

Connections

A newsletter for friends of IIT Gandhinagar



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INSTITUTE HIGHLIGHTS



13TH CONVOCATION

IITGN hosted its 13th Convocation ceremony on June 29, 2024 at the Mahatma Mandir Convention & Exhibition Centre in Gandhinagar. The Institute conferred degrees to 530 students. **Shri Rishad Premji**, Executive Chairman of Wipro Limited, graced the occasion as chief guest. **Shri Sanjiv Puri**, Chairman, Board of Governors of IITGN, was also present during the occasion.

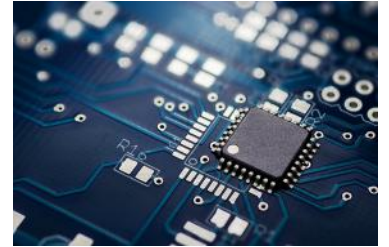
This year, 56 students were awarded various medals, including 40 gold medals and 17 silver medals for excellence in various categories such as academics, outstanding research, innovation, leadership, social service, sports, arts and culture, among others. Prior to the convocation, an Award Ceremony was held on June 28, 2024. During this event, 42 medalists received their medals. IITGN also conferred the Institute Fellow awards to **Mr Mahesh R Patel**, Former Principal, Vishwakarma Government Engineering College, and **Mr Ruyintan Mehta**, Former President, IITGN Foundation in the United States. The Institute Fellow Award honours individuals who have made significant and lasting contributions to the advancement of IITGN.

161% INCREASE IN CSR SUPPORT

In a significant milestone for the advancement of education, research, and community development, IITGN witnessed a remarkable 161% increase in Corporate Social Responsibility (CSR) support during FY 2023-24, as compared to FY 2022-23. This substantial surge in CSR funding reflects a growing recognition of IITGN's commitment to excellence in education, research, and societal impact. With the generous contributions from corporate donors, IITGN continues to expand its reach and enhance its programmes aimed at fostering innovation, entrepreneurship, and social responsibility.

NEW BTECH PROGRAMME IN INTEGRATED CIRCUITS DESIGN AND TECHNOLOGY

IITGN introduced a new BTech programme in 'Integrated Circuit Design and Technology (ICDT)' as part of the Electrical Engineering department from the academic year 2024-2025. The BTech programme, spearheaded by an esteemed advisory committee comprising distinguished members from global academia and industry, represents a significant leap forward in addressing the growing demand for skilled professionals in the ESDM sector.



STAR CAMPUS AWARD 2024

IITGN was honoured with the prestigious Star Campus Award 2024 in the category of water conservation and management. This esteemed accolade, presented by Earth Day Network - India, recognises IITGN's exemplary efforts in implementing innovative and sustainable practices to conserve water resources and promote environmental stewardship.

SUPPORT FOR THE INSTITUTE

SUGUNAMMA AND SAROJAMMA SCHOLARSHIP

Manikanta Mandlem, a BTech alumnus of 2019, has set up the Sugunamma and Sarojamma Scholarship in honour of his paternal grandmother Sugunamma and maternal grandmother Sarojamma. Their unwavering love and support have been the foundation for Manikanta's success. The scholarship, worth Rs 1 lakh, will support one undergraduate student at IITGN every year. Manikanta is a BTech Electrical Engineering graduate of the Class of 2019. After graduating from IITGN, he earned his MS in Computer Engineering from Northwestern University, USA. He currently works as a Data Scientist at CCC Intelligent Solutions in Chicago, USA.



COLLABORATION WITH ADANI DEFENCE & AEROSPACE

IITGN signed an MoU with Adani Defence and Aerospace, a subsidiary of Adani Group, on May 13, 2024 to collaborate in areas of emerging technologies, including Artificial Intelligence (AI), Machine Learning (ML), and Large Language Models (LLMs) for defence applications.

The MoU was signed by **Prof Amit Prashant**, Dean, R&D, IITGN and **Mr Ashish Rajvanshi**, CEO of Adani Defence and Aerospace at the IITGN campus. The MoU aims to foster collaboration in research, education, and innovation in the areas of AI and ML for defence applications.



MoU WITH CITY UNIVERSITY OF LONDON

IITGN and City University of London entered into a Memorandum of Understanding (MoU) on May 20, 2024, to foster academic and research collaborations between the two Institutions. This agreement will facilitate the development of dual degree MSc programmes in Cyber Security, and Financial Technology and Systems. The MoU outlines plans to explore opportunities for staff and student exchanges. The MoU was signed by **Prof Elisabeth Hill**, Deputy President and Provost, City, University of London and **Prof Rajat Moona**, Director, IITGN at City University of London.



of-the-box thinking puzzles and games. Each of these modules will foster innovative and creative learning.

MoU WITH THE DESAI FOUNDATION TRUST

IITGN has entered into an agreement with The Desai Foundation Trust (DFT), on Apr 1, 2024 with an aim to establish long term relationships to conduct programmes focussed on uplifting the health and livelihood of women, youth, and children to serve communities. Under the agreement, DFT and IITGN will collaborate on multiple projects. IITGN's community outreach programmes NEEV and NYASA implement these programmes at grassroots level.



MoU WITH SAMAGRA SHIKSHA, UTTAR PRADESH

IITGN and Samagra Shiksha, Uttar Pradesh signed an MoU on Mar 22, 2024 to foster collaborative activities to enhance learning experience of children attending PM Shri schools in Uttar Pradesh. To further PM Shri schools' goals, CCL, IITGN will provide STEM toys, models and activities for Science, Maths, FLN including out-



MoU WITH AICPMU AT IIT JAMMU

IITGN and AICPMU at the Indian Institute of Technology Jammu signed an MoU on Mar 26, 2024 with the objective of collaboration for investment in research and development of the innovation being developed by the students, faculty, start-ups, and cohort partners etc.



FACULTY NEWS

AWARDS AND RECOGNITIONS



Prof Karla Mercado Shekhar was awarded and named as a Scholar by the IEEE Ultrasonics, Ferroelectrics, and Frequency Control (UFFC) Society for representing Ultrasonics.

PATENTS GRANTED

- An Acoustic Feedback Cancellation System For Assistive Listening Device And Method Thereof: Inventors include **Prof Nithin George**, **Mr Somanath Pradhan**, and **Mr Vinal Patel**. The patent number is: 537601.
- Composite Propellante: Inventors include **Prof Kabeer Jasuja**, **Prof Chinmay Ghoroi**, and **Harini Gunda**. The patent number is: 543818.

PATENTS FILED

- Styryl N-Oxide Fluorophores for Detection Of Fe²⁺ and Process for Preparation of Styryl N-Oxide Fluorophores: Inventors include **Prof Sriram Kanvah**, **Yogesh Dubey**, and **Shabnam Mansuri**.
- Wearable System for Offering Individualised Gait Rehabilitation: Inventors include **Prof Uttama Lahiri** and **Shashi Ranjan**.
- Adsorbent and a Process for Recovery of Rare Earth Elements: Inventors include **Prathmesh Bhadane**, **Prateek Goyal**, **Priya Mahato**, and **Prof Superb Misra**.

SPONSORED AND CONSULTANCY PROJECTS

Please follow this link: https://iitgn.ac.in/newsletter/projects/q2_2024 or scan the QR code to find the list of sponsored and consultancy projects.



NEW FACULTY

Name	Designation	Discipline	PhD/Last Degree	Date of Joining
Dr Anagh Bhaumik	Assistant Professor	Materials Engineering	North Carolina State University, USA	10/05/2024
Vivek P Kapadia	Professor of Practice	Civil Engineering	Master of Law	18/06/2024

SCHOLAR-IN-RESIDENCE

Name	Department	Affiliation	Date of Joining
Prof Amitabh Virmani	Physics	Chennai Mathematical Institute	13/05/2024

ACTIVITIES AT IITGN

IITGN STUDENTS DEVELOP FULLY-AUTONOMOUS VEHICLE

A number of IITGN students developed a fully-functional autonomous vehicle that can operate without a driver. The vehicle was developed as part of a one-of-a-kind course on Autonomous Vehicles. The students transformed an electric golf cart into a state-of-the-art driverless vehicle capable of navigating the campus from the hostels to the academic area autonomously. The vehicle is equipped with hardware and software modifications to make it capable of fully-autonomous operations including lane detection, obstacle detection, automatic steering control, and automatic braking and acceleration.



SRIP 2024



The Summer Research Internship Programme (SRIP) kicked off at IITGN on May 5, 2024. The 14th edition of this eight-week flagship programme saw participation from talented students from various prestigious institutes across the country. The interns spent eight weeks at IITGN and carried out 134 research projects under the mentorship of IITGN faculty members. The interns concluded their internship with a poster presentation competition on July 9, 2024.

INVENTION FACTORY



IITGN hosted the fifth edition of Invention Factory, a unique programme in inventing. This intensive six-week long programme was held from May 27-July 5, 2024 at IITGN, June 3-July 12 at IIT Bombay, and from June 3-July 14 at IIT Jammu. The students from various IITs and NITs spent six-weeks to conceive, prototype, and pitch unique inventions to address various societal and consumer needs.

JEE OPEN HOUSE

IITGN hosted an online 'JEE Open House' for prospective B.Tech students and their parents on June 11, 2024. Institute authorities cleared the doubts of prospective students and provided first-hand guidance on campus life, admissions, programmes, career opportunities, and more.

The live interactive session was addressed by the Director, Dean of Academic Affairs, Dean of Student Affairs, Heads of Departments, Faculty in-charge of Counselling Services, Faculty in-charge of Internships, Faculty in-charge of Higher Education, IITGN Students and Alumni.

CHARMS SPECIAL SESSION WITH MS RAJNI JAIN



IITGN Committee for Holistic Association & Relationship Management among Students (CHARMS) hosted an exclusive session for first-year B.Tech girl students titled 'Life at IIT - Opportunities & Challenges - Heart to Heart with Ms Rajni Jain' on Apr 5, 2024. Ms Jain is an alumna of IIT

Delhi, current Head IT in IITBNF, IIT Bombay, a software consultant in the INUP-i2i Project at IIT Guwahati, and a dedicated teacher. The session was a perfect blend of information, interaction, and enjoyment.

WORKSHOP ON PYTHON PROGRAMMING

The department of Computer Science & Engineering, organised an immersive one-day workshop on 'Python programming and AI applications' on Apr 5, 2024. This hands-on workshop provided proficiency in Python programming fundamentals, and its application in AI in a structured and interactive environment to participants. The participants also experienced hands-on guided exercises and case studies.

WORKSHOP ON 3D PRINTING

Tinkerers Lab, IITGN, organised a one-day workshop, 'Let's Print 3D: Unleashing the World of 3D Printing' on Apr 6, 2024. This comprehensive workshop ensured a balance between theoretical understanding and practical hands-on experience for the participants who gained insights into 3D printing technology, materials, design principles, and hands-on experience.

ACS IGNITION: LAUNCHING SCIENCE INTO FUTURE

The ACS International Student chapter IITGN organised an event 'ACS IGNITION: Launching Science into future' on Apr 13, 2024. The event aimed at bridging the gap between the discipline and to promote multidisciplinary research. Students from IITGN, faculty members, and attendees from surrounding universities took part in the event. The event initiated with the launch of ACS Student Chapter IITGN by **Prof Sivapriya Kirubakaran** and **Prof Biswajit Mondal**.

TEDxIITGANDHINAGAR

IITGN successfully concluded the highly-anticipated TEDxIITGandhinagar 2024 on Apr 7, 2024. Delving into the theme of 'Reimagining Realities', the event witnessed groundbreaking talks on transformative leadership, entrepreneurship, sports empowerment, and more from invited speakers from varied backgrounds. Some of the speakers included **Lieutenant General A Arun**, a highly-decorated officer of the Indian Army; two-time olympian **Dutee Chand**; and **Revathi Ramanan**, distinguished Commonwealth Scholar and an alumna of the Teach For India fellowship.

ART FILM FESTIVAL

IITGN organised the Art@IITGN Film Festival on Apr 13-14, 2024. This festival presented cinema enthusiasts the opportunity to experience the magic of independent cinema and engage with the creative minds behind the masterpieces. The festival was curated by Film Director **Don Palathara**, Artist-in-Residence, IITGN. It featured thought-provoking narratives and visually stunning storytelling by acclaimed filmmakers from all over India.

COOKING FOR MESS WORKERS

As a gesture of gratitude and appreciation towards the mess workers of the Institute, who work tirelessly to feed healthy and nutritious food to the IITGN community; the faculty, staff, and students of IITGN cooked and served a meal to them on Apr 14, 2024. The mess staff members, including managers, chefs, cooking assistants, serving staff, and mess housekeeping staff were invited for lunch under this initiative.

CERTIFICATION IN SCIENTIFIC WRITING PROGRAMME

As part of the Certification in Scientific Writing programme, 61 PhD scholars were awarded the Certification in Scientific Writing for AY 2023-2024 in May 2024. The programme is conducted every semester by **Prof Karla P Mercado-Shekar** as the Faculty-in-Charge, **Dr Maria João Amante** as the examiner.

OUTREACH SESSION BY IPS OFFICER SAFIN HASAN

IITGN invited IPS officer **Safin Hasan** for an interactive talk on May 20, 2024. Mr Hasan cleared the UPSC examination in 2018 at the age of 22 to become one of India's youngest IPS officers and was invited to inspire and motivate the pillars of the Institute: housekeeping staff, mess workers, security, maintenance staff, and horticulture staff.

PROTOTYPE DEMONSTRATION- SUSTAINABLE DESIGN IN ENGINEERING

Under the guidance of **Prof Anezka Sebek**, Visiting Professor (Design Innovation Centre), various students presented their work completed as part of the 'Sustainable Design in Engineering with Human Factors' course on Apr 26, 2024. The project was a collaboration with the WIN Foundation partners Saath, Chetna and Samerth NGOs and the Nutripreneurs, women who are creating businesses to make nutritious snacks for children and their Ahmedabad neighbours.



NEEV'S SUMMER SKILLS COURSES

NEEV, the community outreach programme of IITGN, in partnership with Desai Foundation Trust, successfully conducted six skill development courses during April to June 2024, for youth and women hailing from rural areas in Gandhinagar. A total of 228 participants were trained through these courses. Additionally, 26 participants in the stitching course, 36 in beautician course, 91 in two batches of basic computer course, 43 in Spoken-English course, 32 in nail art design course, received certificates at the closing session held on June 13, 2024.

STUDENTS AND STAFF

AWARDS AND RECOGNITIONS

- **Ashish Tiwari**, PhD Scholar, Electrical Engineering, received the Fulbright-Nehru Doctoral Research Fellowship. As part of the fellowship, Ashish will work on his project titled 'Neural Inverse Rendering of Large-Scale Indoor and Outdoor Scenes from Sparse Multi-View Images' at Rice University, Houston, USA.
- **Ahana Ghosh**, PhD Scholar, Humanities and Social Sciences, was selected as the 'Student Ambassador Lead' by the Society for Archaeological Sciences (SAS) for 2024-2025.

UNDERGRADUATE RESEARCH SHOWCASE 2024

The Institute organised an Undergraduate Research Showcase on Apr 22, 2024. Students from various departments presented their research in front of a diverse audience. The event served as a forum to showcase and communicate their eclectic research work in various interdisciplinary

SPORTS

AWARDS AND RECOGNITION

- IITGN students **Saurabh Kumar** and **Lovekesh** secured Silver and Gold medals respectively in weightlifting at the 13th Aavahan Sports Fest held at IIT Bombay.
- **Hemant Poonia** won the Silver medal in discus throw at IIT Bombay.
- IITGN aquatics team **Adit Rambhia**, **Pradeep Kumar Meena**, **Shree Hiwanj**, and **Tanish Wanve** won various medals at the swimming events at IIT Bombay.

10TH INTERNATIONAL YOGA DAY

The IITGN community celebrated the 10th International Yoga Day on June 21, 2024, emphasising the importance of yoga in daily life. The event saw enthusiastic participation from approximately 40 members across various disciplines, making it one of the most remarkable gatherings of the year.

FIRE FORENSICS & INVESTIGATION SHORT COURSE

The Fire Engineering Research Laboratory (FERL) at IITGN, organised a five-day short course on 'Fire Forensics & Investigation' from June 24-28, 2024. This programme was designed to provide participants with in-depth knowledge and practical skills in the field of fire forensics and investigation.

WORKSHOPS

- Basic Electronic Circuits & Arduino Programming Workshop by **Physics Lab at IITGN** on May 4, 2024.
- Get Rolling with ROS: Hands-on Learning Workshop by **IITGN Robotics Lab** on June 8-9, 2024.
- Three-day Rapid Prototyping Workshop by **Maker Bhawan** on May 14-16, 2024.
- Workshop on 3D Scanning by **Maker Bhawan** on May 11, 2024.
- Testing Aspects of General Relativity-III- Online Workshop by the **Physics Department** May 15-16, 2024.
- Workshop on Creative Learning & Experiential Pedagogy by **Centre for Creative Learning (CCL)** from May 21-24, 2024.
- Workshop on Basic Electronic Circuits & Arduino Programming by the **Department of Physics** on May 4, 2024.
- Crafting Connections- Communication through games by **Leadership Development Initiative (LDI)** on June 15, 2024.

LECTURES AND SHORT COURSES

Follow this link: <https://events.iitgn.ac.in/> or scan the QR code to see the lectures and short courses at IITGN.



fields to a larger and more diverse audience, and thus, facilitated unique discussions and novel perspectives on their research.

UDAAN 2024

Udaan, the official farewell-cum-graduation dinner was hosted by IITGN on Apr 20, 2024. The evening saw some reflection, cherished memories, and speeches and anecdotes by our students and faculty members, followed by dinner.

YOGA FOR WOMEN EMPOWERMENT WEEK

IIT Gandhinagar Sports department held a 15-day celebration starting June 7, featuring varied events led by instructor **Ms Tulsa Pujhari**. Highlights included the surya namaskar challenge, artistic yogasana competitions, meditation workshops, aqua yogasana, acro yoga. Competitions included a yoga photography contest, and yoga quiz.

