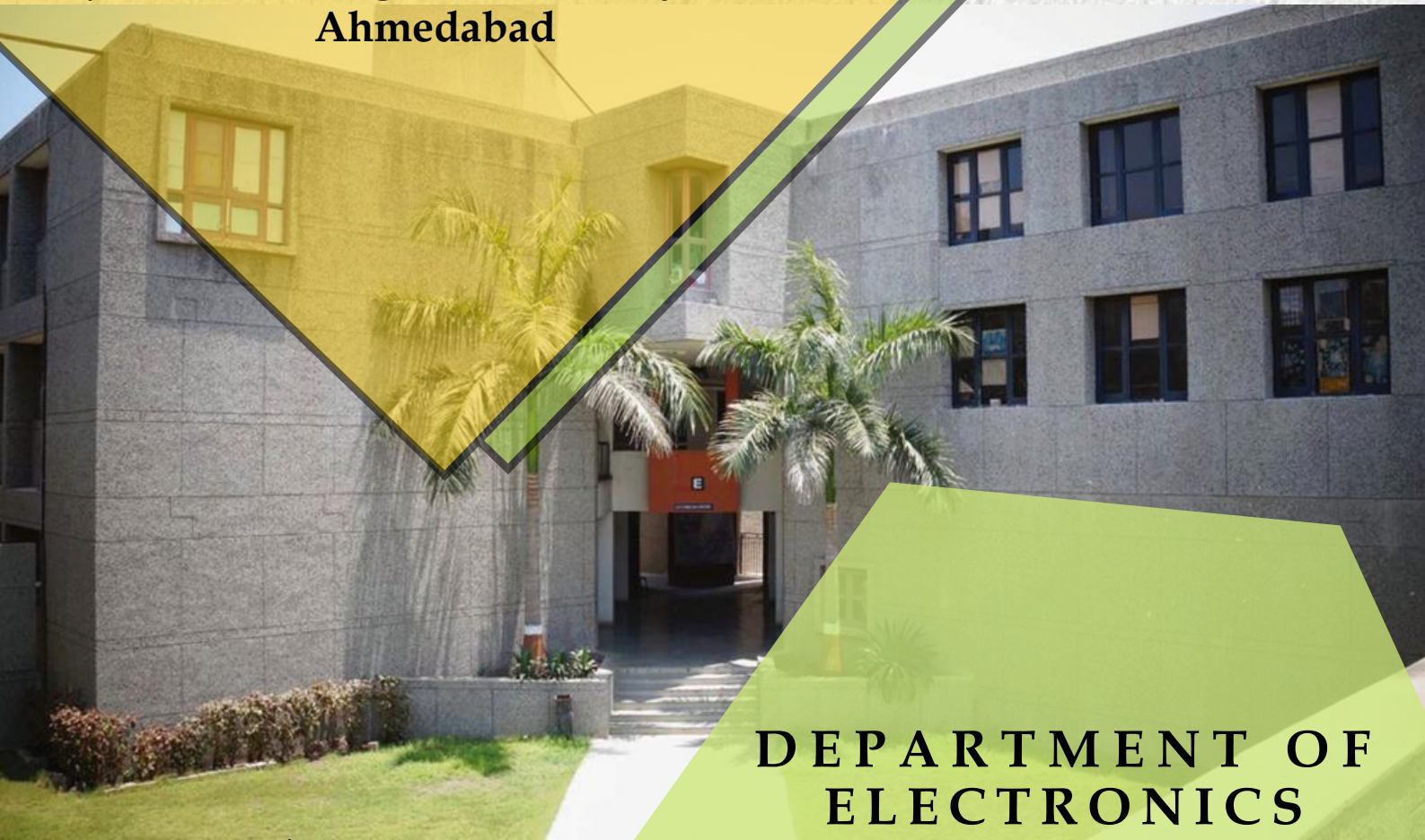




V.V.P. ENGINEERING COLLEGE

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



DEPARTMENT OF
ELECTRONICS
AND
COMMUNICATION
ENGINEERING





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.



Prof. (Dr.) Piyush B. Vanzara

Message from Principal

At V V P Engineering college, our vision is to transform our students into competent professionals by nurturing intellectual curiosity, inspiring creativity, and equipping students with the knowledge and skills needed to thrive in an ever-evolving world. We aim to be an exemplary institution that empowers individuals to reach their full potential, promotes interdisciplinary collaboration, and addresses global challenges.

We envision a future where our students not only excel academically but also grow as responsible and ethical leaders who contribute meaningfully to society. Our commitment to excellence in education and holistic development will ensure that our graduates are prepared to make a positive impact on the world in their respective fields and communities.

With a focus on continuous improvement, we strive to be a place where diverse perspectives are celebrated, and where all members of our community – students, faculty, and staff – work together to create a sustainable, prosperous future for all. Let us move forward with a shared sense of purpose and dedication for shaping the engineers of tomorrow.

ABOUT V.V.P. Engineering College

Vyavasayi Vidya Pratishtan 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 into 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.

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A remarkable Milestone !!!

AICTE & ISTE Sponsored one day National conference

V. V. P. Engineering College, Rajkot, organized the National Conference on Recent Trends and Innovations in IoT (NCIOT-25) on 19th & 20th September 2025. The conference aimed at providing a platform for academicians, researchers, industry professionals, and students to deliberate on the latest innovations, challenges and applications of the Internet of Things (IoT). With eminent resource persons and active participation, the event was a significant step in promoting research and collaboration in this emerging domain.



There was total 66 participants representing Engineering Colleges, Universities, and Research Institutions cross Gujarat and neighboring states. Participation included faculty members, research scholars, industry professionals and students.

This conference enhanced understanding of IoT trends, applications and challenges. It strengthened academic-industry networking and motivated participants for innovative research in IoT.



The National Conference on Recent Trends and Innovations in IoT (NCIOT-25) was a grand success. The conference not only facilitated rich academic discussions but also inspired the participants to align their research with real-world applications. The organizing committee is grateful to AICTE for its continued support in promoting research, innovation, and academic excellence. Dr. Paresh Dholakia and Dr. Dipesh Kamdar from EC department are among the conveners



Congratulations !!!

Department of Electronics and Communication

The Department of Electronics and Communication has achieved its second consecutive Accreditation by the National Board of Accreditation (NBA), a significant milestone that validates the department's commitment to excellence and continuous quality improvement in technical education.

This re-accreditation, which follows a rigorous evaluation of the program's quality and outcomes, highlights the EC Department's adherence to stringent national and international academic standards.

Glimpses of Training & Placement Cell

Placement of 2025 batch

Congratulations !!!

Yuvika Narvane selected in Glide Technologies, Ahmadabad as an Embedded Hardware Engineer and **Tanish Aghera** selected in Yantra Innovations, Rajkot as an Embedded Firmware Engineer.

“Training & Placement Activities”

7th semester students completed their summer internship successfully at various companies. They have worked in field of their choice like VLSI, Embedded Systems, PCB designing etc.

Company Name	Students Name
e Infochips	Shaswat Mehta Brijesh Chauhan
Scalage	Om Doshi
Aartronics	Harit Ashara Yuvika Narvane Niraj Umrethiya
Jayshree Software	Akshara Chauhan
CSRBOX	Kansal Paranjay
Justenable	Tanish Aghera
Sardar Electros witch pvt. ltd.	Viraj Gajera

The department acknowledges the significant contributions of our core recruiters for providing valuable internships and diverse profiles. e Infochips, Mantra Softech, Glide Technologies, and Matrix are offering Embedded hardware, software, and firmware roles. Simultaneously, Scaledge and eInfochips encouraged students to align their preparation in ASIC domain with specific roles like Physical Design and Verification engineering.

8th Semester Internship

@

ISRO, Glide Technologies, Yantra Innovation, ADANI Green Energy and Sardar electros witch pvt. ltd.



Ashara Harit (ISRO)

Domain: VLSI/FPGA Prog
Guide : Smt. Durga Digdarsini



Shashwat Mehta (ISRO)

Domain: Embedded System
Guide: Dr. Soumyarajan Rana



Om Doshi (ISRO)

Domain: Embedded System
Guide: Sri. Amitkumar Dave



Akshara Chauhan (ISRO)

Domain: Embedded System
Guide: Sri. Raksha Ram



Niraj Umaretiya (ISRO)

Domain: Embedded H/W
Guide: Sri. Vishal Sakarvadiya



Brijesh Chauhan (ISRO)

Domain: Embedded System
Guide: Sri. Amitkumar Dave



**Yuvika Narvane
(GLIDE)**

Domain: Embedded
H/W



**Kansal Paranjay
(ADANI)**

Domain : Renewable
Energy



**Tanish Aghera
(YANTRA)**

Domain: Embedded
Firmware



**Viraj Gajera
(Sardar Electros witch)**

Domain: Embedded
Firmware

GTU Results

Chetna Parmar(8th Sem),Harit Ashra (6th Sem), Kaushal Sankhalpara (4th Sem), Kanishk Lakhani and Kanisha Poptani (2nd sem) secured position in Shri Dewang Mehta award for excellence for respective years.



Staff Achievements

Research papers presented/published

1. Dr. Paresh Dholakia published a paper on "Utilization of IoTs and AI to Modernize Academic Libraries." in AICTE sponsored National Conference on recent trends and innovations in IoT (NCIOT2025) organized by VVP Engineering College, Rajkot in Sept 2025.
2. Dr. Charmy Changela and Dr. Sneha Pandya published a paper on "Energy Efficient Optimized Home Automation System using ESP-32" in AICTE sponsored National Conference on recent trends and innovations in IoT (NCIOT2025) organized by VVP Engineering College ,Rajkot in Sept 2025.
3. Prof. Sheron Christy published a paper on "A Review of Techniques for Distinguishing Tiny Objects by Drones in Complex Environments and Real-Time Applications" in Journal of Network Security Computer Networks in August ' 25, ISSN No: 2581-639X.

FDP

1. Dr. Jignesh Joshi attended National level online FDP on "Next Gen of Design, Manufacturing Semiconductor Technology" organized by GTU school of engineering and technology during 30-6-25 to 4-7-25.
2. Prof. Sheron Christy attended 12 week National level online FDP on Digital Image Processing organized by NPTEL-AICTE, IIT Kharagpur during July'25 to October '25.
3. Prof. Sheron Christy attended 1 week National level online FDP on "Outcome Based Education and Application of Generative AI in Teaching and Research" organized by The Internal Quality Assurance Cells (IQAC) and the Exam Cells of St. John Technical & Educational Campus, Palghar in association with IPSR solutions limited during 19-11-25 to 26-11-25.
4. Prof. Sheron Christy attended 9 week National level online Faculty development campaign on "AI for Educators" organized by Swayam Plus, Ministry of Education, in collaboration with Intel India during 18-8-25 to 22-10-25.
5. Prof. Asim Vaniya attended 11 days National level IIRS program on "RS & GIS Application in Natural Resource Management" organized by ISRO during 10-11-25 to 21-11-25.

Seminar

1. Dr. Paresh Dholakia and Dr. Jignesh Joshi attended a National level online seminar on NEP 2020 Implementation and Reforms in National Assessment and Accreditation Council (NAAC), Dr. Atulgiri Gosai organized by V.V.P. Engineering College on 3-10-25.
2. Prof. Asim Vaniya attended a State level webinar on " Making Classroom More Engaging and Effective" organized by TEERTH Knowledge Consortium of Gujarat, Education Department, Government of Gujarat on 21-8-25.
3. Mr. Sanjay Patel attended a state level webinar on " Teaching Tools for Next Generation Students" organized by TEERTH Knowledge Consortium of Gujarat, Education Department, Government of Gujarat on 4-12-25.
4. Mr. Sanjay Patel attended a state level webinar on "Financial Awareness" organized by TEERTH Knowledge Consortium of Gujarat, Education Department, Government of Gujarat on 16-12-25.
5. Mrs. Asha Upadhyay attended an international conference on "Human Values in Higher Education (ICHVHE 2025)" organized by AICTE and UHV foundation, Delhi during 19th to 21st December 2025.

Recognition of Staff

1. Dr. Paresh Dholakia and Dr. Dipesh Kamdar has been appointed as Convener in AICTE & ISTE Sponsored one day National conference organized at V.V.P. Engineering College, Rajkot.
2. Dr. Paresh Dholakia has been appointed as PhD Supervisor and DPC member for Research Scholars at GTU and Atmiya University.
3. Dr. Charmy Changela delivered an online expert lecture on "Pursuing the Characteristics of an Ideal Citizen Contributing to a Stronger Community" conducted by UGC sponsored Faculty induction Programme by Saurashtra university : UGC: Malaviya Mission teacher training center on 26-8-25.
4. Dr. Charmy Changela delivered an expert lecture on "Why do we educate" conducted by UGC sponsored Faculty induction Programme by Saurashtra university : UGC: Malaviya Mission teacher training center on 11-12-25.
5. Dr. Jignesh Joshi has been appointed as DPC member for PhD Research Scholars at GTU and Atmiya University.

6. Prof. Sheron H. Christy Recognized as Top 2% Topper in NPTEL Online Certification on Digital Image Processing in July-October 2025 among 1398 certified candidates.
7. Dr. Sneha Pandya delivered an expert lecture on "AI in academic administration and governance" in the online short term program "Role of AI in next generation" conducted by UGC on 24-7-25.
8. Dr. Sneha Pandya delivered an expert lecture on "Social Responsibilities and its influence in building strong community platform" conducted by UGC on 27-8-25.
9. Dr. Sneha Pandya delivered an expert lecture on "Indian Knowledge System : Evolution and Comparative Analysis" in the faculty refresher course "Indian Knowledge System: Past, Present, Future" conducted by UGC on 4-12-25.
10. Dr. Sneha Pandya delivered an expert lecture on "Ethical Practice ensuring personality development" in the faculty induction program "GURU DAKSHATA" conducted by UGC on 5-12-25.

Outstanding Achievement in Para Swimming by Dr. Sneha Pandya

Dr. Sneha Pandya has brought great pride and honor through her remarkable performance in the field of para swimming. With strong determination, dedication, and consistent practice, she has achieved significant success at the competitive level. In the recent swimming competition KHEL MAHAKUMBH at State level, Dr. Sneha Pandya won the Silver Medal in the 50 meters Freestyle Swimming event, showcasing her speed, technique and confidence in the pool. Along with this, she also secured a Bronze Medal in the 100 meters Freestyle Swimming event, proving her endurance and ability to perform excellently over longer distances.


Adding to these achievements, Dr. Sneha Pandya was also selected for the National Para Swimming Competition held at Hyderabad and she represented the state of Gujarat there, which is a major milestone in her sporting career.



Student Achievements


Congratulations !! on successfully completing NPTEL certification!

This achievement is a true testament to discipline and commitment to up skilling. NPTEL courses are designed by the prestigious IITs and IISc. Students not only added a valuable credential to portfolio but also demonstrated a strong growth mindset.






























V.V.P.
ENGINEERING COLLEGE
NBA Accredited Electrical,
Electronics & Communication, Civil Departments

DEPARTMENT OF
ELECTRONICS & COMMUNICATION



NPTEL
FREE ONLINE EDUCATION
swayam
ए। विद्यया ढरते, उन्नत ढरते

SWAYAM-NPTEL Achievements: Students and Staff July-October 2025

 Vishva V. Katrodiya System Design Through Verilog	 Shruti H. Trivedi Machine Learning & Deep Learning	 Kausee Pathak Neural Networks for Signal Processing - I	 Mihir S. Lathigra Digital Circuits	 Yagnik P. Bhanderi Soft Skill Development	 Grisha Sakhreliya Soft Skill Development	 Yug Pithadiya Soft Skill Development
 Aryan Raj Soft Skill Development	 Ved M. Bhuva Soft Skill Development	 Tapasya Nakum Soft Skill Development	 Pranav R. Dholakiya Soft Skill Development	 Raiyani Dhruv Soft Skill Development	 Nandiniba D. Jadeja Soft Skill Development	 Vaidik Vasoya Soft Skill Development
 Jaydev Joshi Soft Skill Development	 Jay V. Mande Soft Skill Development	 Kashish Gohel Soft Skill Development	 Khushi K. Acharya Soft Skill Development	 Diya S. Ladani Soft Skill Development	 Manal V. Bhut Soft Skill Development	 Saumya Joshi Soft Skill Development
 Meet Sureliya Soft Skill Development	 Mandip Bhanderi Soft Skill Development	 Manthan Kunjadiya Soft Skill Development	 Miten Pansuriya Soft Skill Development	 Riya Ahuja Soft Skill Development	 Prof. Sheron H. Christy Digital Image Processing	Silver Elite

Cultural and Co-curricular achievement

EC students showcased immense talent across dance, drama, music, and fine arts in the GTU Youth Festival, **Xitij 2025**. Aditya Raval (5th EC) secured Gold Medal in Bhajan/Lokgeet competition and he beg one more gold medal in Indian Group song festival. Shruti Trivedi (5th EC) secured Bronze medals in more than one event. She won in all the theatre category events like One act, Mime and Skit in GTU youth festival. Prakruti Pandya (1st EC) secured Bronze medal in Classical Dance competition.



Aditya Raval (5th EC) successfully coordinated the NCC Alumni Meet 2025 at Darshan University. In addition to managing the event planning, he took on several creative responsibilities as the writer, director, and music designer for the show. He also contributed to the performances as a singer and choreographer.



Shruti Trivedi (5th Sem) secured 1st rank and Drashti Jotangia (1st sem) secured 3rd rank in WDC Event "Sustainability in 60 seconds" on 18-7-25.



The WDC organized a Rakhi making competition. Devangi Sankharva (5th sem) secured second rank and Keshvi Fefar (1st sem) secured 3rd rank in this event.



Sports Activities



In **Spirit - 2025** (indoor games) Harit Ashara of 7th EC secured 2nd rank in Chess (Boys) 27-9-25.

WDC Activities

❖ One Minute Speech

EC Girls Participated in WDC Event : "Sustainability in 60 seconds" on 18-7-25.



❖ Rakhi Utsav

EC Girls Participated in WDC Event " Rakhi Utsav 2025" by WDC Cell on 8-8-25.



❖ Rangoli Competition

First year EC girl students participated in "Diwali Rangoli Competition organized" by WDC cell on 13-10-25.



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

- ❖ **165 IIRS Outreach Programme on Remote Sensing and Digital Image Analysis from 22-8-2025 to 19-9-2025**

Sr. No.	Registration No.	Name	Sem
1	20251652782413	Kausee Bhushan Pathak	3rd

- ❖ **1050th IIRS Outreach Programme on Advances in Laser Remote Sensing for Forest Ecosystem on 31-10-2025**

Sr. No.	Registration No.	Name	Sem
1	202510502861588	Smit Adeshara	3rd
2	202510502861154	Rudri Pandya	3rd

- ❖ **174th IIRS Outreach Programme on "RS & GIS Applications in Natural Resource Management" from 10-11-2025 to 21-11-2025**

Sr. No.	Registration No.	Name	Sem
1	20251742864719	Asim Vaniya	Faculty Member

- ❖ **175th IIRS Outreach Programme on Research and Career Opportunities for Space Science and Technology in India from 1-12-2025 to 5-12-2025**

Sr. No.	Registration No.	Name	Sem
1	20251752868015	Mande Jay	1st

Industrial Visits

Industrial Visit at Balaji Wafers Pvt. Ltd. (1-7-25) with Prof. Viral G. Metaliya , U Fresh Milk & Sweets (8-7-25) by FYEC students with Prof. Sheron Christy and Mr. Sanjay H. Patel

During the visit to these companies initially the students observed that there was a good care taken for hygiene. They observed how all automatic plant works. They learnt how they save energy and resources by putting raw materials and processing food and packaging.





Industrial Visit at Aarohi Embedded by 5th & 7th semester EC students with Mr. Dhirendrasinh Jadav on 15-10-25.

The industrial visit to Aarohi Embedded Systems Pvt. Ltd. in Rajkot offers students a rare "concept-to-production" look at the electronics industry. The company doesn't just make "parts"; they build complete ecosystems. During the tour of their students typically witness the complete lifecycle of industrial products. The experience bridges the gap between classroom theory and industrial reality. By interacting with the R&D and production teams, students gain firsthand insights into real-time software integration and the rigorous quality testing required for ISO-certified industrial automation.





Industrial Visit at Welit Solutions by 3rd sem students with Prof. Asim Vaniya on 29-11-25

An industrial visit to Welit Solutions in Rajkot provides students with a specialized look into the world of Home Automation and Sensor Technology. The primary objective of this visit is to help students understand the transition from basic electronic circuits to consumer-ready Smart Home products. Unlike heavy industrial manufacturing, Welit focuses on precision electronics, aesthetics, and user-centered design.



During the visit, students typically explore the following core technologies:

- **Sensor Technology:** Detailed demonstrations of PIR (Passive Infrared) and RF (Radio Frequency) sensors. Students observe how these sensors are calibrated to detect motion and light levels to automate home security and lighting.
- **Mood Lighting & Control:** Insight into the development of LED Dimmers and Programmable Touch Switches. The technical team often explains the Pulse Width Modulation (PWM) techniques used to create varying light intensities.
- **Product Assembly:** A walk-through of the assembly line where PCB boards are integrated into sleek, glass-finish touch switches and remote-operated modules.
- **IoT Integration:** Understanding the communication protocols (like Wi-Fi or RF) that allow hardware modules to "talk" to Smartphone applications.



Alumni Interactions



Aastha Bhatt (Alumni 2024) interacted with 7th sem students on 31-7-25.

Aastha Bhatt interacted with 7th semester students and share her experiences with ISRO and PRL. She guided them for their higher studies , abroad studies and further career.

Workshops

One day workshop on “PCB Designing” in collaboration with Aatronix Embedded System Pvt. Ltd., Rajkot on 4-10-25.

A hands-on workshop on PCB Designing was conducted by Mr. Sagar Kaneria and Mr. Kishan Pathar from Artronics Pvt. Ltd. The session aimed to provide practical exposure to the PCB design process and its industrial applications.

The experts explained the complete workflow—from circuit schematic drafting to converting it into a PCB layout. During the practical session, participants learned about layer management, routing techniques, via placement, ground planes, and design considerations for signal integrity. The instructors also demonstrated common mistakes in PCB designing and how to avoid them through best practices and industry standards.

The session also highlighted the fabrication process, including Gerber file generation, PCB printing, and assembly. The experts shared real-world case studies from Artronics Pvt. Ltd., giving students exposure to industrial requirements and professional expectations.

V.V.P. ENGINEERING COLLEGE
NBA Accredited Electrical, Electronics & Communication, Civil Departments

Department of Electronics & Communication

Hands on session on PCB designing

Date: 4th Oct 2025
Venue: Seminar Hall
EC Semester 3rd, 5th

Expert
Mr. Sagar Kaneria
TEAM MANAGER
AARTRONIX INNOVATIONS
PVT. LTD.

V.V.P. Engineering College
Kalavad Road Virda Vajadi,
Rajkot, Gujarat 360005

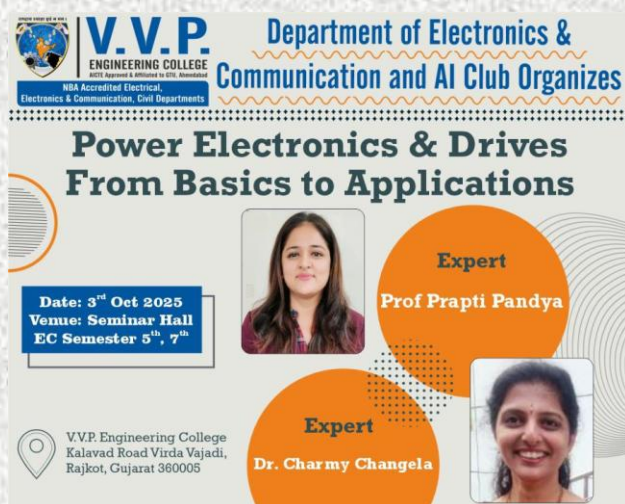


Expert Talks

Expert talk on "Power Electronics and Drives: From Basics to Applications" on 3-10-2025 by Dr. Charmy Changela & Dr. Prapti Pandya.

An expert session on “Power Electronics and Drives: From Basics to Applications” was organized for the students to strengthen their understanding of modern power conversion techniques and their real-world uses. The session was conducted by Dr. Charmy Changela (V.V.P. Engineering College) and Dr. Prapti Pandya (GEC Rajkot), both experts in the field of power electronics.

The session began with an introduction to the fundamentals of power electronic devices such as diodes, MOSFETs, IGBTs, and thyristors. Students were briefed on the principles of AC–DC, DC–DC, DC–AC, and AC–AC converters, along with their significance in controlling power flow efficiently. The experts explained switching characteristics, triggering methods, and the importance of thermal management and protection circuits.



The session covered the working of various motor drive mechanisms and highlighted how power electronics plays a crucial role in speed control, torque control, and overall drive performance and the students were introduced to the PSIM interface, component library, and the step-by-step process of constructing circuits. They learned how to design and simulate basic power electronic converters such as rectifiers, choppers, inverters, and DC–DC converters.

The resource persons demonstrated how switching waveforms, output voltage characteristics, and harmonic behavior can be observed and analyzed using PSIM’s built-in tools. Both experts shared industry-oriented insights, recent technological advancements, and emerging opportunities for engineers in power electronics and automation sectors. Students actively interacted, clarified doubts, and gained clarity on how theoretical concepts are applied in real engineering systems.

Seminars

Seminar on Research Paper Awareness by Dr. Sneha Pandya

This seminar provided a platform to students to develop interest in Research Paper reading & writing. On 23rd July 2025, a seminar was delivered by Dr. Sneha Pandya on the topic "Research Paper writing" for semesters 3rd, 5th and 7th of department of Electronics and Communication. In this seminar, she explained about the format of a research paper and how to write in sequence. Thereafter she explained how to select the topic and on what ideas could student select and also gave some examples of same. After explaining about the topic selection, explained different types of paper presentation and gave the differences between them. She also gave idea on how one can write a review paper about already written paper. Some easy techniques for paper presentations were shared and then students were guided regarding what to be careful about, what to check, how to preview the written paper and how to mention the references. Plagiarism was explained along with the possibilities of removal of the same.

They were given the idea about how this research writing can contribute hugely to their resume as well as personality.



Technical Events

Research Paper writing Competition

Research paper writing competition was organized by Department of Electronics and Communication on dt. 2-9-25. This program provided a platform to students to develop interest in research Paper reading & writing. Total 8 papers from 3rd, 5th and 7th semester were presented. 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.



Group No.	Name of Student	Title of Paper
1	Kaushee Pathak	Comparative Study on Embedded System and Internet of things
2	Keshvi Fefar Aesha Undhad Purva Kothari	6G wireless Communication : Challenges, opportunities and future research direction.
3	Kushal Sankhalpara Krishna Mankadia	Agriculture Automation : Optimizing Irrigation using IoT technology.
4	Hetvik Shah Mihir Lathigara Rudri Pandya	Driver Drowsiness detection system
5	Mourya Vadera Vaibhav Ubhadiya	Smart Card
6	Tanish Aghera	Library Entry Navigation System (LENS)
7	Kanisha Poptani Aditya Talsaniya	Neural cyborg : Innovation and Challenges in Brain Machine interface.

An Outreach Event in collaboration with Space Applications Centre (SAC-ISRO) Ahmadabad on 26-9-25.

Being the Nodal Centre of IIRS-ISRO Outreach Programmes and ISRO START Programme, Our Institute always motivates students to enhance their knowledge in multidisciplinary areas boost their career and Professional Development.





With an objective to make awareness of Space Technologies at Space Applications Centre-ISRO Ahmedabad, an Outreach Event for 3rd, 5th and 7th Sem students of EC/CE/IT/Electrical/Mechanical/Civil/Chemical/Biotechnology was organized on 26-9-2025.

Our Esteemed Expert Shri Santosh Kumar Tripathi covered various aspects of Space Research as :

- History of Space Science in India
- Basic Science of Space
- Launch Vehicles and their Technology
- Satellite Technology, Satellite orbits and applications
- Multispectral/Hyperspectral/Panchromatic sensors
- Satellite data and its processing
- ISRO Achievements
- Challenges
- Internship/Training Opportunities at SAC-ISRO

The Session was extremely impactful for students, and they could directly interact with an Experienced Scientist from ISRO.

Activities

GTU Orientation

GTU conducts online and in-person orientation programs "Abhigam" for first-year students to introduce them to the academic environment, NEP-2020 initiatives, and Outcome-Based Education (OBE) on 7-8-25.



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 14-7-2025 for 3rd semester, 30-6-25 for 5th semester students and 17-7-2025 for 7th semester students.



Parents' Meeting for 7th, 5th and 3rd semester students on 27-09-25.

Department of Electronics and Communication had organized Parents Meeting for for 3rd, 5th and 7th 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



Sir Jagadish Chandra Bose (30 Nov 1858 - 23 Nov 1937) was an Indian physicist and plant physiologist. He is better known as the father of radio science and wireless communication, pioneering microwave optics and radio wave transmission before Marconi, and also considered a father of Bengali science fiction and biophysics for proving plants respond to stimuli like animals.

Bose was among the first scientists to show practical applications of radio waves, and in 1904 he became the first person to receive a patent for a solid-state diode detector, built using a galena crystal to detect electromagnetic waves.

Bose founded the Bose Institute as “not merely a laboratory but a temple” dedicated to scientific advancement and learning. The institute’s emblem depicting the double vajra (Sanskrit: “thunderbolt”) as a symbol of spiritual strength and purity was sketched by educator Nivedita. The institute’s anthem was composed by poet Rabindranath Tagore and spiritual leader Swami Vivekananda inspired the vision of the institute.

V.V.P. Engineering College



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Published by: Department of Electronics & Communication