Velagapudi Ramakrishna Siddhartha Engineering
Department of Electronics & Communication Engineering
News Letter
Volume 9 Issue 4 Jan Feb 2022

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Inside the Issue

- *Programs organized in the dept.*
- *Faculty achievements*
- *Faculty participations in FDPs/Workshops/seminars*
- *Student achievements*
- *Placement details*

……and many more

Vision

To produce globally competitive and socially sensitised engineering graduates and to bring out quality research in the frontier areas of Electronics & Communication Engineering.

Mission

To provide quality and contemporary education in the domain of Electronics & Communication Engineering through periodically updated curriculum, best of breed laboratory facilities, collaborative ventures with the industries and effective teaching learning process.

To pursue research and new technologies in Electronics & Communication Engineering and related disciplines in order to serve the needs of the society, industry, government and scientific community.

Program Educational Objectives (PEOs)

After 3 to 5 years of graduation, electronics & Communication Engineering graduates will

PEO1: Excel in their professional career and higher education in Electronics & Communication Engineering and related fields.

PEO2: Exhibit leadership through technological ability and contemporary knowledge.

PEO 3: Adapt to emerging technologies for sustenance in their relevant areas of interest.

About the Department

Accreditation of B. Tech and MTech programmes by NBA, New Delhi to turn out globally recognized graduates.

40% of the faculty with Ph.D. qualification from premier institutions encompassing IITs, NITs, BITS and government universities to institute strong foundation and impart necessary skills

Establishment of TIFAC CORE in Telematics by DST, New Delhi and industries with outlay of 10 Crores, first of its kind in the state of AP, for producing industry ready students in the focused core areas.

Conduct of research and guidance in the focused areas of Antennas, Image Processing, RF&MW, VLSI & ES, Telematics.

More than 75% of the students are being absorbed by reputed MNCs'.

The Teaching-Learning process adopts different methods such as experiential learning, participative learning and problem-solving methodologies utilizing ICT facilities, LMS and e-resources. All the academic activities are carried out strictly following the academic and activity calendar. Proctor dairy system is in place for counselling and to monitor academic and personal issues of students. Necessary efforts are being made in identifying the learning levels (slow and fast) of the students through various assessments and additional training is imparted to slow learners.

Department encourages academic discussions between faculties and students using black board and faculties shares academic study material using it.

Use of modern teaching aids like LCD projectors, Wi-Fi enabled laptops are usually employed in classrooms and other student learning environments

Department has introduced EPICS (Engineering Projects for Community Services) in the curriculum along with mini and major projects. In EPICS students will go to the society (villages/ hospitals/ towns etc.) to identify the problem and survey the literature for a feasible solution.

Expert video subject lectures delivered by the various eminent resource persons are available in the digital library and it facilitates the faculty and students to utilize E-Tutorials of NPTEL, MOOCs access E-Journals, Video Conference, etc.

Faculty members use department library, digital library and other Open-Source platforms to enhance their teaching skills. The faculty members are encouraged to participate in short term courses, staff development programs and workshops on advanced topics to keep pace with the advanced level of knowledge and skills.

Program Specific Outcomes (PSOs)

After completion of electronics & Communication engineering Program, the students will be able to have ability to:

PSO 1: Demonstrate proficiency in the use of IOT required in real -life applications

PSO 2: Implement functional blocks of hardware/software designs for signal processing and communication applications.

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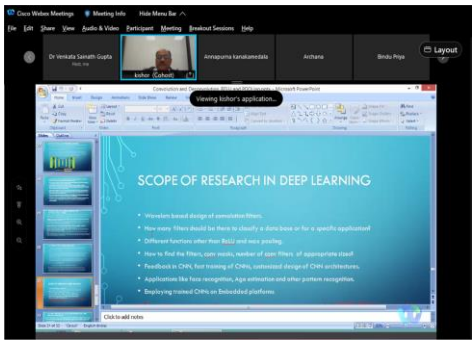
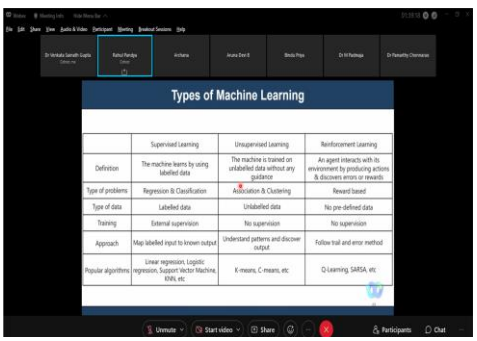
Events organized in the department

FDP on "AI for Communication and Signal Processing"

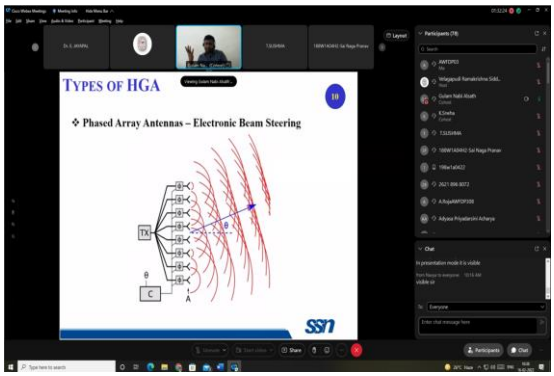
Dr Md. Farukh Hashmi, Asst. Prof, NIT Warangal & Dr Venkat Sainath Gupta T Asst Professor ECE, VRSEC Organized an online FDP on "AI for Communication and Signal Processing Applications" with E&ICT, NIT Warangal in association with Department of ECE, Velagapudi Ramakrishna Siddhartha Engineering College, Vijayawada, Andhra Pradesh from 05/02/2022 to 14/02/2022 (sponsored by MeitY, GOI). Around 51 candidates comprising Faculty, Research Scholars from various parts of the country have actively participated in the event. Prof. Kishore Bhurchandi , VNIT Nagpur Prof. T. Kishore Kumar, NIT Warangal ,Dr. Vimal Bhatia, IIT Indore , Dr. Ram Bilas Pachori, IIT Indore , Dr. M. S. Manikandan, IIT Palakkad , Dr. Prabhat Sharma, VNIT Nagpur , Dr. Rahul J. Pandya, IIT Dharwad , Dr. Vineeth B.S., IIST Valiamala , Kerala , Dr. Prasanna Raut, SR, TII, UAE ,Dr. Kalpana Naidu, NIT Warangal , Dr. Mohammad Farukh Hashmi, NITW were the resource persons who shared their expertise on Introduction to Artificial Intelligence and its applications, Feature Extraction, dimensionality reduction in ML, ML based Regression, Classification and its applications, Artificial Intelligence for 5G/6G systems, Machine learning and signal processing of large scale datasets, AI/ML for imaging and computer vision applications, Working with data pre-processing and data visualization using python, Hands-on session using Python/MATLAB.

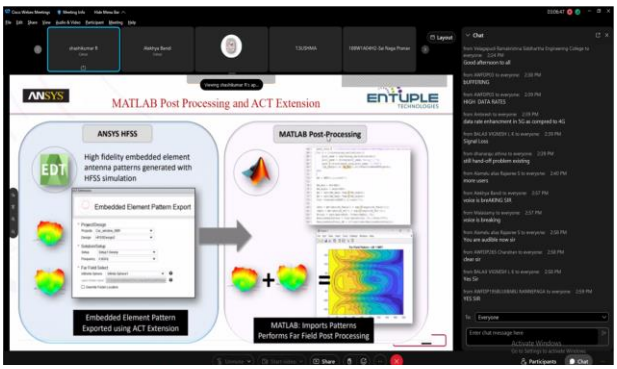


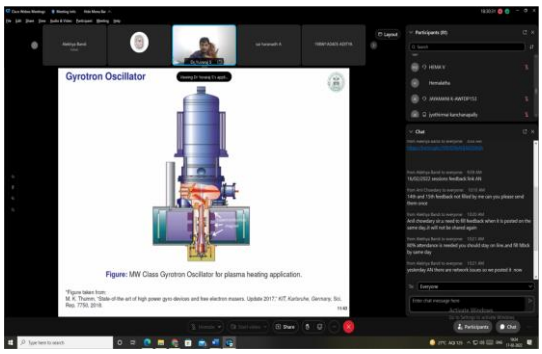


One Week Faculty Development Program on Advancements on Antenna Technologies for Future Applications

A six-day FDP programme was organized by ECE department, from 14 to 19 Feb 2022. The program focused on Advancements on Antennas, design aspects and simulation for future applications with a synthesis approach. Dr. Bratin Ghosh, Prof of ECE, IIT-Kharagpur. Mrinal Kanti Mandal, Assoc. Prof. of ECE, IIT Kharagpur, Dr. D.Sri Ram Kumar, Prof of ECE NIT Tiruchirappalli, Dr. D. Vakula, Associate Professor of ECE, NITW, Warangal, Dr. S. Yuvaraj, Assistant Professor of ECE,NIT, Andhra Pradesh, Dr.M.Gulam Nabi Alsath, Assoc. Prof. of ECE , SSN Engineering College, Dr.A.Jhansi Rani Professor of ECE, V. R. Siddhartha Engineering College , Er. M.Vinoth, Co-Founder & Head, Wilma Communications Groups (Asia | US | Europe), Er. Shashi Kumar R Application Engineer, Entuple technologies Pvt. Ltd, Bangalore, Er. Rajesh kulalar (Application Engineer), Jyoti Electronics, Bangalore were the resource persons. Efficient Technique for the Analysis of Coaxial probe coupled hemispherical DRA, Importance of Metamaterial, Doppler Radars, Multimode Doppler Radars, Challenges for mm wave Antennas, Roadmap of the evolution of 5G communications,5G small cells and Power levels for small cells , A heterogeneous network with massive MIMO and small cells, High gain antennas, Phased Array vs Reflect Array antennas, 5G paradigm change, 5G key enabling Technology, A Simulation Vision, A world of simulation Opportunity, 5G Simulation: User equipment, Travelling Wave Tube Amplifier, Klystron Amplifier, Working Mechanism of slow wave devices, its drawbacks, Design and simulation of Rectangular Patch antenna using HFSS, Plotting of Near Field and Far field parameters were few of the topics discussed by the experts.

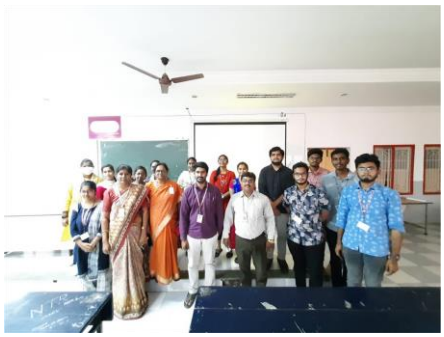


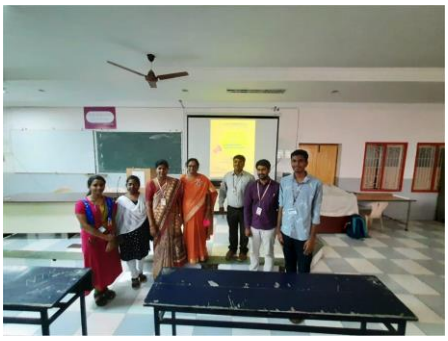


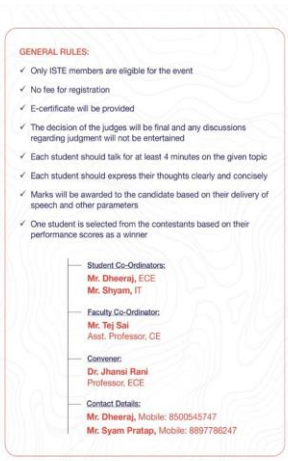


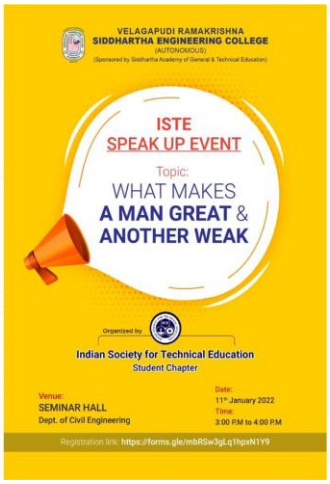
Events Organized Under ISTE

A Speak up Event was conducted on the topic “What makes a Man Great & another Weak” in Seminar Hall, Department of Civil Engineering on 11 January 2022 from 3 P.M to 4 P.M for which Mr. Dheeraj of ECE & Mr. Shyam, IT were the student coordinators, Mr. Tej Sai Asst. Professor, CE was faculty and Coordinator and Dr A Jhansi Rani, Professor, ECE was the Convener.









Interactive Session

RVSS Prasad is currently working with Pavani Engineers as the head for Business development and Quality Initiatives. He has rich experience of over 30 years in Operations Management, Quality Management, Project Management, IT, Air conditioning and Supply Chain Management. He has been working keenly on Theory of Constraints and Six Sigma in many of the projects executed directly or indirectly by him. He also received Black Belt in Six Sigma.

In his lecture in ECE VRSEC, he explained the ways to change life breaking the chains that bind an individual. He also quoted to leave the past and begin life afresh. He recollected the words of Swami Vivekananda: Icha Shakti, Gnana Shakti & Kriya shakti for personality development. He suggested that success can be achieved only when on moves out of comfort zone. All the students actively interacted with Mr. Prasad.

Guest Lecture

Prof. Chennupati Jagdish, Research School of Physics, The Australian National University, was Elected President of the Australian Academy of Science was the invited guest for the lecture on "Nano Technology: Opportunities & Challenges" organized by Dr J Sateesh, Assistant Professor, ECE on 23rd Feb 2022 from 11:00AM. Crucial points discussed were Nanotechnology: control of matter at the nanoscale at dimensions between approximately 1 and 100 nanometers, unique phenomena that enabled novel applications, how things are assembled from nano-scale components, The benefits of nanomaterials like large surface-to-volume ratio, CNTs - lightweight, and high strength, top-down and bottom-up the two approaches used to make nanostructures and applications of nanotechnology. Students from different branches of engineering actively participated in the session.

Faculty Participation in Conference

Sridevi Kadiyam, A. Jhansi Rani presented a paper titled "Synthesis of the variants of Adaptive Hexagonal antenna array configuration "in 3rd International Conference on Mobile Computing and sustainable Informatics ICMCSI 2022, held at Tribhuvan University, Nepal, during 27-28 January 2022.

Faculty Achievements

- Dr Praveen Naidu Vummadisetty, Associate Professor ECE is appointed (09-02-2022) as JNTU Kakinada Board of Studies (BOS) Member - ECE for a period of 3 years (2021 - 2024).
- Dr Praveen Naidu Vummadisetty, Associate Professor ECE has been invited as "Guest of Honors' ' for the prestigious 2022 Dr P B Parikh Endowment Lecture, IETE Mumbai (14-01-2022).
- Dr Praveen Naidu Vummadisetty, Associate Professor ECE has interacted with Padma Vibhushan Dr R Chidambaram, AICTE Sponsored Distinguished Chair Professor VRSEC and delivered lecture on 29-01-2022 on the topic "Design and Analysis of Multi-Octave Band EW phased Array using a Printed Radiator Covering 6 - 18 GHz"

FDPs'/Workshops'/Seminars attended by the faculty

- Dr Venkata Sainath Gupta T has participated in a webinar on "Deep learning for Wireless Communications" organized by MathWorks on January 19, 2022.

- Dr Venkata Sainath Gupta T has participated in an AICTE-ATAL FDP on "Advances in Artificial Intelligence" organized by Siksha 'O' Anusandhan (Deemed to be university) during January 21-25, 2022.

- Dr Venkata Sainath Gupta T has participated in a one-day online seminar on "Guidelines for Quality Publication of Project Works" organized by Department of CSE, VRSEC in association with IQAC, under AICTE MARGDARSHAN on February 4, 2022.

- Dr K Shri Ramtej has participated in a one-day online seminar on "Guidelines for Quality Publication of Project Works" organized by Department of CSE, VRSEC in association with IQAC, under AICTE MARGDARSHAN on February 4, 2022.

- Dr K Shri Ramtej has participated in an FDP on "AI for Communication and Signal Processing Applications" organized by E&ICT, NIT Warangal in association with Department of ECE, Velagapudi Ramakrishna Siddhartha Engineering College during 05/02/2022 to 14/02/2022

- Vanka Saritha has participated in One week FDP on "Advancements on Antenna Technologies for future Applications" organized by ECE Department, Velagapudi Ramakrishna Siddhartha Engineering College during 14.02.2022 to 19.02.2022.

- N Siva Naga Malleswari has participated in One week FDP on "Advancements on Antenna Technologies for future Applications" organized by ECE Department, Velagapudi Ramakrishna Siddhartha Engineering College during 14.02.2022 to 19.02.2022.

- M Bhagya Lakshmi has participated in One week FDP on ""Applications of Deep Learning Techniques to 5G Wireless Communication Technologies "organized by ECE Department, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Avadi, Chennai from 08.02.2022 to 12.02.2022.

- M Bhagya Lakshmi has participated in One week FDP on "Advancements on Antenna Technologies for future Applications" organized by ECE Department, Velagapudi Ramakrishna Siddhartha Engineering College during 14.02.2022 to 19.02.2022.

- P.Vijaya Kumar has participated in an FDP on "AI for Communication and Signal Processing Applications" organized by E&ICT, NIT Warangal in association with Department of ECE, Velagapudi Ramakrishna Siddhartha Engineering College during 05/02/2022 to 14/02/2022

- P Vijaya Kumar has participated in One week FDP on "Advancements on Antenna Technologies for future Applications" organized by ECE Department, Velagapudi Ramakrishna Siddhartha Engineering College during 14.02.2022 to 19.02.2022.

- P Vijaya Kumar has participated in a webinar on "Entrepreneurship Skills, Attitude & Behavior Development", organized by Puducherry Technological University on 23-02-2022.

- P. Vijaya Kumar has participated in a one-day online seminar on "Guidelines for Quality Publication Of Project Works" organized by Department of CSE, VRSEC in association with IQAC, under AICTE MARGDARSHAN on February 4, 2022.

- V B K L Aruna has participated in FDP on "D3 Design, Develop and Decode GUI based FPGA programming" organized by ECE Department, SRMIST in collaboration with VI solutions from 20-12-201 to 24-12-2021.

- P.Vijaya Kumar has participated in One Week Online Faculty Development Program on "Trends and Challenges in Advanced VLSI System Design" organized by Dept.of E.C.E,S.R.K.R Engineering College(A) from 21st to 26th February 2022.

Faculty -- PhD Awarded

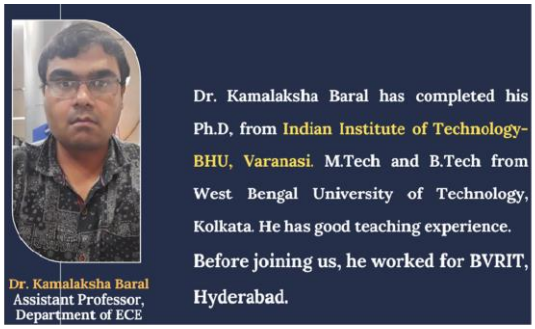
Mr G Kishore Kumar was awarded Doctorate of Philosophy for his work on “Hardware Architecture for Eye Movement Detection using Electrooculography (EOG)” by from JNTUK- Kakinada on 11/01/2022.

Mr. J Sateesh was awarded Doctorate of Philosophy for his work on Mimicking Reabsorption Function of Kidney using MEMS - Microfluidics Technology (Design, Simulation and Analysis) by National Institute of Technology Silchar (NIT Silchar) on 2nd Nov 2021.

Lecture Delivered by Faculty

Dr A Jhansi Rani Professor ECE shared her expertise in the area of “Overview on 5G Antenna Technologies in One week Faculty Development Program on Advancements on Antenna Technologies for future Application, organized by Dept of ECE, VRSEC Sponsored by SAGATE during 14th -19th Feb 2022

Newly Appointed Faculty into the Department



Top Performers Meet

Coursera team conducted Top Performers Meet under Employability Pilot Program on 15/02/2022 with Students, HODs, Principal and Staff Co-Ordinators'.

Dasari Sri Vasavi (198W1A0415) – Student Ambassador received appreciation from Dr A V Ratna Prasad, Principal, VRSEC on behalf of ECE student's performance in Coursera under Employability Pilot Program

Appreciation from Coursera team for all the Top Performers in Employability Pilot Program with College Principal, Head of the Departments, Staff and Students.

Placements During Jan & Feb 2022

S. No	Register Number	Name	Company Name	Pay Scale (LPA)
1	188W1A04G4	Shaik Muzeeb Rehman	AMBLINKS	3.50
2	188W1A0468	D P Venkata Venu Gopal	WIPRO	4.00
3	188W1A0416	Eslavathu Akhila	MIND TREE	4.00
4	188W1A04I9	Harika Kommuri	COFORGE PEGA	4.50
5	188W1A0452	Shaik Sameena	COFORGE PEGA	4.50
6	188W1A04N1	Yohitha Nitya Praharshitha Mandala	ZF INDIA	6.00
7	188W1A04F4	Nalabothu Vamsikrishna	INFOR	6.50
8	188W1A04D6	Gali Akshit Joshua Daniel	INFOR	6.50

V R Siddhartha engineering College
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Asst.Professor
ECE

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Sriram 188W1A04L9

Core values of the institute

V R Siddhartha Engineering college engages itself in a process of self and community reflection that leads the institution to recognize and heighten awareness of the core values the college is practising and to develop an institutional culture that stands accountable to those values

1. **Commitment**
   - Responding to the changing need of our region and nation
   - Develop a shared decision-making process
2. **Respect**
   - Include stake holders in the decisions
   - Recognise and support employee contributions
3. **Excellence**
   - Anticipate techno-social need and respond accordingly
   - Encourage innovation and interdepartmental collaboration
4. **Accountability**
   - Continuously evaluate and improve the academic and administrative systems
   - Demonstrate responsibility through stakeholder satisfaction
5. **Diversity**
   - Ensure fair and equal access for all
   - Recognise, appreciate and celebrate diversity
6. **Cultural competence**
   - Encourage ideas and participate
7. **Learning environment**
   - Outstanding physical infrastructure, along with a culture of excellence
8. **Community**
   - Value and respect Collegiality, Partnerships, Safe and Healthy Environment and Service
9. **Integrity**
   - Committed to ethical and responsible behaviour

Quality policy

VRSEC strives to impart Knowledge, Skills and Attitude through continuous improvement to meet the ever-changing needs of Industry and the Sustainable Development of Society

PROGRAM OUTCOMES (POs)

PO1	**Engineering knowledge:** An ability to apply knowledge of mathematics, science, fundamentals of engineering to solve electronics and communication engineering problems.
PO2	**Problem analysis**: An ability to identify, formulate and analyse electronics and communication systems reaching substantiated conclusions using the first principles of mathematics and engineering sciences.
PO3	**Design/development of solutions:** An ability to design solutions to electronics and communication systems to meet the specified needs.
PO4	**Conduct investigations of complex problems:** An ability to design and perform experiments of complex electronic circuits and systems, analyse and interpret data to provide valid conclusions.
PO5	**Modern tool usage:** An ability to learn, select and apply appropriate techniques, resources and modern engineering tools for modelling complex engineering systems.
PO6	**The engineer and society:** Knowledge of contemporary issues to assess the societal responsibilities relevant to the professional practice.
PO7	**Environment and sustainability:** An ability to understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.
PO8	**Ethics:** An understanding of professional and ethical responsibilities and norms of engineering practice.
PO9	**Individual and team work:** An ability to function effectively as an individual, and as a member in diverse teams and in multidisciplinary settings.
PO10	**Communication:** An ability to communicate effectively with engineering community and with society at large.
PO11	**Project management and finance:** An ability to demonstrate knowledge and understanding of engineering and management principles and apply these to manage projects.
PO12	**Life-long learning:** An ability to recognize the need for, and engage in independent and life-long learning in the broadest context of technological change.