

Electrabuzz-251

3rd

Issue



ELECTRICAL DEPARTMENT
GOVERNMENT ENGINEERING COLLEGE,
SECTOR-28, GANDHINAGAR
NEWSLETTER-25/1(JANUARY TO JUNE-2025)

PREFATORY NOTE

It gives us immense pleasure to introduce our 3rd Issue of “ElectrabuzzZ (Use the electric currents to communicate the feelings)” a semiannual newsletter by Electrical Engineering department of GEC Gandhinagar. In an era of information proliferation, news may be available on different platforms, including social media in a variety of ways. However, the newsletter needs to recapitulate and formally organize the prominent news items as a ready reference for the convenience of the stakeholders of the department as well as Institute. We hope that this issue as well as other upcoming issues will serve this purpose. We are thankful to faculties for their constant co-operation in bringing out the newsletter.

H. O. D.'s Message



Dr. Kunal Ashvinkumar Bhatt

Head of Department

I am happy to note that our Electrical Engineering department is releasing one another issue of Newsletter of this term, enumerating the various activities and achievements of our faculty and students. The department endeavors to produce confident professionals tuned to a real time working environment. The department offers an excellent academic environment with a team of qualified and dedicated faculty members to inspire the students to develop their technical skills and inculcate the spirit of teamwork in them. Commendable job has also been done by the Editorial team in planning for and producing the Newsletter. I also congratulate the entire Electrical engineering department faculties and students for their contribution to department activities and look forward to future developments. Special thanks to the Editorial Board for in house development of this newsletter.

HIGHLIGHTS OF THIS EDITION

Department Zone

Faculty Detail	5
Department Activity	7

Student Zone

Top 5 Students of Electrical Engineering (3 rd Semester-23 Entry) (1 st Semester-24 Entry)	13
Student's Achievement	15
Student's Participation	18

Faculty Zone

Faculty Achievements	21
Faculty Publications	23
Faculty Training	24

Head of Department- Welcome

27

FACULTY DETAIL



HOD

Dr. Kunal A. Bhatt

**Ph. D. (ELECTRICAL
ENGINEERING)**

Experience: 23 Years

Prof. Jignasha A. Prajapati

**M.E. (ELECTRICAL
ENGINEERING)**

Experience: 20 Years



Prof. Ashok L. Vaghamshi

**M.E. (ELECTRICAL
ENGINEERING)**

Experience: 16 Years

Prof. Mihir B. Chaudhari
M.Tech. (ELECTRICAL
ENGINEERING)
Experience: 20 Years



Prof. Priyank R. Bhavsar
M.E. (ELECTRICAL
ENGINEERING)
Experience: 17 Years

Prof. Nirav D. Patel
M.Tech. (ELECTRICAL
ENGINEERING)
Experience: 20 Years



Prof. (Dr.) Sunil P. Agrawal
Ph. D. (ELECTRICAL
ENGINEERING)
Experience: 13 Years

DEPARTMENT ACTIVITY

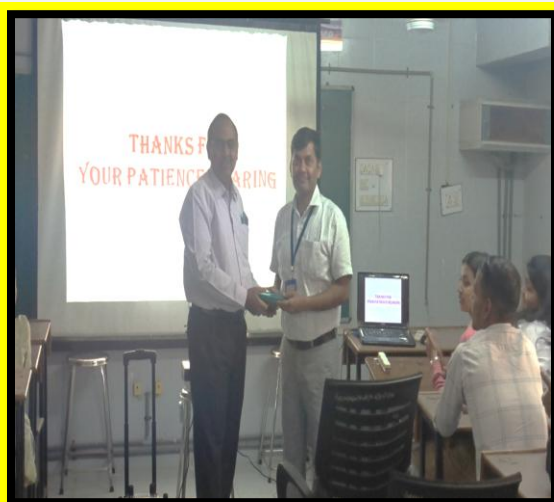
Expert lecture Session on "INDUSTRIAL DESIGN APPROACH FOR POWER ELECTRONICS CONVERTERS"

Electrical Engineering Department of GEC Gandhinagar has organized an expert lecture on '**INDUSTRIAL DESIGN APPROACH FOR POWER ELECTRONICS CONVERTERS**' on Tuesday, 18th March 2025. Total 64 students participated in this expert lecture. The lecture was delivered by Mr. Darshan Patel (Chief Technical Officer) from Bitgreen Technolabz Pvt Ltd, Gandhinagar. He has vast experience in the subject of Power Electronics. Faculty coordinators for this event were rof. A. L. Vaghamshi and Prof. J. A. Prajapati.



Expert lecture Session on "Comprehensive Diagnostic Measurements for Condition Assessment and Monitoring of Transformers"

Electrical Engineering Department of GEC Gandhinagar has organized an Expert Lecture Session on "Comprehensive Diagnostic Measurements for Condition Assessment and Monitoring of Transformers" on 18th March 2025. Total 60 students have actively participated in this event. Faculty coordinators for this event were Prof. M. B. Chaudhari and Prof. S. P. Agrawal.



Technical Visit “400kV Soja Substation”

The Department of Electrical Engineering organized an industrial visit at 400KV Substation, Soja, on 3rd March 2025. 45 students from semester 4 visited the substation. Faculty coordinators for this visit were Prof. M. B. Chaudhari and Prof. P R. Bhavsar.



SSIP 2.0 - “Review of SSIP potential projects for POC support”

Electrical Engineering Department of GEC Gandhinagar has organized SSIP 2.0 event titled “Review of SSIP potential projects for POC support” conducted on 1st February 25. Dr. Maulik C. Pandya and Mr. Anand H. Visani is invited as an expert for the event. Two projects have been approved for POC support approximately worth 35000 rupees. Departmental SSIP faculty coordinators Prof. S. P. Agrawal has coordinated the said event.



“EEMOCO-2025” - ELECTRICAL/ELECTRONICS BASED MODEL COMPETITION

A Model Competition was organized by the Electrical Engineering Department on 3rd May 2025, at Government Engineering College, Sector-28, Gandhinagar. Under the event “**EEMOCO-2025**”, Students of various disciplines participated with great enthusiasm. Each student presented different concept based working models made by their group and were observed and highly appreciated by the head of various departments as well as faculty members from various disciplines.

Total 26 teams registered in the event, a total of 116 students were selected through the first and second qualifying rounds to participate in the finals. All students were awarded by a participation certificate and the three winner teams were also awarded with a winning certificate. The main objective of doing this event was that the student get start up related encouragement from now on and can go further in that direction and do commendable work. Faculty coordinators for this event were Prof. P. R. Bhavsar, Dr. S. P. Agrawal and Prof. N. D. Patel.





STUDENT ZONE

Top 5 Students of Electrical Engineering (3rd Semester-23 Entry)

230130109019 Jagani Manan
Sanjay 8.52



230130109055 Rawat Devanshi
Devendrasingh 8.3



230130109003 Bamta Kishan 8.09



230130109022 Khara Rahul
Baidyanath 7.91



240133109024 Vekariya
Dhvanit
Sudhirbhai 7.74

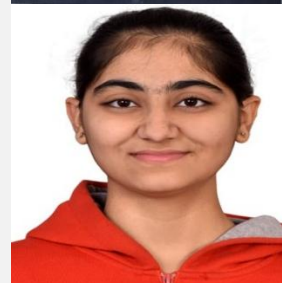


Top 5 Students of Electrical Engineering
(1st Semester-24 Entry)

**240130109035 Pandey Nikhil
Sunil 8.67**



**240130109063 Thakkar Trisha
Kamleshbhai 8.11**



**240130109064 Trivedi Aastha
Rashmikant 8**



**240130109052 Prajapati
Subhash Prakas
hbhai 7.89**



**240130109020
Kavar Dushyant
7.44**



**240130109040
Patel Janvi
7.44**



Student's Achievement

2nd year student of Electrical Engineering Department

Mr. Rahul Khara

is a student of our institute who, along with his team, secured **3rd position (2nd runners up)** in the **National Entrepreneurship Challenge (NEC)** - a prestigious national-level competition organized by **E-Cell, IIT Bombay** on 1st and 2nd February 2025.

The competition saw participation from premier institutes across the country. Rahul's team stood out by demonstrating exceptional entrepreneurial skills and innovation. The team was awarded a **cash prize of ₹55,000**.



"Participating in various levels of the competition exposed me to advanced entrepreneurial concepts and real-world challenges. Refining a startup idea under intense timelines gave me valuable insight into what it truly takes to turn a concept into a successful venture." - Rahul Khara

Student's Achievement Winners at the institute level

- **Team Secures 2nd Position in College-Level EEMOCO Competition-** We are proud to share that our team — comprising **Anish Verma, Rahul Khara, Kishan Bamta, Manan Jagani, and Parth Kayada** — secured 2nd place in the college-level EEMOCO competition. With **over 25 teams** participating, the event saw a wide range of innovative projects. Our team stood out with their project titled ***Digital Multifunction Meter***, which demonstrated practical utility, technical innovation, and strong teamwork. This achievement reflects the dedication and creative spirit of our students. Which was held on **3rd May 2025**.





Student's Achievement Winners at the other institute



- 2nd year student of Electrical Engineering Department **Mr. DEEP VISHALKUMAR SHAH** has secured 2nd rank in x adventure awaits event on 20 February 2025 at LDRP Campus, Gandhinagar.

Student's participation At institute level

- Students as per following list from 1st year and 2nd year Electrical Engineering department participated in the “EEMOCO-2025” a working model competition Organized by Electrical Engineering Department, Government Engineering College, Gandhinagar on 3-05-2025.

BAMTA KISHAN	230130109003	PANDYA UTSAV M.	240130109037
JAGANI MANAN SANJAY	230130109019	PARIHAR AMITSINGH CHANDRABHANSIN	240130109039
RAHUL KHARA	230130109022	PATEL JANVI	240130109040
PARTH KAYADA	230130109037	PATEL HARSHAL HITENDRAKUMAR	240130109042
SMEET ASARI	240130109002	HARSHKUMAR KANUBHAI PATEL	240130109043
ASODIYA LAXANK NARENDRAKUMAR	240130109003	PATEL JENNY JITENDRAKUMAR	240130109044
BARAD VRUSHIKA R	240130109004	PATEL KHUSH VINODKUMAR	240130109045
CHAUDHARY KHUSHI HITESH	240130109006	PATEL MIT RAJENDRAKUMAR	240130109046
CHAUDHARY MAHESHBHAI NAGJIBHAI	240130109007	PATEL MOHIT SURESHKUMAR	240130109047
DARSHAN V BAROT	240130109011	PATEL OM GIRISHKUMAR	240130109048
HARDIK JAMOD	240130109018	SHAN DILIPKUMAR PATEL	240130109049
DUSHYANT JITENDRABHAI KAVAR	240130109020	PRAJAPATI SUBHASH PRAKASHBHAI	240130109052
KHARADI SUHANI SHAILESHBHAI	240130109021	RAJPUT KARAN .M.	240130109053
KAUSHAL KHARWAR	240130109022	RAJPUT SUJIT DHANANJAY SINGH	240130109054
MESARIYA KRISH HARESHBHAI	240130109026	ABHI SINDHAV	240130109061
MODHWADIYA PRATAP	240130109027	SOLANKI RAJVEER SINH YOGENDRA SINH	240130109062
MODI RUDRA BHAVESHKUMAR	240130109028	TRISHA KAMLESHBHAI THAKKAR	240130109063
URVASHI VINOD MUNIYA	240130109030	AASTHA RASHMIKANT TRIVEDI	240130109064
DARSHNA NAINUJI	240130109031	VANSH HEMALBHAI JAGUBHAI	240130109068
NIGAM NARENDRABHAI PATEL	240130109032	VYAS DRASHTI MANOJBHAI	240130109069
PANCHANI DARSHAN	240130109034	ZALA MITRAJSINH ANIRUDDHSINH	240130109070
PANDOR SIDHDHARAJ BHUPATBHAI	240130109036	VERMA ANISHKUMAR KHUSHIRAM	240133109025

Student's participation (Outside the institute)

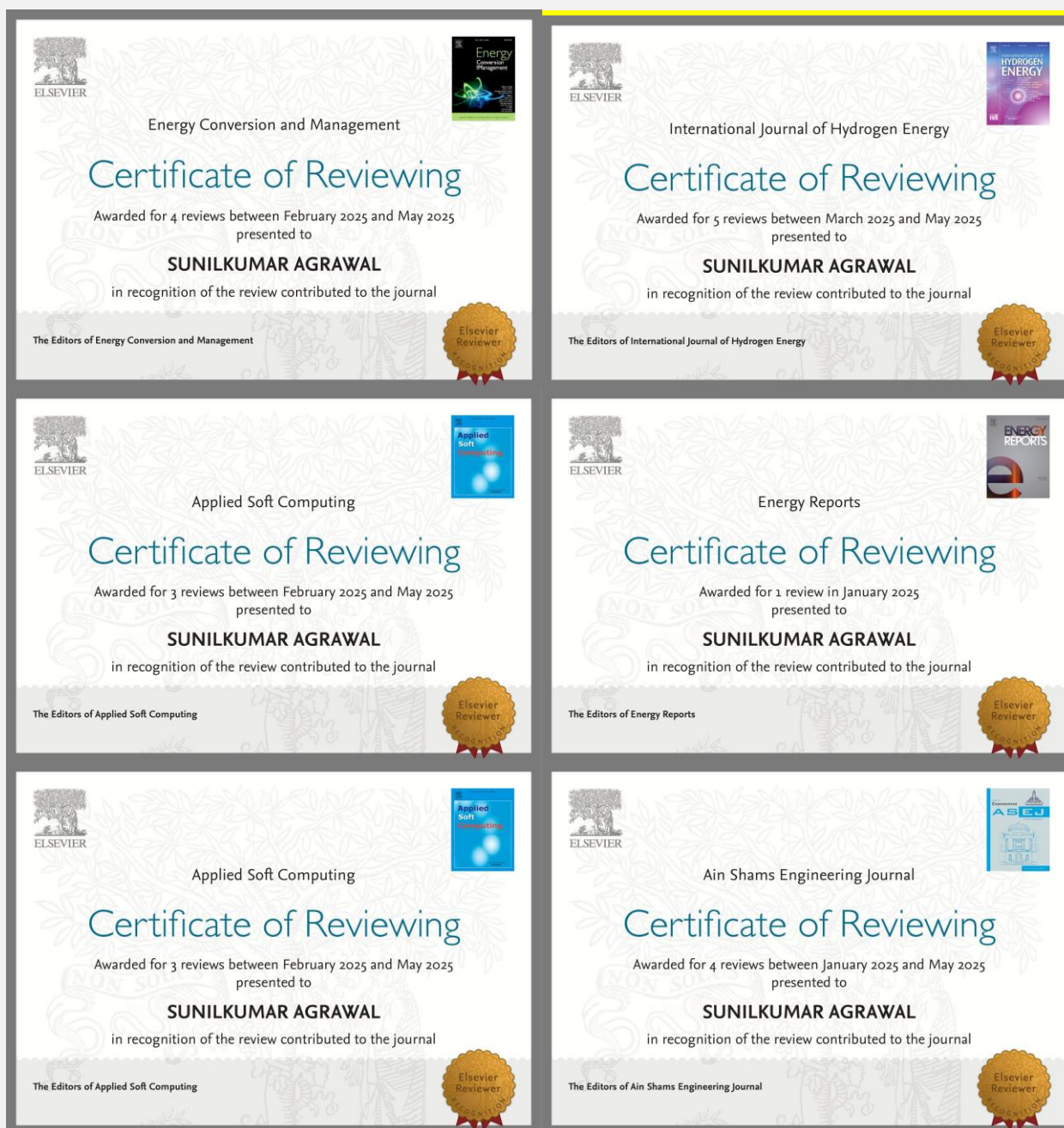
- Some other students have also been getting participation certificates from various events at other universities in the last six months as below.

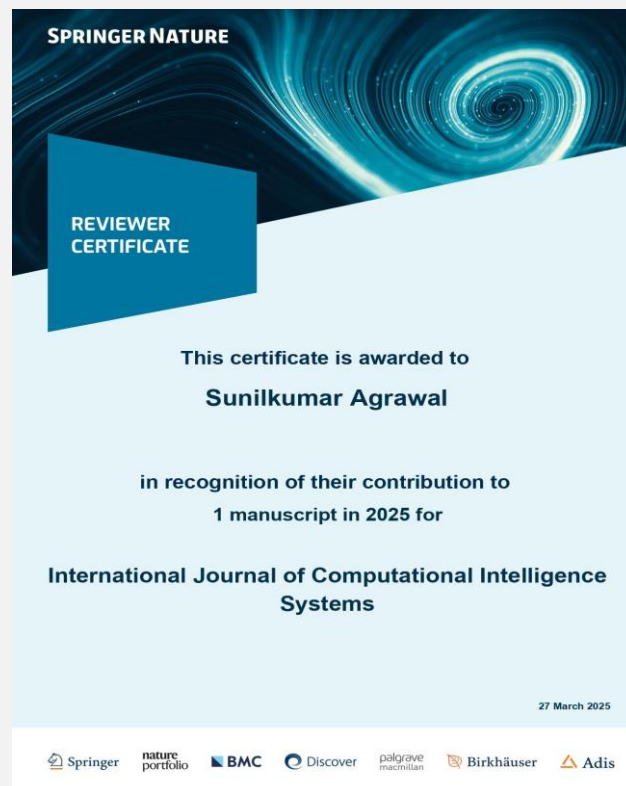




FACULTY ACHIEVEMENTS

- **Dr. Sunilkumar P. Agrawal** has reviewed more than 21 research articles from various international journals associated with Springer Nature and Elsevier.





FACULTY PUBLICATIONS

- **Dr. Sunilkumar P. Agrawal** published a research paper titled "Orthogonal Multi-Swarm Greedy Selection Based Sine Cosine Algorithm for Optimal FACTS Placement in Uncertain Wind Integrated Scenario Based Power Systems." in the **Engineering Reports** in May 2025.
- **Dr. Sunilkumar P. Agrawal** published a research paper titled "A Sine and Wormhole Energy Whale Optimization Algorithm for Optimal FACTS Placement in Uncertain Wind Integrated Scenario Based Power Systems." in the **Journal of Bionic Engineering** in April 2025.
- **Dr. Sunilkumar P. Agrawal** published a research paper titled "A hybrid snow ablation optimized multi-strategy particle swarm optimizer for parameter estimation of proton exchange membrane fuel cell" in the **Ionics** in March 2025.
- **Dr. Sunilkumar P. Agrawal** published a research paper titled "A hybrid slime mold enhanced convergent particle swarm optimizer for parameter estimation of proton exchange membrane fuel cell" in the **Scientific Reports** in March 2025.
- **Dr. Sunilkumar P. Agrawal** published a research paper titled "Exploring the effectiveness of adaptive randomized sine cosine algorithm in wind integrated scenario based power system optimization with FACTS devices" in the **Scientific Reports** in February 2025.
- **Dr. Sunilkumar P. Agrawal** published a research paper titled "Optimizing FACTS Device Placement Using the Fata Morgana Algorithm: A Cost and Power Loss Minimization Approach in Uncertain Load Scenario-Based Systems" in the **International Journal of Computational Intelligence Systems** in January 2025.

FACULTY TRAINING

- **Prof. J. A. Prajapati** successfully completed 01 week training on “Train the trainer program-Electric Vehicle & Hybrid Vehicle (EVHV-01)” at International Automobile Center of Excellence(IACE), Gandhinagar during **17-02-2025 to 21-02-2025**.



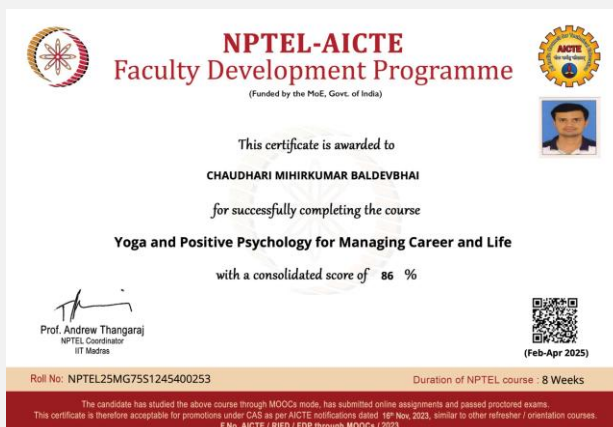
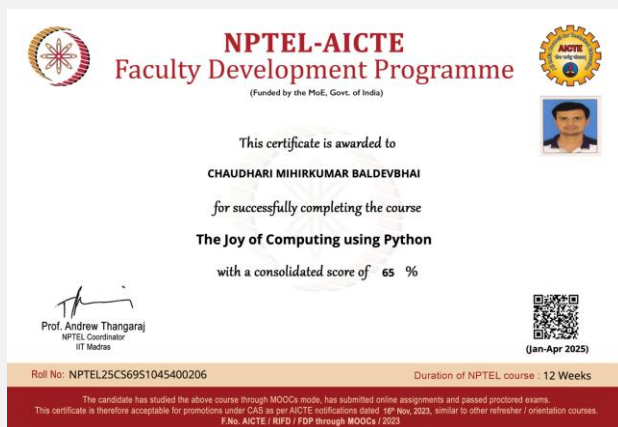
- **Prof. A. L. Vaghamshi** has attended an online webinar on “Education with AI tools” dated 22-05-2025 under the initiative of TEERTH organized by Knowledge Consortium of Gujarat, Education Department, Government of Gujarat.



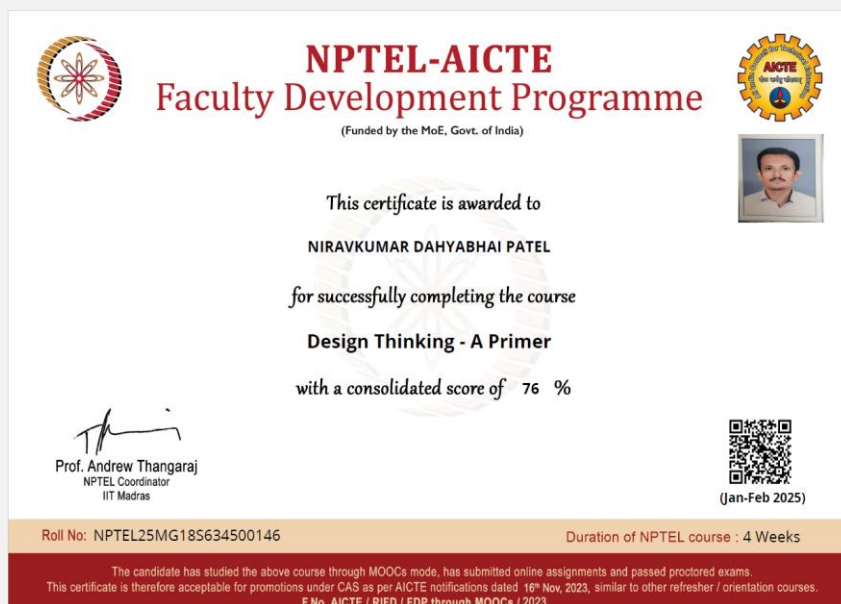
- **Prof. M. B. Chaudhari** successfully completed 01 week training on “Train the trainer program-Electric Vehicle & Hybrid Vehicle (EVHV-01)”at International Automobile Center of Excellence (IACE), Gandhinagar during **20-01-2025 to 24-01-2025**.



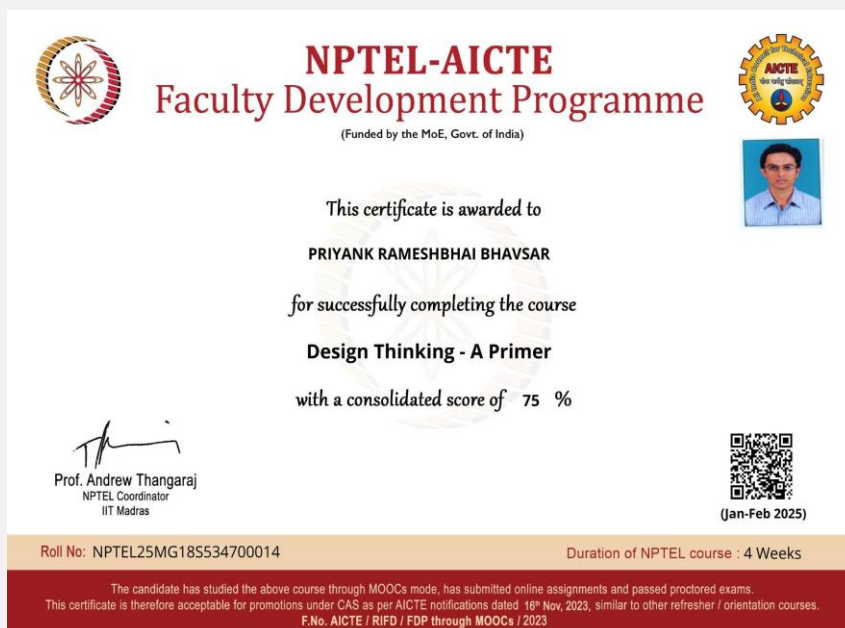
- Prof. M. B. CHAUDHARI successfully completed a 12-week MOOC FDP on ‘The Joy of Computing using Python’ on the NPTEL platform during Jan-April 2025.
- Prof. M. B. CHAUDHARI successfully completed a 08-week MOOC FDP on ‘Yoga and Positive Psychology for Managing Career and Life’ on the NPTEL platform during Feb-Apr 2025.



- **Prof. N. D. Patel** successfully completed a 04-week MOOC FDP on ‘**Design Thinking- A Primer**’ on the NPTEL platform during **Jan-Feb 2025**.



- **Prof. P. R. Bhavsar** successfully completed a 04-week MOOC FDP on ‘**Design Thinking- A Primer**’ on the NPTEL platform during **Jan-Feb 2025**.



HEAD OF DEPARTMENT-WELCOME



Dr. Kunal Ashvinkumar Bhatt

Head of Department

Dr. Kunal Ashvinkumar Bhatt is promoted by the Education department of Gujarat as an Associate Professor and posted at GEC, Gandhinagar in April, 2025. He has done his Ph. D. From Indian Institute of Technology Roorkee (IIT Roorkee). He has experience of 23 years in academics and 5 years in industry. Previously he was working as an assistant professor in various GECs of Gujarat since 2010. Priorly, he was working as a lecturer in GP, Himmatnagar from 2005 to 2010. He has published numbers of research papers in peer reviewed journals (more than 12), filed two patents, and guided to numbers of student projects at UG and PG levels. He has better experience in developing the laboratories also.

Respected Sir,

*Electrical Engineering department of GEC-Gandhinagar
welcoming you.*

GLIMPSE OF EVENTS FOR **GAINING SOMETHING BEYOND THE SYLLABUS**



NEWSLETTER TEAM

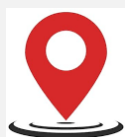
Supported by *Dr. Kunal A. Bhatt*
Head- Electrical Department

Chief Editor *Prof. N. D. Patel*

Executive Editor *Prof. A. L. Vaghamshi*

Advisor *Prof. J. A. Prajapati*
Prof. M. B. Chaudhari
Prof. P. R. Bhavsar
Prof. (Dr.) S. P. Agrawal

Student *Parth Kayada*
Representative *Anish Varma*
Janvi Patel
Mansi Parab



*Block-03, Government Engineering college,
sector-28, gandhinagar, Gujarat-382028*



head.ee@gecg28.ac.in



<https://www.gecg28.ac.in/dept/22>