

# Newsletter

We Communicate Our Vision!

## SIGNALS



### HALF - YEARLY NEWS LETTER

**VOLUME: 21**

**JUNE: 2022**

Newsletter

Electronics & Communication  
Engineering



**PRASAD V POTLURI  
SIDDHARTHA  
INSTITUTE OF TECHNOLOGY**

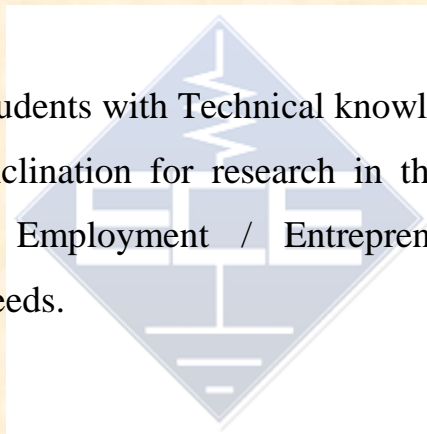
# **Prasad V. Potluri Siddhartha Institute of Technology**

## **Vision**

To provide rich ambience for Academic and Professional Excellence, Research, Employability skills, Entrepreneurship and Social responsibility.

## **Mission**

To empower the students with Technical knowledge, Awareness of up-to-date technical trends, Inclination for research in the areas of human needs, Capacity building for Employment / Entrepreneurship, Application of technology for societal needs.





## Department of Electronics and Communication Engineering

### Vision

To evolve as a center of excellence by adopting innovative methods for teaching, learning and research in the diversified fields of Electronics and Communications.

### Mission

To empower the students with technical knowledge in Electronics and Communications for pursuing higher education, for becoming entrepreneur / employees of prominent companies and also motivating them towards research to meet the societal needs.



### Program Educational Objectives

<b>PEO-I</b>	Capable of applying the knowledge of basic sciences and engineering to understand the new concepts of Electronics and Communication Engineering
<b>PEO-II</b>	Able to demonstrate technical competence for the design and development of innovative electronic and communication systems.
<b>PEO-III</b>	Able to work in a team for the fulfillment of leadership role in a company/organization
<b>PEO-IV</b>	Able to demonstrate passion for life-long learning through interdisciplinary research works or projects to cater societal needs.

## Program Objectives

<b>PO-1</b>	<b>Engineering knowledge:</b> Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
<b>PO-2</b>	<b>Problem analysis:</b> Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
<b>PO-3</b>	<b>Design/development of solutions:</b> 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.
<b>PO-4</b>	<b>Conduct investigations of complex problems:</b> 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.
<b>PO-5</b>	<b>Modern tool usage:</b> 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.
<b>PO-6</b>	<b>The engineer and society:</b> 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.
<b>PO-7</b>	<b>Environment and sustainability:</b> Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
<b>PO-8</b>	<b>Ethics:</b> Apply ethical principles and commit to professional ethics and

	responsibilities and norms of the engineering practice.
<b>PO-9</b>	<b>Individual and team work:</b> Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
<b>PO-10</b>	<b>Communication:</b> 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.
<b>PO-11</b>	<b>Project management and finance:</b> 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.
<b>PO-12</b>	<b>Life-long learning:</b> 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

<b>PSO-1</b>	Demonstrate competency in analysis, design and simulation of complex electronic and communication systems.
<b>PSO-2</b>	Develop smart systems to meet the societal needs.

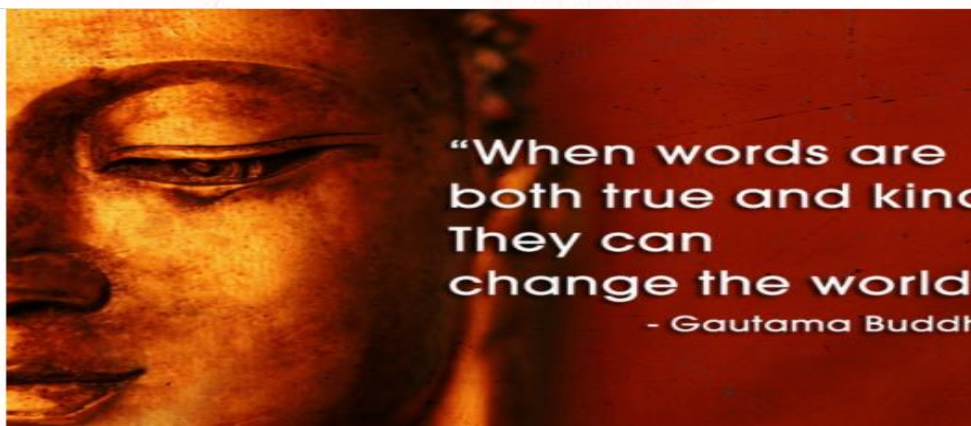


## EDITORIAL BOARD

1. Dr C.Subba Rao  
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Associate Professor
4. Mrs. D.Hareesha,  
Assistant Professor
5. Dr. V.S.D.Rekha,  
Assistant Professor
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(20501A0428) III B.Tech
7. Mr. R.Santosh Kumar  
(20501A0495) III B.Tech
8. Ms. K. Kavyasri  
(21501A0455) II B.Tech
9. Ms. P. Durga Anupama  
(21501A0499) II B.Tech

## Inside:

- ✓ Workshops/Seminars/Guest Lectures/ Training Programs/Symposiums/Quiz organized
- ✓ Papers presented in Seminars/ Conferences/Symposiums by the faculty
- ✓ Workshops/Seminars/STTP/Conference/Faculty Development Programs attended by the faculty
- ✓ Publications by the faculty
- ✓ Faculty Achievements
- ✓ Students achievements
- ✓ Industrial Visits
- ✓ Higher Education
- ✓ MOUs Signed
- ✓ Students Contribution



## 1. Workshops/Seminars/Guest Lectures/Training Programs/Symposiums/ Webinars organized

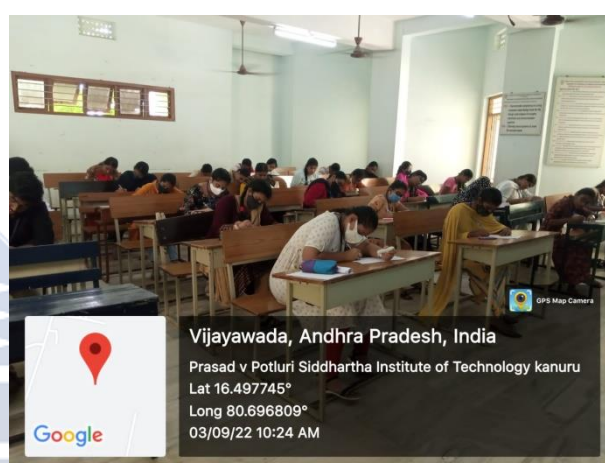
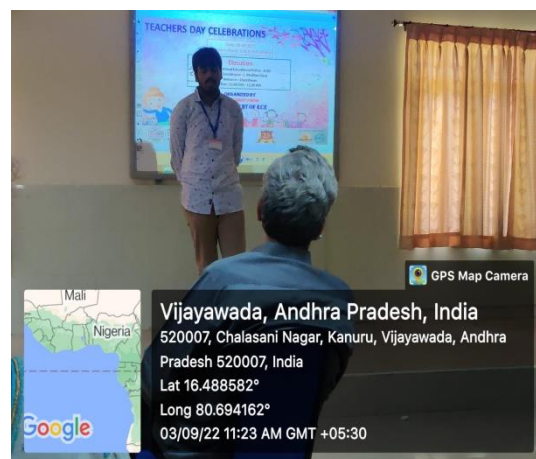
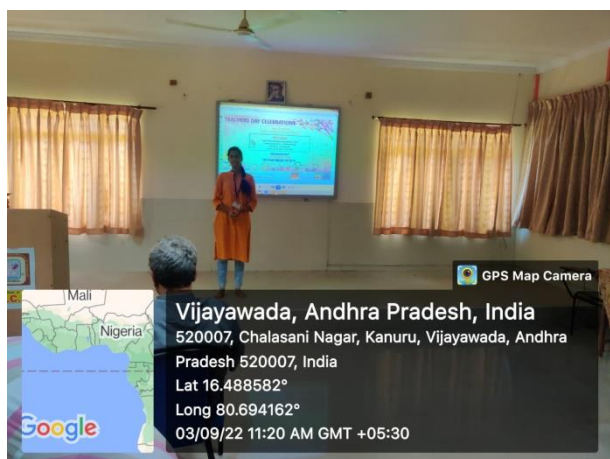
The department of Electronics and Communications Engineering organized ---

- i. Three day workshop on **Design & Development of IoT Systems for Targeted Applications** for the students from various engineering colleges 28<sup>th</sup> – 30<sup>th</sup> July, 2022.

Resource Persons: Faculty of Dept. of ECE, Prasad V. Potluri Siddhartha - Institute of Technology.



- ii. All India Seminar on **5G - The New Radio** sponsored by The Institute of Engineers (IEI) Andhra Pradesh state centre on 14<sup>th</sup> & 15<sup>th</sup> October, 2022.
- iii. Different competitions for III B.Tech. students on the occasion of Teachers Day Students on 5<sup>th</sup> September, 2022.
  - Essay Writing
  - Debate on National Educational Policy-2020
  - Technical Quiz



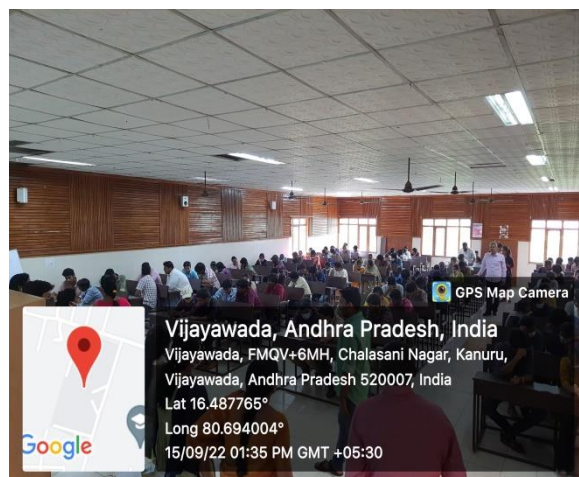
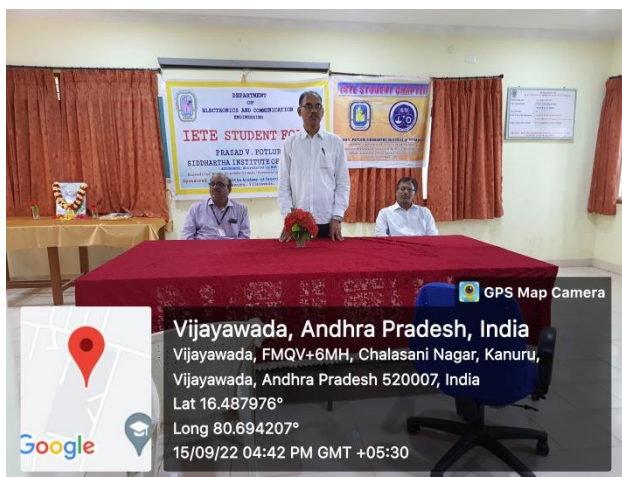
- iv. A guest lecture on **Entrepreneurship** in association with EEE for III B.Tech students on 14<sup>th</sup> September, 2022.

Resource Person: Sri. D. Rama Krishna, Managing Director, Efftronics, VJA.

- v. Different competitions were held for II, III & IV B.Tech students on the occasion of Engineers day in association with ISTE and IETE Local Centre and distributed Prizes for winners on 15<sup>th</sup> September, 2022.

- Technical Quiz
- Coding
- Technical Paper Presentation
- Circuitrix





- vi. A guest lecture on **The Changing Face of Broadcasting** for II & III B.Tech students on 22<sup>nd</sup> September, 2022.

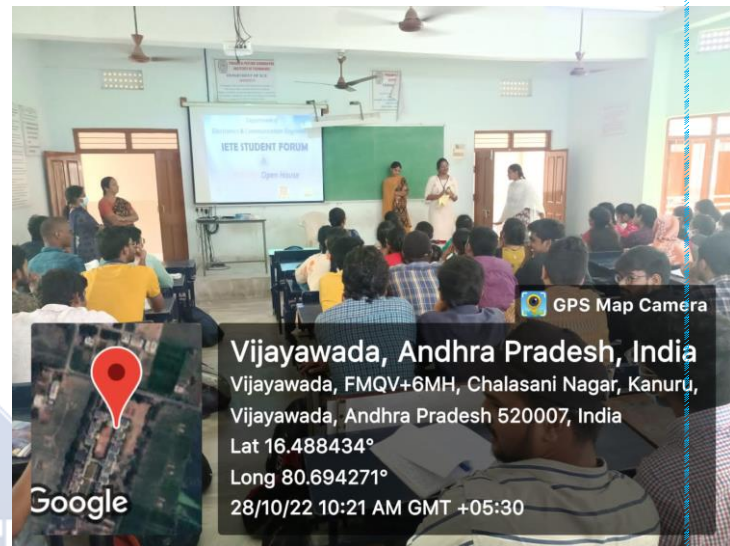
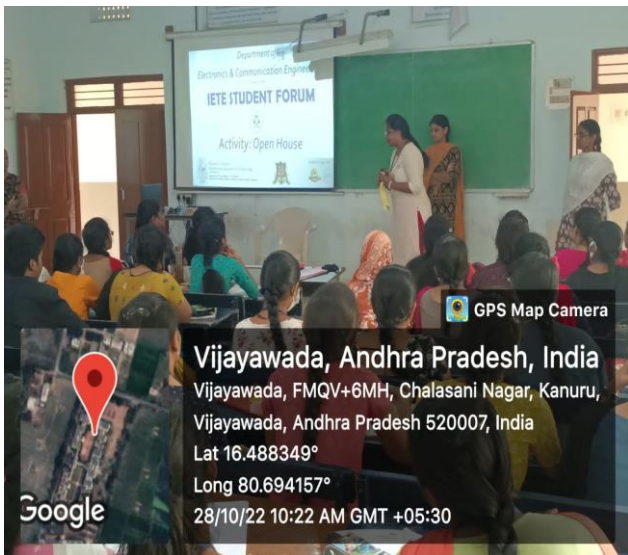
Resource Person: Dr. D. Ranganadham, Deputy Director General & Head, Dooradarshan Kendra, Vijayawada.

- vii. A guest lecture on **Create Your Own Future** for II B.Tech students on 24<sup>th</sup> September, 2022.

Resource Person: Sri V. Raj Kumar, Scientist F, Defence Research & Development Laboratory, Hyderabad.

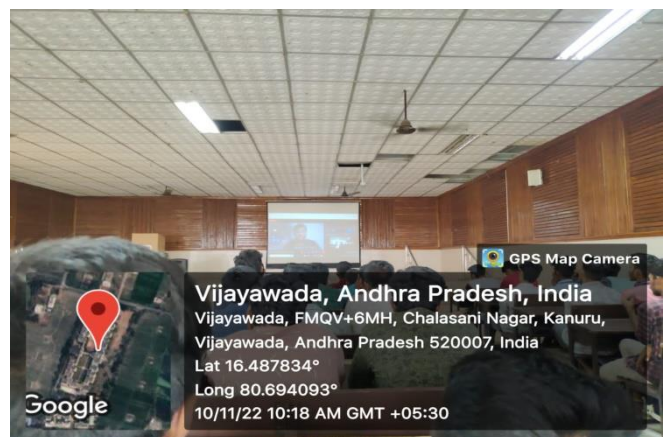
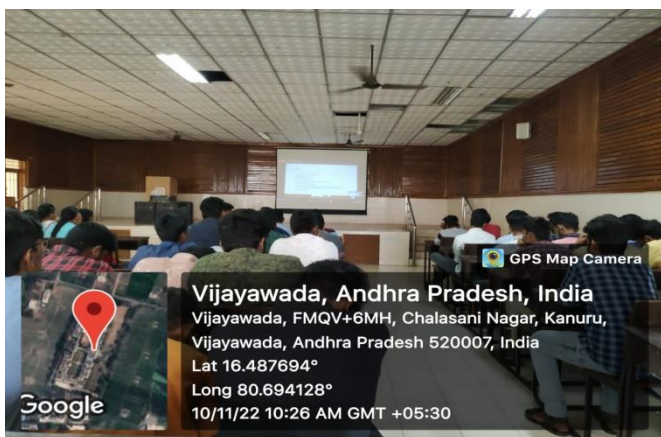
viii. A seminar on **IPR & Patents and Design filing** at PVPSIT, Vijayawada organized by PVPSIT, Vijayawada sponsored by Intellectual Property Office, India on 12<sup>th</sup> October' 2022.

ix. Open house activity was conducted by the IV B.Tech students selected in placements for III B.Tech students on 28<sup>th</sup> October, 2022.



x. An alumni guest lecture on **How to crack IT jobs** for II& III ECE students on 10<sup>th</sup> November, 2022.

Resource Person: Mr. N. Avinash (M.S), Sacred heart University, USA,  
PVPSIT Alumni (ECE 2016-2020 Batch)



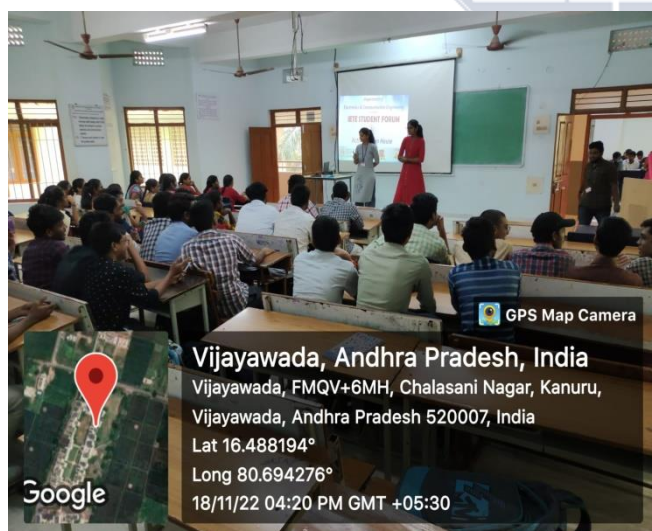
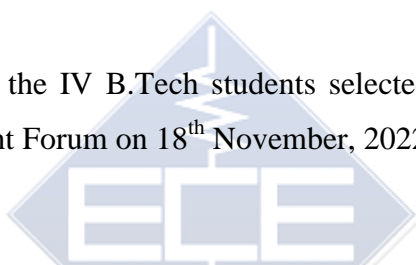


- xi. One week workshop on **PCB Design** for II ECE students in association with APSSDC during 7<sup>th</sup> – 12<sup>th</sup> November, 2022 for Section 1 and 14<sup>th</sup> – 19<sup>th</sup> November, 2022 for Section 2.

Resource Person: Rubeena, Trainer, APSSDC

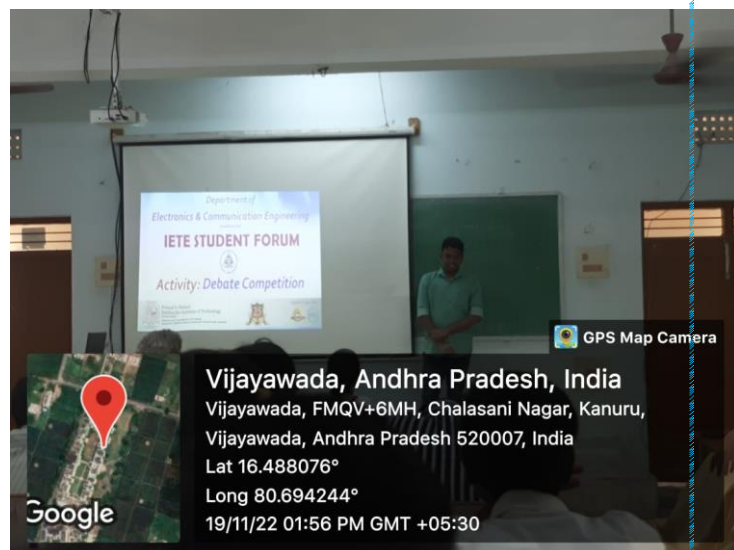
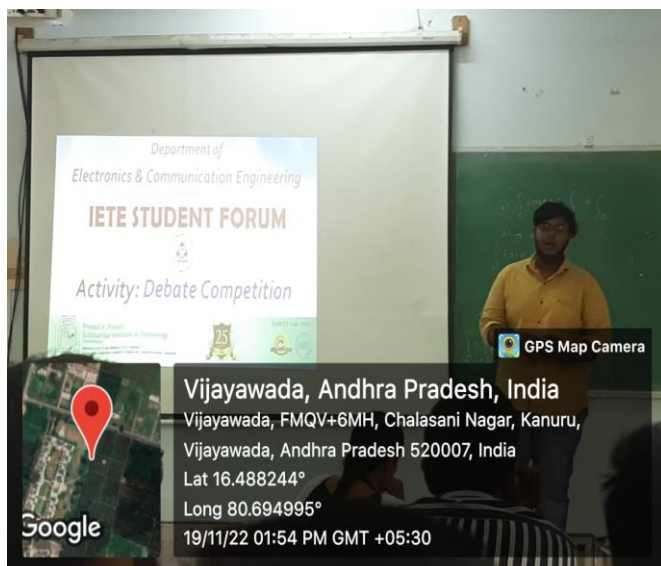


- x. Open house activity by the IV B.Tech students selected in placements for II B.Tech students by IETE Student Forum on 18<sup>th</sup> November, 2022.



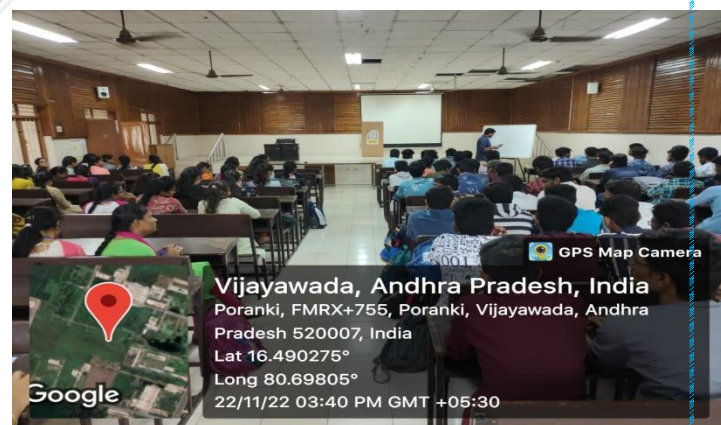
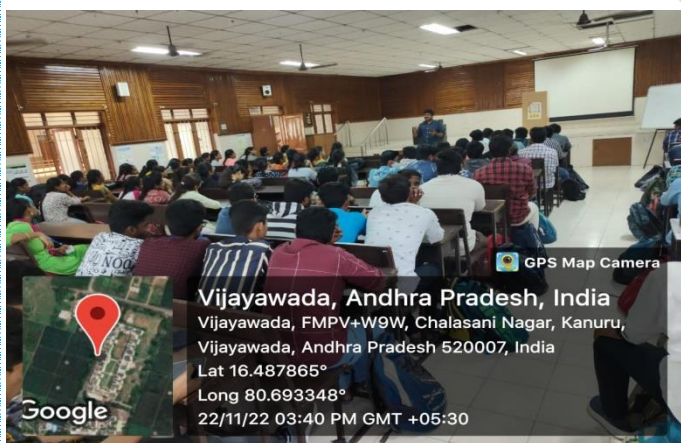
- xi. A debate competition on **Impact of Social Media on students** for II B.Tech students on the occasion of World Television Day by IETE Student Forum on 19<sup>th</sup> November, 2022.





- xii. An alumni guest lecture on **How to prepare for GATE & Govt. jobs** for II & III ECE students on 22<sup>nd</sup> November, 2022.

Resource Person: Mr.A.Srinivas Chowdary, M.Tech (IITD), Quantitative Reseacher,  
World Quant LLC, PVPSIT Alumni (ECE 2015-2019 Batch)



- xiii. Two day hands on session for the participants of AICTE Training and Learning (ATAL) Academy Hybrid FDP on **Applications of IoT in Mechanical Engineering** on 23<sup>rd</sup> & 24<sup>th</sup> November, 2022 organized by Dept. of Mechanical Engineering, Prasad V Potluri Siddhartha Institute of Technology.

Resource Persons: Faculty of Dept. of ECE



- xiv. **Poster Presentation** for IV B.Tech students to present their mini project under IETE Student Forum on 26<sup>th</sup> November, 2022.

Judge: Mr. R V Hanuman Prasad, Asst. Professor, Dept. of ECE, VRSEC





- xv. A guest lecture on **Human Values and Professional Ethics** for II ECE students on 14<sup>th</sup> December, 2022.

Resource Person: Uma Maheswar Desu, CEO of VV Creations.

## 2. Papers presented in Seminars/Conferences/Symposiums by the faculty:

- i. Dr.J. Ravindra Babu, Ms. D. Pallavi, M.Tech. Ms. K. Divya, M.Tech. presented a paper entitled **Multistage Multiuser Detection Techniques for performance Analysis and improvement in DS-CDMA** – ICIET, organized by JNTUH, Kukatpalli, Hyderabad during 15<sup>th</sup> – 17<sup>th</sup> September’ 2022.
- ii. Dr. Ramanjaneyulu. K, presented a paper entitled **Deep Learning-Based Bone Age Estimation Using X-Ray Hand Images** – 2022 IEEE 3<sup>rd</sup> Global Conference for Advancement in Technology (GCAT), organized by IEEE Bangalore Section at NCET, Bangalore during 7<sup>th</sup> – 9<sup>th</sup> October, 2022.
- iii. Mrs.T. Maha Lakshmi, presented a paper entitled **Statistical Analysis of Big Data Models in Android Malware Detection** – ICECAA 2022 (IEEE conference), organized by Gnanamani college of technology during 13<sup>th</sup> – 15<sup>th</sup> October’ 2022.
- iv. Mrs. D. Swathi presented a paper entitled **Adaptable Reconfigurable and Power-Efficient Robots for Health Monitoring** – 2022 Second International Conference on Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT) by Shri Shankaracharya Technical Campus (SSTC), Bhilai, Chhattisgarh, India, ISBN No: 978-1-6654-1120-2.
- v. Dr.P.Venu Madhav presented a paper entitled **A Octagonal Bowtie Antenna With Enhanced Bandwidth For Vehicle- to Vehicle (V2V) Communication Applications** - Second International Conference (Virtual) on Computational and Intelligent Techniques For Automation of Engineering Systems CITAES – 2022 - Dept of ECE, GEC, Gudlavalleru, ISBN No: 0769503331430. 29<sup>th</sup> -30<sup>th</sup> July’ 2022



- vi. Dr. A Geetha Devi, presented a paper entitled **Prediction of Maintenance Time and IoT Device Failures using Artificial Intelligence** - 2022 Second International Conference on Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT), ISBN No: 978-1-6654-1120-2 on 1<sup>st</sup> July' 2022.
- vii. Dr. K Ramanjaneyalu, Dr. J. Ravindra Babu presented a paper entitled **Pre-coding Techniques are used for performance analysis and improvement in MC-CDMA system** organised at JNTU Kukatpalli, Hyderabad. 15<sup>th</sup> – 17<sup>th</sup> September' 2022.
- viii. Dr. A Geetha Devi presented a paper entitled **Visual Attention-based Optic Disc Detection System Using Machine Learning Algorithms** - International Conference on Expert Clouds and Applications organized by RV Institute of Technology and Management on 8<sup>th</sup> August' 2022.
- ix. Dr. A Geetha Devi presented a paper entitled **Real time Video Image edge detection system** - International Conference on UBIQUITOUS Computing and Intelligent information Systems organized by Sri Venkateswara Hitech Engineerig College, Tamilnadu, India on 26<sup>th</sup> July' 2022.

### 3. Workshops/ Seminars/STTP/Conferences/Faculty Development Programmes/ Awareness programmes attended by the faculty:

#### a) Seminars/Webinars:

- i. Dr. V. S.D. Rekha, Mrs. D. Swathi participated in a seminar on **Intellectual Rights with Focus on Patent Filing** organized by the IEEE Student Branch of National Institute of Technology Puducherry Karaikal on 25<sup>th</sup> July' 2022.
- ii. Dr. V. S.D.Rekha participated in a webinar on **Identifying Real Time Societal Problems for the Conduct of Research**, “Impact Lecture Sessions-2” Sponsored by MHRD’S Innovation Cell, New Delhi organized by the Department of Computer Science & Engineering of Shri Vishnu Engineering College for Women(A) and IIC Cell on 30<sup>th</sup> July'2022.

- iii. Dr. V. S.D.Rekha, participated in a webinar on **Filing a National and International Patent and Understanding the Procedure for the Same** - “Impact Lecture Sessions-2” Sponsored by MHRD’S Innovation Cell, New Delhi organized by the Department of Computer Science & Engineering of Shri Vishnu Engineering College for Women(A) and IIC Cell on 6<sup>th</sup> August’ 2022.
- iv. Mr. A. Ashok Babu participated in **Regional Meet - Institutions Innovation Council MoE Innovation Cell** organised by Ministry of Education organized by Srinidhi Educational Group Hyd on 12<sup>th</sup> August’ 2022.
- v. Dr. V. S.D. Rekha participated in a seminar on **Semiconductor Electronics for High Power/High Speed Reconfigurable RF and Microwave Electronics** sponsored and organized by IEEE MTT-S Student Branch Chapter (SBC), NIT Silchar, IEEE Silchar Subsection, and Department of ECE, NIT Sticher on 9<sup>th</sup> September’ 2022.
- vi. Dr. K. Ramanjaneyulu participated in a webinar on **Data Privacy - A Humanistic Perspective** sponsored and organized by BVICAM, New Delhi on 10<sup>th</sup> September’ 2022.

**b) Workshops:**

- i. Dr. A. Geetha Devi, Associate Professor participated in a workshop on **Fundamentals of Data Security** organized by NITTTR, Kolkata during 25<sup>th</sup>-29<sup>th</sup> July’ 2022.
- ii. Dr.A.Geetha Devi, Dr. B. Surya Prasada Rao participated in a workshop on **Designing and Modelling of IoT, AI& ML Systems** at PVPSIT organised by AICTE during 1<sup>st</sup> - 5<sup>th</sup> August’ 2022.
- iii. Dr. V. S.D. Rekha participated in a workshop on **5G Noma Communications** sponsored and organized by CVR College of Engineering Hyderabad Telangana on 12<sup>th</sup> & 13<sup>th</sup> August’ 2022.

- iv. Dr. V. S.D. Rekha participated in a workshop on **Intellectual Property Rights (IPR) & Patents and Design Filing** organised at PVPSIT by Intellectual Property Office India on 12<sup>th</sup> October' 2022.
- v. Dr. Ch. Gangadhar participated in a workshop on **Low Power Cryo-CMOS Design for Quantum Computing Applications** organised by IEEE IISc MTT/AP-S Student Branch Chapter on 16<sup>th</sup> December' 2022.

**c) Guest Lectures Attended:**

- i. Dr. V. S.D.Rekha participated in a guest lecture on **Designing and Analysis of equivalent circuits in ADS tools** organised by IEEE RFID student Chapter MNIT Jaipur on 20<sup>th</sup> July' 2022.
- ii. Dr. V. S.D. Rekha participated in a guest lecture on **IP Awareness/Training Program** at PVPSIT, Vijayawada on 12<sup>th</sup> October' 2022.
- iii. Dr. T. Haritha participated in a guest lecture on **Awareness programme on Environmental sustainability** organized by faculty of life sciences of FED Department, PVPSIT on 24<sup>th</sup> December' 2022.

**d) STTP/STC's:**

- i. Dr.A. Geetha Devi, Associate Professor participated in a 5 days STTP on **Fundamentals of Data Security** organised by NITTTR, Kolkata during 25<sup>th</sup> – 29<sup>th</sup> July' 2022.
- ii. Dr. T. Haritha, Ms.K. Anitha, Dr.A.Geetha Devi, Mrs. K. Aruna Kumari, Dr.Haji Habibulla MD, Ms T. Sushma, Ms. L. Madhavi Devi,Dr. V. S.D.Rekha, Mrs.D.Praveena Bai, Mrs. D Swathi Mrs. Ch.Sri Lakshmi, Mrs. T. Maha Lakshmi participated in a five days STTP on **Enhancing Research Capabilities for Academic Career Progression** organized by NITTTR Chandigarh during 5<sup>th</sup>- 9<sup>th</sup> September' 2022.



- iii. Dr. T. Haritha, Dr.A.Geetha Devi participated in STTP on **Introduction to image processing** organised by NITTTR Kolkata during 17<sup>th</sup>- 21<sup>st</sup> October' 2022.

**e) Faculty Development Programmes:**

- i. Dr. V. S.D.Rekha participated in a FDP on **5G Wireless Communication Technology** organised by IEEE India Council during 28<sup>th</sup> - 30<sup>th</sup> July'2022.
- ii. Dr. B. Surya Prasada Rao participated in FDP on **Advanced Optimization Techniques and hands-on with MATLAB/SCILAB (AOT 2022)** organised by E&ICT Academy, MNIT Jaipur during 8<sup>th</sup> – 19<sup>th</sup> August' 2022.
- iii. Dr. V. S.D.Rekha, Mrs. D Swathi participated in FDP on **Amazon Web Services (AWS)** organised by GITAM (Deemed to be University), Hyderabad Jaipur during 22<sup>nd</sup> –27<sup>th</sup> August' 2022.
- iv. Dr. K. Ramanjaneyulu, Mrs.K. Anitha,Dr. B. Samuyelu, Ms T. Sushma, Mrs. V. Ratna Kumari, Mrs.D.Hareesha, Mr. T. Balaji participated in FDP on **Medical Image Processing** organised by Electronics and ICT Academies at IIT Roorkee, MNIT Jaipur, NIT Patna, PDPM IITDM Jabalpur and NIT Warangal during 22<sup>nd</sup> August - 02<sup>nd</sup> September' 2022.
- v. Dr. C. Subba Rao, Dr. Ch. Gangadhar, Mrs. V. Ratna Kumari,Ms. D. Hareesha, Mrs. B. V. Subbayamma, Mrs. T. Maha Lakshmi, Dr. P. Venu Madhav participated in a FDP on **VLSI Design & Nano electronics: Emerging Challenges & Opportunities** sponsored by Electronics and ICT Academy at PDPM IITDM Jabalpur during 1<sup>st</sup> – 8<sup>th</sup> September' 2022.
- vi. Mr. A. Ashok Babu participated in FDP on **Python for Scientific Computing** organised by VR Siddhartha Engineering College during 19<sup>th</sup> -23<sup>rd</sup> September' 2022.
- vii. Mrs. K. Aruna Kumari, Ms. B. Swathi Lakshmi, Mrs. L. Madhavi Devi, Dr. V. S.D.Rekha, Mrs. D Swathi, Mrs. Ch.Sri Lakshmi participated in FDP on **Internet of things based green energy technologies** organised by LBRCE, Mylavaram, A.P during 17<sup>th</sup> - 29<sup>th</sup> October' 2022.

- viii. Dr.A. Geetha Devi, Ms T Sushma participated in AICTE Training and Learning (ATAL) Academy Hybrid FDP on **Applications of IoT in Mechanical Engineering** organized by, Dept. of Mechanical Engineering PVP Siddhartha Institute of Technology during 14<sup>th</sup>- 25<sup>th</sup> November' 2022.
- ix. Dr. Ch. Gangadhar participated in FDP on **DST Sponsored Summer School on Geospatial Technologies** organised by VRSEC, VIJAYAWADA on 06<sup>th</sup> & 7<sup>th</sup> December' 2022.
- x. Mrs. Ch. Sri Lakshmi participated in FDP on **Applications of Power Electronics in Electric Vehicles** organised by NRI Institute of Technology, Agiripally during 12<sup>th</sup> - 23<sup>rd</sup> December' 2022.
- xi. Dr. J. Ravindra Babu, Dr. T. Haritha, Dr.A.Geetha Devi, Dr. B. Samuyelu, Ms T. Sushma, Mrs. B. V. Subbayamma, Mrs. L. Madhavi Devi, Dr. V. S.D. Rekha, Mrs. D.Praveena Bai, Mrs. D Swathi, Mrs. Ch.Sri Lakshmi participated in FDP on **Design and Practical Aspects of RF Devices, MEMS and Antennas for 5G Communications, Radar and Electronic Warfare** organized by VR Siddhartha Engineering College, Vijayawada, India during 14<sup>th</sup> – 16<sup>th</sup> December' 2022.
- xii. Dr. V. S.D. Rekha participated in the IEEE sponsored FDP on **Awareness of Electronic Tools for System Design** organized by Dept of ECE, Sairam Institute of Technology, Chennai during 19<sup>th</sup> - 24<sup>th</sup> December 2022.
- xiii. Dr. Ch. Gangadhar participated in FDP on **Open Source VLSI Tools** organised by VIT-AP University on 20<sup>th</sup> & 21<sup>st</sup> December' 2022.
- xiv. Dr.A.Geetha Devi, Mrs. V. Ratna Kumari, Mrs D Hareesha, Mrs. B. V. Subbayamma participated in FDP on **Deep Learning in Computer Vision: An End-to-End Pipeline** organised by VR Siddhartha Engineering College, Vijayawada, India during 27<sup>th</sup>- 31<sup>st</sup> December' 2022.

#### 4. Publications by the faculty (National/International Journals/ Conferences):

##### a) Scopus indexed journals:

- i. Dr. P. Venu Madhav published a paper entitled **IOT Based Real-Time Energy Monitoring-** ICIC Express Letters, 1881-803X, Aug-2022 (Scopus).
- ii. Mrs. L. Madhavi Devi, Dr. C. Subba Rao, Mrs.B.Swati Lakshmi, Ms.T.Sushma presented a paper entitled **Multiple Slot Fractal Structured Antenna for Wi-Fi and Radio Altimeter for uncertain Applications** - International Journal of Communication Networks and Information security, Sep-2022 (Scopus), ISSN: 2073607X.
- iii. Dr.Ch. Gangadhar published a paper entitled **An energy efficient NOMA-based spectrum sharing techniques for cell - free massive MIMO** - International Journal of Engineering Systems Modelling and Simulation (IJESMS), ISSN: 1755-9766; Vol. 13, No.4, Oct -2022. (scopus)
- iv. Dr. B. Samuyelu published a paper entitled **Target Application Based Design Approach for RF MEMS Switches using Artificial Neural Networks** - Transactions on Electrical and Electronic Materials, ISSN: 2092-7592, Vol:23, Issue:5, P.P:509-521, Oct -2022. (scopus)
- v. Mr.T. Balaji published a paper entitled **A High Performance Dual Stage Face Detection Algorithm Implementation using FPGA Chip and DSP Processor** - Journal of Information Systems and Telecommunication, ISSN: 23221437, Vol:10, Issue: 4, P.P:241-248, Oct -2022. (scopus)
- vi. Ms T.Sushma, published a paper entitled **A Novel Energy Aware Clustering Mechanism with Fuzzy Logic in MANET Environment** - International Journal on Recent and Innovation Trends in Computing and Communication, ISSN: 2321-8169, Vol:10, Issue: 10, P.P:109-118, Oct -2022. (scopus)



- vii. Mrs.D Swathi published a paper entitled **Performance signature of transceiver communication system based on the cascade uniform fiber bragg grating devices** - Journal of optical communications, ISSN : 2191-6322, Dec- 2022 (Scopus).

**b) SCI/SCIE/ESCI indexed journals:**

- i. Dr. K. Ramanjaneyulu published a paper entitled **Virus Texture Classification of TEM Images using Fusion of Chebyshev Moments and Resnet50** - Brazilian Archives of Biology and Technology, ISSN: 1678-4324, Vol.65, Issue: 1, P.P:1-11, Aug -2022. (SCI)

**c) UGC/ Other journals:**

- i. Mrs. Kukati Aruna Kumari published a paper entitled **Data Security Enhancement in 4G Vehicular Networks Based on Reinforcement Learning for Satellite Edge Computing** - International Journal of Communication Networks and Information Security, 2073-607X, 2076-0930/2073 607X 2076 0930, Dec- 2022.

**5. Faculty Achievements (Patents, Higher Qualification awarded, guest lectures given, awards and rewards, acted as a Resource person etc.):**

**a) Patents:**

- i. Mrs. K.Anitha, Mr.M. Srinivasa Rao published a patent – **Multi – Directional Baby Carrier** with the application no: 363881-001 filed on 07.05.2022 and published on 30.09.2022. (**Granting Organization:** Intellectual Property India).
- ii. Dr.P.Venu Madhav published a patent – **An Integrated And Smart Dual Power Cooking System With Interchangeable Configuration And A Method Thereof** with the application no: 202241067403 on 02.12.2022.(**Granting Organization:** The Patent Office, Government of India, Intellectual Property, Chennai).

**b) Guest lectures delivered:**

- i. Dr. C. Subba Rao delivered keynote address on **RF Antenna design for Targeted Applications** – workshop organized by Andhra Layola Institute of Engg. & Technology, Vijayawada on 22<sup>nd</sup> September, 2022.

**c) MOOCs/COURESERA courses completed by the faculty:**

- i. Following faculty received course completion certificates for online courses through Infosys spring board offered by Infosys.

Sl. No.	Faculty Name	Course Name	Course Completion Date
1	Dr.B. Samuyelu,	Block chain Development for beginners	28.11.2022
2	Mrs.T.Maha lakshmi	Focusing on the bottom line as an Employee	17.11.2022
3	D. Hareesha	Hands-On Machine Learning with Python and Scikit-Learn	06.12.2022

**d) Others:**

- i. Dr.B. Surya Prasada Rao & Dr. Md. Habibulla are the members of FIE - Fellow in Institute of Electronics & Tele Communication Engineers.
- ii. Dr. P. Venu Madhav, Invited as a chief guest at the First Investiture Ceremony on Shamrock International School, Vijaywada on 1<sup>st</sup> September, 2022.

**6. Industrial Visits:**

Sl. No	Name of the organization	Place	Dates	Year of Study	Staff Accompanied
1	Efftronics Pvt. Ltd.	Mangalagiri	11.11.2022	II ECE	1. Dr. B. Samuyelu 2. Mr. A. Ashok Babu
2	VTM, HAL facilities Centre, IISc Bangalore, Deepanjan Cables Pvt. Ltd. Mysore.	Bangalore, Mysore	09.11.2022 — 12.11.2022	III ECE	1. Dr. J. Ravindra Babu 2. Dr. B. Surya Prasada Rao 3. Mrs. B. V. Subbayamma 4. Ms. M. Lahari Ratnanjali

## 7. Students' achievements:

### a) Co-curricular Activities:

#### Certification Courses:

- i. 198 students of II and III students received course completion certificates for online courses on **C# Data Structures and algorithms and Time management** through **Infosys spring board** offered by **Infosys**.
- ii. NPTEL online certification courses conducted by IIT from July - December 2022. Exam was conducted in the period July - December 2022. Following are the details of certified students.

Sl. No.	Regd. No.	Name of the student	Course Name	Final Score	Certificate Type
1	21501A0401	Abdul Namathunnisa	Cryptography and network security	62%	Elite
2	21501A0403	Akipalli Vasavya	Python for Data Science	64%	Elite
3	21501A0408	Arigela Siva Ram	Python for Data Science	68%	Elite
4	21501A0410	Bande Manoj	Python for Data Science	68%	Elite
5	21501A0413	Bejjam Tejaswi	Python for Data Science	61%	Elite
6	21501A0424	Chathala Guru Babu	Python for Data Science	70%	Elite
7	21501A0432	Dhannana Vasu	Python for Data Science	65%	Elite
8	21501A0437	Gandreti Jayanth	Python for Data Science	58%	Successfully completed
9	21501A0442	Gudiseva Jogi Sai Lakshmana Phanindra	Python for Data Science	65%	Elite
10	21501A0448	Jeya Vardhini Battu	Python for Data Science	67%	Elite
11	21501A0451	Kandula Naga Praveen	Python for Data Science	66%	Elite
12	21501A0452	Kareti Sri Krishna	Python for Data Science	69%	Elite
13	21501A0454	Kavilikatta Varsha	Python for Data Science	64%	Elite
14	21501A0464	Kovuri Sai	Python for Data Science	66%	Elite



15	21501A0471	Madivada Bhavana	Python for Data Science	64%	Elite
16	21501A0473	Magati Naga Mani Kanta	Python for Data Science	68%	Elite
17	21501A0474	Mandala Jahnvi	Python for Data Science	67%	Elite
18	21501A0475	Marri Baji Babu	Python for Data Science	53%	Successfully completed
19	21501A0476	Mediboyeena Saritha	Python for Data Science	69%	Elite
20	21501A0477	Mediboyina Praveen Kumar	Python for Data Science	66%	Elite
21	21501A0487	Nammi Chaitanya	Python for Data Science	62%	Elite
22	21501A0497	Pilla Chandu	Python for Data Science	63%	Elite
23	21501A04A2	Putta Vivek Raj Manoj	Python for Data Science	65%	Elite
24	21501A04A3	Rajulapati Puneetha	Python for Data Science	70%	Elite
25	21501A04B0	Shaik Saleem	Python for Data Science	61%	Elite
26	21501A04B3	Tadapaneni Maruthi Bharath	Python for Data Science	56%	Successfully completed
27	21501A04B4	Talluri Divya Naga Durga	Python for Data Science	77%	Elite
28	21501A04B9	Tirumalasetti Pranith	Python for Data Science	68%	Elite
29	21501A04C1	Turlapati Mani Chandra Avinash	Python for Data Science	66%	Elite
30	21501A04C3	Varagani Hari Mani Kumar	Python for Data Science	70%	Elite
31	21501A04C8	Yarra Usha Kiran	Python for Data Science	63%	Elite
32	20501A0401	Abdul Ayesha	Python for Data Science	63%	Elite
33	20501A0406	Alapati Naga Venkata Sai Akshaya	Python for Data Science	67%	Elite
34	20501A0409	Avutapalli D S S L Tejaswini	Python for Data Science	62%	Elite
35	20501A0411	Banda Navyasri	Python for Data Science	63%	Elite
36	20501A0412	Battina Puja Madhuri	Python for Data Science	67%	Elite
37	20501A0413	Battina Rammohan	Python for Data Science	72%	Elite
38	20501A0416	Buradagunta Chandu	Python for Data Science	68%	Elite
39	20501A0417	Chaganti Sai Sarath	Python for Data	65%	Elite

		Chandra	Science		
40	20501A0422	Darajula Sai Revanth	Python for Data Science	61%	Elite
41	20501A0423	Dasari Dwijit	Python for Data Science	70%	Elite
42	20501A0424	Dasi Devika	Python for Data Science	62%	Elite
43	20501A0425	Divi Bhargavi	Python for Data Science	60%	Elite
44	20501A0427	Dondapati Tanmai	Python for Data Science	67%	Elite
45	20501A0429	Gandikota Tejeswararao	Python for Data Science	63%	Elite
46	20501A0431	Golla Kamaraju	C programming and assembly language	54%	Successfully completed
47	20501A0434	Gunuru Bhaskar	Python for Data Science	63%	Elite
48	20501A0435	Jai Aashish Sammeta	C programming and assembly language	73%	Elite
49	20501A0436	Jayana Thanmaya Ramya Krishna	Python for Data Science	67%	Elite
50	20501A0437	Kadiyala Navatej	Python for Data Science	65%	Elite
51	20501A0438	Kagita Deepti Sri	Python for Data Science	63%	Elite
52	20501A0440	Kancharla Ramya	Python for Data Science	66%	Elite
53	20501A0442	Karlapalepu Hemasri	Python for Data Science	56%	Successfully completed
54	20501A0444	Kolli Anvitha	C programming and assembly language	49%	Successfully completed
55	20501A0448	Korivi Divya Naga Durga	Python for Data Science	66%	Elite
56	20501A0449	Kosuri Ravali Priya	Python for Data Science	67%	Elite
57	20501A0452	Kukkamalla Sanjana	Python for Data Science	60%	Elite
58	20501A0453	Lalitha Vangavolu	Python for Data Science	69%	Elite
59	20501A0454	Lanke Harshitha	Python for Data Science	64%	Elite
60	20501A0456	Madu Kesav	Python for Data Science	63%	Elite
61	20501A0458	Mallampally Manvitha Naga Siri	Python for Data Science	65%	Elite
62	20501A0461	Maradani Uma Sri	Python for Data	60%	Elite

			Science		
63	20501A0463	Meda Tanmayi	Python for Data Science	62%	Elite
64	20501A0464	Mendu Vinay	C programming and assembly language	56%	Successfully completed
65	21505A0402	Appikonda Prabhu Shankar	Python for Data Science	62%	Elite
66	21505A0403	Chintalacheruvu Nandini	Python for Data Science	64%	Elite
67	21505A0406	Kampasati Maneesha	Python for Data Science	60%	Elite
68	21505A0407	Kotta Naga Sai	Python for Data Science	63%	Elite
69	20501A0470	Nagabathula Lakshmi Gayathri	C programming and assembly language	47%	Successfully completed
70	20501A0472	Nallajarla Dana Durga Venkata Krishnavamsi	Basics of Software Defined Radios	57%	Successfully completed
71	20501A0476	Pamula Vamsi Sridevi	Python for Data Science	62%	Elite
72	20501A0477	Panuganti Ravi Kishor Reddy	Python for Data Science	58%	Successfully completed
73	20501A0478	Pavuluri Sai Goutham	Programming in JAVA	79%	Elite
74	20501A0480	Penumudi Kousalya	Python for Data Science	64%	Elite
75	20501A0481	Peta Asha	Python for Data Science	55%	Successfully completed
76	20501A0482	Podili Srimaheswari	Python for Data Science	62%	Elite
77	20501A0483	Potluri Siva Ram	Programming in JAVA	75%	Elite
78	20501A0484	Pranavi Sri Narapareddy	Python for Data Science	66%	Elite
79	20501A0487	Puvvada Swathi Naga Manikanta Manasa	Python for Data Science	63%	Elite
80	20501A0488	Rabia Kousar	Python for Data Science	67%	Elite
81	20501A0492	Ravada Anil Kumar	C programming and assembly language	55%	Successfully completed
82	20501A0493	Ravuri Anil Kumar	Python for Data Science	65%	Elite
83	20501A0495	Rompelli Santosh Kumar	C programming and assembly language	70%	Elite
84	20501A0496	Rugvedam Padma Sri	Python for Data	68%	Elite



			Science		
85	20501A0498	Saripalli Pujitha Bhavani	Python for Data Science	71%	Elite
86	20501A04A1	Shaik Arshiya	Python for Data Science	64%	Elite
87	20501A04A3	Sonti Sweekar	Data Structures and Algorithms using JAVA	75%	Elite
88	20501A04A5	Tekimudi Sai Venkat	Python for Data Science	67%	Elite
89	20501A04A6	Tharugu Meghana	Python for Data Science	69%	Elite
90	20501A04A7	Thatithuri Lalitha	Digital Circuits	60%	Elite
91	20501A04A8	Thollikonda Esther Rani	Python for Data Science	76%	Elite
92	20501A04A9	Thotapalli Mohana Iswarya	Python for Data Science	67%	Elite
93	20501A04B1	Uppala Sai Gowtham	Programming in JAVA	72%	Elite
94	20501A04B3	Vadlamani Venkata Satya Bharathi	Python for Data Science	63%	Elite
95	20501A04B4	Vadlamudi Sangeetha	Python for Data Science	72%	Elite
96	20501A04B6	Vamsi Sai Krishna Gogineni	Programming in JAVA	75%	Elite
97	20501A04B7	Vanga Ganesh Sai Kartheek	Python for Data Science	80%	Elite
98	20501A04B9	Varadapureddi Venkata Rao	Python for Data Science	68%	Elite
99	20501A04C0	Vatturi Prasanna Ganesh	Problem Solving Through Programing in C	73%	Elite
100	20501A04C1	Velamala V S S Lakshmi Narasimha	Python for Data Science	69%	Elite
101	20501A04C3	Vemu S V S S Anandamai	Python for Data Science	68%	Elite
102	20501A04C5	Vucha Ushaswini	Python for Data Science	67%	Elite
103	20501A04C6	Yadavalli Omkar	Python for Data Science	83%	Elite
104	21505A0409	Mohammad Naseer Baig	Basics of Software Defined Radios	47%	Successfully completed
105	21505A0411	Shaik Hussainbee	C programming and assembly language	71%	Elite
106	21505A0412	Sunkara Naga Devi	Python for Data Science	51%	Successfully completed

Following students got topper position:

Sl.No	Regd. No.	Name of the student	Course Name	Final Score	Certificate Type	Position
1	20501A04B7	Vanga Ganesh Sai Kartheek	Python for Data Science	80%	Elite	Top 5%
2	20501A04C6	Yadavalli Omkar	Python for Data Science	83%	Elite	Top 2%

### Internships attended by students:

- i. Following are the details of Internships attended by students.

#### IV B.Tech

S. No	Company Name & Place of Internship	No. of Students Participated
1	Airport Authority Of India, Vijayawada Airport	10
2	Brain O Vision Solutions Pvt. Ltd	58
3	BSNL, Hyderabad	24
4	Dooradarshan, Vijayawada	16
5	Entuple, Bangalore	26
6	Hexaware, Chennai	3

#### III B.Tech

S. No	Company Name & Place of Internship	No. of Students Participated
1	Airport Authority Of India, Vijayawada Airport	16
2	Bharat Electronics Limited, Machilipatnam	15
3	Brain O Vision Solutions Pvt. Ltd	61
4	Efftronics Systems, Pvt.Ltd, Mangalagiri	5
5	South Central Railway, Vijayawada	28
6	Visakhapatnam Steel Plant, Visakhapatnam	14

### c) Extra-curricular Activities:

#### Technical Quiz:

##### III B.Tech:

S.No.	Reg. No. of the Student	Name of the Student	Prize won
1	19501A04B2	Tadikonda Surya Bhavani	I
2	19501A0418	D. Praneeth	II
3	19501A0424	Duggaraju Harsha Chaitanya	III

##### IV B.Tech:

S.No.	Reg. No. of the Student	Name of the Student	Prize won
1	18501A0465	Kothagundla Sai Ramya	I
2	18501A0488	Polukonda Raghu Babu	II
3	18501A04B1	Vakacharla PhaniTeja	III

##### i. Innovative Idea:

S.No.	Reg. No. of the Student	Name of the Student	Prize won
1	19501A0456	M V Sai Pavani	I
2	19501A0407	Arepalli Maha Siva Parvathi	II

## 8. Higher Education

Sl. No.	Reg. No. of the Student	Name of the Student	Year of Study	Name of the Competitive Exam	Score	Date
1	19501A0441	J. Siva Ram	IV	IELTS	6.5	08.12.2022
2	19501A0452	K.Bindu Madhavi	IV	CAT	8.42	27.11.2022
3	19501A0453	K.Pavan Kumar	IV	GRE	322	15.09.2022
4	19501A0475	Nallaboyina Rajesh	IV	IELTS	6.5	19.11.2022



5	19501A0484	Ramya Peddineedu	IV	TOEFL	101	13.11.2022
				GRE	314	10.12.2022
6	19501A0485	Varsha Peddineni	IV	TOEFL	98	13.11.2022
				GRE	318	10.12.2022
7	19501A0487	P.Likitha	IV	GRE	317	22.08.2022
8	19501A04B2	T.Surya Bhavani	IV	GRE	321	08.09.2022
9	19501A04B6	Tatineni Bhavishya	IV	TOEFL	104	11.12.2022
10	19501A04C5	Y.Manoj	IV	IELTS	6.5	19.11.2022
11	19501A04C6	Yarramreddy Ravi Chandrika	IV	Duolingo	115	10.12.2022

## 9. MOUs Signed

- Memorandum of Understanding with E-world- Software Development Centre, **South Central Railway** women's welfare organisation, Vijayawada from 01.07.2022 to 30.06.2023.

## 10. Students Contribution

### Fieldtrip Highlights:

Our Bangalore trip started with Visvesvaraya Industrial and Technical Museum, at that place I learnt many things like how the objects in our daily life works. For example how a piston rotates etc., and we saw wright brother's flight model. The museum divided into many sections like one section is dedicated for Space Technology at this section how GPS works and space station looks etc., and one section is dedicated for bio technology at

this place I learnt how human evaluates and one section is dedicated for fun science at this place I enjoyed many fun science projects like Magic Water Tap etc. So, in that place we gained so much knowledge about how the things work.

After Museum visit we went to Hindustan Aeronautics Limited Heritage center at that place, I learnt how aviation starts and how an Aeroplane evolution occurs and how different models of Rockets and Helicopters evaluates. We saw very old models of planes after that went to Indian Institute of Science Bangalore, Department of Electronic Systems Engineering at that place I learnt history of IISC and different research works of Electronics department on solar panels, motors and Electronics development in Bio-Technology like inserting chips in brains of rats and analysis of animal behaviors.

Thanks for our “PVPSIT” collage management for giving us this auspicious opportunity and never before experience...



Y.Sai Pranathi

20501A04C7



