



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.



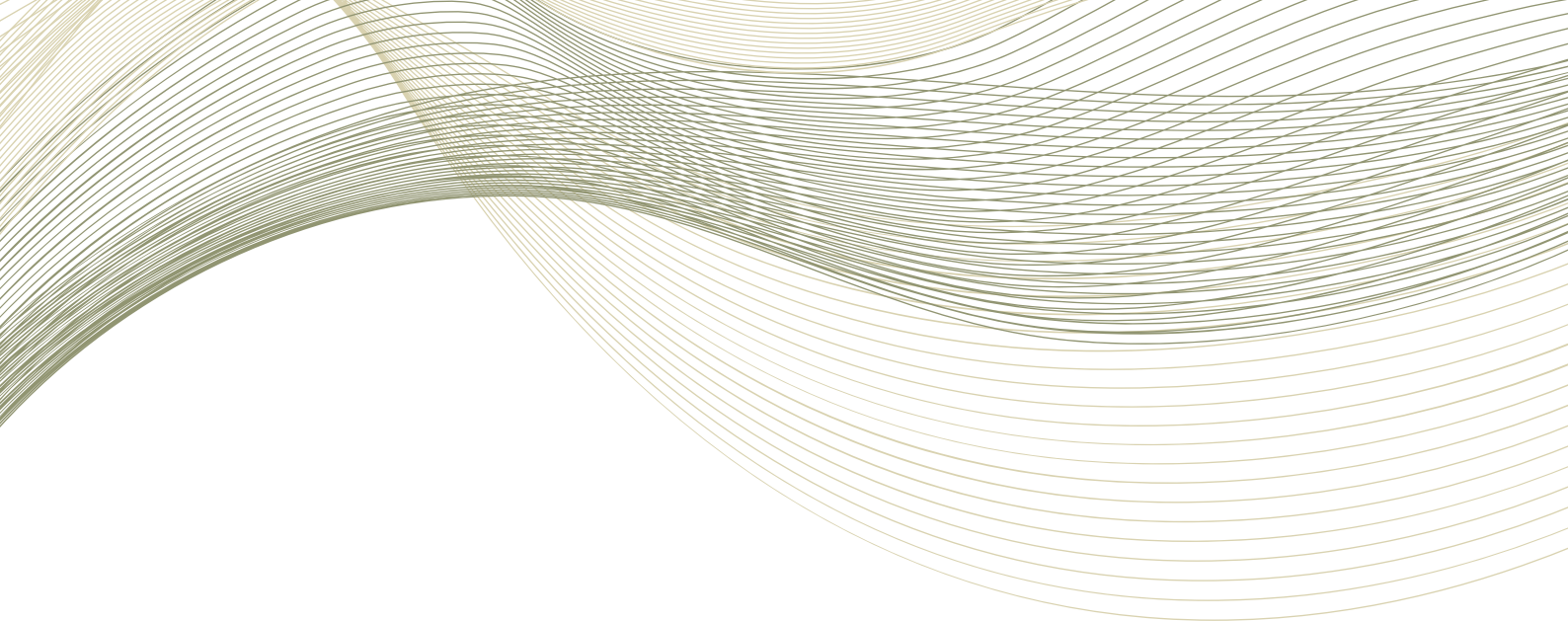
ABOUT THE DEPARTMENT

➤ 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.



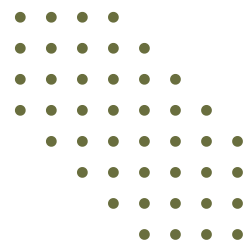
VISSION AND MISSION OF THE DEPARTMENT

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
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PROF. CHANDRESH R. PAREKH

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

Designation : Assistant Professor
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Area of Interest : Wireless Communication
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PROF. (DR.) NITINKUMAR J. BATHANI

Designation : Assistant Professor
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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)
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MR. KETU RAMANBHAI PATEL

Designation : Assistant Professor
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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
Qualification : M. E. (Communication Engg.)
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PRIYANK V PATEL

Designation : Assistant Professor
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Experience : 09 year
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Website : <https://sites.google.com/view/priyankpatelgec/home>



MANISH CHAUHAN

Designation : Assistant Professor
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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.



Placement Fair 2023

A placement fair of entire Aravalli district was hosted at Government Engineering College, Modasa on 13/03/2023. Total 11 institutes (Government and Grant in Aid) have participated in this fair. 16 companies and 317 students have been the part of this fair. The fair was conducted in blended mode. Few companies were invited in college campus, whereas few industries conducted interviews in online modes such as google meet, MS Team, Zoom meet etc. 90 students have been placed in these 16 companies.



DEPARTMENTAL ACTIVITIES

ALUMNI MEET 2023

More than 800 alumni joined the alumni network, which keeps expanding, and already many have enrolled for lifetime membership in the alumni association (ENCOMAA). To attend this event, all alumni and their families were invited. The number of alumni who were eager to attend the event of Alumni Meet 2023 was huge in number but all could not make it. Alumni Meet-2023 was successfully organized on 4th March, Saturday to have a get together for all the alumni. This meet was arranged at the campus in the new seminar hall where it was jam-packed with alumni, students and faculties. This event was also open to all former principals and faculty members of the institute from 1984.



Breakfast and registration for the meet was held at the main building 10:00 a.m. onwards. All the alumni who attended the meet received a token of memory and a registration kit. The number of alumni who joined meet was more than 350, many of whom were present with family and more than 60 alumni spot registered. Alumni were delighted to meet their former colleagues and friends. They enthusiastically clicked selfies with their classmates and professors at the selfie zone. At the event, after the address from the principal and alumni president, past students became emotional when they shared their journey to success and narrated the role of their college days in their achievements.

HEALTH AWARENESS SESSION IN COLLABORATION WITH RED CROSS SOCIETY

The event was conducted on 21/02/2023 with a view to spread awareness of healthy life, common health issues, history and role of Red Cross society. Significance of student membership of Red Cross society was explained by Capt. Dr. C. S. Sanghvi, Prof. V. J. Upadhyay addressed and motivated students to become members. Prof. U. L. Makwana and Prof. H. S. Pandya coordinated the event and pursued students to become life member of RedCross society.



DEPARTMENTAL ACTIVITIES

WORKSHOP ON INDUSTRIAL AUTOMATION AND EMBEDDED SYSTEM

The expert lecture conducted on 14/03/2023 covered an introductory overview of embedded systems, highlighting their relevance in today's technology landscape. The audience gained insights into key embedded system concepts, followed by a practical demonstration of 8051 microcontroller interfacing for real-world applications. Shifting focus to industrial automation, the lecture detailed the significance of programmable logic controllers (PLCs) in streamlining industrial processes. The role of PLCs in enhancing efficiency and reducing manual intervention was explained, along with discussions on their architecture, programming, and versatile applications across industries. Overall, the lecture provided a well- rounded understanding of embedded systems, spanning from microcontroller interfacing to the broader scope of industrial automation through PLCs. Students gained fundamental knowledge that prepare them to explore these technologies in their future professional pursuits.



FACULTY ACTIVITIES

PARTICIPATION AND ACHIEVEMENTS

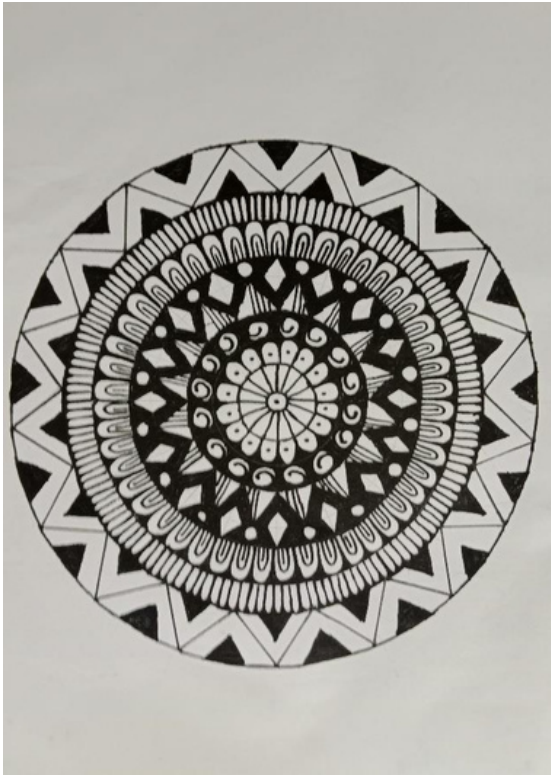
Prof. N. D. Patel has participated in NPTEL-AICTE faculty development program on Op-Amp Practical Applications: Design, Simulation and Implementation during April 2023 organized by SWAYAM NPTEL.

Prof. M. S. Chauhan has participated in NPTEL-AICTE faculty development program on Op-Amp Practical Applications: Design, Simulation and Implementation during April 2023 organized by SWAYAM NPTEL.

Prof. K. R. Patel has participated in NPTEL-AICTE faculty development program on Op-Amp Practical Applications: Design, Simulation and Implementation during April 2023 organized by SWAYAM NPTEL.

Prof. S. H. Mansuri has participated in NPTEL-AICTE faculty development program on Op-Amp Practical Applications: Design, Simulation and Implementation during April 2023 organized by SWAYAM NPTEL.

CREATIVE CORNER



Mandala Art, Riddhi Hemkant Neve, 210160111504, Electronics and Communication Department



Drawing of Virat Kohli, Suthar Keyur H., 210160111020, Electronics and Communication Department

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