VP-Connect

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION

1ST Jan2023 to 31st June 2023

Institute Vision

To achieve excellence in imparting technical education so as to meet the professional and societal needs.

Institute Mission

- Developing technical skills by imparting knowledge and providing hands on experience.

- Creating an environment that nurtures ethics, leadership and team building.

- Providing industrial exposure for minimizing the gap between academics & industry.

Department of Electronics and Telecommunication

Vision

To produce Electronics and Telecommunication engineers capable of effectively using technical knowledge and interpersonal skills to benefit the industry and society.

Mission

- Providing state of the art facilities and conducive environment enabling the students to sustain the challenges in the field of Electronics and Telecommunication.

- Educating the students to face the competitive world, develop leadership skills and to instill discipline and ethics.

- Promoting industry institute interaction .

VP CONNECT

Vidyalankar Polytechnic

Department of Electronics and Telecommunication

Program Educational Objectives (PEOs)

- **PEO 1. Provide socially responsible, environment friendly solutions to Electronics and Telecommunication engineering related broad-based problems adapting professional ethics.**

- **PEO 2. Adapt state-of-the-art Electronics and Telecommunication engineering broad-based technologies to work in multi-disciplinary work environments.**

- **PEO 3. Solve broad-based problems individually and as a team member**

Program Specific Outcomes (PSOs)

- **Test and maintain modern electronic tools and telecommunication systems by applying technical and conceptual knowledge.**

- **Select appropriate technologies of specified electronic and telecommunication systems based on engineering principles and professional ethics.**

- **Develop critical thinking with inquiring and flexible attitude towards modern trends in electronics and telecommunication technology.**

- **Function effectively as an individual or as a leader in multidisciplinary teams with an ability to communicate in both technical and professional environment and by engaging in lifelong learning. and entrepreneurship by engaging in lifelong learning**

VP CONNECT

Department of Electronics and Telecommunication

Program Outcomes (PO)

1. **Basic and Discipline specific knowledge:** Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.

2. **Problem analysis:** Identify and analyze well-defined engineering problems using codified standard methods.

3. **Design/ development of solutions:** Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.

4. **Engineering Tools, Experimentation and Testing:** Apply modern engineering tools and appropriate technique to conduct standard tests and measurements

5. **Engineering practices for society, sustainability and environment:** Apply appropriate technology in context of society, sustainability, environment and ethical practices.

6. **Project Management:** Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.

7. **Life-long learning:** Ability to analyze individual needs and engage in updating in the context of technological changes.

Vidyalankar Polytechnic

From HOD'S Desk

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Prof. Anjum Mujawar

Electronics & Telecommunication Engineering is one of the most flourishing discipline that cultivates innovation and new trends in technology. It provides the most demanding skills one can learn to excel in this profession.

Department of Electronics & Telecommunication Engineering endeavors to provide best professional opportunities to our students and look forward to their bright future. We as a team resolve to take the department to greater heights of success and glory and prepare for the forthcoming challenges.

Quote

Education's purpose is to replace an empty mind with an open one" –
M. Forbes

Expert Lectures And Seminar
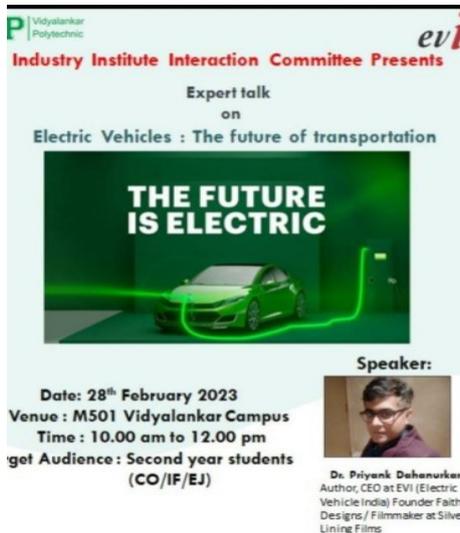
Seminar on Electric Vehicles

A seminar on electric vehicles was organised on 28th February 2023 for second year students of Electronics and Telecommunication. The seminar aimed at the following agenda: ▢ Introduction to Electric Vehicles and its components ▢ Design & development of Electric Vehicles along with demonstrations. ▢ Electric Vehicles market in India ▢ What should you know to enter the EV market. ▢ Job opportunities in EVs The session was conducted by Dr. Priyank Dahanukar, founder EVI. He gave a good insight to students about inter-disciplinary approach towards the upcoming electric vehicles trend.The session also introduced environment sustainability factors. He also showed some good demonstrations & videos with respect to his factory manufacturing unit.Students were open for a question/answer session later.

Seminar on- "Future of Semiconductor "

A guest lecture on 'Future of Semiconductor Technology' was arranged for the Diploma final and second year students. The comparative assessment of InGaAs/InP DG MOS-HEMT and Silicon based DG MOSFET is comprehensively explained by Dr. Hemant Pardeshi,Lecturer,Government Polytechnic,Mumbai for a wide variation in gate length.. Heterostructure devices using narrowband ternary III–V materials, such as In0.53Ga0.47As and wideband InP, with high dielectric provides higher ON current, lesser fall in SS with respect to change in gate length, lesser delay, lower energy delay product and lower DIBL than the silicon based devices. Results are also shown to indicate that Heterostructure device has good electrostatic control. However, higher SS and lower Ion/Ioff are some of the concerns which need to be addressed.

Seminars and Workshops

Seminar on- "Emerging Trends in Electronics and Telecommunication"

A lecture on the topic 'Emerging Trends in Electronics and Telecommunication', was organized by Vidyalankar Polytechnic, for all 6 th Sem students, The guest speaker for the program was, Mr. Makrand Sawant– Senior Manager Vodafone India Shared Services Pvt. Ltd.,Mumbai. Every technological area is developing at an exponential rate.New applications are coming up and it is mandatory for all technologists to be well versed in these developments to survive and provide satisfactory and quality services to the society and Industry.This guest lecture gives an introduction of these areas and helps the students to apply emerging trends.The outcome of this seminar is students will be able to suggest different telecom network for given application. Mr.Makrand Sawant discussed about Latest trends in Fiber Optic communication.-DWDM,FTTH,GPON etc.Internet of Things. (Architecture, Protocols, Case Study).Artificial Intelligence (AI) and Big Data for Telecom Operations.SD-WAN-Software Defined Wide Area Network.3G,4G& 5G Wireless – Advances and Challenge,Where are we on GSM services.

Industrial Hackathon 2023

Industrial Hackathon 2023 was conducted in association with NDLI club of Vidyalankar Polytechnic for two days in various Computer and Electronics labs. Problem statement. Industrial personals were invited on both the days to mentor and guide the students. Around 22 problem statements were given by 6 industries for the Hackathon and 65 teams participated with a total of 372 students for this activity. Around 20 faculty members were assigned the role of team mentors for the activity. Winners and runner up teams of the activity were felicitated with prize money. An overwhelming participation of students from all the departments made the activity a grand success. Events like Hackathon is an initiative to serve our society by providing effective solutions based on real world scenarios and hence contributing in individual's professional and personal growth. It brings students with technical backgrounds together for problem solving, developing new ideas, work in a team, time management skills and makes them industry ready.

Expert Lectures And Seminar

Training on Financial Planning and Investment

A one-day Training session on on "Financial Planning and Investment Avenues" was conducted by the Staff Development Committee of the Institute for the Non-Teaching staffs on 25/03/2023.The Resource Person was Dr. Amit Oak,HOD and COO,VIT,Mumbai Financial planning is the process of taking a comprehensive look at your financial situation and building a specific financial plan to reach your goals. It is the practice of putting together a plan for your future, specifically around how you will manage your finances and prepare for all the potential expenses and issues that may arise in future. Various situations discussed by the Trainer giving examples of various Investment Avenues which can be a takeaway for the participants & help them achieve their financial goals. .

ISTE Approved One Week FDP on "Cyber Security

A one-week ISTE approved FDP on "Cyber Security and Cyber Forensic" was conducted by the Staff Development Committee of the Institute for the staffs from 20/03/2023 to 25/03/2023.The Resource Person was Dr. Tanmay Dixit,Cyber Expert,Nashik. The FDP on Cyber security and Data Forensic will be providing the basis knowledge of Cyber security and Data Forensic. Data forensics is a branch of forensic science that focuses on identifying, acquiring, processing, analyzing, and reporting on data stored electronically. The combination of Cyber security and Data Forensic is Computer forensics. Computer forensic is the application of investigation and analysis techniques to gather and preserve evidence from a particular computing device in a way that is suitable for presentation in a court of law. The main objectives of this FDP is to impart technical knowledge on the following concepts on Network Security Measures, Vulnerability Assessment and Penetration Testing, Multi server Authentication, Design of Secure Protocol, Light-

Technical Activities

Front-end Development Workshop

Techshala Committee of Vidyalankar Polytechnic had organized a Workshop based on Frontend Development under Web/Mobile Application Development domain. This Workshop covered the basic curriculum of Web Development i.e., HTML, CSS & Bootstrap. Teaching CSS and Bootstrap was on the top priority as it does not include in our syllabus. This Workshop was organized under: Er. Anjum Mujawar (CTO) Institute Technical Head: Kush Kapadia Technical Heads of IF Department: Darshan Khapekar & Nabeela Ashrafi Domain Head of Web/Mobile Application Development: Krish Thakkar
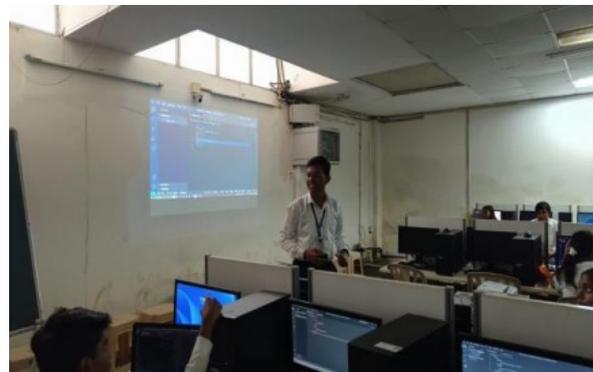
Technical Activities

Seminar on 'Soft skill and Interview Etiquettes'

A seminar was arranged for all the students CO/IF/EJ on 'Soft skill and Interview Etiquettes'.The session started with an introduction by the speaker about the highlights of soft skills.He talked about different types of resume and pointers to be included in it.He gave a brief summary of the do's and don't's while writing a resume overall to make it impressive.He concluded the session by taking questions and doubts from the students and clearing the queries.The session highlighted all the skills required during an interview. .

Non Technical Activities

Alumni Association Meeting
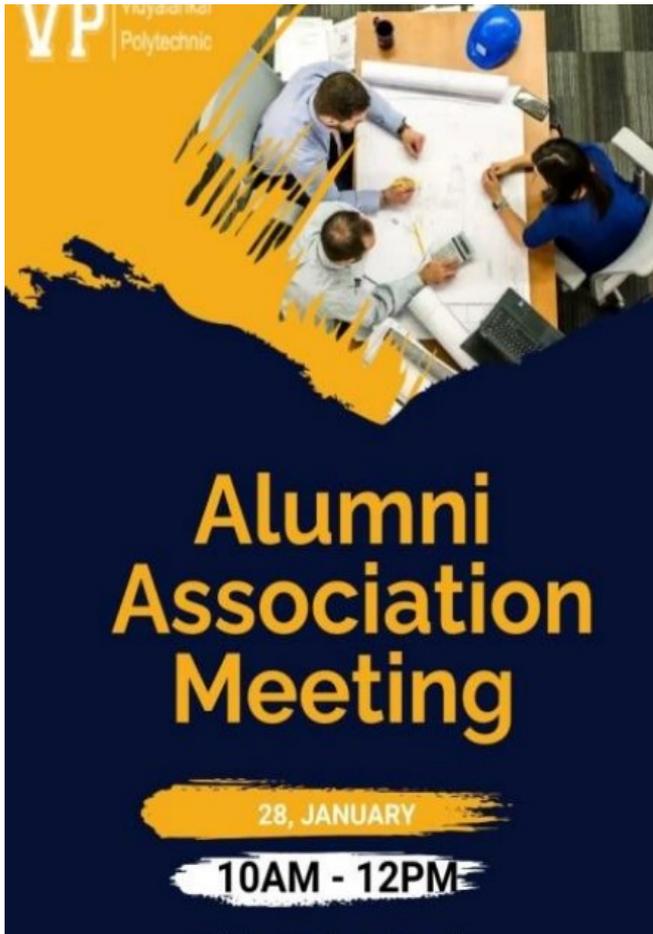
Alumni association meeting was organised by alumni committee on 28th Jan 2023. ⬚ The main agenda of meeting was follows: ⬚ To exchange professional knowledge, organize technical conferences, seminars workshops & training courses. ⬚ To provide career development and guidance. ⬚ To create interest and motivate the alumni to participate in the progress of the Institute and make them contribute towards the enhancement of their Alma mater. ⬚ To promote a lifelong relation and to act as a forum for the exchange of information among its members. ⬚ To promote alumni portal.

Non Technical Activities

Visit to " ChatrapatI Vidyalay , Jawahar and kanishta mahavidyalay, sakhre"

Volunteering Committee of Vidyalankar Polytechnic had organized a visit to Chatrapati Vidyalay, Jawahar and Kanishta Mahavidyalay, sakhare called "Lets Share" on 29-03-2023.The activity took place in number of Events such as 1)Collection and Distribution of stationary Kits 2)Conducting Drawing competition, Essay Competition, Games for all students-by-students volunteers 3)For creating awareness of Higher Education Career Counselling Seminar will be given to 9th Std students 4) for Physical Fitness of girls -Yoga Training by EXPERT with videos will be provided 5) For personal Hygiene of girls tips stating Template for Menstrual cycle will be given 6)To Encourage Girls Education Felicitation of Topper Girl Student With the help of everyone Volunteering Committee manage to share help to collect 650 Stationary Kits , 60 Lezims, 1 Nashik Dhol ,3 Bicycles, and 2 Speakers to the Chatrapati Vidyalaya and Kanistha Mahavidyalaya, Sakhare, Vikramga

Non Technical Activities

Verve 2022-23,Sports Day

This activity was performed in Ground 1 and 2. The main aim of this activity was to provide platform to students to explore their skills in various outdoor games like Box Cricket, Football, Volley ball and Throw ball, Kabaddi etc. and indoor games like carom,chess,table tennis etc. Students and staff participated in above events.

Vidyalankar Polytechnic Cultural, Sports and Hobby Club Committee has organised an event, VERVE 2022-23 for students.This event took place in Ravindra Natya Mandir, Dadar in two sessions. Students those have skills in Drama, Singing, Dance and Fashion show, Stand-up etc. participated in this event. This event gave platform for students to explore their hidden skills. Not only students but also all staff enjoyed this event.

Achievements of the Department

1. **Ms. Sandhya Kumar** has submitted her research papers on following topics in various national and international publications

Research Topic	Publication
INDUSTRY 4.0 BENEFITS THROUGH SKILLS DEVELOPMENT IN INDIA: STUDY	International Journal of Recent Scien-
Transformation through Online Education: Issues & Challenge	Shri Jagdishprasad Jhabarmal Tibrewa-
"Engineering Advancements (ICEA-2021)"	Shri Jagdishprasad Jhabarmal Tibrewa-

2. **Mr. Pratik Tawde** has submitted his research papers on following topics in various national and international publications

Research Topic	Publication
Implementation of Load Balancing Using Cloud Sim	International Journal of Design Engineering (ISSN: 0011-9342 | Year 2021 Issue: 8)
Agricultural crop yield prediction and efficient use of fertilizer using Machine learning	Tumbe Group of International Journals Impact Factor: 4.75 Volume-Issue:
IOT Based Neonatal Caddy	International Conference on Humanities, Sciences & Technical Education
Education for a just, peaceful and inclusive society	Thakur College of Engineering and Technology, Kandivali (E), Mumbai

3. **Ms. Madhavi M** has submitted her research paper on Simulation of Switched reluctance motor drive using Asymmetric bridge converter in IJERT publication, date :29/12/2021

Achievements of the Department

Branding

- **Special Webinars have been organized by department to create awareness about Careers and future scope of Electronics and Telecommunication. Industry.**

- **These webinars have been conducted by Er. Imran Sayyed and Er. Shilpa Gaikwad, who are senior faculties at our department.**

- **We are able to reach almost 2000 target audience through these webinars.**

Our Toppers of MSBTE Summer 2023 Exam

THIRD YEAR TOPPERS

Patil Runali
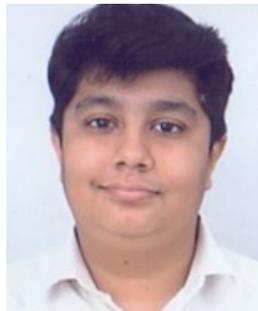**90.76 %**

Sawant Ritesh
88.65%

Amate Sahil
88.65%

SECOND YEAR TOPPERS

Pandhare Sahil
87.33 %

Errampurwala Khuzema
80.00 %

Worlikar Anuj
79.44 %

FIRST YEAR TOPPERS

Jamdaade Anurag
83.88 %

Bhekare Shreya
81.63 %

Dsouza Christina
80.13 %