



GOVERNMENT ENGINEERING COLLEGE, MODASA

SINCE 1984



EC ENGINEERING DEPARTMENT

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Prof. C. R. Parekh

MESSAGE FROM THE HEAD OF DEPARTMENT

Electronics & Communication Department

Dear Students & Faculty members, Warm greetings to all.

The Electronics & Communication Engineering Department was established in the year 1984 and is considered one of the oldest and most successful concrete pillars of Government Engineering College, Modasa. The department offers a Bachelor of Engineering in Electronics & Communication with an intake capacity of 30 students. The department has highly qualified faculty members and all 16 laboratories are equipped with the latest technology equipment and instruments. The department provides teaching in the area of Analog and Digital Communication, VLSI Design, Embedded Systems, Signal Processing, Antenna and Microwave Engineering, and Microprocessors. The Department of Electronics & Communication Engineering has a vision to deliver technical programs that meet the changing needs of society and industry, preparing determined and goal-oriented engineers with high ethical values and strong analytical skills.

The Department of Electronics & Communication Engineering emphasizes developing technical skills and creating awareness about the needs of industries through industry-institute interaction, technical seminars, workshops, and specialized training in thrust areas. Students are encouraged to think innovatively through project works and research in fields like satellite communication and wireless networks, with the department providing a full-fledged departmental library and computer center to support overall personality and technical development.

The Electronics & Communication Engineering program is committed to maintaining high academic standards and quality assurance. The department consistently works towards excellence in technical education and infrastructure to ensure our students remain in tune with the rapid advancements in the global electronics field.

ABOUT THE INSTITUTE

Government Engineering College, Modasa was established in 1984 under the Directorate of Technical Education, Gujarat State, Gandhinagar in North Gujarat region with a view to spread out technical education in the region and hence promote industrial development. The institute was affiliated with Hemchandracharya North Gujarat University (HNGU), Patan from 1984 to 2007. The institute is affiliated to Gujarat Technological University; Ahmedabad from 2008. It is recognized by All India Council for Technical Education (AICTE), New Delhi.

The institute was started with two undergraduate courses, with an intake of 60 each. At present it runs seven under graduate courses and two post graduate courses. Each department has well established laboratories, computer centers and well qualified staff.

VISSION AND MISSION

VISSION

To be a Leading Institution on Ensuring Academic Excellence, Research, Nurturing Innovation and Entrepreneurial Attitude to produce competent technocrats for service to Nation.

MISSION

- To be a student centric institute imbibing experimental, innovative and lifelong learning skills, addressing societal problems.
- To create a conducive ecosystem for research, innovation and extension services.
- To inculcate entrepreneurial attitude and values amongst learners.
- To collaborate with Industries and other institutions to strengthen symbiotic relations.
- To mentor aspiring Institutions to unleash their potential, towards nation building.



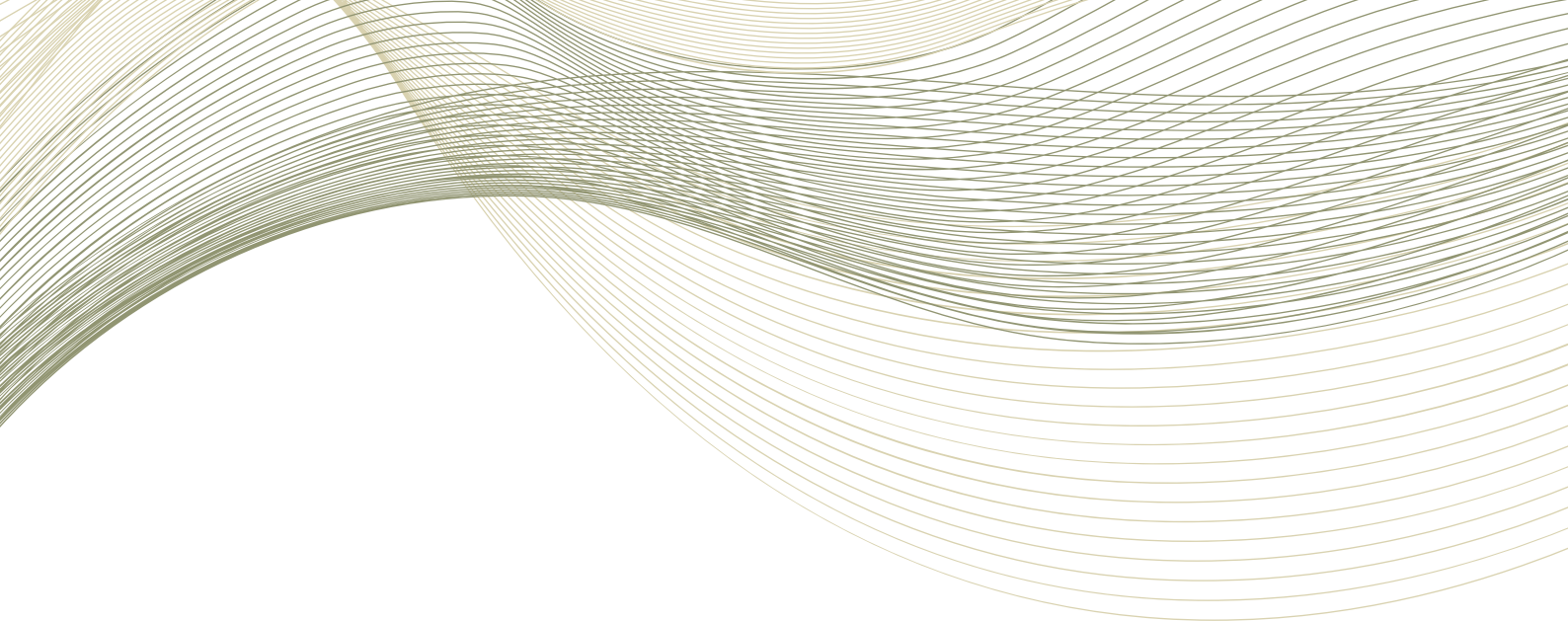
ABOUT THE DEPARTMENT

➤ ELECTRONICS & COMMUNICATIONS DEPARTMENT

The department of Electronics & Communication was established in the year 1984 is one of the oldest and successfully running the engineering branch of G.E.C. Modasa. The Department offers a four-year course in electronics and communication with 120 intakes.

The department was established with the mission to deliver technical programs and services to meet the changing needs of the society and industry, thereby contribute to the overall techno-economical development of the state. The department is persistently committed to enhancing technical knowledge with high ethical values.

The department of E.C. is accommodated in building No. 4. It has laboratories in thrust areas of Analog and Digital Electronics, Communications, Antenna, Microwave, VLSI Design, and Signal Processing. Department has a Computer Center with the latest computer facilities. All labs are well equipped with the latest types of equipment to keep the students in tune with the advancement in the field of Electronics & Communication. The department is also equipped with a full-fledged departmental library.



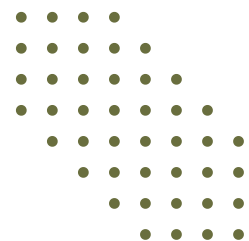
VISSION AND MISSION OF THE DEPARTMENT

VISSION

To strive for academic excellence, enhance industry- institute interaction to create competent technocrats in relevant areas for addressing ever changing needs of society.

MISSION

- To ensure dissemination of knowledge through effective teaching and learning process.
- To strengthen collaboration with industries.
- To prepare the students with multidisciplinary competence for their successful career and service to the society.



FACULTY AND STAFF (EC ENGINEERING)

DR. BHARAT J. SHAH

Designation : Principal
Qualification : Ph.D. (Civil Engg.)
Experience : 35 Years
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PROF. CHANDRESH R. PAREKH

Designation : Associate Professor and Head
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Experience : 23 Years
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PROF. (DR.) NIRAV D. PATEL

Designation : Assistant Professor
Qualification : Ph.D.
Experience : 15 Years
Area of Interest : Wireless Communication
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PROF. (DR.) NITINKUMAR J. BATHANI

Designation : Assistant Professor
Qualification : Ph.D.
Experience : 10 Years
Area of Interest : Antenna, Freq. selective surface and absorber design
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SHILPA K RANA

Designation : Assistant Professor
Qualification : M.Tech (ECSE)
Experience : 11 Years
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MR. KETU RAMANBHAI PATEL

Designation : Assistant Professor
Qualification : M.E. (CSE)
Experience : 12 Years
Area of Interest : Analog and Digital Communication, Wireless Communication, Electromagnetics
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DR. BHAVIK ARVINDBHAI BRAHMBHATT

Designation : Assistant Professor
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SAMEER H. MANSURI

Designation : Assistant Professor
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PRIYANK V PATEL

Designation : Assistant Professor
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Experience : 09 year
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MANISH CHAUHAN

Designation : Assistant Professor
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Experience : 05 Years
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Linear IC
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LABORATORIES



ANALOG ELECTRONICS AND DIGITAL ELECTRONICS LABORATORY

Analog Electronics and Digital Electronics laboratory provides the platform for the students to understand the behavior of the circuit related to Analog Electronics and Digital Electronics. The laboratory is equipped with the different experimental set-ups like Lab Station, digital trainer kits provided to the students to do hands on for observing the response of the circuits and to carry out the testing of the circuits.

VLSI & EMBEDDED SYSTEMS LAB

It provides the platform for the students to understand the architecture and interfacing of microprocessor, microcontroller, Field Programmable Gate Array (FPGA) and Complex Programmable Logic Device (CPLD). This laboratory is equipped with the different experimental set-ups. Facility is provided to the students to do hands on for testing their programming codes



DIGITAL COMMUNICATION LAB

It deals with the analysis and manipulation of signals. The equipments like Digital Storage Oscilloscope (DSO), Lab Station Amplitude, frequency and phase shift keying Trainer Kits and modulation kits for mobile communication, AM-FM Modulation-Demodulation kits are available in this laboratory.

GOVERNMENT ENGINEERING COLLEGE,MODASA

EC ENGINEERING DEPARTMENT

NEWSLETTER



Inside The Issue

• Departmental Activities

The Departmental Activities takes initiatives for overall development of students and give them a practical orientation to inculcate employability skills which will help them to face this competitive world. The department activities conducted are focused on imparting technical knowledge along with its application in the practical world. Simultaneously personality development of students is also given priority. It includes major activities conducted such as Quiz Competition, Expert Lectures, Workshops, Seminars, Industrial Visits.

• Faculty Activities

Educational activity of the Faculty is performed through studies, including the special forms of study for knowledge upgrading and continuous professional education and training. Scientific work is performed through basic, applied and development research, which is carried out for the purpose of developing the profession, raising the quality of teaching, upgrading the scientific and professional level.



PRAVAAH 2K24

The Department of EC Engineering had organized "Pravaah- 2K24 The Project Expo" on 6th March 2024. The project prepared by students using innovative ideas, and it drew the attention of dignitaries during the project expo. While visiting the Expo, the judges expressed their appreciation to the students for their tireless work in showcasing their creative ideas for the good of society.



DEPARTMENTAL ACTIVITIES



POSTER PRESENTATION BY FINAL YEAR STUDENTS

Final-year students showcased their internship achievements during a Poster Presentation event on April 24, 2025. By presenting their industrial projects to faculty and peers, students demonstrated significant growth in technical expertise and professional communication. The session, which focused on the practical application of academic knowledge, provided a valuable forum for knowledge sharing and critical evaluation of real-world work experience.

FACULTY ACTIVITIES

RESEARCH & PUBLICATIONS

PROF. B. A. BRAHMBHATT AND PROF. P.V. PATEL

Prof. B. A. Brahmbhatt, Prof. P. V. Patel, Prof. T. A. Chaudhari and Prof. S. V. Banker has published a research paper on "Indirect Field Oriented Control of Induction Motor" in Journal of Electrical Systems (JES), ISSN: 1112-5209, March 2024.

PROF. S. H. MANSURI

Prof. S. H. Mansuri has published a research paper on "A multimode frequency reconfigurable Antenna for 5G and WLAN Applications" in Indian Journal of Natural Sciences, ISSN: 0976-0997, October 2023

PROF. B. A. BRAHMBHATT AND PROF. P.V. PATEL

Prof. B. A. Brahmbhatt, Prof. T. A. Chaudhari and Prof. S. V. Banker has published a research paper on "Metaheuristic Optimization Algorithms Comparison Adopted for the Profit Maximization of Electricity Market Participants" in Journal of Electrical Systems (JES), ISSN: 1112-5209, May 2024.

PROF. B. A. BRAHMBHATT AND PROF. P.V. PATEL

Prof. B. A. Brahmbhatt, Prof. P. V. Patel, Prof. N. D. Patel, Prof. N. J. Bathani and Prof. S. A. Mansuri has published a research paper on "Implementation of Reconfigurable Modified Advanced Encryption Algorithm with Area Optimization" in International Journal of Intelligent Systems and Applications in Engineering (IJISAE), ISSN: 2147-6799, March 2024.

PROF. B. A. BRAHMBHATT AND PROF. P.V. PATEL

Prof. B. A. Brahmbhatt, Prof. N. J. Bathani and Prof. S. K. Rana has published a research paper on "Selective Harmonics Elimination Technique using Particle Swarm Optimization algorithms in Multilevel H5 Inverter Topology" in International Journal of Intelligent Systems and Applications in Engineering (IJISAE), ISSN: 2147-6799, March 2024.

PARTICIPATION

Faculty Name	Training/Induction Phase/FDP/Workshop/ Seminar	Starting Date	Ending Date	Hosting Institution	Venue
Prof. N. D. Patel	1 day program on semiconductor technology A way forward for making Gujarat Semi-conductor Hub	27/04/2024	27/04/2024	iHub Ahmedabad	iHub Ahmedabad
Prof. K. R. Patel	Psychology Of Stress, Health And Well-Being	22/01/2024	12/04/2025	SWAYAM NPTEL	Online
Prof. B. A. Brahmbhatt	1 day program on semiconductor technology A way forward for making Gujarat Semi-conductor Hub	27/04/2024	27/04/2024	iHub Ahmedabad	iHub Ahmedabad
Prof. S. H. Mansuri	FDP on Training and Development	22/01/2024	12/04/2025	SWAYAM NPTEL	Online
Prof. P. V. Patel	1 day program on semiconductor technology A way forward for making Gujarat Semi-conductor Hub	27/04/2024	27/04/2024	iHub Ahmedabad	iHub Ahmedabad
Prof. M. S. Chauhan	1 day program on semiconductor technology A way forward for making Gujarat Semi-conductor Hub	27/04/2024	27/04/2024	iHub Ahmedabad	iHub Ahmedabad
Prof. M. S. Chauhan	FDP on Fundamentals of Semiconductor Package Mfg. & Test	15/5/2024	15/06/2024	GTU and Micron Technology	Online & GTU

FACULTIES PURSUING PH.D

Faculty Name	Research Area	Ph.D Pursuing from University
Prof. Shilpa Rana	Microwave Filter Design	Gujarat Technological University
Prof. Sameer Mansuri	Antenna Design	Gujarat Technological University