VIVEKANAND EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY

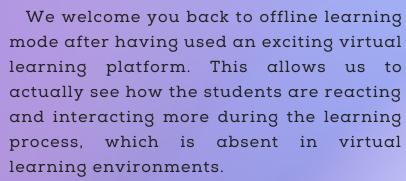
DEPARTMENT OF ELECTRONICS
ENGINEERING

JULY 2021 - DECEMBER 2021

SILICON TODAY

Message From The Department

By Dr.Parmeshwar Birajadar



Hope you enjoy reading about the developments happening in the field of Internet of Things, Drone Technology, Robotics, Machine Learning, VLSI, and Remote Sensing these days.

We must utilize our knowledge, skills and resources to design, invent and develop novel technology and innovative solutions to engineering problems in a multidisciplinary work environment.

A final message to my dear students, "Strength doesn't come from what you can do. It comes from overcoming the things you once thought you couldn't. - Rikki Rogers"

HERE'S WHAT'S UP!

FACULTY CONTRIBUTION

- WORKSHOP/COURSES CONDUCTED/ORGANIZE D/ATTENDED BY FACULTY
- RESEARCH PAPER PUBLISHED
- OTHER CONTRIBUTION BY FACULTY

STUDENT'S CORNER

- HIGHER STUDIES DETAILS && PLACEMENT
- WORKSHOP/SEMINAR ORGANISED
- INTERNSHIP AND TRAINING
- SKILL DEVELOPMENT ACTIVITIES
- FINISHING SCHOOL
- CERTIFICATION COURSES/PROGRAMS
- CO-CURRICULAR & EXTRA CURRICULAR ACTIVITIES

VISION OF THE DEPARTMENT

To equip our students with the latest technology and implement their ideas to conduct research in selected areas of excellence within traditional disciplines, technologically important and relevant to the region and development of nation.

MISSION OF THE DEPARTMENT

- The department is committed to produce technocrats ready to handle the state-of-art technologies in the field of Electronics Engineering.
- The department is committed to prepare students to contribute effectively to the profession and society for advanced study, lifelong learning, and conduct research integrated with education in selected areas of excellence.

FACULTY CONTRIBUTION

Workshop/Courses Conducted/Organized and Attended by Faculty

Our faculty members were actively involved in organizing and participating in various workshops, STTPs and seminars.

The various workshops / STTPs / orientation programs organized are:-

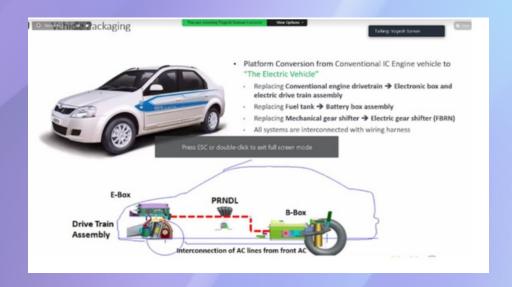
- Dr. Rajani Mangala conducted a session on "National Education Policy" AICTE Sponsored Online Short Term Training Program (STTP) Series on "Blockchain & Its Applications Phase-III" organized by department of Information Technology (IT) in association with the department of Computer Science (CMPN) and Masters in Computer Applications (MCA) at VESIT on 12/07/2021.
- Mr. Abhishek Chaudhari organised a course on "The AICTE Learning and Training Academy (ATAL)" which was a sponsored Faculty Development Program (FDP) on "Cyber Security" organized by VESIT Renaissance Cell (VRC) in association with the department of electronics engineering, masters in computer applications and VESIT-IIC on 05/07/2021.



FDP on Cyber Security

The various workshops / STTPs / orientation programs in which they participated are:-

- "Two-Days Online Workshop on Universal Human Values"
- The AICTE Learning and Training Academy (ATAL) sponsored Faculty Development Program (FDP) on "Cyber Security"
- Online faculty development program on "Electric Vehicles"



The various workshops / STTPs / orientation programs in which they participated are:

- Research Directions in science and technology
- Advanced VLSI design using microwind
- "Modern Tools for Electronic Circuit Design and Signal Processing Applications"
- "Cultivation of Engineering Tools Based on Competencies in Engineering Community"
- FDP on Research Directions In Science & Technology
- AlCTE FDP Inculcating Universal Human Values in Tecnical Education
- One week STTP on Embedded System Design
- Coursera on Positive Psychology
- Current Industry and Research Trends and its Impact on Atmanirbhar Bharat
- STTP on leveraging AI and Data Analytics for health care
- Principle of Control System Orientation of subject
- IoT based Condition Monitoring

Research paper published

Our faculty members published a number of papers in reputed conferences and journals such as IEEE, ADBU, Samriddhi, Springer, etc. Details of them are listed as follows-

- 1. Mrs. Kavita Tewari, Raj Talashilkar, "Analysing the effect of Hyperparameters on Convolutional Neural Network and finding optimal Solution with a limited Dataset" IEEE 2021 International Conference on Advances in Computing, Communication and Control (ICAC3'21) 7thEdition(3rd and 4th December 2021)
- 2. Mrs. Kavita Tewari, Aaryan Agrawal, Suyog Sawant. "COVID-19 prediction and analysis using neural Network and Pearson correlation", IEEE 2021 International Conference on Advances in Computing, Communication and Control (ICAC3'21) 7thEdition(3rd and 4th December 2021)
- 3. Kavita Tewari and R.K. Kulkarni, "Locating Cracks in 1050 Aluminium Alloy by Digital Image Correlation", Samriddhi A Journal of Physical Sciences, Engineering and Technologies. Volume 13, Issue 2, December 2021, ISSN: 2229-7111 (Print) and ISSN: 2454-5767 (Online) pp 104-108.
- 4. **Kavita Tewari and R. K. Kulkarni**, "Statistical Analysis of Estimated Displacement Measurements using Digital Image Correlation", ADBU-Journal of Engineering Technology. Volume 10, Issue 4, December 2021, ISSN:2348-7305. 0100401613(5PP)1-5.
- 5. Mrs. Anushree Prabhu, "Modular Garbage Collector Robot", International Journal of Creative Research Thoughts (IJCRT), 2021.

Research paper published

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- 6. Kavita Tewari and R.K. Kulkarni, "Application of Digital Image Correlation Technique to Study Strain Localization in Fe-Ni-W Alloy", Third International Conference on Advances in Electrical and Computer Technologies 2021 (ICAECT 2021) October 29-30, 2021, (Springer Conference).
- 7. **Jayamala Adsul**, "Design of Versatile Reconfigurable ADC for Wide Range of Resolution and Conversion Time", Second International Conference on Advances in Electrical and Computer Technologies 2021, 16th July 2021
- 8. **Jayamala Adsul**, "A New Method of Reconfigurable ADC with Automatically Optimized Parameters", 3rd International Conference on Communication, Computing and Electronics Systems ICCCES 2021, 9th Oct 2021
- 9. **Jayamala Adsul**, **Harsh Sawardekar**, "Reconfigurable Successive Approximation Register ADC and SAR-Assisted Pipeline ADC" SAMRIDDHI: A Journal of Physical Sciences, Engineering and Technology, 12th September 2021.
- 10. **Dr. Asawari Dudwadkar**, "Blood Bank Management System", International Research Journal of Engineering and Technology (IRJET), 2021.

Research paper published

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- 11. Rajani Mangala, Amogh Gajare; Yogesh Tembe; AmeySonje; Sayli Sawant; "CircuitScribe: Block Diagram based Circuit Simulation Application", IEEE Xplore, 2021 IEEE Mysore Sub Section International Conference (MysuruCon), Date of Conference: 24-25 Oct. 2021 Date Added to IEEE Xplore: 22 December 2021
- 12. **Mrs. Sarika Kuhikar,** "IoT Based Smart Switchboard Using Self-Designed Programmer Device", International Research Journal of Engineering and Technology (IRJET), 2021.
- 13. **Mrs. Naveeta Kant**. "Effect of Variation of Radius of Ground Plane on the Performance of a Water DRA", 2021 2nd Global Conference for Advancement in Technology (GCAT), 1 and 3rd October 2021.
- 14. **Dr. Abhay Kshirsagar**, "IoT based smart lock with predictive maintenance", The Twelfth International Conference On Computing, Communication And Networking Technologies July 6 8, 2021, Indian Institute of Technology Kharagpur.
- 15. Mrs. Rakhi Jadhav, "Intelligent Traffic Routing And Congestion Relief", International Journal of Creative Research Thoughts (IJCRT), 2021.

Other Contributions by Faculty

 Minor research Grant of 20,000/- allotted to Mrs. Anushree Prabhu for "Water Monitoring System using IoT".

Research Forum Activities

Event: Current Industry and Research Trends & its Impact on Atmanirbhar Bharat

 As an initiative of research forum activities, our faculty members were actively involved in organizing and participation in the same. Mrs. Anushree Prabhu co-ordinated VESIT Research forum in association with VESIT-IIC, VESIT IQAC and department of Electronics Engineering on 15th December 2021.

Dr.(Mrs) Anita Diwakar (Ph.D Education Techology, IIT Bombay) enlighted the participants on "Current Industry and Research Trends and its impact on Atmanirbhar Bharat."



Current Industry and Research Trends and its impact on Atmanirbhar Bharat

Other Contributions by Faculty

V-Reach Activity

V-Reach (An Alumni Engagement Initiative)

"V-REACH", VESIT-Alumni engagement initiative, has tried to unlock the Teaching Learning in an innovative way, through its inceptive series of 14 online webinars commencing from 02 August to 26 August 2021, which was streamed on VESIT-YouTube channel covering the following broad topics:

- 1. Guidance on preparing for better placements
- 2. Higher studies and career guidance
- 3. Research and innovations
- 4. Entrepreneurship development and
- 5. New trends in Technology (Covering all streams of learning)

This series enlightened the participants on the following topics which was very well received by the participants.





STUDENT'S CORNER

- Higher Studies details for 2021-22
- Inspite of the pandemic few students aimed and proceeded for higher studies. The details are depicted below:



TANMAY KOTHALE

UNIVERSITY OF COLORADO, BOULDER
PROFESSIONAL MASTERS OF SCIENCE IN EMBEDDED
SYSTEMS ENGINEERING

Dhanesh Vakte

DREXEL UNIVERSITY
MASTERS IN INFORMATION SYSTEM





ANUSHKA RAJWADE

TEXAS A&M UNIVERSITY

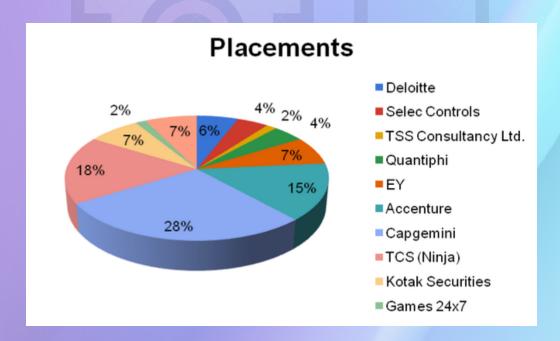
MASTERS OF SCIENCE IN ELECTRICAL ENGINEERING

Suraksha Lund

NMIMS MBA Programme

Placement Activities

- 16 students have got their dream job offers
- The highest salary offered is (10+1) LPA
- 18 companies have visited the campus till date for the Electronics Engineering stream.
- Total strength 141, jobs offered 68 & total 59 students are placed.





Workshops/Seminars for students

Students participated in the following workshops and seminars:

- Analog & Digital Electronics
- PCB designing Workshop

The Tinkerer's lab of the electronics department (VESIT, Mumbai) conducted a workshop on Analog, Digital electronics, and PCB designing. The workshop was conducted spanning a period of three days from 22nd August to 24th August 2020 with each interactive hands-on session lasting about two-and-a-half hours each on the Google meet platform.

The target audience was primarily students from the Second and Third year of the electronics engineering department. Due to Covid 19, the first-year students promoted to the second year were not given hands-on training on Eagle and hardware simulation software, the aim was to make them self-reliant for doing projects with the help of these tools. The workshop received a huge response of 119 students from second and third-year students. It was free of cost. The students were required to install LT-Spice and Eagle software with no other prerequisite taken into consideration. The students were provided with step guides at the end of the workshop.

Internship and Training

Students were actively involved in various innovative internship projects. The details of the same are listed below:-

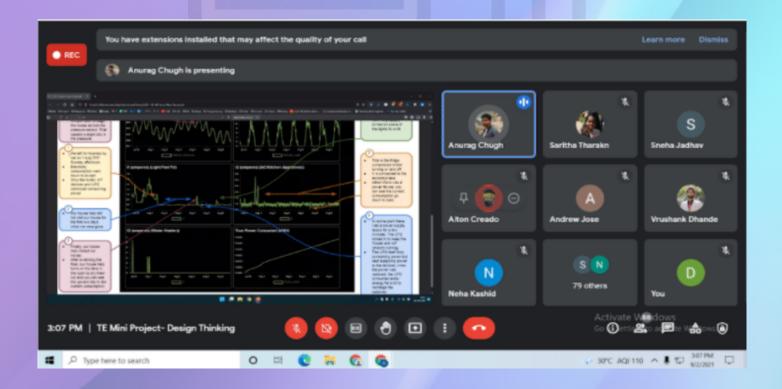
Tinkerer's Lab Electronics organized a 4-week internship program from 14th June to 15th July 2021, where students learned about designing and developing a solution to a specific problem statement. Each student is assigned a project on an individual basis. They were provided with the basic learning material. Furthermore, they are provided with a certificate upon successful completion of the project.

Learning Objectives

- Understand the definition and significance of the Internet of Things, Web designing, Analog and digital design, PCB design, and data science.
- Discuss the architecture, operation, and benefits of the solution.
- Examine the potential opportunities that the solution can uncover.
- Explore the integration of IoT, Web designing, Analog and digital design, and data analysis.

Special talk on Mini Project - Design Thinking

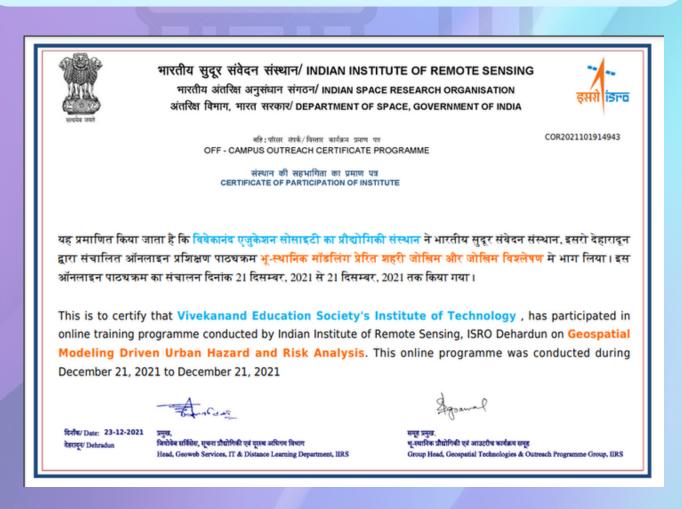
A session on "Mini Project - Design Thinking" was organized by the Department of Electronics Engineering on 2nd September 2021 Thursday from 2:00 pm- 4:00 pm. The session was conducted for second-year and third-year students on the online Platform: Google Meet by Mr. Anurag Chugh, Senior System Software Engineer, Tarana Wireless. Dr. Abhay Kshirsagar, Mrs. Dipti Karani, and Mr. Abhishek Chaudhari jointly coordinated the event. Separate Google Meet links were created for SE and TE students.



Skill Development Activities

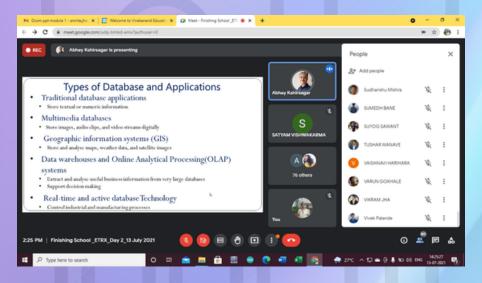
Skill Enhancement Lectures (SEL)

Department of Electronics is recognized as IIRS under Indian Space Research Organisation, Department of Space, Govt. of India About IIRS Indian Institute of Remote Sensing (IIRS) under Indian Space Research Organisation, Department of Space, Govt. of India is a premier Training and Educational Institute set up for developing trained professionals in the field of Remote Sensing, Geoinformatics and GPS Technology for Natural Resources, Environmental and Disaster Management, Founded in 1966, the Institute boasts to be the first of its kind in entire South-East Asia.



Finishing School Report

Online finishing school, one of the placement activities, was organized by the placement team of the Department of Electronics Engineering. The objective of the online finishing school is to revise the fundamentals of main Electronics Engineering subjects which include Digital Linear Integrated Circuits, Digital Circuit Design, Database Management Systems and Communication Networks, etc.



Session by Dr. Abhay Kshirsagar

The finishing school activity was conducted on 12 July 2021 from 1:30 pm onwards. Mrs. Sarika Kuhikar, Placement Incharge, Department of Electronics Engineering delivered an introductory speech and briefed the students about the various sessions of finishing school. The welcome address was given by Mrs. Naveeta Kant, Deputy HOD, Department of Electronics Engineering. Mr. A. Nagananda, Training and Placement Officer, VESIT briefed the students about the importance of finishing school. Further sessions were conducted by Mrs. Jayamala Adsul and Dr. Abhay Kshirsagar.

NPTEL & Other Certification Programs

Students participated in NPTEL and various certification programs. The details are below:-

- Web Development HTML and CSS and Data science with Python
- Front End Development HTML
- Front End Development CSS
- Supervised Machine Learning with Tree Based models
- Supervised machine learning with logistic regression and naive bayes
- My SQL Basics
- Digital Marketing
- TCS iON Career Edge Young Professional
- Introduction to Web Devlopment
- Introduction to Web Development
- SC-900:Microsoft security, compliance, and identity Fundamentals
- Bootcamp From Zero to Hero in Python
- Digital Marketing and its Influence on Brand Switching (Internship)
- Master Class on Deep Learning
- VESIT tinkerer's lab 'IOT based weather monitoring system'
- 3D PRINTING

Co-cirricular Activities

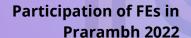
| Sr. No | Student's Name | Class | Event Name | Organized by | Achievement |
|--------|----------------|-------|--------------------------------|------------------------|-------------|
| 1 | Bivab Sahoo | D11B | LBS | VESIT IIC | Winner |
| 2 | Vivek Palande | D16A | e-VES Robotics Challenge | VESIT e-Praxis 2021 | Winner |
| 3 | Amey Advirkar | D16A | E-VES Robotics challenge | VESRC | Winner |



Extra-Curricular Activities



Students participating in extra curricular activities organized by cultural council







Students hosting Cultratri 2021

Extra-Curricular Activities

| Sr. No | Student's Name | Class | Event Name | Organized by | Achievement |
|-----------|--------------------------|-------|---------------------------------|-----------------|-------------|
| 6 | Ameya Roplekar | A | UTSAV Duet act | VESIT | Winner |
| 7 | Jaykumar Kabra | A | UTSAV Duet act | VESIT | Winner |
| 8 | Vedant Jadhav | A | UTSAV Instrumental | VESIT | Winner |
| 9 | Prathamesh Gudame | A | UTSAV Scandal | VESIT | Winner |
| 10 | Mehul Nikumbh | A | UTSAV Scandal | VESIT | Winner |
| 11 | Riyansh Jain | A | UTSAV Mandala Competition | VESIT | Winner |
| 12 | Darshan Borole | A | UTSAV Poem Recitation | VESIT | Winner |
| 13 | Abhiroop Bhattacharje | А | UTSAV Bots | VESIT | Winner |

FACULTY - INCHARGE



Mrs. Kavita Tewari Head Of Department



Mrs. Jayamala Adsul Assistant Professor



Mrs. Anushree Prabhu Assistant Professor

STUDENT - INCHARGE



Sudhanshu Mishra



Raj Talashilkar



Freya Mota



Ameya Roplekar



Sejal Bishoyi



Prathamesh Gudame