

# NEWLETTER

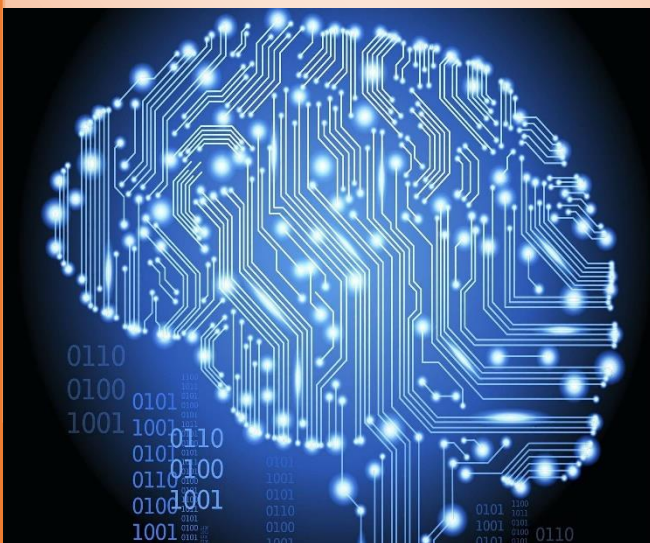
ACADEMIC YEAR : 2022-2023

Vishnu Waman Thakur Charitable Trust's

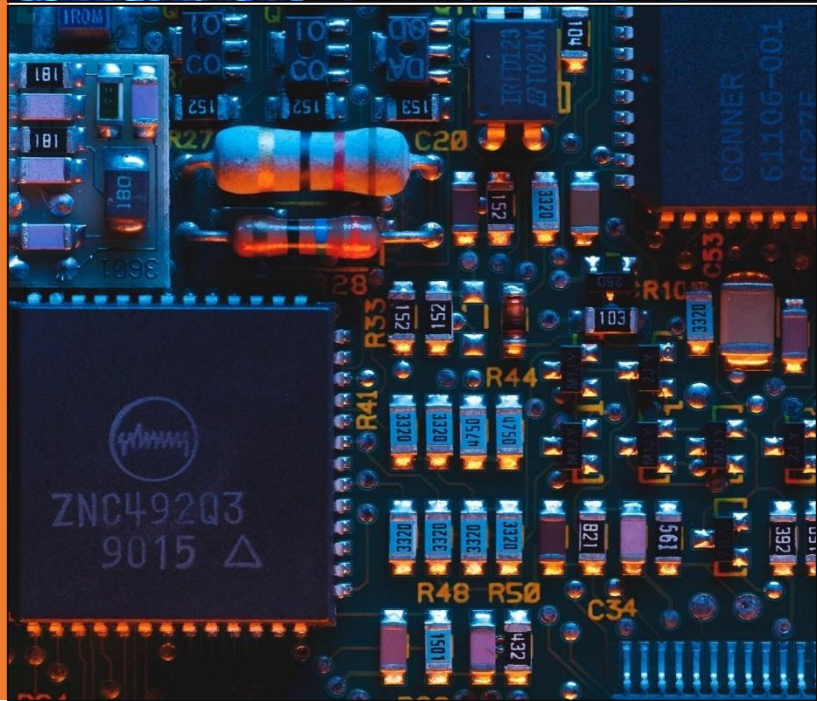
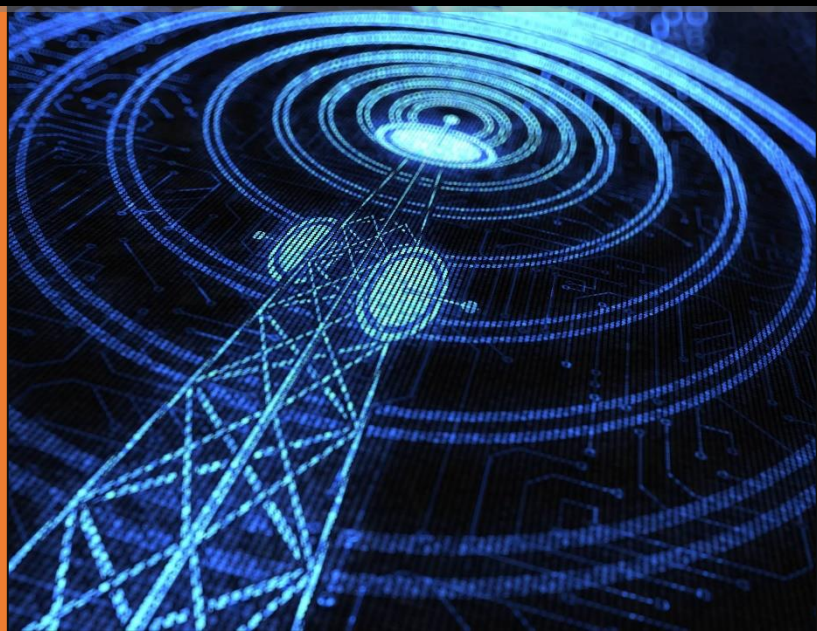
**VIVA Institute of Technology**

Shirgaon, Virar(E), Dist-Palghar, Taluka:Vasai, Maharashtra-401305

DEPARTMENT OF  
ELECTRONICS AND  
TELECOMMUNICATION  
ENGINEERING



<https://www.viva-technology.org>



<b>CONTENT</b>	<b>Pg. No.</b>
ABOUT THE DEPARTMENT	2
VISION, MISSION, PROGRAM EDUCATIONAL OBJECTIVE	3
PROGRAM LEARNING OUTCOME	4
PROGRAM SPECIFIC OUTCOME	5
PRINCIPAL'S MESSAGE	6
WORDS FROM HOD	7
MEMORANDUM OF UNDERSTANDING (MOU)	8
OSCILLATIONS 2023 - CONVERGENCE	9
SHORT TERM TRAINING PROGRAM	12
GUEST LECTURES	14
WORKSHOPS	17
INDUSTRIAL VISIT	20
STUDENT ACHIEVEMENTS	22
FACULTY ACHIEVEMENTS	24
TOP RANKERS	25
COLLEGE PLACEMENTS	26
COLLEGE PHOTO	27
DEGREE DISTRIBUTION CEREMONY	28
ALUMNI CORNER: STUDENT SPEAKS	29

## ABOUT THE DEPARTMENT

Electronics and Telecommunication is a diverse field of engineering connecting to electronics, civil, structural, and electrical engineering. This branch has wide scope in the Public sector, Private sector as well as in Government sector which makes telecom engineers responsible for providing the method for customers to have telephone and high-speed data services.

It is a versatile branch, meaning that the students holding the degree in the Electronics and Telecommunication can build up their carrier in any field such as Computer Engineering, Information Technology and Telecommunication Engineering etc. Our motto is to build up students who will be equally competent in all these fields. Keeping this in mind, our laboratories are well-equipped with advanced computer, (to implement concept of virtual lab) to give the students full exposure to computer, Internet Technology, and the advancements in this field.

The Department is running IETE student forum (ISF), which is right forum for the students to give exposure to their facets and help them for their overall personality and Technical development.



## **VISION**

Providing quality technical education to develop professionally competent and ethically strong Electronics and Telecommunication Engineers.

## **MISSION**

1. To achieve academic excellence by creating the right academic ambience, that will enable students to pursue higher studies and career in research.
2. To provide an effective teaching-learning environment.
3. To promote Industry- Institution Interaction.

## **PROGRAMME EDUCATIONAL OBJECTIVES(PEOs)**

The Bachelor of Engineering in Electronics and Telecommunication program has following educational objectives. These objectives are the long-term career goals that we set for our students. Our program prepares students to achieve these objectives.

1. Identify, analyze and formulate problems to offer appropriate design solutions that are technically superior, economically feasible, environmentally compatible and socially acceptable.
2. To create the necessary academic ambience that nurtures the student ability to cope up with situations that emerges in the professional context with confidence through lifelong learning.
3. To inculcate professional and ethical attitude, teamwork skills, good leadership qualities and commitment to social responsibilities.

# PROGRAMME LEARNING OUTCOMES

The outcomes of the program objectives are:

**Engineering Knowledge:** The ability to apply knowledge of mathematics, engineering and science to solve complex engineering problems.

**Problem Analysis:** The ability to identify, formulate and analyze engineering problems.

**Design/development of Solutions:** The ability to design a system, component, or process to meet desired needs within realistic constraints such as environmental, social, ethical.

**Conduct Investigations of Complex Problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

**Modern Tool usage:** An ability to use the techniques, skills, and modern engineering tools necessary for telecom engineering practice.

**The Engineer and Society:** Ability to be aware of social, health, safety, cultural, legal issues and responsibilities relevant to professional engineering practice.

**Environment and Sustainability:** The broad education necessary to understand the impact of engineering solutions in environmental and societal context.

**Ethics:** Apply professional ethics to engineering practices.

**Individual and Team Work:** The ability to function in multi-disciplinary teams by involving in technical activities.

**Communication:** The ability to comprehend, present and document effectively.

**Project Management and Finance:** Ability to apply engineering and management principles.

**Life-long Learning:** The ability to engage in lifelong learning with advances in technology.

## **PROGRAM SPECIFIC OUTCOME**

### **PSO1: Professional & Problem-Solving Skills:**

An ability to understand and analyze the basic concepts in Electronics & Communication Engineering and to apply them to various areas, like Electronics, Communications, Signal processing, VLSI, Embedded systems, Microwaves etc.

### **PSO2: Successful Career and Entrepreneurship:**

An understanding of social-awareness and ethical Responsibility to have a successful career and to endure passion for real-world applications using optimum resources as an entrepreneur.

## PRINCIPLE's MESSAGE



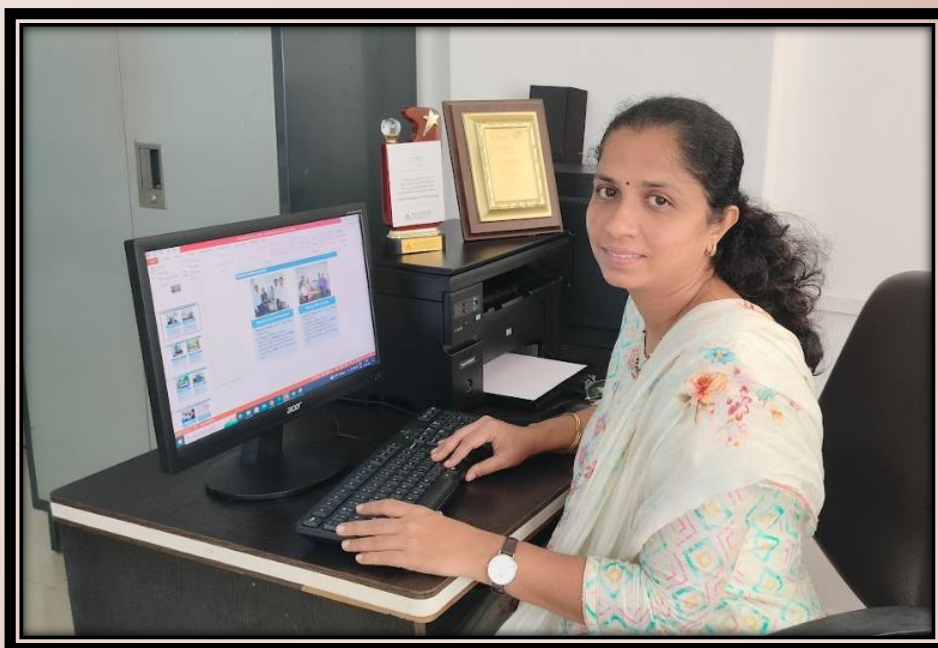
It is a matter of pleasure to speak with all of you through this newsletter. We all can take pride from the fact that each one of us has contributed to the present-day glory and growth of our college. The Newsletter will serve as an interface between the Institute and outside world. It provides information about the academic activities organized in the Institute and Information about co-curricular activities held during recent past is also shared.

I am happy to note that various initiatives are taken by the faculty to disseminate knowledge by organizing conferences, training programs and workshops. Expert lectures are also organized by various departments time to time to keep abreast with the latest developments in the field of science and technology.

VIVA INSTITUTE OF TECHNOLOGY established in the year 2009, nurtures a unique system of education for creating dynamic leaders in the corporate sector, entrepreneurs, academicians, researchers and professionals who contribute to the development of society and nation at large. It has an aesthetically designed and elegantly built campus furnished with state of art equipment and facilities. Here, education is not only focusing on 4 years B.E. degree course but also creating for the students a platform to realize their dreams, hone their cognition, sharpen their competence and carve out a wholesome personality.



## HOD's MESSAGE



The motto of our department is *'Nothing can we achieve without genuine effort'*.

The department of Electronics and Telecommunication Engineering is one of the pioneering departments of this institution. We offer our students good educational experience that combines intellectual rigor and cross-disciplinary breadth in an organized, student centered environment.

Department of Electronics and Telecommunications Engineering aims at training students in the areas of Electronics like Solid state circuits, VLSI, Electronic Controls and Communications Engineering including, Multiple access technology, optical fiber, wireless communication, signal and image processing, mobile communication and Microwave Engineering. One specialty with the department is that students learn published material from journals and generate publications of International quality. We provide opportunity to students to explore their interests in microprocessor and microcontroller-based applications, image & video processing, VLSI, Wireless Networking, Embedded systems, Robotics, data compression, signal processing, analog and digital communication.

It is indeed my great pleasure that our department is publishing newsletter etching every aspect of activities and events held in academic session 2022-2023. The newsletter aims to bring into view about various proceeding, functions and happenings in the department.

I congratulate the team who has taken efforts for producing this newsletter



## MEMORANDUM OF UNDERSTANDING (MOU)

This memorandum of understanding (MOU) is made and will remain effective between TESTRIQ QA LAB, LLP represented by Mr. Sandeep Maske, CEO and VIVA Institute of Technology, Virar (East), Palghar, represented by Principal VIVA Institute of Technology, Virar and H.O.D. of Electronics and Telecommunication Engineering Department.



The objective of the MOU is to co-operate for providing multifaceted industry-institute interactive partnership which will benefit the undergraduate students, especially the Electronics and Telecommunication Engineering students. In addition, this partnership will enable VIVA Institute of Technology to produce skilled and industry ready professionals

## OSCILLATIONS 2023 - CONVERGENCE

Convergence 2023 is an intercollegiate event which include different track as Major project, Minor project, Poster making and Reel making competition. Various colleges took part in the competition. Students of EXTC branch were competing in 4 fields of competition at VIVA Institute of Technology.



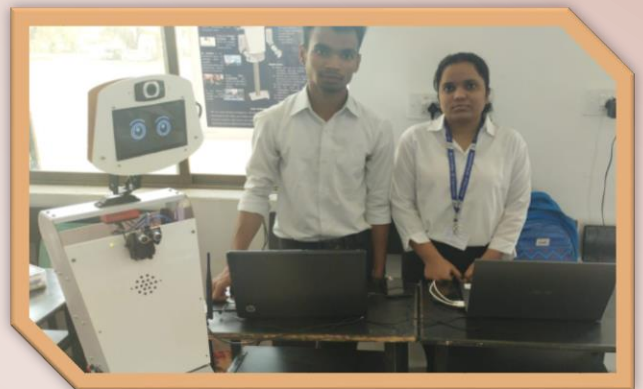
The major project competition was organized specially for the BE students who showcased their final major projects. In the minor project competition TE and SE students were competing. In poster making competition students showcased their projects in the form of attractive posters which provided information about their projects. Reel making competition was an interesting one and was

judged on the basis of likes through department Instagram account and different parameters as per rules and regulations.

Indeed, it was an amazing event where different projects related to different topics were at display like robots, IOT based, drones, and software based systems. The event ended with the deserving projects winning exciting cash prizes.



## Category Major Project

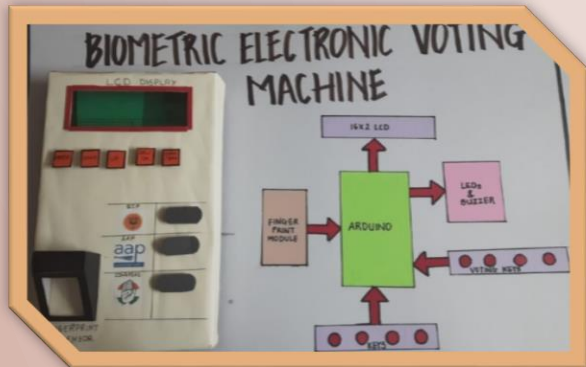


## Category Minor Project





## Category Poster Competition



## SHORT TERM TRAINING PROGRAM

**University of Mumbai and ISTE Approved One Week Short Term Training Program on “Machine Learning and Data Science Application” from 2<sup>nd</sup> Jan to 6<sup>th</sup> Jan 2023.**

The objective of the one-week short term training program is to provide conceptual understanding of how machine learning and data science can be applied to Real world problems and how learning tools and techniques are to be applied to different applications.

Training is required for increasing the knowledge and skills of students to make them more employable to acquire global competencies. The purpose of this STTP is to bring together researchers & PG students from academia and Engineers & Scientists from industry and R&D institutes to have discussions on various ways in which these tools can be used to carry out research.



**Dr. Sujata Kulkarni,**  
Associate  
Professor, SPIT,  
Andheri:  
Introduction to  
Machine Learning  
and Recent  
Applications

Participants were the teaching faculty of Engineering College. Total of 18 faculty members participated in the One week Short Term Training Program conducted. On the last day of STTP institute had received the feedbacks from the participants that they have learned and enhanced their knowledge in this STTP and they would always want to attend this kind of STTP in this institute once again. The overall feedback of the Training Program was encouraging and was highly rated by the participants





**Prof. Samidha Kurle**, Senior Lecturer Regenesys Business School, Vashi: Data Visualization and Tableau.

**Mr. Yadnesh Zagade**, Senior Research & Development Engineer C.E.O. & Founzder: Data Science Pre-Processing and Modelling, real life applications of data science.



**Prof. Sindhu Nair**, Assistant Professor DJ Sanghvi: Python Programming & Machine Learning Algorithm



## GUEST LECTURES

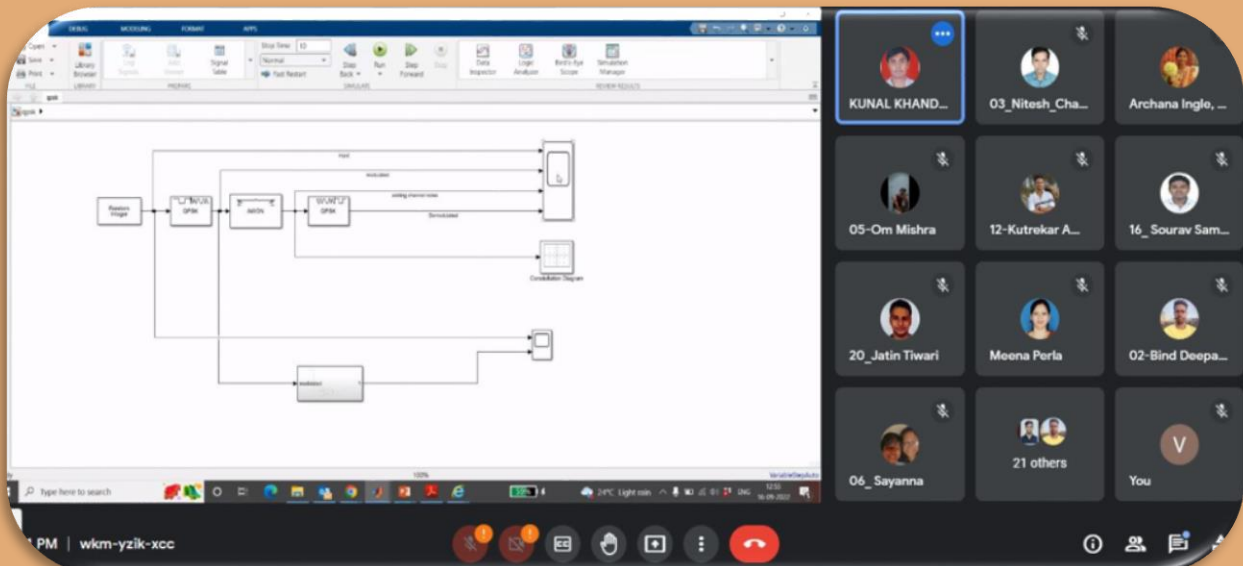
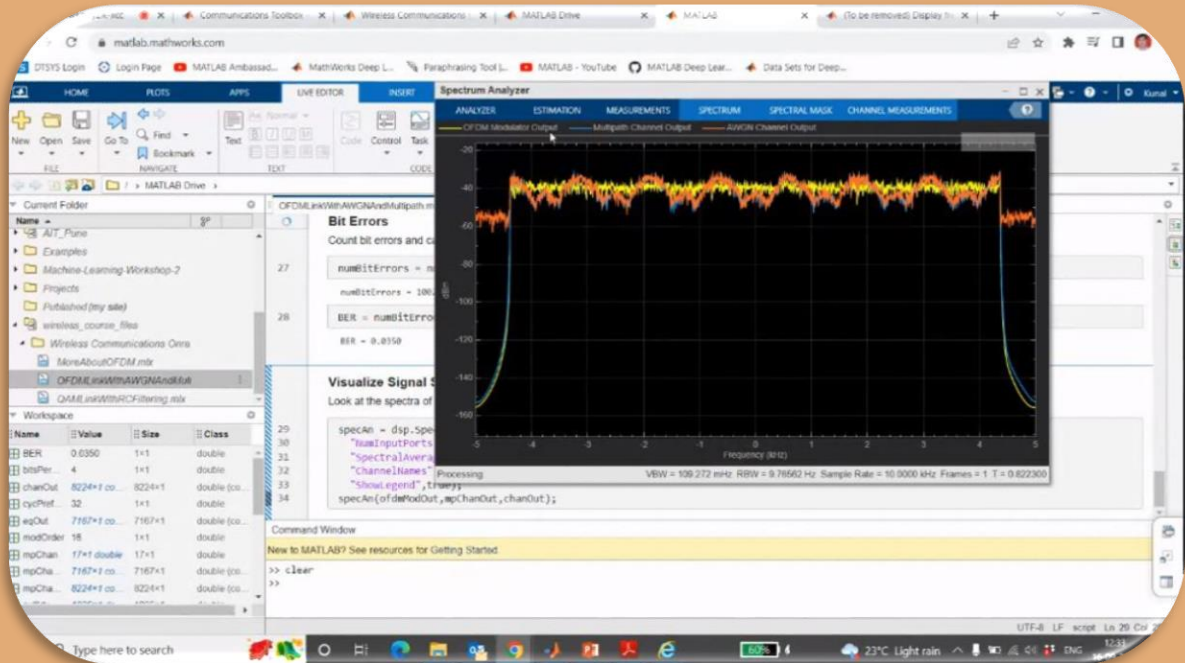
1. **Introduction to .NET and C#** by **Dr. Brijesh Joshi**, Assistant Professor,  
VIVA Institute of Technology, MCA department  
Conducted on: 08<sup>th</sup> August 2022  
No. of Students attended: 50



2. **Fundamentals of MATLAB and Simulink / Signal Processing** by **Mr. Kunal Khandelwal**, DesignTech Systems Pvt. Ltd.  
Conducted Online on: 12<sup>th</sup> August 2022  
No. of Students attended: 50



3. **Wireless communication and Optical Communication using MATLAB** by **Mr. Kunal Khandelwal**, DesignTech Systems Pvt. Ltd.  
 Conducted Online on: 16<sup>th</sup> September 2022  
 No. of Students attended: 50





#### 4. Block chain System by Nikhil Naidu

Conducted on: 15<sup>th</sup> sept. 2022

Number of students present: 75



#### 5. Data Science by Rubini Pulliadi

Conducted on: 12<sup>th</sup> april 2023

Number of students present: 50





## WORKSHOP 1

**Online Workshop on Importance of Antenna and its Design using HFSS was organized by the department on 31<sup>st</sup> March and 1<sup>st</sup> April 2023.**

Speaker: 1. **Mr Arjun Balamurali**, Jr. Research Fellow, DRDO Hyderabad

2. **Prof. Prathibha Sudhakaran**, Assistant Prof . at Muthoot Institute of Technology and Science, Kochi

The session started by introducing the basics of antenna and its parameters along with designing of dipole antenna on HFSS software. It came out to be a very interactive session as all the doubts on basics of antenna got cleared.

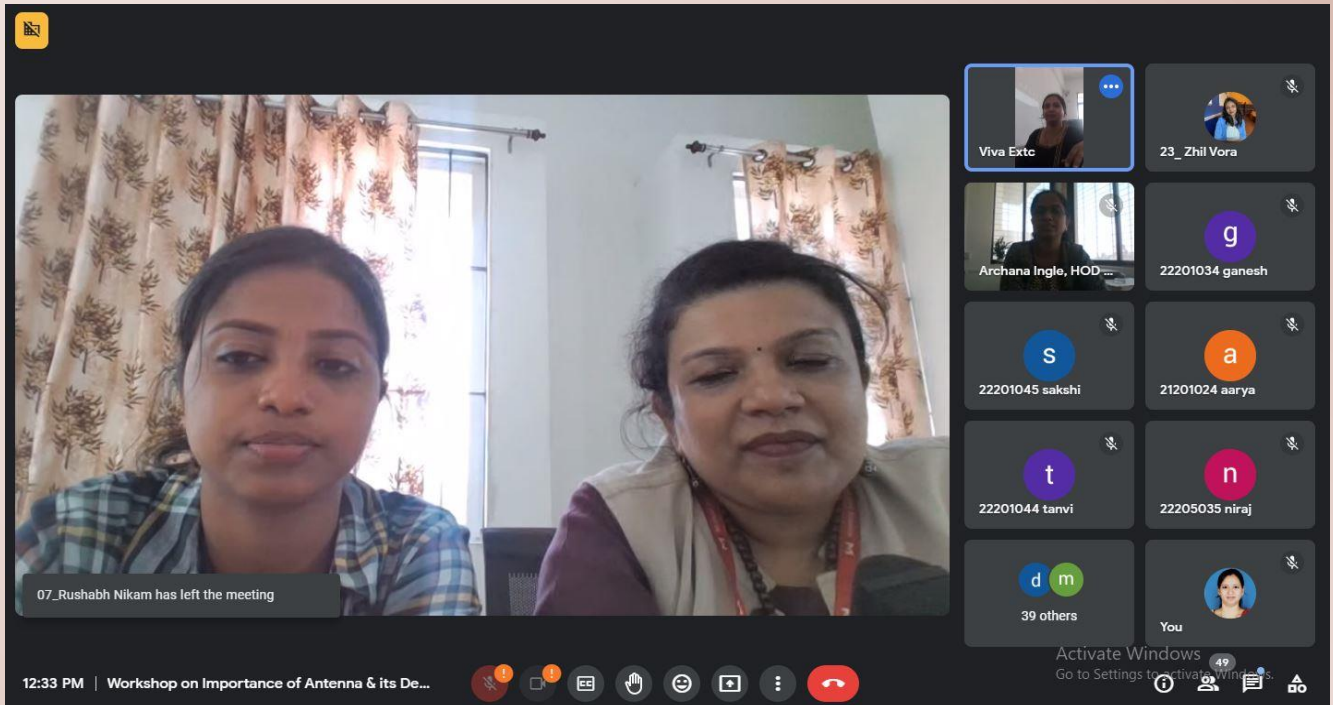
The first day session ended at 4 pm at the end of the day students were able to design a simple dipole antenna on HFSS.



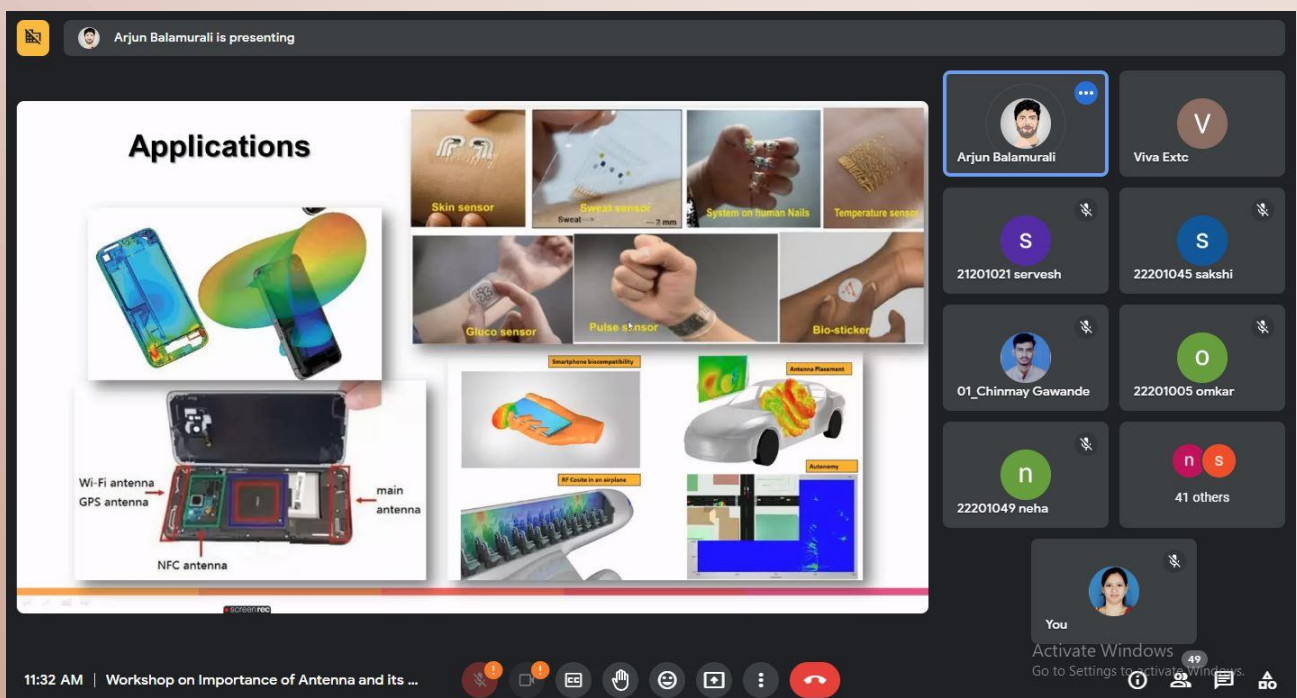
The second day session was conducted by Mr. Arjun Balamurali who is a Jr. Research fellow at DRDO Hyderabad, he explained in detail about the working of the HFSS software and even taught how to design a Microstrip Patch Antenna on HFSS. He even discussed the importance of antenna and future scope in the field of antenna and job opportunities in this field and research work for the afternoon session he even gave a tutorial like question for the students to solve on designing of antenna.

Overall the two day workshop was a great success as the students were able to learn a new software which is one of the most crucial one in the field of antenna. Both the speakers were amazing towards delivering their knowledge to students which proved to be very helpful for the students.

**Prof. Prathibha Sudhakaran, Assistant Prof . at Muthoot Institute of Technology and Science, Kochi**



**Mr Arjun Balamurali, Jr. Research Fellow, DRDO Hyderabad**





## WORKSHOP 2

### University of Mumbai Approved Two Days Workshop on “Current Trends using Blockchain Technology” on 06th & 07th October, 2022

Speaker: **Mr. Mihirsinh Parmar**, Founder, Simplr HQ, Surat



The workshop was basically on Project-based learning, where the cohort was taken through important concepts while building a real-world project. Mr. Mihirsinh Parmar Founder of Simplr HQ guided the participants. The event was a success with very positive feedback

from the participants. The speech by The Principal Dr. Arun Kumar was an inspiring one that covered the broad future scopes of the Blockchain field. The Principal being an encouraging one who said that for such events where in student development is involved, he will always be supportive. The Faculty Co-ordinator along with the other committee members managed the event very perfectly with no loops. The workshop organized by Electronics and Telecommunication Department was worth fruitful for all the Students of VIVA Institute of Technology.





# INDUSTRIAL VISIT

## 1. Visit to Virar Railway Car-Shed



The Electronics and Telecommunication Engineering Department organized an Industrial Visit for the B.E & T.E students to Western Railway Virar Carshed. All the students along with Mrs. Meena Perla, Mrs. Madhura Ranade, Mr. Kushal Suvarna and Mr. Pratik Parsewar visited to the Virar carshed, western railway on 17<sup>th</sup> August, 2022 & 24<sup>th</sup> August 2022 with an interest of linking the theoretical knowledge with the practical aspects of Traction system.



Mr. Ansari Sir (chief instructor) has given brief idea about traction system and signals like auto signals and manual signals in details. Students were given brief idea about signal system used in traction system & different safety features. Signals like siemens and medh handle in engine front acceleration in EMU. The AWS Auxiliary warning system of EMU explained in details. He has briefly discussed about different types of traction motor their performance, different method used for speed control and why Dc is now replaced by Ac. He also gives the knowledge of torque.



Students got opportunity to see the locomotive driving section. Mr. Ansari sir has briefly explained how the train is provided traction and brake by Motorman with the help of joystick. He given the idea about how motor driver working in twisting condition (15-degree angle). The different parameter displaced on screen in motorman cabin like supply available, braking status, event occurred, master key, cabin occupation, status of light, fan in different units.

In practical session the shows us various component used in EMU like master controller, internet protocol ring switch, modular digital input/output card, internet protocol cable switch, Fiber optic cable, mobile communication gateway, Governor pressure switch, centralised control panel and many more.





## STUDENT ACHIEVEMENTS



**Krutika Penkar & Sayanna Mukharjee Won Best Spotlight Award** for Project titled “**Device for Flood Alerts**” in The Schools Challenge Mumbai 2023, Mumbai Organized by JP Morgan in association with Agastya International Foundation.

**Krukita Penkar** was awarded as Best Student of the year 2022-23 in Electronics and Telecommunication Engineering Department







**Krutika Penkar** received Scholarship from Bank of Baroda based on her academic excellence.



**Harsh Purohit, Aniket Yadav & Abdulkadir Sadriwala** Won Best Paper Award for the paper title “**A One Stop APP for Personal Data Management with Enhanced Security using IPFS**” in National Conference on Role of Engineers in Nation Building (NCRENB-23) with cash prize.

## FACULTY ACHIEVEMENTS



CONGRATULATIONS ON YOUR  
REMARKABLE ACHIEVEMENT. YOUR PHD  
IS A REFLECTION OF YOUR INTELLIGENCE,  
HARD WORK, AND PERSEVERANCE.

*Dr. Madhura Ranade*

*Prof. Archana Ingle*



CONGRATULATIONS PROF. ARCHANA  
INGLE FOR SECURING

- TOPPER CERTIFICATE IN DEEP LEARNING -NPTEL ONLINE CERTIFICATION. (JULY-OCT 2022)
- BEST RESEARCHER AWARD THROUGH WOMEN EXCELLENCE AWARD 2023 BY GENESIS OF EDUCATIONAL IMPRESSIONS.

# Congratulations

## TOP RANKER CGPI

### BE EXTC (Sem VIII)

- |                          |      |
|--------------------------|------|
| 1. KRUTIKA SANJAY PENKAR | 8.83 |
| 2. NIKITA SHIVRAM KUBAL  | 8.57 |
| 3. RUTIK PANDURANG KINI  | 8.52 |

### TE EXTC (Sem VI)

- |                   |      |
|-------------------|------|
| 1. SHUBHUM PATIL  | 9.28 |
| 2. OMKUMAR MISHRA | 8.95 |
| 3. MANALI KADAM   | 8.79 |

### SE EXTC (Sem IV)

- |                   |      |
|-------------------|------|
| 1. SERVESH SINGH  | 7.73 |
| 2. MANAS LAGORI   | 7.21 |
| 3. ESHAAN BANGERA | 7.18 |



# Congratulations

## COLLEGE PLACEMENTS

SR NO.	STUDENT NAME	NAME OF COMPANY IN WHICH STUDENT IS PLACED
1	Poorti Nai	TCS
2	Omkar Chaudhari	Inensy
3	Saurabh Agre	Testriq
4	Krutika Penkar	Testriq
5	Akshay Palkar	Testriq
6	Krutika Penkar	Robokart
7	Rutik Kini	Hikvision
8	Omkar Chaudhari	Hikvision
9	Dhrumil Chavan	Hikvision
10	Abhishek Khandekar	Robokart
11	Nayan Tiwaramkar	Process Precision Instruments
12	Megha Dipak Kini	Techq Konnect

## CLASS PHOTO (AY 2022-23)



**B.E**



**T.E.**



**S.E.**



## DEGREE DISTRIBUTION CEREMONY





## ALUMNI CORNER: STUDENT SPEAKS



***Ms. Nikita Kubal***

“It was a great learning experience during the three years of B.E. (EXTC) in VIT. It has provided me with some great opportunities which helped me improve myself in every aspect as a student, as a friend, as a leader and most importantly as a professional. Experience in VIT has helped me sharpen my skills in my field of choice by providing fully equipped labs where I could practice and learn. Our department staff (teaching & non-teaching) is very supportive and have in-depth knowledge in respective domains. Apart from this being a part of student panel helped me improve my managing skills along with technical which will assist me to grow in future as well.”

### ***Mr. AMAN KUTREKAR***



Salutations for the day. This is AMAN KUTREKAR, a VIVA Institute of Technology alumnus from the 2023 batch of the Electronics and Telecommunications department. First and foremost, I would want to express my gratitude to the entire teachers of the EXTC department for their support and camaraderie during the year. They are very capable in their respective disciplines; of that I am certain. There were numerous seminars, workshops, and guest lectures in addition to the normal lectures, all of which were very beneficial to my growth both personally and professionally. In order to provide a variety of platforms for students to demonstrate their talent, VIVA Institute of Technology is well recognised for organising numerous cultural festivals, technology competitions, and paper presentation conferences. Finally, I would want to thank the institution for assisting me in getting to know myself better.