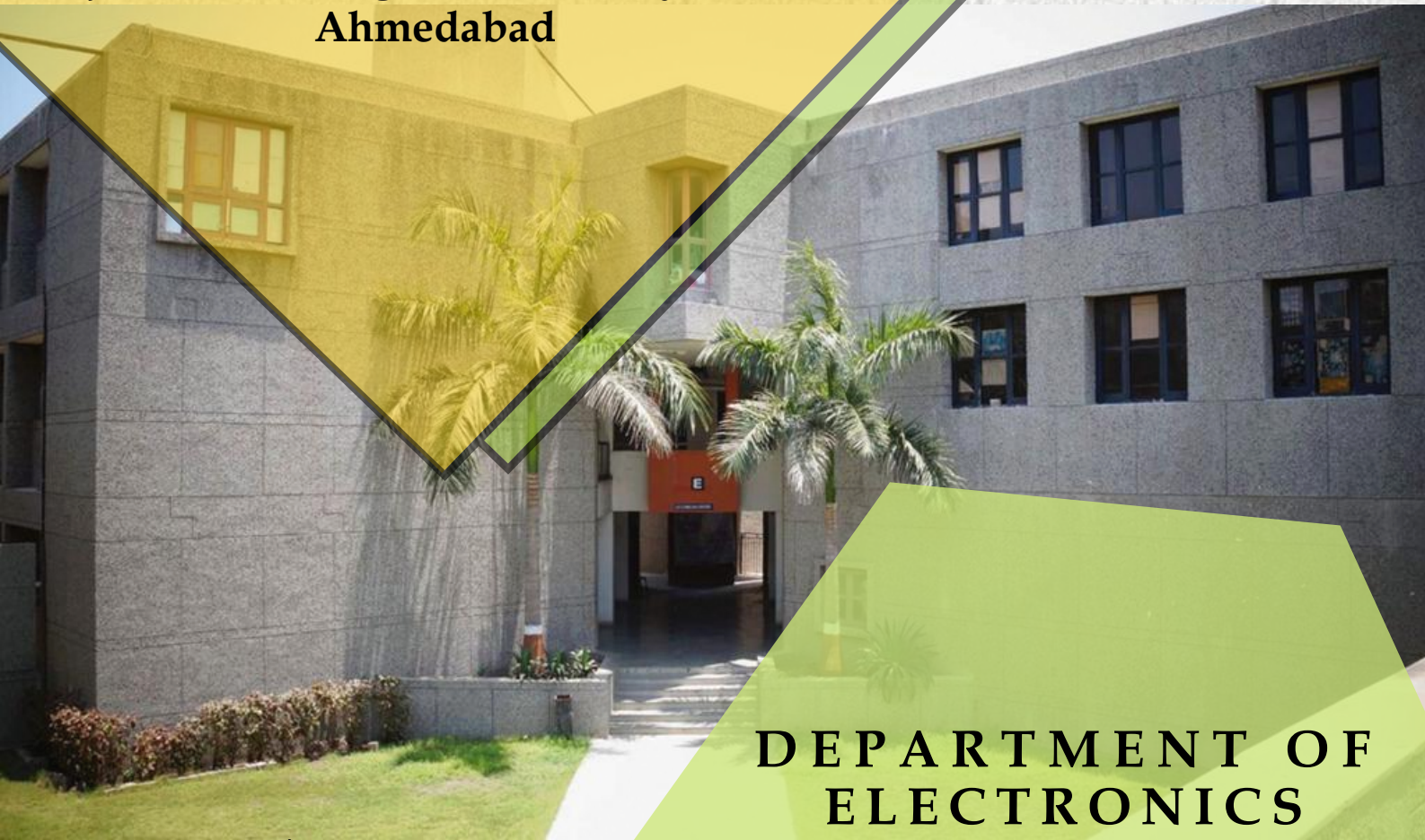# V.V.P. ENGINEERING COLLEGE

Approved by AICTE and affiliated to Gujarat Technological University (GTU) , Ahmedabad

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Darpan

2023-24 Even

Message from Trustee

India's energy transition is in its own interest because, otherwise economic growth would not be sustainable and human security would be at stake, since millions of climate changes are created due to the devastating consequences of climate change.

The Prime Minister has committed to increase renewable energy and reach 500 GW target by 2030, which is only 100GW in 2021.

Our wind energy production is only 12.5% of the total potential and solar energy production is only 4.6% of the total potential, a challenging task to tap unused resources.

The Prime Minister has announced the launch of the National Hydrogen Energy mission.
Green Hydrogen is a major component of renewable capacity of energy.

Engineering problems of cost, scale, adopting new technologies, working out distribution chains and storage of Hydrogen should be met by the government, bureaucracy, universities, engineers and technocrats by a coordinated policy and its implementation.

Dr. Tejas Patalia

Message from Principal

Welcome to V.V.P. Engineering College, a world class center for excellence in technical education. We are a leading technological institute of India, a home to a wide range of academic departments, providing best education in the major areas of technology and services in the area of research and consultancy.

We are proud and distinct through our global technical perspective, cosmopolitan character and being deeply rooted in the high Indian traditional culture, heritage and values.

You would enjoy the challenges and opportunities we offer. We look forwards to welcoming the engineering aspirants to a place of genuine intellectual excellence for an unforgettable simulating experience in the world of existing and emerging technologies, Welcome back to Future….

ABOUT V.V.P. Engineering College

Vyavasayi Vidya Pratishthan is established by Rajkot Nagarik Sahakari Bank Ltd. to promote quality education in various technical fields. The trust was founded in 1996 with the objective of meeting technical educational needs of Gujarat.

The trust prides itself of establishing the first engineering college in Rajkot, the central location of Saurashtra and Kutch region. V.V.P. Engineering College is a self-financed institution affiliated to Saurashtra University and Gujarat Technological University, recognized by All India Council for Technical Education (AICTE), New Delhi and the Government of Gujarat.

It has a specially designed on 30 acres of land with spacious building providing an adequate infra-structural facility setup in a beautiful natural surroundings. It is landscaped with enlivened architecture that creates conducive environment of learning. The campus is located 10 Km on Kalawad Road, the west of Rajkot, with transportation and conveyance facilities.

VVP Engineering College is one of the best engineering colleges in India catering holistic growth to the students. It is providing state of the art facilities to the students. The institute has many schemes and offers for well education of the students.

VISION AND MISSION OF THE INSTITUTE

VISION

To be an exemplary institute, transforming students in to competent professionals with human values.

MISSION

1. To provide a conducive academic environment for strengthening technical capabilities of the students.

2. To strengthen linkages with industries, alumni, and professional bodies.

3. To organize various co-curricular and extra-curricular activities for overall development of the students.

4. To practice good governance and conduct value- based activities for making students responsible citizens.

Dr. Paresh Dholakia

MESSAGE FROM HOD

The Department was established in the year 2001 with the aim of providing technical education through technology-based learning, innovation and excellence in teaching learning process in the field of Electronics and Communication Engineering. The well-equipped laboratories with qualified faculty members ensure hi-tech standard of education delivered from our department. Various workshops, faculty development programs, alumni interaction, expert talks, seminars, webinars, skill- development programs, project developments are conducted on recent trends in Electronics & Communication engineering to get the knowledge of the same.

Our students are motivated to write research papers under the guidance of experts. To improve their verbal communication & public speaking we are conducting technical and non-technical seminars. In house training is also provided to students to set up various projects in guidance of faculty and senior students as a part of peer learning. The students are also encouraged to participate in various extra-curricular activities and include them in different clubs. Industrial visits are arranged to get in touch with the latest technologies used in the industries.

The students are placed in leading hardware and software based multinational and reputed companies. They are motivated and guided to pursue their higher studies in India and abroad.

VISION AND MISSION OF THE DEPARTMENT

VISION

To evolve as a recognized Electronics and Communication Engineering Department preparing capable engineers with good human qualities.

MISSION

1. To facilitate adequate infrastructure, well equipped laboratories, experienced staff and technical experts for development of technical knowledge and skills in the students.
2. To collaborate with industries and alumni to stay updated with the latest skills and technology.
3. To organize technical & nontechnical activities for overall grooming of the students and to make them good citizens.

Program Educational Objectives (PEOs)

1. Work as a professional with innovative thinking in the fields of industry, government sector and academia.
2. Advance their career by pursuing higher studies and research or as an entrepreneur.
3. Demonstrate teamwork, professional ethics, human values and lifelong learning to serve the society.

Program Specific Outcomes (PSOs)

1. An ability to grasp, analyze and apply the concepts of Electronics, Communication, VLSI technology, Embedded systems and Signal processing in implementing engineering systems and solution of complex problems in Electronics and Communication Engineering.
2. An ability to have adaptability to changing work environment and good interpersonal skills as an individual/leader in a team with professional ethics, social responsibilities and human values.

I N D E X

Glimpses of Training & Placement Cell

Placement of 2024 batch

Congratulations !!!

Dhruvi Pokar — CTC 7.88 LPA — SOPHOS	**Zenil Dodhiya** — CTC 7.88 LPA — SOPHOS	**Taksha Rathod** — CTC 4.00 LPA — eInfochips	**Preet Ginoya** — CTC 4.00 LPA — eInfochips

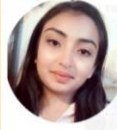|		
Jeet Nathwani — CTC 4.00 LPA — eInfochips	**Dev Sachdev** — CTC 4.00 LPA — eInfochips	**Mirali Gajera** — CTC 4.00 LPA — xylem Let's Solve Water
Tushar Parmar — CTC 4.00 LPA — plusnet communication pvt. ltd.	**Daksh Kakadia** — CTC 4.00 LPA — GLIDE EMBEDDED SOLUTIONS	**Aditya Kanani** — CTC 3.00-4.00 LPA — VICHARAK

Sumit Lunagariya — CTC 4.00 LPA — VOLANSYS An ACL Digital Company	**Priyanka Bhatt** — CTC 4.00 LPA — ProtoConvert	**Khushi Monara** — CTC 4.00 LPA — ProtoConvert	**Shubha Pandya** — CTC 4.00 LPA — powertrac UPDATES YOUR NEEDS

Ayush Khokhra — CTC 3.60 LPA — AEROMESH SYSTEMS WIRELESS UNLEASHED	**Bijal Pilojpara** — CTC 3.60 LPA — INFINITI SOLUTIONS

"TPO - Academia Meet 2024"

   eInfochips and ARROW company has arranged "TPO - Academia Meet 2024" for recruitment process 2025 batch on 18th April 2024.

Team eInfochips [CEO, HEAD of ASIC & PES & HR]

   These sessions were very precisely targeted to EC for EC engineers' bright future in Embedded System and VLSI domain industry. They covered eInfochips Service Offering, Industry Segment and Customer example with PES and ASIC updates. Moreover from overview of HR for Campus Hiring observations they explain What exactly eInfochips (or other companies) are looking for? in students. As they stated Students required Good Communication Skill , Concepts and Fundamental Strengthen, Counseling not to be specific in technology.

   For all above proficiency We, Department of Electronics and Communication is arranging Technical and Non-Technical Seminar presentation where students are presenting topics in front of group to get practice on speaking English/Presentation skill. Skill Development Program and Workshops have been arranged. There are also MOCK aptitude test and MOCK PI in where experts are alumni from MNC who are actually taking hiring interviews to experience PI before attempting their placement PI. Faculties are providing questionnaire for PES and ASI FAQs from interviewer of the regular recruiters for better performance in campus PI.

At this point we would like to thank all our regular recruiters, our alumni and who are directly or indirectly contributing in all activities and guide students.

Online Mock PI Interview for 6th Sem students on 20-4-24.
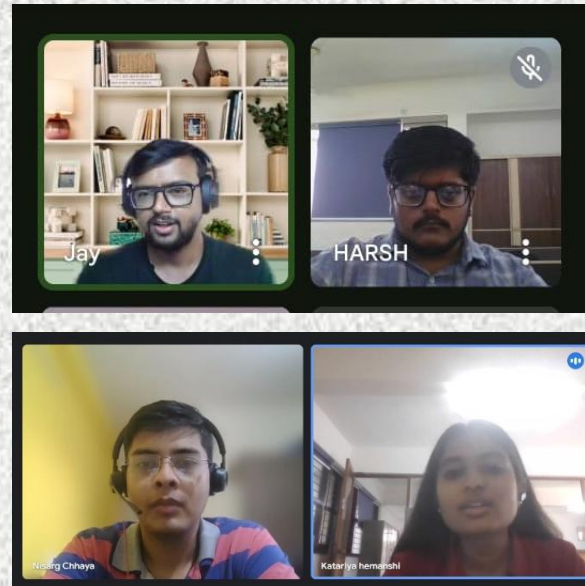
An online Mock PI for 2025 batch was organized on 20/04/2024. Interview was conducted based on students' interest in different domains liker VLSI, Embedded System and Networking.

Expert from various domains Mr. Rutul Trivedi (Ericsson), Mr. Dhawal Fitchadia (eInfochips,ASIC Div),Mr. Jay Ganatra (eInfochips PES Div), Miss. Aashlesha Dave (Synopsys), Mr. Nisarg Chhaya (ARM) , Mr. Ayush Savaliya (Matrix Comsec) were invited to conduct the interview. After the interview, individual feedback was conveyed to each student for his/her further preparation for placement.

Mock interviews are an optimal way to prepare for a real job interview. It provides students an opportunity to practice, receive feedback and improve their technical skills. A mock interview also helps students to develop interview strategies, to enhance their communication skills and answer challenging questions in safe environment which is helpful in real campus interviews.

Project work by 2021 – 2025 Batch

Hexacopter Drone

A Hexacopter Drone used for military purposes, to perform bomb dropping in the enemy area. It can carry up to 8 explosives at a time, and it have maximum weightlifting capacity up to 3Kg also equipped with GPS system to find its live location/coordinates.
Team member : Nikhil Parmar , Sidhharth Malaviya and Ravi Vaghasiya

Live Streaming ROBOT : Sofia

"Sofia" is an IoT-based face recognition system using the ESP8266 and ESP32 camera module. It aims to detect and recognize faces, providing personalized greetings to identified individuals. Sofia leverages IoT and face recognition to create intelligent, interactive systems. Combining the ESP32-CAM and ESP8266 modules, Sofia offers a cost-effective solution for real-time face detection, recognition, and personalized greetings, with applications in home automation, security, and customer service.

Team Members : Hemanshi Katariya, Prachi Rekvar, Eshita Kathrodiya.
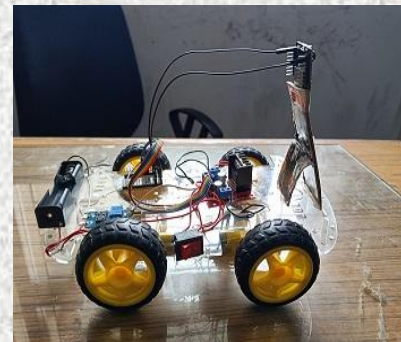
Obstacle Detection, Line and Human Follower

The idea of project is to detect obstacle to avoid accidents using ultrasonic sensor using hardware board Arduino. The same hardware with infrared sensor converted to follow line called line follower in robotic s application. The extinction of the above project using camera it can be converted in human follower to avoid carryon luggage while walking, instead camera the hardware was used ultrasonic sensor to demonstrate human follower.

Team Members : Khris Vaz , Dev Dhameliya, Yash Ramolia and Ishika Mungara.

GTU Results

7th Sem Result:
7 students secured 9 above SPI and 16 students have 8 above SPI.
Astha Bhatt (2nd rank) , Dhruvi Pokal (5th rank), Zenil Mehta (6th Rank) , and Mirali Gajera (7th Rank) secured Ranks among Top 10 students in GTU.

5th Sem Result:
4 students secured 9 above SPI & 6 students got 8 above SPI.
Hemanshi Katariya (5th Rank) and Chetna Parmar (7th rank) secured Ranks among top 10 students in GTU.

3rd Sem Result:
1 student secured 9 above SPI and 5 students got 7 above SPI
Harit Ashara secured 1st Rank in Top 10 .

1st Sem Result
2 students secured 9 above SPI
Mourya Vadera (4th rank) secured rank among GTU Top 10 in entire EC Branch.

Staff Achievements

Research papers presented/published

1. Dr. Paresh Dholakia published a paper on " Performance analysis of next gen wireless systems to achieve higher spectral efficiency in different fading environment." in International journal Mukt Shabd Journal, ISSN NO : 2347-3150.

2. Dr. Charmy Patel , Dr. Jignesh Joshi and Dr. Sneha Pandya published a paper on " Association Rule Mining on Basis of Frequent Pattern Tree" in International journal Mukt Shabd Journal, ISSN NO : 2347-3150.

3. Prof. Sheron Christy published a paper on " Climate Change Monitoring and Solution using Remote Sensing, Geographic Information System and Artificial Intelligence: a Review" in National peer reviewed Journal of Remote Sensing & GIS, ISSN No: 2230-7990.

FDP

1. Dr. Jignesh Joshi attended 6 Day National Level online FDP on "Outcome Based Education and Application of Generative AI in teaching and reasearch" organized by IPSR Solutions Ltd. (DST- CURIE-AI centre) during 18-03-24 to 23-03-24.

2. Dr. Sneha Pandya attended 6 Day National Level online FDP on " Outcome Based Education and Essential AI Tools for teachers" organized by (IQAC) of St. Thomas College, Palai with the The Kerala State Higher Education Council (KSHEC) during 10-01-24 to 16-01-24.

3. Prof. Sheron Christy attended 12 week National Level NPTEL-AICTE FDP Training program on "Integrated Circuits, MOSFETS, Op-Amps and their applications" organized by NPTEL/IISc Bangalore during 22-1-24 to 12-4-24.

Workshop

1. Dr. Sneha Pandya attended a National workshop on " Celebration of National Technology Day-2024 (NTD-2024)" organized by Space Application Center, ISRO, Ahmedabad on 11-05-24.

Seminar

2. All the faculties of department attended a national level seminar on " Remote Sensing Applications to Climate Changes" organized by Department of Electronics and Communication , V.V.P. Engineering College, Rajkot on 17-02-24.

3. Dr. Jignesh Joshi attended a state level webinar on "The role of entrepreneurship and innovation in economic development" organized by Education Department, Government of Gujarat, Knowledge Consortium of Gujarat on 26-04-24.

4. Dr. Jignesh Joshi attended a National level meet on " Industry-Academia Partnership Meet 2024" organized by e-Infochips and ARROW Company, Ahmadabad on 18-04-24.

Recognition of Staff

1. Dr. Paresh Dholakia, has been appointed as IEEE reviewer for 2nd IEEE International Conference organized at Graphic Era University, Dehradun during 15-03-24 and 16-3-24.

2. Prof. Sheron Christy has been invited to give motivational talk on Life Skill. She had given talk on Self-Confidence and Positive Attitude at STAR GALA 2024 by Navjeevan Trust on 25-02-24.

CSIR Sponsored Seminar

One Day National Seminar on "Remote Sensing Applications to Climate Change" on 17-2-24.

As climate change research is a crucial task because of its requirement of extensive quantities of long-term data to compute the past, present, and future scenarios of Earth's climate system and other biophysical systems at global to local scales, the data collected with remote-sensing technologies has proved efficient to authenticate climate models, improve knowledge of the physical and dynamic processes of the climate system, and aiding to project future climate change and its impacts with minimized unreliability.


Department of Electronics and Communication organized a one day national seminar on "Remote Sensing Applications to Climate Change" on 17-2-24. Experts of this field Dr. Reshma Raskar Phule, Assistant Professor ,Civil Engineering in Bharatiya Vidya Bhavan's Sardar patel College of Engineering, Andheri(West), Mumbai and Dr. Anurag Kandya ,Associate Professor, Civil Engineering at School of Technology, Pandit Deendayal Energy University, Gandhinagar are invited

This National Seminar had received registration entries from various renown Institutes of India. Dr. Reshma Raskar Phule had elaborated following topics on **Climate Change and Climate Resilience** and **Approaches in Geospatial Technologies (Open Source) for Climate Change Studies in India**. Dr. Anurag Kandya had elaborated following topics on **Assessing the changes in the Land Surface Temperature**, **Vegetative Cover of different cities of Gujarat using Remote Sensing Data** and **Assessing the dynamics of Climate Change and Air Pollution using Remote Sensing data.**

Glimpses of seminar

Inaugaral Function
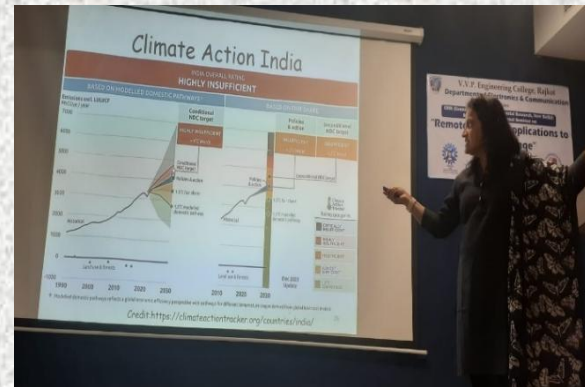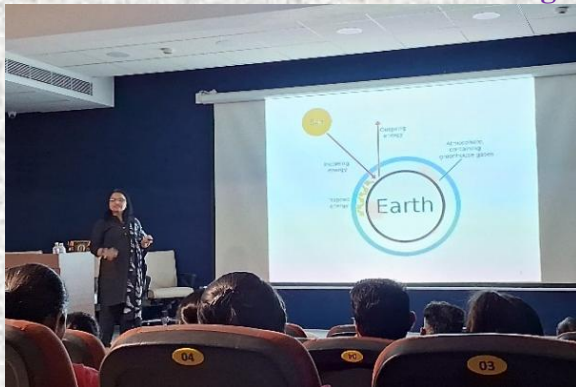
Keynote Session and Expert lecture by Dr. Reshma Raskar Phule

Expert Lecture by Dr. Anurag Kandya
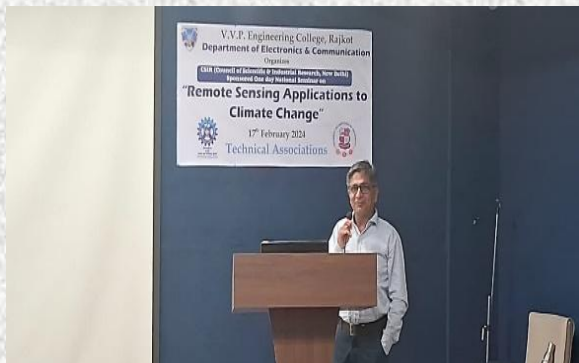
Verbal Feedback and vote of thanks

Dr. Charmy H. Changela gave a book talk on non technical book "Tottochan" on 24-2-24 in Library booktalk series.

EC department staff members also participated in "**Spirit 2024**". Dr. Dipesh Kamdar became Champion in Chess (Male). Prof. Sheron Christy secured Ranks in Female catagory Carrome (Champion), Badminton (Runners Up) and Cricket team (Champion).

Matdar Jagruti Abhiyan by EC Staff on 2-5-2024

Student Achievements

Hitarthi Vekariya (2023 Alumni) received a Gold Medal ➤

Congratulations !!!

◄ Nikhil Parmar (6th EC) qualified in GATE Exam

Shri Dewang Mehta Award

	Name	Semester
1	Vadera Mourya	1st
2	Aasara Harit	3rd
3	Parmar Chetna	5th
4.	Pokar Dhruvi	7th

Student Participation

WDC Activities

Make and Eat

Vishva Katrodia, Shruti Trivedi & Devangi Sankharava of 2nd sem EC participated "Make & Eat " competition by WDC cell on 16-2-2024 and enjoyed this activity as well.

Shivani Patel (6th EC) participated in 1-2 mins Speech Competition on "Ayodhya ke Shree Ram" by WDC Cell on 19-1-24.

Sports Activities

In **Spirit - 2024** (outdoor games) 9-2-24 EC students Shashwat Mehta (4th Sem), Het Umrethiya (4th Sem), Harit Ashara (4th Sem), Viraj Gajera (4th Sem), Om Doshi (4th Sem), Aditya Raval (4th Sem), Viraj Der (2nd Sem), Mourya Vadera (2nd Sem), Krishna Makadia (2nd Sem), Vaibhav Ubhadiya (2nd Sem), Taksh Dobariya (2nd Sem), Harsh Ladava (2nd Sem) participated as a team for Cricket.

Co curricular & Cultural Activities:

NSS:

Sr. No.	Name	Semester
1	Hiral Chavda	8th
2	Aastha Bhatt	8th
3	Yash Patel	8th
4	Dipali Mehta	8th
5	Taksha Rathod	8th

NCC:

Sr. No.	Name	Semester
1	Dixit Khokhar	2nd
2	Shruti Trivedi	2nd
3	Vishva Katrodiya	2nd

Participation in Cultural Events

V.V.P. Engineering College had organized a wonderful memorable farewell **"Zeal '24"** for 2024 batch students on 9-3-24**.** Students of EC Department participated through various club in this event.

Student Name	Sem	Activity
Shruti Trivedi	2nd	Theater Club
Yash Ramoliya	1st	Dance Club
Shivani Patel	6th	Dance Club
Aditya Raval	4th	Music Club
Tanish Aghera	4th	Fine Arts Club
Dixit Khokhar	2nd	Event Management
Taksh Dobariya	2nd	Event Management
Shreyansh Dafda	2nd	Event Management
Viraj Der	2nd	Event Management

IIRS Outreach Programmes

Remote Sensing and Geo-information Science have become backbone to many location-based services and decision-making systems emerging in the New Information Economy. Under a noble objective to promote of Remote Sensing & GIS Technologies & Applications, IIRS (Indian Institute of Remote Sensing) - ISRO had conducted many Online Outreach Programmes in which EC students and faculty members had successfully participated for their knowledge enhancement under our Institute as a Nodal Center of IIRS Outreach Programmes. (Ms. Sheron Christy is the coordinator for all these programs.)

Department of EC Students IIRS participation

❖ 134th IIRS Outreach Programme on Exploring Earth's Mission Moon through Chandrayaan from 17-2-24 to 24-2-2024

Sr. No.	Name	Sem
1	Pratik Ghosh	2nd

❖ 135th IIRS Outreach Programme on Geospatial Analysis using Google Earth Engine from 19-2-24 to 24-2-2024

Sr. No.	Name	Sem
1	Pratik Ghosh	2nd

❖ 137th IIRS Outreach Programme on Aditya L1: India's first space based observatory 18-3-24 to 23-3-24

Sr. No.	Name	Sem
1	Aastha Bhatt	8th
2	Drashti Kalaria	6th
3	Pratik Ghosh	2nd
4	Chetna Parmar	6th
5	Janvi Goswami	6th
6	Tanish Aghera	4th

❖ 1037 IIRS Outreach Programme on Soil Health: Measurement and Monitoring on 28-3-2024

Sr. No.	Name	Sem
1	Pratik Ghosh	2nd

❖ 141 IIRS Outreach Programme on Geospatial Technology for modeling of Urban Environment from 27-5-2024 to 31-5-2024

Sr. No.	Name	Sem
1	Tanish Aghera	4th
2	Pratik Ghosh	2nd

Industrial Visits

e-Infochips, an Arrow Electronics company, collaborated with Department of Electronics and Communication Engineering Department for Students Industrial Visit, Workshop and Expert Lectures as well as for placement in core domain ASIC and PES.

6th semester EC students visited eInfochips to visualize their course VLSI and Embedded System they studied in their last semester/year. During this visit eInfochips presented their services in front of students to aware them about current digital transformation, product engineering services and their expertise in IoT, AI/ML, security, sensors, silicon, wireless, cloud, and power. After the presentation they demonstrate their experience zone so student can visualize products and services.

Industrial Visit at Circuit Node Technologies by 4th EC students with Dr. Dipesh Kamdar on 8-4-2024.

Our Alumni Keval Bhut is the CEO of Circuit Node Technologies Company. During the visit: The students came to know about the Single and Double Side PCB Manufacturing and how to do Custom PCB Design. They also learned about the procedure of Prototype Development. and the Mass Production Solutions and PCB Testing.

Apart from all these students learned about the induction motor starter's design and manufacturing process.

Workshops

One day workshop on Introduction to Antenna Designing & Hands on: HFSS , on 16-2-2024.

Introduction was given about the various concepts which are required for the designing of any antenna. For e.g., beam area, Faraday's law, Maxwell's equations, etc. Additionally, an introduction about HFSS was given and the designing of horn antenna was also a part of it. Even, various functions of HFSS were explained briefly to the students.

Dr. Namrata. guided about the geometry, radiation pattern and structure of microstrip patch antenna and took the hands-on session for HFSS Software which allowed the students to design a microstrip antenna from the very beginning and they did complete it successfully.

Overall, this one-day workshop was filled with bunch full of knowledge for the 6th EC students about Antenna designing. With the help of this activity, the students were able to apply fundamental knowledge of antenna to design and analyze various modern antennas using HFSS tool. Hands on session was given to the students in the group.

"Hands on training to PCB Design" for 4th EC students by Mr. Niral Rakhasia, JMR Technologies on 19th and 20th February 2024.

In this 2 days skill development program, the students were made aware of the Printed circuit board (PCB) design that brings electronic circuits to life in the physical form. The students were explained that with the help of Diptrace Layout Software, the PCB design process can combine component placement and routing to define electrical connectivity on a manufactured circuit board.


2 days Workshop on Arduino and its applications by Prof. Ravin Sardhara and Prof. Nirmal Bhalani on 25th and 26th April 2024.

In this 2 days workshop, the students learned about Arduino boards, combined with sensors, and wireless connectivity. They were made aware of different uses of Arduino in home automation system and other automated security system and energy management.

Online Workshop on "Implementation of CRUD operations with Web programming using Php and MySQL" by Dr. Rachit Adhvaryu to 6th EC students on 6-3-24.

Dr. Rachit Adhvaryu (Asst. Prof. Parul University) took an online workshop about CRUD operation. 6th semester and 8th semester students participated in this workshop. In this workshop students were made aware of CRUD ,DBMS, SQL. There was also hands on practice for CRUD covers HTML and CSS tags, Form tags, properties and methods, AMP and VS code features, Create database using tools, Bootstrap to build website responsive and fast, Design student database to store data in table using PHP code and SQL for CRUD.
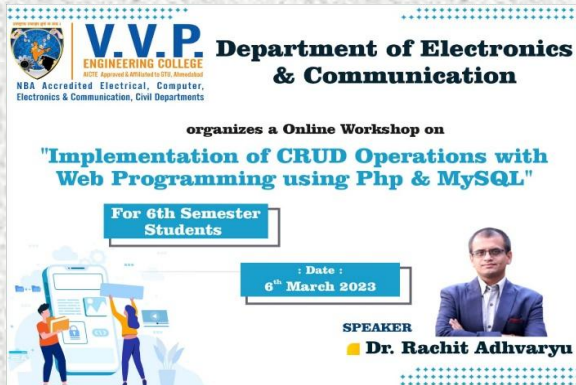
One day workshop on "Design Process of Embedded System and Career in Embedded Domain" by Mr. Dhaval Kapupara and Mr. Sagar Kaneriya from Aartronix Innovations on 22-3-24.

This workshop was arranged for 4th and 6th semester students. Experts Mr. Dhaval Kapupara (team lead - Firmware and Mr. Sagar Kaneriya (Team Lead - Hardware) are from Embedded System company Aartronics. They gave introduction to Embedded System and Embedded System Product Cycle. They deliberately explained sub domain in Embedded System like Hardware Design, Firmware Design and Linux application or device drivers' developer. Both of them gave the insight about career opportunity in Hardware Desigh , QA testing etc with the industries case study. Student learned about Aartronics products like Measuring instruments interfaces for GLCD, Load cell, RS485, RS232, USB printer , IIoT, wifi LORA, Bluetooth, CAN, Ethernet , Power Electronics - inverter, controlled rectifier, Motor controller. They were

also guided for Coursera design process course, NXP, STM development board GPIO, ADC, MOD bus.

Workshop held at Space Application Center – ISRO - Ahmadabad .

The celebration of National Technology Day 2024 (NTD-2024) was organized at Space Applications Centre, ISRO, Ahmadabad on May 11, 2024 to commemorate the anniversary of successful Pokharan –II nuclear tests conducted by India, in May 1998.

From all over Gujarat, many engineering colleges were invited for the celebration and they were given the opportunity to visit four of the state of art laboratories of space application center. Dr. Sneha Pandya attended this workshop with our 4th semester students. The scientists explain to all the students in depth about the working of the labs, demonstrated the software used and all the instruments. It has been a mesmerizing experience for the students to visit and learn from the experts, scientists and all the personnel of SAC, Ahmadabad. Overall, this one-day workshop was filled with many insightful speakers and scientists whose contribution to the space program and society.

Expert Talks

Mr. Suree Sharma – CEO and Founder
Mr. C P Umashankar – Co-Founder
Mr. Gaurav Joshi – Physical Design, eInfochips Arrow Company
Mr. Ridhhi – Physical Design, eInfochips Arrow Company

With esteemed support of eInfochips to organize a workshop on "Embedded with HDL" for the pre-final year and final year EC students (2024 and 2025 batch).

The sessions of the workshop delivered Introduction to Avionics Communication Systems and Protocols used in Avionics. Students came to know about VLSI opportunities and proficient required, VLSI Classification and types , HDL coding using GROWIN IDE. They have also given Introduction to FPGA board - Eklavya and Hands on with FPGA board designed by VidyaTech

Students got knowledge about role of VLSI technologies and importance of HDL in industries. Students got motivated to do programming using HDL because of hands on sessions with FPGA board.

An Expert Talk on "Career in AWS" by Mr. Janak Vadaria on 21-2-2024.
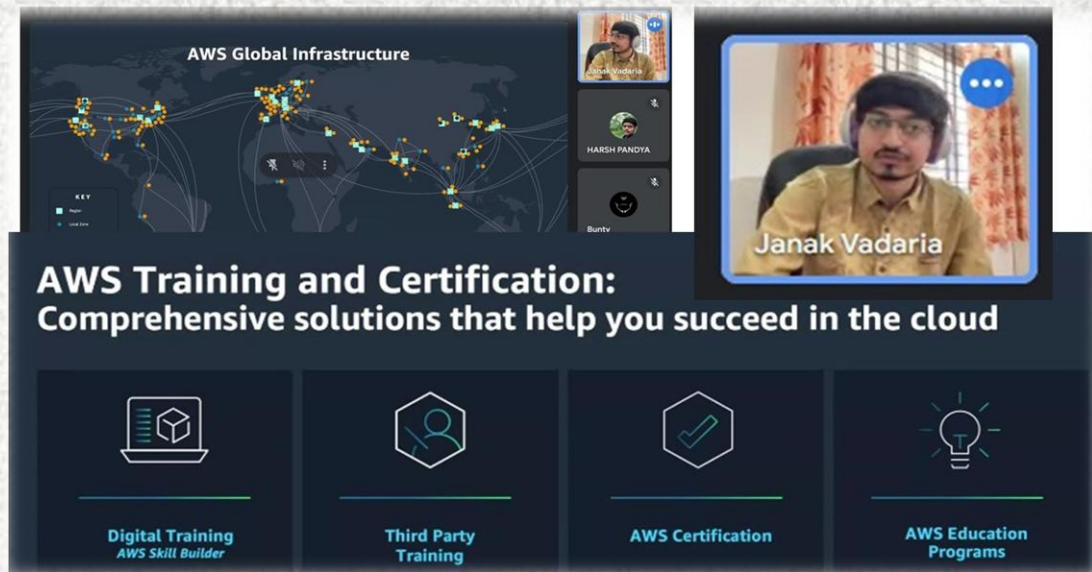
This expert talk has been delivered online by Mr. Janak Vadaria (Proserve , Amazon Web Service) our Alumni . This talk included AWS console demo, AWS application and serviced offered ,AWS global infrastructure and AWS certification and resources. All Students of EC Department attended this workshop. Students got information about AWS and its services. They came to know about applications and infrastructure of AWS. They got motivated towards AWS certification and resource to get involved with AWS.

Skill Development Programme

Skill Development Programme on "From Concept to Code: Modeling Digital Circuits using Verilog" by Dr. Jignesh Patoliya (Senior Engineer, e Infochips) on 13-4-24.

This workshop provided a comprehensive foundation for further exploration and learning in the field of digital circuit design using Verilog.

In session1 he started to explain Icarus, Importance of Verilog in ASIC, Module structure in Verilog and Verilog HDL Basic elements. Understanding hierarchical design, Creating modules for different components of a digital circuit, Connecting modules using ports and Combinational logic modeling are explained in session 2.

He delivered one more session for Sequential logic modeling, Blocking vs. non-blocking assignments, Importance of verification in digital circuit design, Stimulus generation and response checking and Debugging techniques.

By the end of this workshop, participants got a solid understanding of Verilog and its application in modeling digital circuits. They were able to translate digital circuit concepts into Verilog code, design and simulate basic digital circuits, and write test benches for verification purposes.

Seminars

Seminar on Interview Preparation for Engineering students by Mr. Ajesh Kamania from K7 Academy on 28-3-24.

The seminar was interactive to discuss about resume content and things to keep in mind while appearing for the personal interview.

Students came to know about etiquettes required for the PI. They came to know about their resume content and type of questions which are very common in personal interview. Students got motivation for MOCK PI as it is required for trials to perform well in actual campus PI.

Alumni Interactions

Alumni Interaction with Pavan Belani and Jignesh Chhatbar with 6th EC students on 30-01-24.

Pavan Belani (Principal Software Engineer), Citrix, Bangalore and Jignesh Chhatbar (Automation Engineer), Infosys, Canada.

They discussed about IT fresher recruitment and Opportunities in industry, Need of Logical skill/Soft skill currently required by the IT companies, courses offered by CDAC on Embedded System. They elaborated Service base company requirements and Product base company requirements. They motivated students by discussing "How to become a capable Engineer.", with a good examples of Power of Engineering and engineering marvellous. They guided students by Common mistakes in pi and given advice to don't bluff and be honest in interview. They explained in detail testing of application, manual testing disadvantages, how to develop automated solution for website. They discussed about design of framework used for testing to find to crash condition and to test all functionality.

Alumni Interaction with Raj Popat (TCS), Bansi Raychura (Volansys) , Nishant Thummar (Softnautics) on 30-01-24.

During interaction Alumni guided students on Industry needs concepts and fundamentals, Project based learning helps a lot, Service base and product base company meaning, Current situation in respective alumni company and their role. Students got information about role of EC engineer in TCS, Volansys and Softnautics. They came to know about importance of project work during their BE journey and get motivated to work on their interest.

Technical Events

GTU Techfest held on 29-2-24

In the heart of the Electronics and Communication Department at the V.V.P. Engineering College, the annual Tech Fest unfolded on the auspicious date of 29th February 2024 at Electronics and Communication Department, igniting the passion for innovation and creativity among tech enthusiasts. This event served as a beacon for innovation and creativity, attracting a total of 309 entries.
Faculty coordinator :   Prof Ravin Sardhara
Student Coordinator : Shivani Patel and Dev Dhameliya

1. Arduino Error:
        Event Coordinator : Khris Vas
        The Arduino Error event witnessed enthusiastic participation, with 101 entries. Held within the Electronics and Communication Department, participants showcased their prowess in troubleshooting and problem-solving using Arduino microcontrollers.

2. Digitrixs:
        Event Coordinator : Hemanshi Katariya
        With 60 entries, Digitrixs captivated participants with its exploration of digital design and graphics.

3. 7 Hunters:
        Event Coordinator : Ishika Mungara
        As one of the most popular events, 7 Hunters attracted 87 entries. Participants embarked on an exhilarating scavenger hunt adventure across the campus, solving clues and challenges along the way. This non-technical event fostered teamwork, problem-solving abilities, and camaraderie among participants, providing a refreshing break from the technical competitions.

4. The Blank Space:

Event Coordinator : Diya Bhalodia

The Blank Space event garnered 61 entries, providing participants with a canvas to unleash their creativity through various art forms. The event celebrated the diverse artistic talents of the participants, inspiring them to explore new realms of expression.

The Techfest provided a platform for innovation, collaboration, and exploration. As the curtains closed on another memorable edition of the Techfest, the spirit of innovation continues to thrive, leaving a lasting impact on all who participated.

Department Level Research Paper Writing Competition held on 27-2-24.

This program provided a platform to students to develop interest in Research Paper reading & writing. Total 1 paper from 4th EC & 3 papers from 6th EC students were presented.

Following Research Papers were presented:
1. 3D Printing by Yuvika Narvane (4th EC)
2. Harnessing sustainable energy: A comprehensive study of Piezoelectric tiles for electricity generation by Hemanshi Katariya, Chandni Rav, Chetna Parmar
3. Design for Testability   by Chintan Parekh (6th EC)
4. Space Debris: The new but deadly problem   by Khris Vaz (6th EC)

Students had effectively written Research Paper along with Plagiarism check.Students learnt to read various Research Papers of their domain of interest & write their own Research Paper. They were able to present the Research Paper which has improved their Communication Skills.

Project Fair for 6th, 4th and 2nd semester students on 30-4-24.

Electronics and Communication Engineering Department of VVP Engineering College hosted its Project Fair, showcasing the innovative projects and research endeavors of its students. The event aimed to provide a platform for students to display their technical skills, creativity, and problem-solving abilities across various engineering disciplines. The fair witnessed enthusiastic participation from students across all years of Electronics and communication Department.

Over 20 projects were displayed, covering a wide range of topics such as renewable energy, Drone technology, robotics, smart city solutions, environmental sustainability.
projects included: Data Transfer through Li-Fi, Mini Drone, Electricity Generation With Piezoelectric, Robo Vacuum Cleaner, Home Automation, Solar Panel Cleaner, Multifunctional Robot, Gesture Controlled Robot, Fire Fighter Robot, Digital Speedometer and odometer using PIC microcontroller, Automation with IR Sensor, LED cube, Water level indicator, Automatic security light, sensitive intruder alarm circuit, infrared motion detector, Electronics Thermometer.

Interactive sessions and live demonstrations were conducted, allowing visitors to engage with the projects and understand the underlying technologies. Students provided detailed explanations and answered queries from attendees, demonstrating their in-depth knowledge and expertise.

Activities

Orientation (commencement of new semester)

All the faculty members welcome students for new semester. They were explained the importance of Vision, Mission, Program Objectives, PEOs and PSOs of our Department from NBA Perspective initially. The Students had been given insights regarding their academic term, various subjects, semester projects, Chalk and talk seminars, Research Paper Writing and technical events. The students were appreciated for their achievements during past semester by certificates. The appreciation was done in the categories of Academic Excellence, Aptitude Exam, Chalk & Talk seminar presentation as well as Projects. The students were advised to improve their communication skills and attend online courses in addition to their academics to enhance their technical skills. This orientation was held on 10--1-2024 for 6th semester students, 2-2-2024 for 2nd semester students and 3-2-24 for 4th semester students.

Orientation of 6th EC students on 2-2-24

Orientation of 4th EC students on 3-2-24   **Orientation of 2nd EC students on 2-2-24**

Parents' Meeting for 8th, 6th and 4th semester students on 27-4-24.

Department of Electronics and Communication had organized Parents Meeting for for 4th, 6th and 8th semester students. In this meeting, our respected HOD Sir Dr. Paresh M. Dholakia had addressed all parents with current activities of our EC Department, efforts put behind students by our Faculties for their overall development and subjective performance and career perspective guidance for all students. The Parents were conveyed the attendance of their son/daughter as well as their subjective Mid Semester exam Result. They were glad to know about their children's academic progress in this meeting and about various aspects and dimensions carried out for the 360-degree development of their kid. Matters like training and placement and contributions from college in the growth of their kids helped them become stress free. Hence, the meeting was very informative and fruitful to all Parents as they became aware of their son/daughter's performance.

Motivational Quote

"Comfort is no test of truth. Truth is often far from being comfortable."
SWAMI VIVEKANANDA

V.V.P. Engineering College

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