



Editorial

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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:

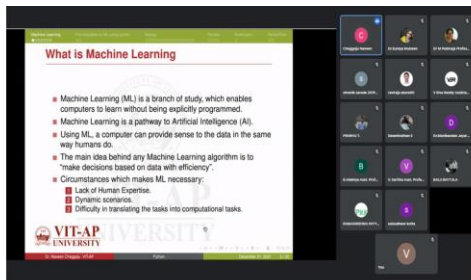
PSO 1: Demonstrate proficiency in the use of IOT required in real -life applications

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



Events organized in the department

STTP on Open-Source Tools



Dr Venkata Sainath Gupta T, Asst. Professor and Dr K Shri Ramtej, Asst. Professor of ECE organized a Five Day STTP on Open-Source tools for efficient research (LaTeX, scilab, python) from 20th to 24th of December 2021. Around 86 Candidates comprising faculty, Research Scholars & PG students have registered for the event. Dr Naveen C, Asst Professor, VIT- A.P, Dr Venkata Sainath Gupta T, Asst Professor, VRSEC, Dr Saurav Gupta, Asst Professor, VIT-Chennai, Dr. V Siva Prasad, Asst Professor, IIIT Kurnool and Dr K Shri Ramtej, Asst Professor, VRSEC were the resource persons for the STTP. Major Contents Covered were Introduction to LaTeX Article and Report Writing Bibliography (Managing references) Preparing sample IEEE paper, Introduction to SCILAB, XCOS, Writing programs and debugging on SCILAB, Introduction to python, Libraries and data types in python, Machine learning using python....

VELAGAPUDI RAMAKRISHNA SIDDHARTHA ENGINEERING COLLEGE
Autonomous, Affiliated to JNTUK, NAAC A+
(Sponsored by Siddhartha Academy of General & Technical Education)
Vijayawada-520007, Andhra Pradesh
www.vrsiddhartha.ac.in

Online STTP on Open Source Tools for Efficient Research (LaTeX, SCILAB, Python)

Organized by **Department of ECE**

Co-ordinators:
Dr. Venkata Sainath Gupta T, Asst. Professor, Department of ECE
Dr. K. Shri Ramtej, Asst. Professor, Department of ECE

20th - 24th December 2021

Target Audience:
Faculty, Research Scholars, PG Students of any department

Alumni Lecture Series



Department of
Electronics & Communication Engineering

Mode: Virtual

ECE Distinguished Alumni Lecture Series

On

"CAREER OPPORTUNITIES & HIGHER STUDIES"
Session 3

Career Opportunities
with Masters Abroad

On 06-11-2021 (Saturday) @ 7:30 PM



RAJA JAYA CHANDRA
Hadoop Systems Engineer
Amazon Web Service

Faculty Co-ordinators:
Dr. M. Padmaja
Professor, ECE
Dr. A. Anitha
Sr Asst. Prof., ECE

Student Co-ordinator:
P. Nagi Parasuram
ECE A - 4th Year,
Ph: 99053 47059

E. Lakshmi
ECE D - 3rd Year,
Ph: 92468 80267

Registration Link:
<https://forms.gle/vrVtMmp5Gm3u3j8>



VELAGAPUDI RAMAKRISHNA SIDDHARTHA ENGINEERING COLLEGE
(AUTONOMOUS)
(Sponsored by Siddhartha Academy of General & Technical Education)

Department of
Electronics & Communication Engineering

Mode: Virtual

ECE Distinguished Alumni Lecture Series

On

"CAREER OPPORTUNITIES & HIGHER STUDIES"
Session 4

Core Career Opportunities
with Masters Abroad

On 18-12-2021 (Saturday) @ 2:30 PM to 3:30 PM



ATLURI LAVA KUMAR
SoC Design Engineer
Intel Corporation

Faculty Co-ordinators:
Dr. M. Padmaja
Professor, ECE
Dr. A. Anitha
Sr Asst. Prof., ECE

Student Co-ordinator:
K. Durga Shanmukhi
ECE A - 4th Year,
Ph: 7995420950

Sampathkumar
ECE B - 2nd Year,
Ph: 7842732957

Registration Link:

A series of lectures were organized by Dr. M Padmaja Professor & Dr A Anitha Sr Asst Professor, ECE on 06.11.2021 and 18.12.2021 for which Mr. Raja Jaya Chandra Mannem, Hadoop system engineer, Amazon Web service and Mr. Lava Kumar, SOC Design Engineer, Intel Corporation were the resource persons respectively. They motivated students on Career Opportunities with Masters Abroad and encouraged the students how to prepare for Masters and get admission into a reputed University.

Workshop on AWS Cloud Computing

Mr G Venkata Subbaiah, Assistant Professor, Dept of ECE organized workshop on AWS Cloud Computing in collaboration with APSSDC from 01-11-2021 to 06-11-2021 for which Ramadeep R, Multi skill trainer from APSSDC was the trainer. Topics like Android Application Development, Source Code Management using Git & GitHub, Web Designing Using React JS, Data Analysis using Python Machine Learning using Python, AWS Cloud Computing, Basics of Linux & Shell Scripting etc. were discussed in the workshop.

Guest Lecture

Dr. Mulpuri Venkata Rao garu has been a faculty member in Department of Electrical and Computer Engineering at George mason University since 1984 and as a professor since 1993 For the past 12 years he has been teaching mathematics and science for elementary, middle, and high school students and founded Curie learning LLC in 2010. He is a unique educator with concurrent experience from preschool to Ph.D. level education.



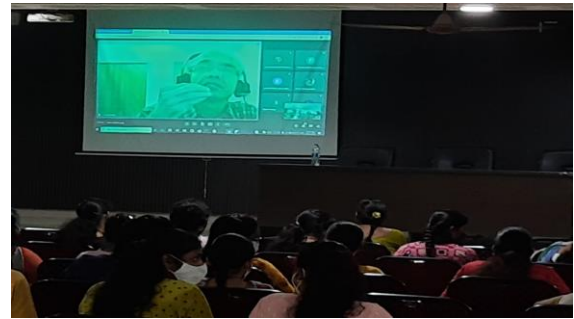
On 23rd December 2021 VRSEC IEEE Student Branch and Department of Electronics and Communication Engineering of VR Siddhartha Engineering college organized an International Guest Lecture by Dr. Mulpuri Venkata Rao garu from 2:30 pm to 4pm in ECE department seminal hall. The lecture was attended by 135 students and 10 Faculty members of Electronics and Communication Department. During the lecture Dr. Rao garu expressed some of his experiences and mentioned about the future technologies and courses offered by George Mason University. At the end of the session Principal Dr A V Rana Prasad, HoD ECE Dr D Venkata Rao and Dr Praveen Naidu IEEE SB Counselor of VR Siddhartha Engineering college presented the token of appreciation.

Events organized under ISTE

- A Technical quiz was organized on 7th December 2021 at 3:00 P.M by the Indian Society of technical education student chapter. Total 29 Teams attended the technical quiz with a team size of three members each. Four rounds are conducted to finalize the winners and runners.



- A webinar on the topic “Skill Development, Career Guidance, and power of the mind” was organized by the Indian Society of technical education student chapter student coordinators under the guidance of Dr.A.Jhansi Rani Convenor, Smt.P.Madhavi Latha Faculty coordinator, and invited speaker Dr.K.M.Prasad R&D Engineer in Enginia Research Inc., Winnipeg, Canada on 24th December 2021 at 9:00 A.M IST ,DR.K.M.Prasad, is currently working as an R&D Engineer in Enginia Research Inc., Winnipeg, Canada from 2006 August. He was also a fellow member of professional societies such as IETE(India), IEE(India). Dr.K.M.prasad was shared his experiences to the students, and he was elaborating about practical knowledge as Practical or informal knowledge manifests itself as skills or “knowing-how”.



Guest lectures delivered by faculty

Dr Praveen Naidu Vummadisetty “INDIGENOUS TECHNOLOGIES FOR SMART FARMING “during Azadi Ka Amrit Mahotsav program, conducted by Andhra Pradesh State Council of Science & Technology, Government of Andhra Pradesh on 02-12-2021.

FDPs'/Workshops'/Seminars attended by the faculty

- P Vijaya Kumar attended an Expert Talk On Srinivas Ramanujam: The Man Who Knows Infinity Organized By Sadhana Education Society, Mumbai, on 15th Dec ,2021
- Dr.A. Jhansi Rani participated in AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "5G Antenna Design Engineering" from 6th Dec to 10th Dec 2021 organized by Mailam Engineering College.
- Dr.A.Jhansi Rani attended IEEE GRSS Summer School 2021 on "Artificial Intelligence in Remote Sensing Applications" 21st to 23rd October 2021 organized by IEEE CIS/GRSS Jt. Chapter Hyderabad Section in collaboration with Muffakhm Jah College of Engineering & Technology and Geethanjali College of Engineering & Technology, Hyderabad.
- Dr.A. Jhansi Rani attended FDP on "Recent trends in Microwave and beyond techniques" organized by Dept.of ECE, SRM AP from 15th to 20th, Nov 2021
- Vanka Saritha participated on 5-day online STTP on "Open-Source Tools for Efficient Research (LaTeX, SCILAB, Python)" from 20th Dec to 24th Dec 2021, organized by the Department of ECE at Velagapudi Ramakrishna Siddhartha Engineering College, Vijayawada, Andhra Pradesh.
- Vanka Saritha participated in the NDLI Awareness Activity VRSEC Vijayawada held on Nov. 27, 2021, organized by the NDLI Club of Velagapudi Ramakrishna Siddhartha Engineering College NDLI Club.
- Dr Venkata Sainath Gupta T participated in the NDLI Awareness Activity VRSEC Vijayawada held on Nov. 27, 2021, organized by the NDLI Club of Velagapudi Ramakrishna Siddhartha Engineering College NDLI Club
- Alekya Bandi participated in 5-day online STTP on "Open-Source Tools for Efficient Research (LaTeX, SCILAB, Python)" from 20th Dec to 24th Dec 2021, organized by the Department of ECE at Velagapudi Ramakrishna Siddhartha Engineering College, Vijayawada, Andhra Pradesh.
- Mr. A Ravi Raja participated 5-day online STTP on "Open-Source Tools for Efficient Research (LaTeX, SCILAB, Python)" from 20th Dec to 24th Dec 2021, organized by the Department of ECE at Velagapudi Ramakrishna Siddhartha Engineering College, Vijayawada, Andhra Pradesh.
- Mr. A Ravi Raja participated in IEEE GRSS Summer School 2021 on "Artificial Intelligence in Remote Sensing Applications" 21st to 23rd Oct 2021.organized by IEEE CIS/GRSS Jt. Chapter Hyderabad Section in collaboration with Muffakhm Jah College of Engineering & Technology and Geethanjali College of Engineering & Technology, Hyderabad.
- Mr. A Ravi Raja attended an FDP on Artificial Intelligence in Remote Sensing Applications organized by Department of Computer Science and Engineering, VRSEC in collaboration with ISRO & DRDO from 27th Sep 2021 to 08th Oct 2021
- Mr. A. Ravi Raja participated in the NDLI Awareness Activity VRSEC Vijayawada was held on 27th Nov 2021 organized by the NDLI Club of Velagapudi Ramakrishna Siddhartha Engineering College.
- Mr. A. Ravi Raja participated in Workshop on Improving Institute Industry Interaction and consultancy conducted by Dept. of Civil VRSEC on 13th Nov 2021
- Dr. B Lakshmi Sirisha, participated in STTP on "Open-Source Tools for Efficient Research (LaTeX, SCILAB, Python)" from 20th Dec to 24th Dec 2021, organized by the Department of ECE at Velagapudi Ramakrishna Siddhartha Engineering College, Vijayawada, Andhra Pradesh.

Faculty Publications

- Sudhakar Tummala , Venkata Sainath Gupta Thadikemalla, Barbara A.K. Kreilkamp, Erik B. Dam, Niels K. Focke Fully automated quality control of rigid and affine registrations of T1w and T2w MRI in big data using machine learning Computers in Biology and Medicine, 1st november 2021, volume 139
- Naidu, Praveen Vummadisetty, Akkapanthula, Sai haranadh, Dhanekula, Maheshbabu, Vummadisetty, Neelima and Kumar, Arvind. "Diversity performance analysis of four port triangular slot MIMO antenna for WiBro and ultrawide band (UWB) applications" Journal of RF-Engineering and Telecommunications Frequenz, vol. 75, no. 11-12, 2021, pp. 513-523. <https://doi.org/10.1515/freq-2020-0194>
- R Mariappan ,B Lakshmi Sirisha, P S Suhasini, Review of quality assessment of fruit and vegetables using NIR spectroscopy, Book chapter in “Advances in Image and Data Processing using VLSI Design”, Volume 1, IOP Publishing Ltd 2021.

Patents Filed

- ✚ Dr. A. Jhansi Rani, Dr. M. Padmaja, K. Prasuna Adaptive Reception-Transmission Scheduling for a Reliable 5G Network, Application No.202141048117 A, Publication Date: 29/10/2021
- ✚ Dr. M. Padmaja, Dr. A. Jhansi Rani, K. Prasuna, Video Streaming over Cognitive Radio Network, Application No.202141048115 A, Publication Date: 29/10/2021

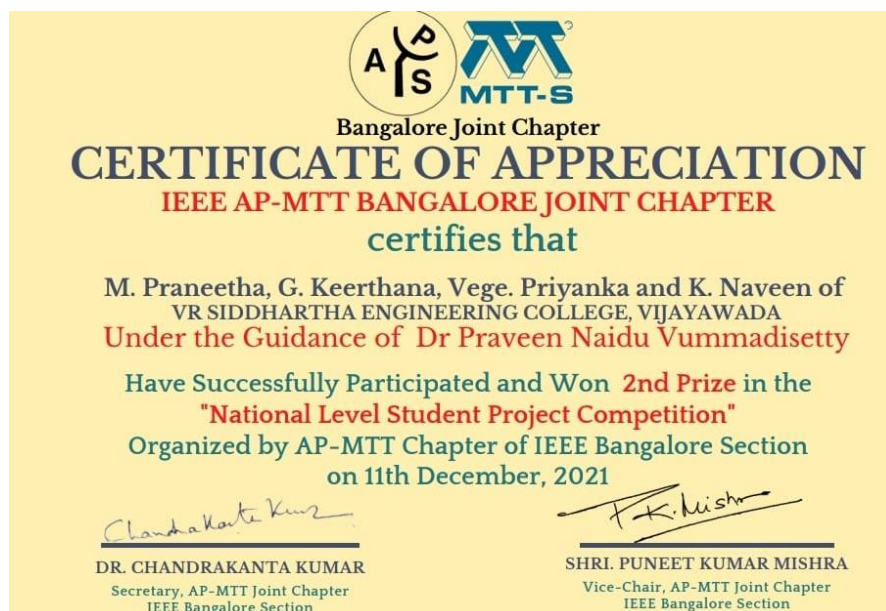
Students Corner

Conferences attended by Students

- N. Karthik Ram Reddy (178W1A04M3), B. Alekhya, Harshvardhan (178W1A04K9), K. Sai Barghav (178W1A04K8) attended an International conference from 29th to 30th November-2021, organised by SPAST foundation and presented a paper titled “An empirical model to overcome the attenuation caused due to rain” (ICTSGSC-2021)
- Anusha Prudhivi, Sai Sahithya Bonumaddi, Niharika Kota, Chandra Sekhar, Venkata Sainath Gupta T, attended CAPS - 2021, 10-12 December-2021, organised by IIIT Jabalpur, INDIA and presented a paper title “A Robust System to Detect and Prevent Boat Accidents”,

National Level Awards to Students

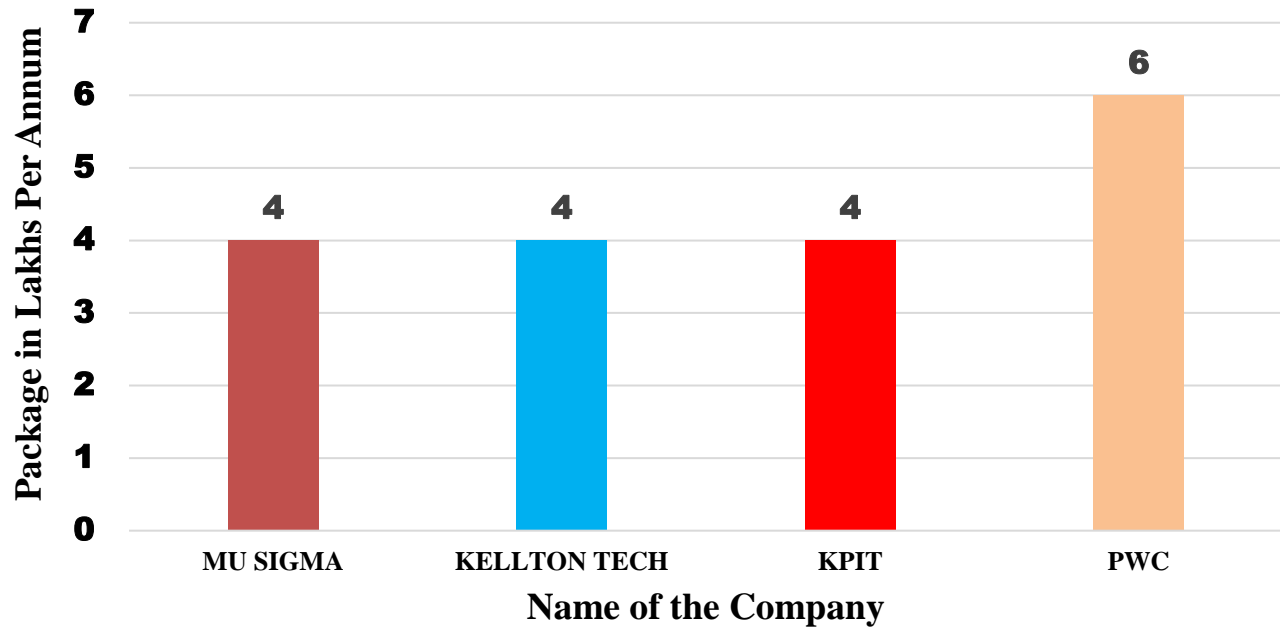
- M.Praneetha, G.Keerthana, Vege.Priyanka and K. Naveen under the guidance of Dr Praveen Vummadisetty Naidu, won National Level 2nd prize 2021 National Level Student Project Competition organized by the IEEE AP/MTT, Bangalore Section for the project titled High Isolation Compact Four Port MIMO Antenna with Slotted Ground for UWB Applications



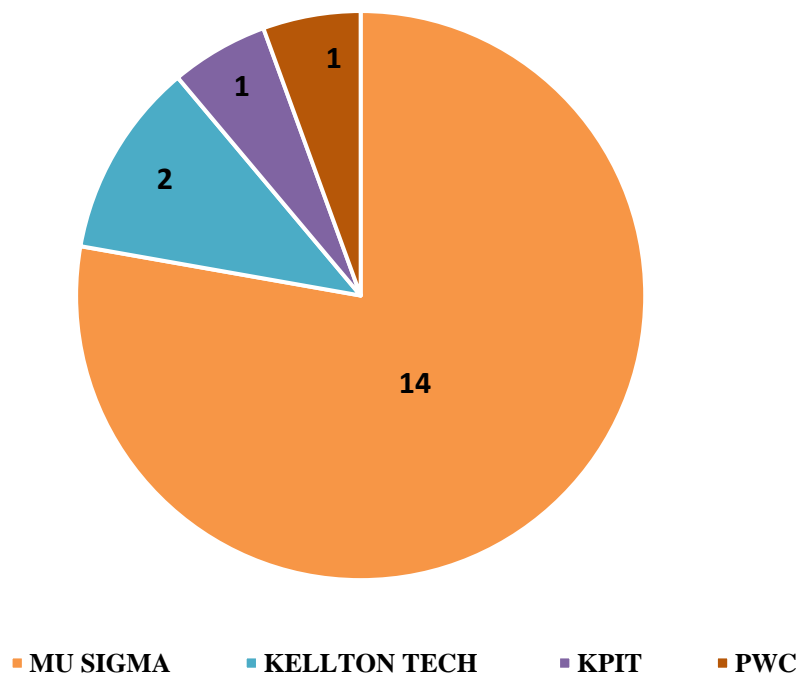
Placements during Nov & Dec 2021

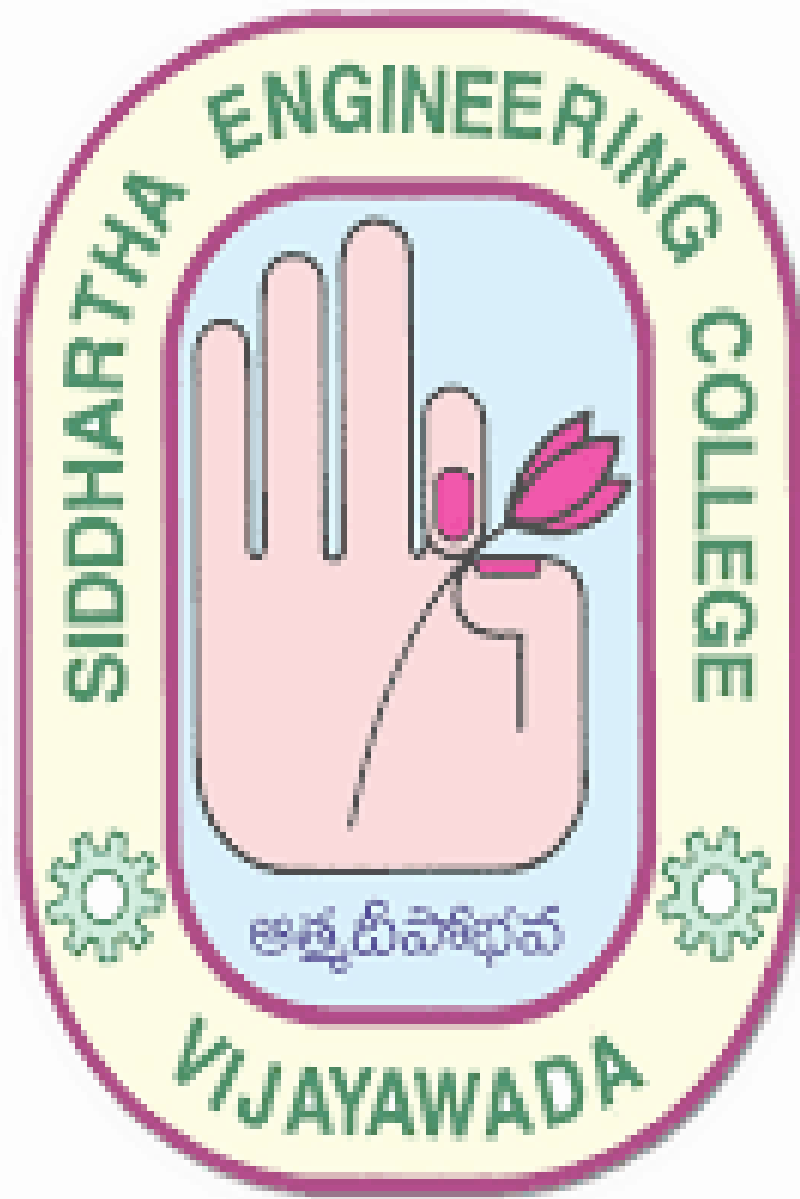


Placement Package details during Nov & Dec 2021



Number of Students Placed during Nov & Dec 2021





V R Siddhartha engineering College
Department of ECE
News Letter Editorial Board

Chief Editor
Dr. D Venkata Rao
Head of Dept
ECE

Editor
Mrs. Y Sarada Devi
Asst.Professor
ECE

Student Editors
Ramakrishna 188W1A04L5
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.