

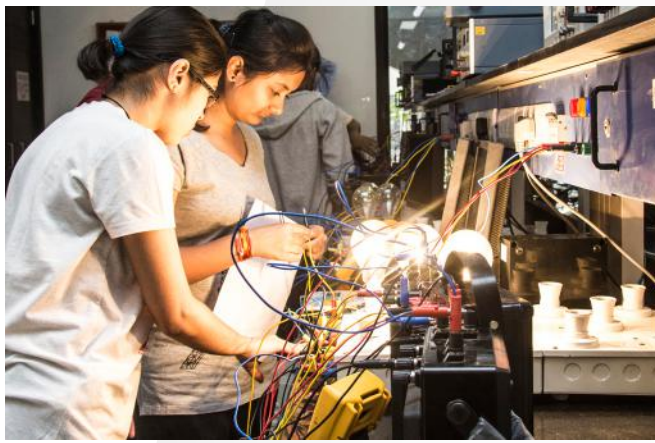
INDIAN INSTITUTE OF TECHNOLOGY GANDHINAGAR

BTECH

at IIT Gandhinagar

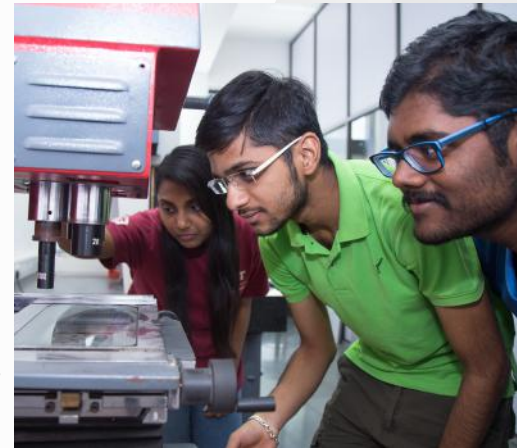


IIT GANDHINAGAR



THE IITGN ADVANTAGE

- Established in 2008, IITGN is a “second generation” IIT. In a very short time it has developed a reputation for its innovative curriculum and vibrant academic culture. IITGN has leveraged the storied history of the IIT system with cutting-edge pedagogical practices to forge a distinctive and innovative path in higher education.
- At IITGN, the undergraduate education is far more than acquiring mere technical expertise. The most sought after employers of tomorrow are looking for well-rounded engineers who can ask important questions rather than give the correct answers.
- The BTech education at IITGN gives students an edge over traditional engineering degrees and trains them to be thought leaders and problem solvers of the future. Our programme trains students to blaze new paths rather than follow those charted by others. It also sensitizes them to make the world better and pushes them to realize their true potential.



KEY ELEMENTS OF OUR UNIQUE BTech CURRICULUM

Innovation is not merely a slogan for us; it is the essence of our character, even our DNA. Our commitment to innovation drives the design and implementation of our award-winning BTech curriculum that strikes the right balance between depth and breadth and provides a broad-based education that echoes the philosophy of the world’s leading universities.

FOUNDATION PROGRAMME BUILDING THE GROUNDWORK FOR A DISTINCTIVE CAREER

IITGN’s unique five-week Foundation Programme is aimed at orienting undergraduates towards a holistic education that develops a broad set of life skills, such as: a) physical fitness, b) leadership and teamwork, c) values and ethics, d) societal concerns, and e) creativity. The programme includes interactions with renowned speakers through lectures, workshops, discussions, short projects, field activity, etc. Started in 2011 and pioneered by IITGN, the Foundation Programme has since been adopted by several other IITs.

INTER-DISCIPLINARITY INTEGRATING ENGINEERING WITH THE LIBERAL ARTS

Critical thinking is best promoted when we recognize that technology development is rooted in a social context and appreciate the interdisciplinary character of knowledge. This recognition is reflected in the IITGN curricula that has the largest liberal arts content of any engineering curricula in the country. Our undergraduates credit more than 20% of their coursework in the humanities and social sciences — nearly twice the proportion of other leading

engineering institutions in the country. Among the courses being taught at IITGN include literature and languages (English, Sanskrit, Urdu), Philosophy, Sociology, World Civilisation, Democracy, Indian Heritage, Anthropology, Ancient Indian History, etc. This coursework is intertwined with compulsory courses in Economics, Design and Innovation, Life Sciences, and opportunities for additional learning via a wide-variety of short courses, providing a truly rounded education.

PROJECT BASED LEARNING LEARNING BY ACTUALLY DOING

IITGN emphasizes project based learning both inside and outside the classroom. Hands-on training via course projects, dedicated term project courses, extensive lab work and an emphasis on “learning by doing”, enable undergraduates to get their hands dirty, and solve challenging problems of the real world rather than be confined to books, black boards and powerpoints.

Our Tinkerers’ Lab encourages students to explore creative ideas beyond the curriculum. Equipped with advanced machines such as a Dual Extrusion 3D Printer, and Laser Cutting and Engraving machines, the Lab allows students

the freedom to experiment, exercise imaginations, build novel systems and convert concepts and creative ideas to actual engineering products.

FLEXIBLE BRANCH CHANGE NORMS, MINORS, HONOURS, DUAL MAJORS CHOICES GALORE

IITGN offers a 4-year B.Tech programme in the disciplines of Chemical, Civil, Computer Science & Engineering, Electrical, Mechanical and Materials Science & Engineering. We empower students to discover and pursue their passion, with the most liberal branch change policy in the IIT system, offering the opportunity to most students to switch to a discipline of their choice in their second year. Undergraduate students also have a range of other opportunities to pursue their academic interests. They may graduate with an Honors or Minors in specific disciplines. They may also choose to graduate with a major in an additional discipline. For instance, a student may graduate with a BTech in Mechanical Engineering and an additional BTech in Electrical Engineering. BTech students also have the opportunity to obtain an MTech degree through a dual-degree option.



BEYOND THE CURRICULUM

OVERSEAS RESEARCH EXPERIENCE

The Institute places a strong emphasis on undergraduate research. Our undergraduates have numerous Institute-supported opportunities to do research with and learn from the best faculty at leading universities in the world. Nearly 40 percent of the 2017 BTech class received overseas opportunities in the world's top institutions and organizations, among the highest in the country. A number of undergraduate students also pursue their research at IITGN itself through the Institute's competitive Summer Research Internship Programme. The Institute has a liberal travel support policy to encourage undergraduate students every year attend scientific conferences overseas to present their work.

EXPLORER FELLOWSHIP

This unique annual summer programme encourages students to discover and appreciate the staggering cultural diversity of India by undertaking a six-week journey across the country on a shoestring budget. 98 Explorer Fellows travelled the length and breadth of India in 2017 to explore its incredible cultural diversity, and came back with life-changing experiences.

GRAM FELLOWSHIP

Designed to sensitise students to the rural context divide in the country, this fellowship takes students to rural India. It encourages students to immerse themselves in the experience of living in a village and in the process appreciate and think about technological and non-technological solutions.

INCUBATION AND ENTREPRENEURSHIP

The entrepreneurship and innovation development programmes at the Institute offer incubatees round the clock access to design software, fabrication facilities and sophisticated laboratories. Courses on incubation and entrepreneurship are taught by serial entrepreneurs, and mentorship is provided by successful businesspersons. Some of our recent incubatees include GeoCarte Radar Technology that provides underground infrastructure mapping without digging, and Whitepanda Media Pvt Ltd., which is a content marketing platform that enables brands to access quality content creators.

RECOGNITION OF STUDENT PASSIONS

The Institute has set up merit scholarships for excellence in areas beyond academics, such as sports, cultural pursuits, social work and leadership, all with the aim of incentivising all round development. Graduating student awards recognise a wide array of accomplishments, including leadership, human qualities, excellence in academics, sports, culture and beyond.

SCHOLARSHIPS AND FINANCIAL AID

The Institute firmly believes that no deserving student should face challenges in pursuing his/her education due to financial constraints. Numerous scholarships and financial aid programs, supported through alumni donations and endowment funds, have been instituted to ensure that students with financial needs do not face any difficulty in completing their education.

EXCEPTIONAL OUTCOMES

IITGN's culture of excellence is best exemplified in the performance and achievements of our students. Driven by a desire to learn, ask critical questions and contribute to the creation of knowledge, they have excelled in various spheres.

- A large proportion of our undergraduates have gone on to pursue higher education in some of the world's top universities such as CalTech, MIT, Princeton, UT Austin and Stanford.
- Many of our students have found placements in top companies such as ITC Ltd., Barclays, Goldman Sachs, Larsen and Toubro Ltd., and Tata Consultancy Services.
- A substantial number of students have chosen the path of entrepreneurship by incubating innovative ideas for the ends of commercial success and social imperatives.

UNPRECEDENTED ALUMNI ENGAGEMENT

IITGN alumni have demonstrated an extraordinary level of engagement with the Institute. More than half of IITGN alumni have donated to the Institute and nearly 20 percent make regular monthly donations. This extraordinary alumni engagement has enabled us to award scholarships that are entirely funded by the alumni. This exceptional level of young alumni engagement at an Institute that is 10 years old is a powerful testament to their incredible experience at their alma matter.

AN AWARD WINNING CAMPUS

A world-class university must have the physical space that is conducive to the life of the mind, where ideas can flow, knowledge is shared and people collaborate. Situated along the Sabarmati River, the award-winning IITGN campus embraces and reflects the tradition and spirit of free inquiry.



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