumar Reddy	History of Medicine Studies	1300-669
2	Including a variety of riders and rides into the dial-a-ride concept and algorithm	Dr. D. Prathyusha Reddi	(IJBAR)	2249-3352
3	Amplify-and-forward multiple- input multiple-output (MIMO) relay channel with incomplete channel state information; joint linear processing	Dr. M Venkatesan	(IJBAR)	2249-3352

4	The Case of the Operating Mode of the Skipper-II Parallel Programming Environment for Handling Algorithmic Skeleton Nesting Requirements in Real-World Image Processing Applications	Dr. S.V. Subba Rao	(IJBAR)	2277-2685
5	Small-scale compressed air energy storage systems with maximum efficiency or power tracking	G. Malyadri	(IJBAR)	2277-2685
6	Observing Occlusion's Impact on Kernel-Based Object Tracking in Virtual Reality	K Ashok Kumar	(IJBAR)	229-6107
7	Constrained MIMO radar waveform design by peak and total power	K S Bhanu Rekha	(IJBAR)	229-6107
8	Improvements in data transfer rates and energy efficiency through opportunistic relaying in residential power networks	Syed Samar Sulthana	(JST)	2456-5660
9	Multi-Terminal Direct Current (DC) Networks for Grid Integration of Offshore Wind Farms: Operation and Power Flow Control Using Genetic Algorithms	M Sreehari	(JST)	2456-5660
10	COVID-19 Infection Control Using a Cloud-Based IOT And Block chain Model	Lallam Vasu	History of Medicine Studies	1300-669
11	Internet of Things Program Tracks and Records Electric Motor Temperature Data	Dr. A S Viswanadha Sarma	YIDDISH	0364-4308
12	Robot With IOT And Smart Gloves	Dr. D. Prathyusha Reddi	YIDDISH	0364-4308
13	Patient Health Monitoring with Internet of Things with ESP8266 and	CH. Pavan Kumar	(JST)	2456-5660
14	Using the K-Nearest Neighbor and Moth Blade Optimization Algorithm to Identify Malicious Sessions in IOT Networks	K. Uma	(JST)	2456-5660
15	An Affordable Robotics Learning Environment Built on Open- Source Hardware and 3D Printers	P Sasitha	(IGPAST)	2229-6107
16	Using a Convolutional Neural Network to Identify Malnutrition	P Shallini	(IGPAST)	2229-6107
17	Using Static and Dynamic Analysis, We Can Now Precisely Estimate the Average Age of IOT Malware Exploits	V Bharath Kumar	Applied GIS	1832-5505

18	Quantum dot cellular automata with a reversible ALU: a novel design and simulation	R Sravanthi	Applied GIS	1832-5505
19	Comparing DWT-SVD with RDWT-SVD for Robust Watermarking Performance	SK Jagadeesh Babu	Applied Laser Technology	1000- 372X
20	The Use of Motion Detection in Real-Time Video Surveillance	V Anjaiah	Applied Laser Technology	1000- 372X
21	creation of a Sensor Network and Mobile Agent-based System for Monitoring the Condition of Equipment Rooms	Dr. A S Viswanadha Sarma	(JBT)	0976-0172

NPTEL COURSES

- 1. NPTEL Certificate Course entitled "Principle and Techniques of Modern Radar Systems" authored by Mrs. P. Sasitha, Assistant Professor, Department of ECE during Jul- Oct 2022, from IIT Kharagpur.
- 2. NPTEL Certificate Course entitled "Principle and Techniques of Modern Radar Systems "authored by Mrs. C V Kavya Suvarchala, Assistant Professor, Department of ECE during Jul- Oct 2022, from IIT Kharagpur.
- 3. NPTEL Certificate Course entitled "Electromagnetic Theory" authored by Mr. A. Srinivasa Rao, Assistant Professor, Department of ECE during Jul- Oct 2022, from IIT Kanpur.

ACADEMIC TOPPERS

Heartiest Congratulations to the Toppers the Management, Principal, Faculty & Students of ECE Dept., are happy to congratulate the students for proving their excellence in the Examinations for the A.Y. 2022-2023, conducted by P.B.R. VISVODAYA INSTITUTE OF TECHNOLOGY & SCIENCE (AUTONOMOUS).

(I B. TECH, II-SEM, 2021 BATCH)

I B. Tech, II-Sem				
S. No	Roll Number	Name	Percentage(%)	Rank
1	21731A04F6	KONDA MANJU	91.29	I
2	21731A04F7	KARRA VISHNU VARDHAN REDDY	92.26	11
3	21731A04F8	RACHARLA RENUKA	91.18	III

Heartiest Congratulations to the Toppers the Management, Principal, Faculty & Students of ECE Dept., are happy to congratulate the students for proving their excellence in the University Examinations for the A.Y. 2022-2023, conducted by JNTUA, Ananthapur.

II B. TECH, II-SEM, 2020 BATCH)

	II B. Tech, II-Sem				
S. No	Roll Number	Name P	ercentage(%)	Rank	
1	20731A0452	UPPALAPATI BHANU 8	3.7	1	
2	20731A04I5	CHITTETI RUSHENDRA 8	3.1	II	
3	20731A0428	KOMMI PALLAVI 8	3	III	

II B. TECH, II-SEM, 2020 BATCH)

	III B. Tech, II-Sem				
S. No	Roll Number	Name	Percentage(%)	Rank	
1	19731A0402	BADE MANASA	86.63	1	
2	19731A0403	BANKA SRI KEERTHI	86		
3	19731A0476	YAMARTHI TEJASWI	85.78	Ш	

II B. TECH, II-SEM, 2020 BATCH)

	IV B. Tech, II-Sem				
S. No	Roll Number	Name	Percentage(%)	Rank	
1	18731A04A2	VUDUMULA YAMUNA	91.8	į į	
2	18731A0479	KASARAM SANDHYA	91	II	
3	18731A0438	AADI SARANYA	90.4	Ш	

CERTIFICATE COURSES

AMAZON WEB SERVICES

A Certificate Course was organized by the department of ECE on "Employability Skills" on behalf of Soft Skill Trainer, Nandi Foundation, Andhra Pradesh which is held from 17.10.2022 to 22.10.2022. In this program 100 students and 02 faculty members were attended. The experts for this program SK. Mehaboob Subhani from Nandi Foundation, Andhra Pradesh delivered lecture on importance of Employability Skills.





Employability Skills can be defined as the transferable skills needed by an individual to make them 'Employable', Along with good technical understanding &subject knowledge, employers often outline a set of skills that they want from an employee. For employers, getting the right people means identifying people with the right skills &qualities to fulfil the role& contribute to the organization's success.

AMAZON WEB SERVICES

A Certificate Course was organized by the department of ECE on" Amazon Web Services" on behalf of Technical Skill Trainers, MERITAS software solutions, Andhra Pradesh which is held from 24.11.2022 to 26.11.2022. In this program 75 students and 02 faculty members were attended. The experts for this program K. Lokesh, Senior Consultant from MERITAS software solutions, Andhra Pradesh delivered lecture an importance of Amazon Web Services and conducted Workshop.





AWS (Amazon Web Services) is a comprehensive, evolving cloud computing platform provided by Amazon that includes a mixture of infrastructure-as-a-service (IaaS), platform-as-a- service (PaaS) and packaged-software-as-a-service (SaaS) offerings. AWS services can offer an organization tool such as compute power, database storage and content delivery services. AWS offers many different tools and solutions for enterprises and software developers that can be used in data centers in up to 190 countries. Groups such as government agencies, education institutions, non-profits and private organizations can use AWS services.

GUEST LECTURES

ROLE OF THE STUDENT IN RECONSTRUCTION OF THE NATION

The Guest lecture was organized by the department of ECE on "Role of The Student in Reconstruction of The Nation" on behalf of Swami Vivekananda Centre, SPSR Nellore which is held on 29.09.2022. In this program 100 students and 02 faculty members were attended. The experts for this program Mr. S. Siva Pradeep, talked on Role of the Student in Reconstruction of The Nation.





Resource person S. Siva Pradeep started Guest lecture by introducing himself and explain Importance of student in Reconstruction of nation. Students, the future of a nation. Play a very vital role in nation building. Every individual country man can play its role in nation building by doing his duties in right manner. One should be sincere about his duties not only for self but also in the prospect of the nation. He continued his guest lecture by telling the importance of discipline and self-confidence. He also motivated the students towards National issues.

ROLE OF ENGINEER FOR SOCIETY

The Guest lecture was organized by the department of ECE on "Role of Engineer for Society" on behalf of Swami Vivekananda Centre, SPSR Nellore which is held on 3.09.2022. In this program 120 students and 03 faculty members were attended. The experts for this program Mr. V. Savarkar talked on Role of Engineer for Society.





Resource person V. Savarkar started Guest lecture by introducing himself and explain Importance of Engineer for society. First role of an engineer in our changing world is creating new technologies to solve world problems. Technological and scientific discoveries have significant impact on people. The second role of an engineer is they have many different social responsibilities in our changing world. The third roles of an engineer in the changing world in develop new solutions but before you can develop a new solution you must research the problem and then you can develop a new prototypes. This method is useful when the exact requirements cannot be set out in advance. He continued his guest lecture by telling importance of discipline and self-confidence. He also motivated the students towards social issues and hoe to solve the issues.

INDUSTRIAL VISITS

SHAR, SRIHARIKOTA

Department of ECE organized an industrial visit to SHAR, Srihari Kota, on 27.12.2022. Total 55 students and 2 faculty members visited the SHAR, Srihari Kota. During this visit, all the students were able to visit Launch pads, Tracking center, Command center, etc.





PARENTS MEET

Department of The college has organized a Parent-teacher meeting on Saturday,24th December 2022 in the college at 10:00AM .Total 75 parents were report for the meet. The main purpose of meet is to create a common platform, where teacher and parent come together to enrich the student's educational experiences and discuss variety of issues, regarding all round development of students.

The Parent Teacher Meeting was conducted as per the following schedule:

- Parent Teacher gathering was started by tea and snacks.
- After the refreshment Registration of parents at the registration desk started at 10:30 am.
- Parent teacher meeting started with the speech of Mrs. R. Sravanti Reddy, HOD of ECE department.
- Followed by motivational speech of Year In-Charges
- Also, Parents were invited to express their views about the college, their views regarding the development of their wards and to come up with suggestions.
- Distributed appreciation to the top five students in I-I, II-II RESULTS (2021-2022)
- The session was anchored & Vote of thanks to the parents was given by Mr. A. Venka Reddy.
- After the parents went to meet the class-teachers, discussed about the academic performance of the students like class attendance, marks in class tests, internal marks and overall discipline in the campus.









PRE-SANKRANTHI CELEBRATIONS



The college has organized a PRE SANKRANTHI-CELEBRATIONS on Saturday, 31st December 2022 in the college at 8:30 AM. Total 450 Students were participated in various events like Rangoli, Musical chairs, Tug of war, dumb charades etc. The main purpose of this event is to encourage the students in all areas. The PRE SANKRANTHI-CELEBRATIONS was conducted as per the following schedule:

PRE SANKRANTHI-CELEBRATIONS was started Registration of students at the registration desk started at 8:30 am.

- PRE SANKRANTHI-CELEBRATIONS started with the speech of Mrs. R. Sravanthi, HOD of ECE department.
- Followed by motivational speech of Year In-Charges.
- Rangoli event started by 9.00 AM, over 350 students Participated in Rangoli event.

- Musical chairs, Tug of war, dumb charades etc. These events are started by 10.00 AM simultaneously; on avg 50 students participated in each event.
- By 12.30 PM prizes will be distributed to all the winners.
- After lunch cultural events conducted from 1.30 PM to 3.30 PM





PLACEMENT SUMMARY

S.NO	NAME OF THE COMPANY	NUMBER OF STUDENTS SELECTED
1	LUMEN	1
2	PERSISTENT	5
3	INFOMERICA	6
4	HCL	20
5	DXC	42
6	HEXAWARE	4
7	WIPRO	50
8	CAPGEMINI	7
9	IBS SOFWARE	9
10	INFOSYS	8
11	NTT DATA (5.0 & 3.5 LPA)	14
12	TCS	9
13	MPHASIS	13
14	HIDDEN BRAINS	5
15	QUEST GLOBAL	5
16	US METRIX LAB	1
17	ASTRA MICROWAVE	8
	TOTAL	207





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