

Late Shri. Vishnu Waman Thakur Charitable Trust's

VIVA Institute of Technology



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

Newsletter

Department of Electronics and Telecommunication Engineering

Academic Year: 2018-2019





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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.

Year: 2018-2019

VISION

To emerge as a "Centre for Excellence" offering Technical Education by developing the total personality of the individual, imparting high level of discipline, making professionally competent and ethically strong, who in turn shall contribute to the advancement of society in particular and the nation at large.

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 designed to develop internationally competent professionals with a sense of responsibility and social sensitivity.
- 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.

Year: 2018-2019

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 electronics circuits, conducts experiments, analyze and interpret data.

Modern Tool usage: An ability to design analog and digital systems and components.

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 ethics to carryout engineering practices more professionally.

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.

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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.

Year: 2018-2019

Principal'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.

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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 2018-2019. 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.

Year: 2018-2019

OSCILLATIONS 2019 - CONVERGENCE

Oscillations 2019 - CONVERGENCE was organized by EXTC Department at inter collegiate level on 28th March 2019 gave a platform for engineers of coming years to present their creative and innovative engineering solutions also to get an opportunity to interact with fellow innovators to exchange ideas. Total eight colleges were participated in this project competition.





Judges understanding student's project.





Students with their projects.

Year: 2018-2019



Principal and Judges suggesting improvements to student's project



Prof. Archana Ingle giving prize to the project competition winner

Total 21 final year projects were showcased from which 3 prizes along with a consolation prize was selected. Total 21 Mini Projects were showcased from which 3 prizes along with a consolation prize was selected. There were 33 participations for poster competition from which 3 prizes were given.

SHORT TERM TRAINING PROGRAM

1. AICTE-ISTE Approved One Week Short Term Training Program on "Research methodology with Management techniques And tools in research" from 2nd January to 7th January 2019.

The objective of this training program is to teach the techniques and technical paper writing and ethics in research. This STTP provides relation building of the institute with industry for collaboration.

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 the recent methods in research techniques. This program also deals with the various ways to read and write the technical research papers which will help them to improve their paper writing skills. The STTP aims at equipping teachers with skills and knowledge in order to create a better society by guiding, training and motivating the students to take up research projects





Dr. Uday Pandit explaining Optimization in Research Methodology

Topics Covered in STTP on "Research methodology with Management techniques and tools in re search"

- Online research tools
- Optimization in research Methodology
- Industry and Institute Interaction & Industry Collaborative research
- Revenue generation through institute
- Technical Paper writing skills
- Research Data Analysis



Faculties of EXTC with Mrs. Arti Karande after A session on Technical paper writing skills



Ms. Devashree Ugvekar explaining varios tools for research

At the end of STTP:

- The participants learnt the skills of technical paper writing.
- After the completion of this course the participants had knowledge of industry and institute collaborative research.

 The participants learnt different online strategies and methods using different software and tools

- The participants were able to perform optimization in research methods
- The participants learnt the Research data analysis

As new developments are introducing in industry day by day demanding expertise in the field of Research Methodology, it was felt necessary that the teaching faculty also become competent in the said field. In this training program we all participants visited IIT Central Library, Powai.



Faculties of EXTC outside the Central Library of IIT Bombay



Faculties of EXTC with the authorities of central Library of IIT Bombay

Bridge Course- Nirman

1. Arduino Bridge Course

This 5 days Bridge course was conducted by Prof. Nutan Malekar in order to achieve following objectives:

- To provide basic knowledge to second year and third year students about an **Arduino** and how it works,
- To learn programming concepts using C and C++ along with Arduino specific programming,
- To use a wide variety of hardware and components and prototype projects using a breadboard.

26 students of second year and third year EXTC engineering participated in this course After this bridge course **project exhibition was organized** where every students showcase their knowledge by doing various innovative projects.





2. PCB Design

Objective of this Bridge course was as follows:

To develop skills for second year and third year EXTC students and imbibe within the skillset required for electronics design.





Year: 2018-2019

GUEST LECTURES

1. **Realtime Web Application** by **Mr. Sumukh Barve, Founder & CEO at Polydojo.com** Conducted on: 3rd August 2018.

No. of Students attended: 122

2. Online Information Sources for Quality Research Writing by Ms. Devashree Ugvekar, Librarian at VIVA Institute of Technology

Conducted on: 11th January 2019 No. of students attended: 69

3. Career Guidance & Job Opportunity by Ms. Gauri Bodkhe, Cloud Support Associate at Amazon Web services

Conducted on: 14th January 2019 No. of Students attended: 64

4. Computer Communication Network by Mr. Annirudha Bodkhe, Ethical Hacker.

Conducted on: 11th February 2019

No. of Students attended: 40

5. Database Management System by My. Suman Yemula, Senior Manager at Kotak Mahindra Prime

Conducted on: 15th February 2019

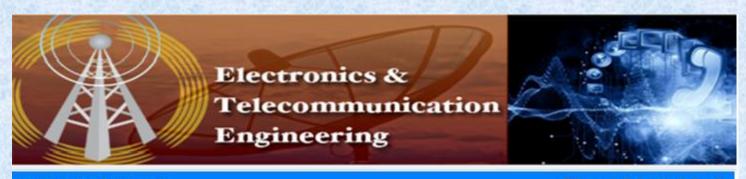
No. of students attended: 35

6. Goal Setting & Accomplishment by Mr. Irudaya Malar, Trainer, Success Coach

Conducted on: 15th February 2019 No. of students attended: 110

7. Real world & Trending Digital Networking Technology by Ms. Yogita Sharma, Lead Network Administrator at Wipro Technologies.

Conducted on: 22nd March 2019 No. of students attended: 116



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WORKSHOP

IETE Approved Two Day Workshop On "Ethical Hacking and Cyber Security"

10th & 11th September, 2018

On 10th September 2018, ISF at VIVA Institute of Technology organized Two day Ethical and Cyber Security SIDR Workshop on Hacking by Solutions and Technologies PVT LTD. It include topics as Introduction to Networking and cyber Security with Real time world applications. The Speaker Mr. Aditya Mathur Director Cyber Security of SIDR Solutions and Technologies PVT LTD talked on Hacking concepts, Scanning Techniques which & **UDP** use nmap, **ICMP** Scanning. He described and gave glimpse to password cracking limitations password cracking tools. He covered Application security and SQL injection. He also shared some of his recent cases on cyber hacking and real world hacking. Hands on practice was given to students. On 11th September 2018, the speaker Mr. Ramesh Mohite Ex. Police Officer talked on Cyber Crimes and cyber laws, he also shared the career opportunities as a Security Analyst.

Total 100 Students participated in workshop and were enlightened by the Ethical hacking and cyber security.



Year: 2018-2019





Glimpse of workshop conducted by Mr. Aditya Mathur





Mr. Aditya Mathur briefing students about the possible projects with Ardiuno



Certificates were given on the completion of workshop

Year: 2018-2019

WORKSHOP

1 Day Workshop On

"INTRODUCTION TO ARDUINO PROGRAMMING"

15th February, 2019



Workshop on Introduction to Aurduino Programming was organized by EXTC Department. The objective was to help students of third year to choose their final year projects and Final year students to gain more knowledge and solve doubts related to this technology. This workshop was conducted by CEO and co-founder of EduTronics, Mr. Varun Poladia. Total of 58 students participated in this workshop.

Topics covered in the workshop were as follows:

- What is Arduino
- What are the types of project implemented with Arduino
- How to use Arduino uno
- What are the possible projects
- Doubt solving session

STUDENT'S CONTRIBUTION

A motivational lecture was delivered by Third year student Mr. Aman Khan under guidance of Prof. Meena Perla, for Students in association with IETE.

It was a short motivational speech on a new approach to life, a way to expand your thinking by changing habits. Mr. Aman Khan tried to explain how by varying their pitch, sentence formation and use of power words they can improve the way they speak. Tips on Group Discussion, Interviews, Presentations,

Debates and how to respond to each given scenario were also explained in short. The lecture also included topics like Boosting self-confidence and Self-awareness and how to make oneself stand out in the crowd.



Student of T.E EXTC, Aman Khan while delivering a motivational lecture

Year: 2018-2019

INDUSTRIAL VISIT

1. Tarapur Atomic Power Station

Students of T.E visited TAPS at boisar on 16th October 2018. Total 37 students were accompanied by 3 faculties. At the power station students were given information related to Atomic and Thermal power plants.

Students were explained the process of nuclear fission.



Students and faculty who visited TAPS, Boisar

Year: 2018-2019

2. Amul Dairy Plant

Students of S.E visited on 16th October 2018. Total 57 students were accompanied by 3 faculties. At the plant, students were given information related to their business history, making of their products and machinery used. They were shown different sections of variety of products and were shown the automated processes with the help of technology.



Group of students along with faculty visited Amul-Virar Dairy





Amul Officials while briefing about the company



Outside Amul- Virar Dairy

3. Centre for Development of Advanced Computing (CDAC)

On 7th March 2019, 50 students from the third year and final year visited the Centre for Development of Advanced Computing (CDAC) Pune for an Industrial Visit to learn about supercomputers.



After Successful Completion of Visit to CDAC



CDAC, Pune

Year: 2018-2019



Param Yuva-II Supercomputer



Model of Param Yuva-II Supercomputer

4. I- Medita, Pune

On 7th March 2019, 50 students from final year visited the I- Medita Center of learning. I-Medita is a Cisco Registered Partner. It is considered as India's Most Trusted Cisco Training Centre. I-Medita is a Global firm offering various Educational training services across the globe. They provide Technical Hand on Training to Colleges, Universities and they also run Training Program at our Pune Main Office.

They were taken to various labs to show their set up. They were shown Routers, Switches, VoIP Set up, Cables, Network Racks etc. They explained about Types of networking, Global Internet usage, Internet Accessing and addressing, Investors in India and many other topics related to networking. Students were made aware of the jobs available in networking field and the kind of courses they can pursue.



Group of B.E EXTC students visited I-Medita training center with faculty





Students attending lecture at I-Medita's Classroom.



Actual network setup at I-Medita



Rack Set up

Year: 2018-2019

STUDENT ACHIEVEMENTS

National Students Space Challenge 2018



Mr. Rohit Pandey (T.E EXTC) Receiving his prize at IIT Kharagpur.

HOVERPOD

National Students Space Challenge was organized by IIT Kharagpur on 5th to 7th October 2018. The contestant had to build a manually controlled, wireless, hovercraft that has the capacity to move through a predefined path. The path would consist of varied terrain, having potholes, water and other kinds of terrains as specified in the arena. The benefits society can receive from this project is, it can be used in High speed marine sub surface & ground scanning survey & detection, Rescue work from flooded areas, mud, sand, tidal areas, River, lake & port geological surveys.

Mr. Rohit Rajesh Pandey Secured Third prize in this national level Competition.

Avishkar Research Convention: 2018-19

Avishkar Research Convention was organized by Department of Student Development, University of Mumbai on 23rd December 2018 at Ramrao Adik Institute of Technology, Navi Mumbai

Rohit Rajesh Pandey and Rahul Indrasen Mishra got Selected for Final Round of 13th InterCollegiate/ Institute /Department level Avishkar Research Convention:2018-19



Students of VIVA Institute of Technolgy at Avishkar Research Convention: 2018 at RAIT, Navi Mumbai

AAGNEYA-The fire Drone

The drone is capable of emitting fire as well as can be used for spying purpose using thermal and fpv camera. This is capable of lifting 1.5kg of weights. It is capable of flying in in any wind condition. This project could be used for removing burning obstacles off the over-head wires of trains and for spying on terrorist camp.

Year: 2018-2019

Anyeshana Mumbai 2018-2019

Final event of Anveshana Mumbai 2018-2019 was held at Nehru Science Center, Worli, Mumbai, Maharashtra during 18th to 20th February 2019. Smart Room project is undertaken by Sufyan Parkar, Rubini Pulliadi (TE EXTC Students, 2018-19 batch) and Sayali Patil, Laxmi Sontakale (Class 9th, 2018-19 batch). They won **1st prize** with the cash Prize of Rs. 30000/-.

1. Smart Room

This project presents the design and the implementation of a lighting system which is able to detect the approach of the visitors and then turn ON LED lights and fans. All lights and fans are equipped with the energy-saving function which will turn itself OFF automatically after the visitors' leaving.



Rubini Pulliadi and Sufyan Parkar at Anveshana Science and Engineering Fare 2019

Year: 2018-2019

2. Fire Fighting Robot

Fire Fighting Robot project was implemented by Sanohi Jatav, Godavari Kedar (BE EXTC Students, 2018-19 batch) and Rucha Phadke, Kaustubh Patil (Class 9th, 2018-19 batch). They won Consolation prize with Cash prize of Rs. 5000/-.

The physical limitations of humans to deal with these kinds of destructive fires combined with the adverse conditions, makes fire extinguishing an arduous task. The use of autonomous robots can reduce the errors and the limitations that are faced by human fire fighters.



Sanohi Jatav and Godavari Kedar at Anveshana Science and Engineering Fare 2019

Year: 2018-2019



Students of VIVA at Anveshana, Nehru Centre with their Prizes

Extra-Curricular Achievements:

Sr. No	Name of Student	Event	Year	Organized by	Result
1.	Omkar Navalkar (B.E)	51 st Youth	26-27 th	Mumbai University's	Consolation.
	Godavari Kedar (B.E) Abhijeet Biswas (T.E)	Festival, Indian Folk	September 2018	Department of Students' development	
	And group	Dance	2010	Students development	
2	Sushant Bhosale (B.E)	Vajra World record	13 th June 2018	Vajra World record	Created a Vajra world record by carving on 0.5 mm pencil
3	Amey Tiwramkar (S.E) and Team	Udaan Series	19 th -20 th October 2018	Theem college of Engineering	Won

Year: 2018-2019

congratulations

Top Ranker	
BE EXTC (Sem VII)	
1) Naik Soham	9.41
2) Pawar Vaishnavi	9.26
3) Bhushankar Omkar	8.67
TE EXTC (Sem V)	
1)Sahani Sunil	9.26
2) Pilliadi Rubini	9.11
3) Pawar Sushant	8.78
SE EXTC (Sem III)	
4) Raut Riddhi	9.23
5) Kanrar Vishal	8.62
6) Dandekar Nishant	8.58

Year: 2018-2019

congratulations

College Placements

- 1. Soham Naik
- Capgemini & Jaro
- 2. Shubham Tiwari
 - Capgemini
- 3. Suman Mondal
- TATA Consultancy Service
- 4.Omkar Bhushankar
 - Jaro and QSpiders
- 5. Shashwat Mishra
- Jaro, Clover Infotech and QSpiders
 - 6. Amitendra Bhardwaj
 - ExtraMarks & Toppr
 - 7. Saili Bakalkar
 - ExtraMarks, Toppr & QSpiders
 - 8. Hrishikesh Haral
 - ExtraMarks

Year: 2018-2019

congratulations

College Placements

9. Yoshin Engineer

- PPM Infinity Engineers Pvt. Ltd.

10. Akshay Tukral

- Toppr

11.Sagar Panchal

- Clover InfoTech

12.Sushma Chippa

- Clover InfoTech

13. Deepak Pandey

- Clover Infotech

14. Pradeep Yadav

- Clover Infotech

15.Aakash Thakre

- Clover Infotech

Year: 2018-2019

congratulations

College Placements

16. Mayur Rane- Clover InfoTech & QSpiders

17. Shubham More
-QSpiders

18. Bhakti Shetty
-QSpiders

19. Suraj Gupta
-QSpiders & Robokart

20. Sagar Panchal -QSpiders

21. Kartikkumar Mahyavanshi-Robokart

22. Ravi Maurya -WIPRO

....And still counting

Year: 2018-2019

ALUMNI CORNER: STUDENT SPEAKS

Mr. Sagar Panchal (Placed at Clover InfoTech)



I wish to express my heartfelt gratitude to my alma mater, 'VIVA Institute of technology' for moulding me into a person that I am today. The staff and administration have helped to imbibe the sense of learning and promote practical education.

My love and thanks to all the staff of my EXTC department. Karishma ma'am, who made us understand that learning should be the objective and not just memorising. Our beloved HOD, Archana ma'am taught us to keep a balance between the academic & co-curricular activities. Nutan ma'am always helped in practical implementation of our ideas into everyday applications. Shoeb sir, who was a mentor and stood as a moral support for us. And nonetheless, our dearest ever friendly Chitra ma'am who understood us for everything that we were.

I would also like to extend my thanks to our TPO, Bhushan Talekar sir for tirelessly striving to provide us with job opportunities. Above all, I am much obliged to our principal, Dr. Arun Kumar sir to provide us with a healthy learning environment.

The days of my college have come to an end, but the memories created have been deep rooted into me to cherish them for all my life. All of this time and those wonderful moments would not have been possible without my wonderful & dearest friends. Truly, I'm gonna miss my college days.

Year: 2018-2019

Mr. Omkar Bhushankar (Placed at Jaro and QSpiders)



I loved my experience at VIVA. It wasn't easy to read all those long books, those complicated codes and circuit diagrams and getting up early morning lectures.

But being part of EXTC department showed me that if it was something easy, it would have been probably boring and if it wasn't been encouraged and pushed by our beloved teachers who had some extraordinary talent of keeping students charged-up and were so friendly towards us.

For this course of 4 years, me and my friends endured and emergerd more confident than when we had began. Engineering taught us to emerge as ourselves as we were meant to be "Whole and Complete" and most importantly "The sleep Deprived ones"

Ending this, I would only say, life at "VIVA Institute of Technology" and to be more specific at "EXTC Department" was like some little episodes of good, bad and encouraging times that built me what I am todays!

Year: 2018-2019

Mr. Akshay Singh (Working at Treya Wireless Pvt. Ltd.)



"I had a great experience by being a part of Viva Institute of Technology, I was not sure about my future and was anxious about the different challenges I was heading forward to face. But Viva gave me the support and confidence due to which I grew exponentially both personally and professionally. It gave me an opportunity to enrich my knowledge. The faculty members are helpful, open and supportive. The campus is beautiful and full of countless opportunities. I will forever cherish the memories I made in Viva Institute of Technology". One of the most interesting stages in life that gives you an opportunity to explore is the 'college phase.' Life at college is the time when the teenage years end and we all dive deep into the ocean of new beginnings and possibilities. This golden period better equips you for all the challenges you'll face in life and creates a strong foundation of knowledge.