IIID | INDRAPRASTHA INSTITUTE *of* INFORMATION TECHNOLOGY **DELHI**

PLACEMENT BROCHURE 2022-23

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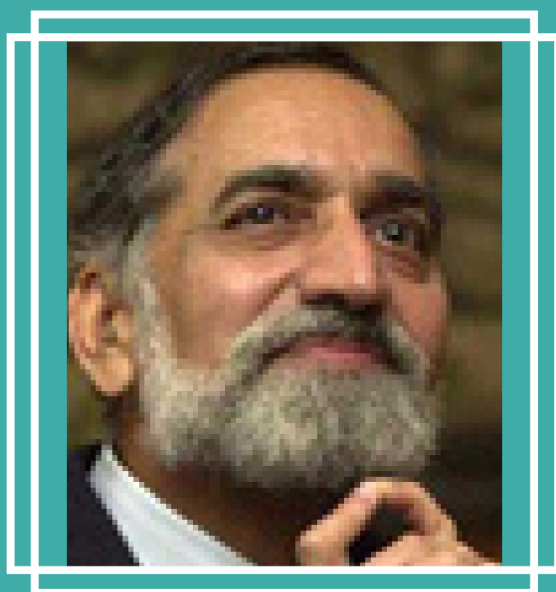
Dr. Kiran Karnik

"
Though fairly young, IIIT Delhi is now firmly on its way to realizing its mission of becoming a globally respected institute for research and higher education.

With its focus on recruiting highly qualified faculty from across the world, it has already emerged as one of the leading institutes in IT, capable of developing well-trained and innovative young professionals. Its graduates combine a solid technical grounding with other supporting knowledge, including soft skills. This type of talent is unique and in supply; it will be of special interest to companies working in cutting-edge technologies. In this era of knowledge, companies know the value of talent and innovation. I invite all such corporations, working at the forefront of Information Technology, to visit IIIT Delhi for recruitment. "

Director's Message

Dr. Ranjan Bose

" I am very pleased to invite companies to visit our Institute for considering our graduating B.Tech. and M.Tech. students for recruitment. In 15 years, IIIT Delhi has established itself as one of the leading engineering institutes, with top-class faculty with PhDs from across the world. Our students are exposed to challenging research-based education along with a variety of cultural, sports, and organizational activities on our vibrant campus. The presence of state-of-art research facilities, close industry collaborations, international linkages, interdisciplinary programs, and industrial training opportunities contribute to our students' well-rounded growth.

The students graduating from this Institute are motivated, bright, and very eager to perform after they graduate. I invite the recruiting organizations and graduating students to find the best match between their needs and capabilities. "

Founding Director's Message

Dr. Pankaj Jalote

" I welcome the recruiters for the campus placement for our graduating B.Tech. (CSE, ECE, CSAM, CSD, CSSS, CSB and CSAI) and M.Tech. (CSE, ECE, CB) students for recruitment. In a short span, IIIT Delhi has established itself as one of the leading institutes in research and education in IT, with one of the finest faculty, all of whom are PhDs from across the world. Our graduating batches have obtained excellent technical training which includes core areas like data structures, operating systems, networking, databases, software engineering, etc. Some new courses on advanced topics include data mining, mobile computing, machine learning, IOT, artificial intelligence, information security, image processing, etc. Many of these courses have group projects, which helped the students develop team working abilities. In addition, they have gone through a stream of courses graduating in communication, finance, biotechnology, social sciences, theatre appreciation, and design. Our students have good communication skills and good exposure to problem solving and teamwork. "

Mission

The mission of IIIT-Delhi is to be a global centre of excellence in Information Technology education, training and research. Its twin aims are:

- To carry out advanced research and development in information and software technologies, and in leveraging IT in specific domain areas.

- To train and educate, at both undergraduate and postgraduate levels, engineers of outstanding ability who can become innovators and new product creators.

Vision

The vision of the Institute is to be a world-class research-led institution of higher education in IT and allied areas which

- Is globally respected for research and education

- Offers thriving UG and PG programs

- Is socially relevant, industry facing, and globally connected

It aims to encourage innovation and entrepreneurship in specified domain areas of IT. Towards this end it plans to organize itself as a conglomerate of R&D Centers, some of which would be in partnership with different companies and global organizations. All centers will also be engaged in teaching and thesis guidance. These centers, with various labs, will be the hub of activity, with active contribution from faculty and students - B.Tech., M.Tech. and Ph.D.

About IIITD

Indraprastha Institute of Information Technology, Delhi was created as a State University by an act of Delhi Government (The IIIT Delhi Act, 2007) empowering it to do research and development, and grant degrees. In a relatively short time, it has earned an excellent reputation in India and abroad for being a centre of quality education and research in IT and interdisciplinary areas.
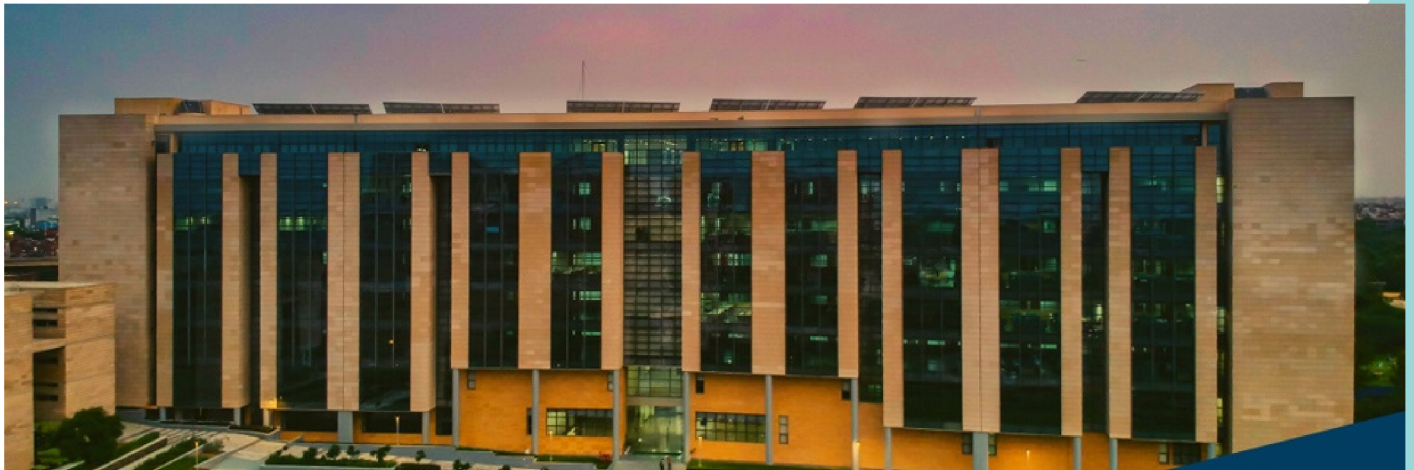
Established in 2008, the institute has grown to be recognized as one of the most promising young institutions for education and research in India. IIITD offers one of the most up-to-date curricula that prepares the students for high-end industry careers as well as for higher studies. IIIT Delhi is distinguished by its excellent faculty, who are all PhD recipients from institutions of repute from around the world. The faculty is actively engaged in research and students are also encouraged to take up innovative research projects.

The campus promotes a host of student activities to improve their soft skills, which are imperative for one to excel in his/her workspace. IIITD's Incubation Centre provides a platform for students to come up with unique ideas that address technology-based problems in IT research and entrepreneurship.

There are 25 active student-driven clubs to encourage the active participation of students in various extracurricular and sports-related activities. The academic programs are accredited by the National Board of Accreditation (NBA). The institute has been accorded 12-B status by the University Grants Commission (UGC).

Infrastructure

IIIT Delhi has been operating in its permanent campus spread over 25 acres of land in Okhla Industrial Estate Phase III. The institute is running several labs and facilities to support its teaching and research work being carried out by its faculty members, research scholars, and students.
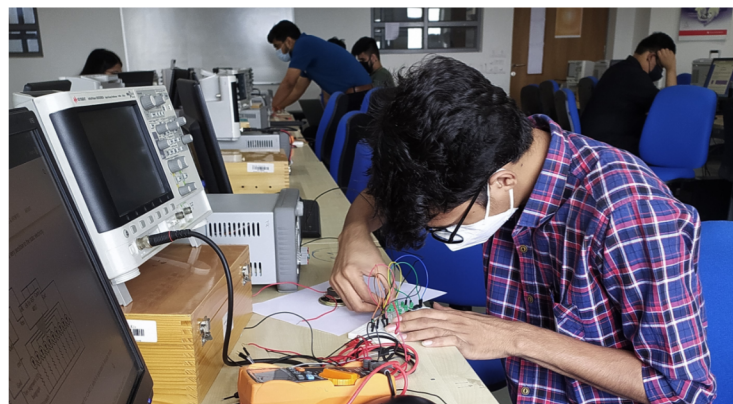

The Institute has an auditorium of capacity 500, and a total of 25 lecture halls of varying sizes. The lecture hall block has several labs on the second and third floors. The Faculty and Research wing has a capacity of 120 faculty offices and 58 research labs, along with Ph.D. and M.Tech. labs. The Library and Information Centre has common study areas for students on multiple floors and a highly equipped library on the first floor. The Dining and Recreation Centre contains the mess which spreads over two floors, a cafeteria, and facilities for extracurricular activities such as music, art, table tennis, pool tables, etc.

IIITD provides air-conditioned hostel facilities to its students. The institute has its own sports block with facilities like a swimming pool, yoga room, gymnasium, and squash courts. Other sports facilities including lawn tennis courts, badminton and basketball courts, a football field, and a volleyball ground reside on the campus.
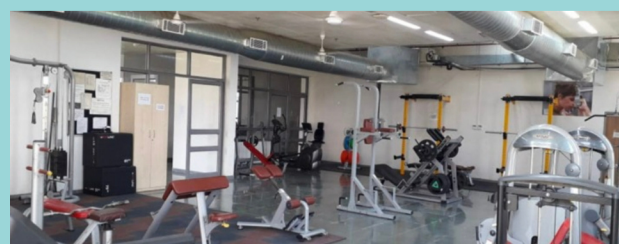
Our Faculty

IIIT Delhi faculty members have earned their PhDs from fine institutions of the world, with two-thirds of them from prestigious universities in Europe and the USA.

Faculty members of this institute are consistently involved in top-quality research. IIITD boasts of a highly qualified and capable faculty. A number of papers have been published and accepted in numerous well-known international journals and conference proceedings in the recent academic years. The Institute now has over 87 permanent, 12 visiting, and 41 adjunct faculty members.

Research at IIITD

Excellence in research is essential for an institute to gain global stature. IIIT-Delhi is a research led-institute that aims to have focussed research groups in some areas of IT and some domain areas. The institute has received a grant from TCS. Each year we get funds from Microsoft for summer research projects, under the guidance of the faculty. Researchers from IIIT Delhi have received several best paper and poster awards at international conferences. Various projects have been sponsored by agencies like Meity, DRDO, DST, DIT, Indo-US Foundation, Microsoft, SAP etc

Extensive research is ongoing in several domains, some of which include: Artificial Intelligence, Cryptology, Program Analysis Graphics, Security, Cognitive Neuroscience, Machine Learning, Deep Learning, NLP, CV, VLSI.

Many PhD students have received PhD Fellowships from TCS, IBM, Microsoft. The aim is to build systems and tools that are of direct interest to different stakeholders like the citizens, Government, and industry, as well as to create awareness amongst the public about Cybersecurity and privacy in India. The center also conducted high-end technical training. Focus areas are secure coding, protecting critical infrastructure, privacy, and security in online social media.

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Research Labs

Some of the _Research Groups_ at IIITD:

- Program Analysis Group
- Graphics Research Group
- High-Speed Electronics Group
- Visual Conception Group

Some of the _Research Centres_ at IIITD:

- DataKart Centre of Excellence
- Centre of Excellence in Healthcare
- Centre for Design and New Media
- Centre of Excellence on Light Fidelity
- Centre of Technology in Policing
- Infosys Centre for Artificial Intelligence
- Centre of Excellence on Sustainable Mobility

Some of the _Research Labs_ at IIITD:

- Mobility and Optimization Lab
- Human-Machine Interaction Lab
- Advanced Multi-core Systems Lab
- High Performance Computing Lab
- Nanoscale Devices and Circuit Lab
- Accessibility and Inclusive Design Lab
- The Chemosensory Lab (Ahuja Lab)
- Cryptology Research Group (CRG) Lab
- Systems and Mathematical Biology Lab
- RegGen Lab - Regulatory Genomics Lab
- Ray Lab - Computational Structural Biology
- Tav Lab - AI/ML for Medicine and Public Health
- The Translational Biology Lab (Dhanjal Lab)
- Signal Processing and Bio-medical Imaging Lab
- Raghava Lab
- Melange Lab
- MIDAS Lab
- Weave Lab
- Living Lab
- Wirocomm Lab
- Space Systems Lab
- Academic Writing Lab
- Cross-Caps Lab
- Networks Research Lab
- NeatAI Servo Lab (Nice Lab)
- Complex Systems Lab
- Visual Cognition Lab
- Algorithms to Architecture Lab
- Laboratory for Computational SS

Demographics

B.Tech. Batch Graduating in 2023

Total Students: 450

- A: CSE, Female
- B: ECE, Female
- C: CSAM, Female
- D: CSD, Female
- E: CSSS, Female
- F: CSB, Female
- G: CSAI, Female
- H: CSE, Male
- I: ECE, Male
- J: CSAM, Male
- K: CSD, Male
- L: CSSS, Male
- M: CSB, Male
- N: CSAI, Male

Female 86

Male 364

A 26 · B 7 · C 12 · D 14 · E 12 · F 9 · G 6
H 108 · I 70 · J 56 · K 41 · L 35 · M 38 · N 16

M.Tech. Batch Graduating in 2023

Total Students: 229

- A: CSE, Female
- B: ECE, Female
- C: CB, Female
- D: CSE, Male
- E: ECE, Male
- F: CB, Male

Female 73

Male 156

A 45 · B 19 · C 9 · D 97 · E 54 · F 5
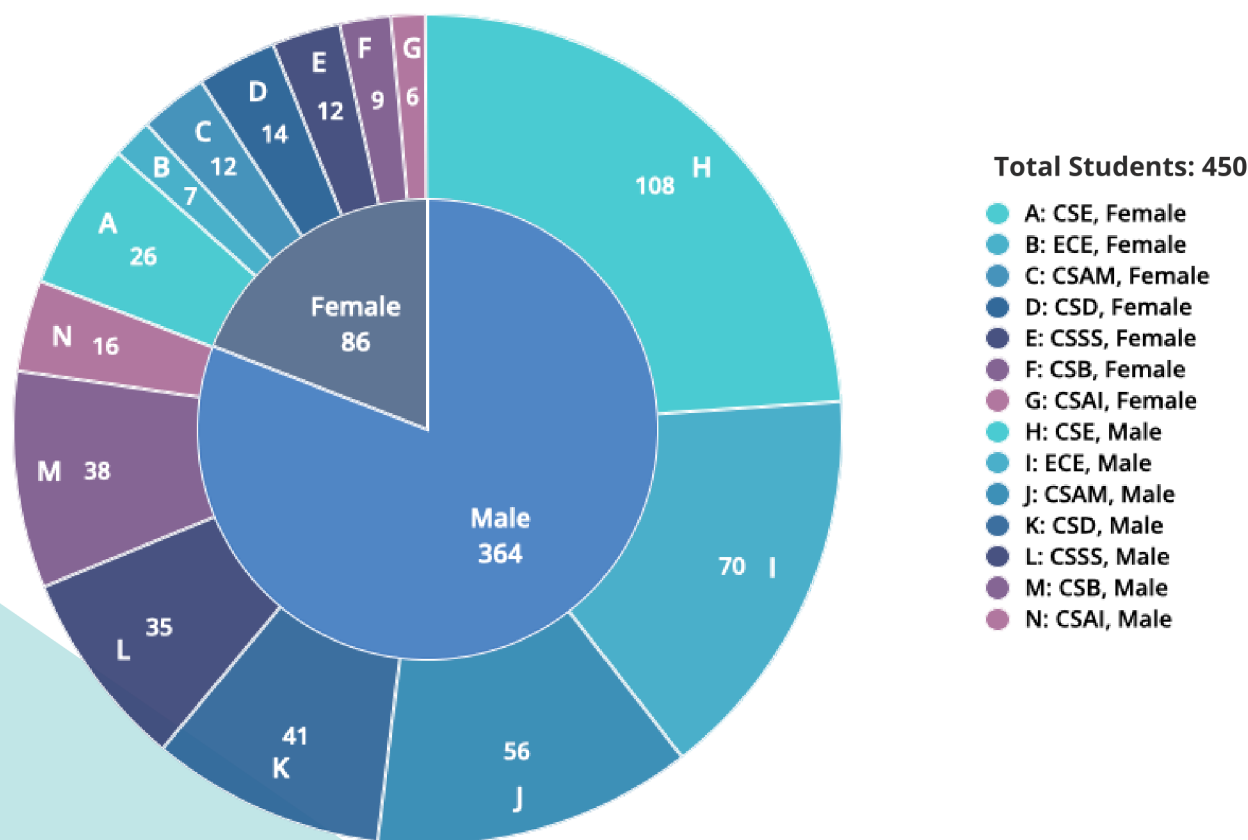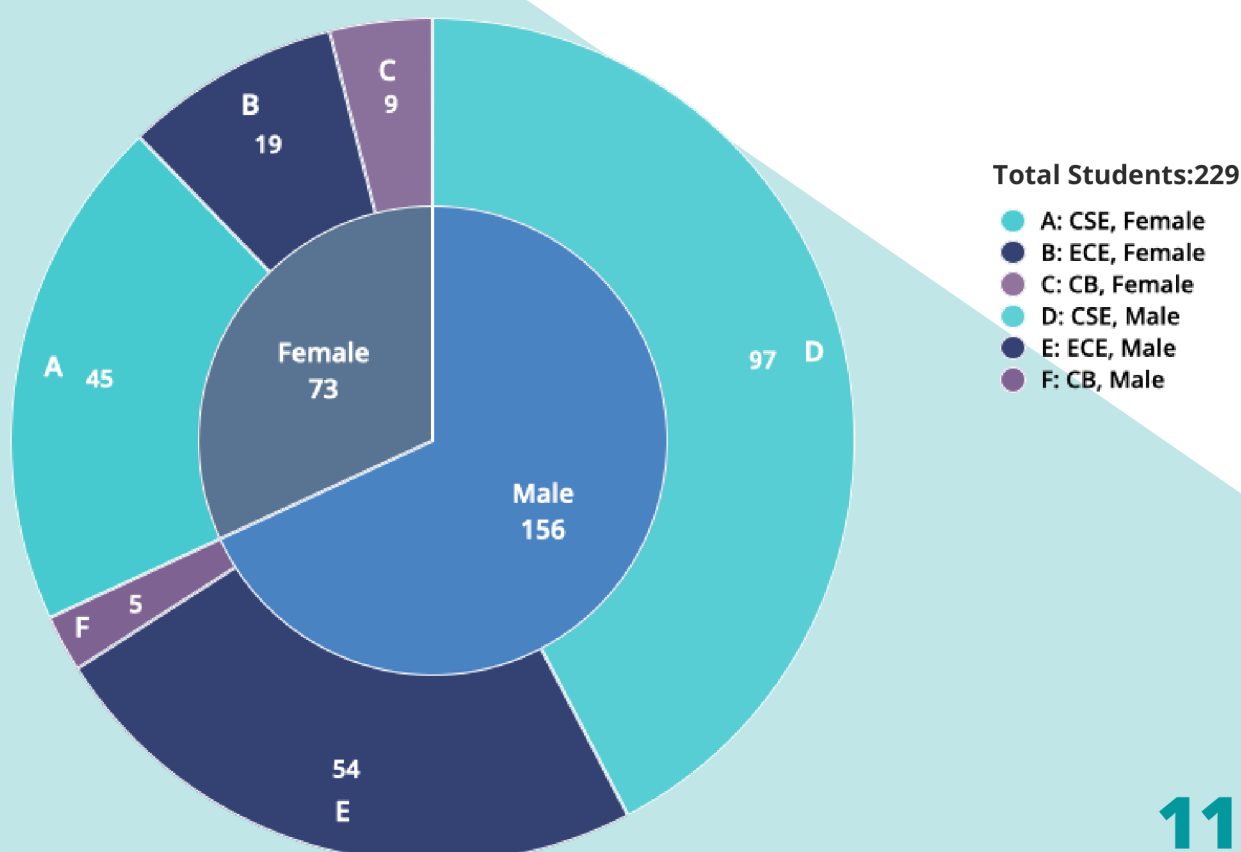
Demographics

Pre-final Batch Graduating in 2024

The undergraduate class of 2024 has 504 students under 7 UG programs - CSE, ECE, CSAI, CSAM, CSD, CSSS, and CSB.

These students are eligible to apply for short and long-term internships :

1) Summer Internship:
Duration - May - July (06 to max 08 weeks)

2) Semester Long Internship:
Duration - January - June (04 to 06 months)
B.Tech. students can go for a semester-long internship in their 8th semester (starting from January) post fulfilling academic requirements.

CSAI 28
CSB 52
CSSS 50
CSD 61
CSAM 78
ECE 78
CSE 157
Total Students: 504

Demographics
600
400
200
0
Total Students   Male   Female
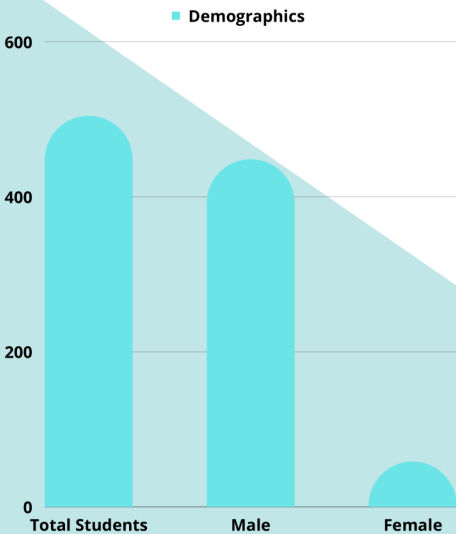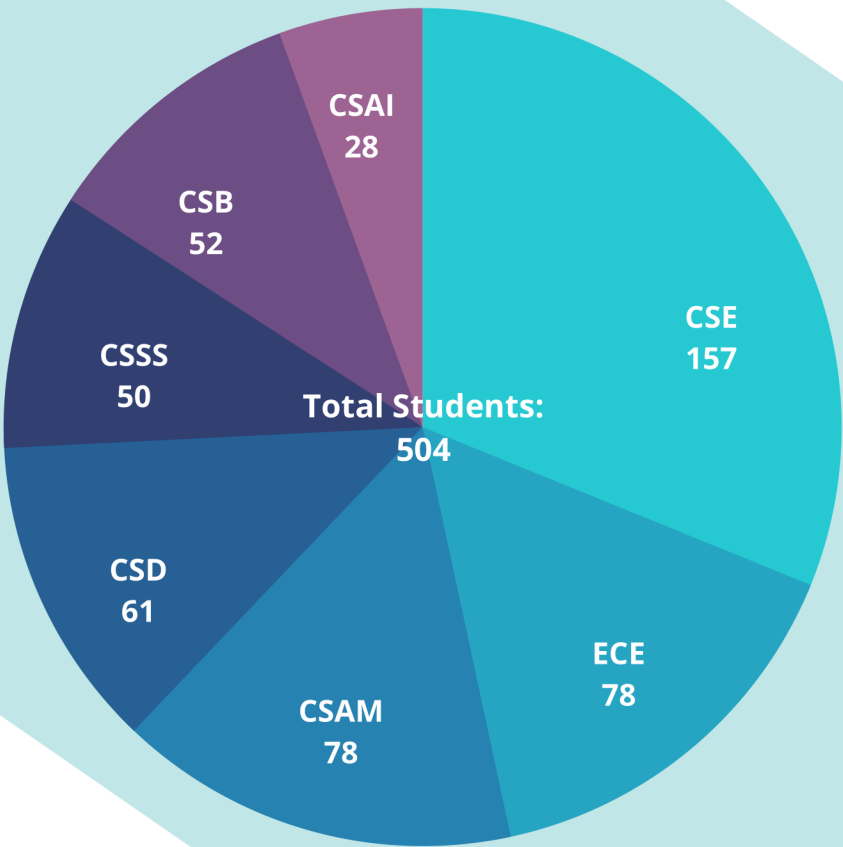
Academic Programs

There are 3 academic programs at IIITD.

The **BTech program** comprises of 7 UG programs listed as Under -

- CSE - Computer Science and Engineering
- ECE - Electronics and Communication Engineering
- CSAI - Computer Science and Artificial Intelligence
- CSAM - Computer Science and Applied Mathematics
- CSD - Computer Science and Design
- CSSS - Computer Science and Social Sciences
- CSB - Computer Science and Bio Sciences.

The **MTech** students are offered the following programs and specializations:

- Computer Science and Engineering (CSE) - Artificial Intelligence, Data Engineering, Information Security, Mobile Computing
- Electronics and Communication Engineering (ECE) - VLSI and Embedded Systems, Cyber-Physical Systems, Machine Learning
- Computational Biology (CB)

The **Ph.D. program** at IIIT-Delhi empowers students to become part of the global research ecosystem and contribute to research organizations. The students are offered Ph.D. programs in the following areas-
- Computational Biology (CB)
- Computer Science and Engineering (CSE)
- Electronics and Communications Engineering (ECE)
- Human-Centered Design (HCD)
- Mathematics (Maths)
- Social Sciences and Humanities (SSH)

CSE

The main objective of the BTech and M.Tech CSE program is to equip students with a solid core of computer science courses with electives from the field of Artificial Intelligence, Bioinformatics, Finance and Economics. It prepares the students with a strong engineering background along with an aptitude for research and development. The curriculum imparts foundational knowledge coupled with industry-relevant skills making students fit for roles like SDE, Data Scientist, Big Data Analyst, Full-Stack developer, Security and Systems engineer, ML engineer, Robotics, etc.

BTECH CSE

The B.Tech program prepares students to blend innovation and creativity and build quality problem-solving skills in CSE. It creates an understanding and the ability to use advanced techniques and tools in different areas of computing. Besides preparing students for careers in CSE, it also enables them to pursue advanced studies for core CSE research careers. The curriculum for the CSE program focuses on the fundamentals of computer science, as well as the implementation and evaluation of computer-based applications which are relevant in the modern context. Students start with core CSE courses, with the possibility of doing Economics and Finance, Social Sciences, Biology, and Design courses later. The B.Tech. program requires students to complete 152 credits.

Core Courses

- Introduction to Programming
- Linear Algebra
- Digital Circuits
- Data Structures and Algorithms
- Computer Organisation
- Probability and Statistics
- Basic Electronics
- Advanced Programming
- Operating Systems
- Discrete Mathematics
- Fundamentals of Database Management Systems
- Algorithm Design and Analysis
- Computer Networks

Electives

- Machine Learning
- Artificial Intelligence
- Digital Image Processing
- Compilers
- Computer Graphics
- Computer Vision
- Mobile Computing
- Deep Learning
- Natural Language Processing
- Foundations of Computer Security
- Data Mining
- Foundation of Parallel Programming
- Distributed Systems
- Applied Cryptography
- Networks and System Security
- Information Retrieval
- Topics in Software Engineering

MTECH CSE

The M.Tech program prepares students to blend innovation and creativity and build quality problem-solving skills in CSE. It creates an understanding and the ability to use advanced techniques and tools in different areas of computing. Besides preparing students for careers in CSE, it also enables them to pursue advanced studies for core CSE research careers. The curriculum for the CSE program focuses on the fundamentals of computer science, as well as the implementation and evaluation of computer-based applications which are relevant in the modern context. The M.Tech. program requires students to complete 48 credits.

Core Courses

- Modern Algorithm Design
- Randomized Algorithms
- Graduate Algorithms
- Computer Architecture
- Mobile Computing
- Wireless Networks
- Program Analysis
- Information Retrieval
- Compiler
- Artificial Intelligence
- Statistical Machine Learning

Electives

- Information Retrieval
- Data Mining
- Computer Vision
- Deep Learning
- Foundations of Computer Security
- Data Mining
- Reinforcement Learning
- Theories of Deep Learning
- Image Analysis
- Natural Language Processing
- Mobile Computing
- Deep Learning

CSAI

The main objective of the BTech Computer Science and Artificial Intelligence program is to provide students with a unique path to develop a stronger understanding and gain experience in theoretical and practical aspects of Artificial Intelligence (AI) and Machine Learning (ML) technologies.

The focused approach on the fundamentals of AI from the beginning aims to better prepare students to undertake industry careers involving innovation and problem solving using AI and ML, along with other career options like SDE, Data Science roles, Applied Science, and are equipped with knowledge for any role offered to a CS student.

BTECH CSAI

Bachelor of Technology in Computer Science and Artificial Intelligence (CSAI) is a specialized program in the fields of Artificial Intelligence (AI) Machine Learning (ML) with emphasis on hands-on practice which helps students develop a strong knowledge base of the respective subjects.

The course is designed on the basis of an "inverted pyramid" which starts with foundation strengthening in basic computing and AI-oriented courses. Furthermore, they get an opportunity to explore applied domains such as computer vision natural language processing, cognitive AI, Robotics, and autonomous systems.

At the end of CSAI Btech program, students will have, ability to model and analyse problems using appropriate mathematical, computational and AI concepts taught, ability of apply and develop AI algorithms to transform large amount of data into intelligent decisions and behaviour.

Core courses

- Data Structures and Algorithms
- Algorithm Design and Analysis
- Operating Systems
- Computer Organisation
- Computer Networks
- Probability and Statistics
- Introduction to Intelligent Systems
- Artificial Intelligence
- Machine Learning
- Statistical Machine Learning
- Convex Optimization
- Deep Learning
- Reinforcement Learning
- Ethics in Artificial Intelligence
- Discrete Mathematics

Electives

- Advanced Machine Learning
- Data Mining
- Big Data Analytics
- Data Science
- Probabilistic Graphical Models
- Human-AI Interaction
- Blockchain and Cryptocurrency
- Semantic Web/Knowledge Graphs
- Computer Vision
- Natural Language Processing
- Speech Recognition and Understanding
- Cryptography
- Multi-Agent Systems
- Collaborative Filtering Systems
- Robotics

CSAM

Computer science and Applied Mathematics is aimed at training students in the fundamental theory of all aspects of computer science, mathematical modelling and simulation, analytical computational techniques, data analysis along with probabilistic and statistical tools. Covering a wide variety of computer science and math fundamentals and skillsets makes them fit for all Software Development Engineer, Data Science, Full Stack Development and Machine Learning roles, and are equipped with knowledge for any role offered to a CS student.

BTECH CSAM

The rising utilisation of complex numerical instruments and strategies pair with computational tools in a few regions like computational money, science, online business, climate determining, and information science inspires the requirement for a program that will create graduates with computational abilities as well as the capacity to involve modern numerical ideas and devices in request to handle these issues.

The program is similar to the Mathematics and Computing programs operating in many leading Institutions. The program has a small set of core courses in both Computer Science and Mathematics, and many electives which can be taken from both the disciplines. This enables the students to build a program most suitable for them. The Computer Science and Applied Mathematics program plans to foster such alumni.

Core courses

- Data Structures and algorithms
- Systems Management
- Real Analysis
- Computer Architecture and Operating Systems
- Discrete structures
- Abstract algebra
- Theory of computation
- Algorithm design and analysis
- Linear Optimization/Convex Optimization
- Statistical Inference
- Probability and Statistics
- Advanced Programming

Technical Electives

- Advanced Programming
- Graph Theory and Number Theory
- Database Management Systems
- Semantic Webs
- Scientific Computing
- Natural Language Processing
- Machine Learning
- Advanced Machine Learning
- Computer Vision
- Deep Learning
- Data Science
- Statiscal Machine Learning
- Reinforcement Learning
- Data Mining
- Internet of Things
- Computer Networks

BTECH CSD

The program aims to develop CS and Design and Digital Media capabilities. Students are not only well versed in understanding the foundations, limitations and capabilities of computing but also self-reliant in making efficient software solutions approachable to the common masses by bridging the gap, i.e., they are able to independently investigate a problem and solve it by a Human-Computer Interaction(HCI) design process.

This course prepares students to undertake industry careers involving understanding a problem, finding a solution for it, then creating or inventing that solution, which uses both design thinking as well as programming skills. So, they can pursue and indulge in SDE, VR/AR Software Development, Human Interactive Systems, Prototyping, UI-UX, Data Science, Machine learning, Audio Visuals Analysis roles, and are equipped with knowledge for any role offered to a CS student.

BTECH CSD

Students of this program compete with their counterparts using suitable algorithms, data structures, and other computing techniques. Along with this, they apply their understanding of design principles and techniques to develop effective solutions to human/societal problems using a learnt and practised tech stack. The program will prepare socially empathetic students to work in the CS/IT industry and digital media industry, showcasing a more diverse and holistic skillset.

Core Courses

- Data Structures and Algorithms
- Algorithm Design and Analysis
- Advanced Programming
- Computer Organisation
- Operating Systems
- Fundamentals of DBMS
- Linear Algebra
- Human Computer Interaction
- Visual Design and Communication
- Design Perspective and Processes
- Design of Interactive Systems
- Research Methods in Social Science and Design

Electives

- Computer graphics
- Virtual Reality
- Data visualization
- Digital Image processing
- Spatial and Mobile computing
- Computer vision
- Machine learning
- Usability studies and evaluation
- Visualization
- Game design and development
- Animation & Graphics
- Special effects
- Non Linear Editing
- Digital audio design and synthesis
- Wearable Applications
- User Interface Software and Technology

CSB

The main objective of the B.Tech CSB program is to yield students who are proficient in Computer Science Engineering and have a theoretical and practical experience in Bioinformatics. The program aims to prepare students to undertake corporate, research or entrepreneurial innovation and problem solving using computational techniques and technologies. In addition to software development roles, students become fit to pursue careers in core bioinformatics, epidemiology and showcase a holistic understanding of computer science as applied to study life processes. Students are equipped with knowledge for any role offered to a CS student.

BTECH CSB

With the advent of high-throughput techniques, biological sciences are grappling with a paradigm shift toward data-intensive explorations and challenges for managing and analysing massive data. Students are well-versed in making progress on these frontiers and have insight into suitable algorithms, data structures, machine learning techniques, mathematical modelling, programming skills and biological processes.

Core Courses

- Data Structures and algorithms
- Operating Systems
- Advanced Programming
- Algorithm Design and Analysis
- Fundamentals of Database Management Systems
- Computer Organisation
- Linear Algebra
- Probability and Statistics
- Multivariable Calculus
- Cell Biology and Biochemistry
- Genetics and Molecular Biology
- Practical Bioinformatics
- Algorithms in Computational Biology

Electives

- Computer Networks
- Machine Learning
- Natural-Language Processing
- Big Data Mining in Healthcare
- Data Science in Genomics
- Computer Vision
- Big-Data Analytics
- Blockchain and Cryptocurrency
- Cryptography
- Computer aided drug discovery
- Introduction to Computational Neuroscience
- Machine Learning for Biomedical applications
- Biomedical Image Analysis

MTECH CB

Though there is a significant advancement in modern health care, the development of the biological aspects are backed up by the progress in computational and statistical tools. Massive volumes of genomics data are generated quickly due to new biotechnological approaches, and analyzing these data takes a significant amount of subject knowledge, a strong computational background, and strong programming abilities. This course offered at IIITD focuses on building the foundation for modern biology and Biochemistry. It also brings in the mathematical approach toward the biological aspects. The research area targets the computational algorithms required for computational biology and bioinformatics.The requirement for an M.Tech CB student is 48 credits. Of which, 32 credits include the course work and the rest 16 credits for Thesis.

Core Courses
- Foundations of Modern Biology
- Algorithms in Computational Biology
- Cell Biology and Biochemistry
- Introduction to Mathematical Biology
- Machine Learning for Biomedical Applications
- Network Biology
- Introduction to Quantitative Biology
- Statistical Computation
- Stochastic Simulation and Systems Biology
- Cheminformatics
- Introduction to Computational Neuroscience
- Systems and Synthetic Biology
- Practical Bioinformatics
- Stochastic Simulations in Systems Biology and Biophysics

Elective Courses
- Molecular mechanics and Biological physics
- Network Science
- Data Mining
- Machine Learning
- Modern Algorithm Design
- Computer Graphics
- Image Analysis/Digital Image Processing
- Advanced PRML
- GPU Computing
- Probabilistic Graphical Models
- Mobile Computing
- Foundations of Parallel Programming
- Big Data Analytics
- Statistical Computation
- Graph Theory

CSSS

The computer science and social science program recognises that the tools and thinking apparatus required to solve a lot of problems are embedded in other disciplines. The program aims to develop graduates who are well versed in solving problem, in the one of the following disciplines: economics, sociology/ anthropology, psychology, liberal arts, communication and humanities, using computer systems and technologies.

The interdisciplinary curriculum makes the students industry ready for roles like SDE, Data Scientist, Full-stack developer, Business Consultant, Human Resources, Media Planner, Social Scientist, Management roles and are equipped with knowledge for any role offered to a CS student.

BTECH CSSS

The program aims to develop the ability to design and implement efficient and effective software solutions using suitable algorithms, data structures, and other computing techniques. Their understanding of social science foundations across disciplines like Economics, Sociology, and Psychology empowers the students to use analytical methods, including data collection, evaluation, and analysis, to understand issues from different social science perspectives.

Students are imparted with the skills to build and integrate concepts, principles, and methods from various Social Science disciplines and Computer Science domains to apply these in addressing issues relating to society, especially at the intersection of social and technological domains.

Core Courses

- Introduction to Programming
- Data Structures and algorithms
- Operating Systems
- Advanced Programming
- Computer Organisation
- Algorithm Design and Analysis
- Fundamentals of Database Management Systems
- Linear Algebra
- Probability and Statistics
- Discrete Mathematics
- Convex Optimization
- Introduction to Sociology/Anthropology
- Introduction to Sociology and Anthropology
- Critical Thinking and Readings in Social Sciences
- Econometrics
- Research Methods in Social Science and Design

Electives

- Computer Vision
- Data Mining
- Machine Learning
- Artificial Intelligence
- Digital Image Processing
- Compilers
- Computer Graphics
- Mobile Computing
- Deep Learning
- Natural Language Processing
- Social Network Analysis
- Cognitive Psychology
- Attention and Perception
- Learning and Memory
- Information Technology and Society
- Sociological Theory
- Neuroscience of Decision Making
- New Media and Politics

ECE

The main objective of the ECE program is to equip students with necessary core competency in major areas such as telecommunications, energy and electronic sectors while encouraging the development of essential skills for integration of hardware and software components. Students are free to select electives to specialize in Circuits and VLSI, Communication Engineering, Signal & Image Processing and Control & Embedded Systems, and are equipped with knowledge for any role offered to a CS student.

BTECH ECE

The main objective of the BTech. ECE program is to produce students who are well prepared for industry with necessary core competency to succeed in the long-term in engineering/ entrepreneurship careers(post B.Tech.), and who are well prepared to undertake PG studies and research careers.

The program starts with introducing some application oriented and computing courses first, in order to equip students with the requisite tools, and allows the possibility of doing core engineering courses later. The students are required to fulfil 32 credits of ECE Electives, other than the core courses.

Core Courses

- Introduction to programming
- Digital circuits
- Data structures and algorithms
- Introduction to Human Computer Interaction
- Linear Algebra
- Signals and Systems
- Probability and Statistics
- Basic Electronics
- Computer Organisation
- Multivariable calculus and differential equations
- Integrated electronics
- Embedded logic design
- Circuit Theory and Design
- Fields and waves
- Principles of communication systems

Electives

- Digital Communication Systems
- Digital Signal processing
- Internet of things
- Image analysis and machine learning
- Advance Machine Learning
- Natural Language Processing
- Applied Cryptography
- Robotics
- Deep Learning
- Computer Vision
- Technical Communication
- Ecology Evolution and Environment
- Scientific Computing
- Digital VLSI Design
- Solid State Devices
- Foundation of Cyber Security
- Introduction to Nano-electronics
- Integrated Circuit Fabrication
- Quantum Material and Devices

MTECH ECE

The main objective of M.Tech The ECE program is not just to bring in a theoretical perspective of designing and developing IC-based systems but also to develop the skills in individuals to view things with a practical approach. This course provides students hands-on experience with industry-standard tools. The coursework as well is designed as per the industry requirements.

The requirement for an M.Tech ECE student is 48 credits. Of which, 32 credits include the course work and 16 credits of a scholarly paper.
A student has an option to opt for either of the following:
- Thesis along with course work.
- Scholarly paper along with course work (without thesis)
- Only coursework (without any specialisation.)

Specialisations

- VLSI and Embedded Systems
- Cyber Physical Systems
- Machine Learning
- General

Core Courses

- Analog CMOS Design
- Digital VLSI Design
- Advanced Embedded Logic Design
- VLSI Design Flow
- Computer Architecture
- Memory Design and Test
- Mixed Signal Design
- Solid State Devices
- Statistical Signal Processing
- Theories of Deep Learning
- Probabilistic Graphical Models
- Natural Language Processing

Elective Courses

- IC Fabrication
- Introduction to Nanoelectronics
- Artificial Intelligence
- Deep Learning
- Digital Image Processing
- Reinforcement Learning
- Bayesian Machine Learning
- Advanced Machine Learning
- Computer Vision
- Wireless Communications
- Wireless system implementation
- Mobile Computing
- Robot Dynamics and Control
- Reinforcement Learning
- Modeling and Analysis of 5G Networks

From the Placement Desk

Ms. Rashmil Mishra

GM (Corporate Relations, Placements & IOP)

"It gives us immense pleasure to extend to you a cordial invitation to participate in the Campus Placement Process at IIIT-Delhi to experience and evaluate the dexterity, competencies, skills and talents of our budding engineers and absorb them into your esteemed organisations.

It is my sincere belief that your esteemed organisation and IIIT-Delhi stand to gain immensely from this symbiotic relationship. Our students have the necessary skills and ability to become a successful & valued member of any organisation. It would be a proud privilege to host you, and we would be most delighted to be involved in such a partnership."

Placement Procedure

1) The Placement office (nodal point for placements & Internship at IIITD) sends invitations to companies/organizations along with relevant information.

2) Company/ Organization fills in a JAF (Job Announcement Form) containing details of the job offer (pay package, location, allowances and other bonuses). Along with the preferred dates of campus visit.

3) The duly filled JAFs should be sent to Placement Cell (rashmil@iiitd.ac.in).

4) Placement Office allocates dates to companies for campus interviews based on various details given by companies. The company/ organization confirms the dates with the Placement Office.

5) Companies come down to the campus on the allotted date/s and conduct PPT /tests and/or interviews according to their recruitment process.

6) The company/ organization is required to furnish the final list of selected students on the same day of campus visit.

7) The company should hand over the duly signed hard copy of the final selection list to the placement cell.

8) In case the company is unable to declare the result on the same day, then the student is allowed to participate in other companies & the final status will depend upon who declares the result first.

9) The purview of the Placement Cell is restricted only to the offers made as part of the campus placement process.

10) The company shall provide the offer letters to the Placement office and not directly to the students.

Placement Policy

Classification of Company

Will be based on compensation packages, relationship & record of recruitment at IIIT-Delhi

A+ Category: CTC >= 11 Lacs per Annum
A Category: 6.5 Lacs > CTC <= 10.5 Lacs per Annum
Companies are allotted dates based on the above parameters.

Job Offer for a student

- If a student's name appears on the final shortlist declared after the Company's process through the Placement Cell, then that would be considered as an Offer to the student.
- A student will be out of campus placement process if he/she gets an offer from A+ Category Company.
- The student is allowed to upgrade for an A+ Category company only.
- PPO Offer is considered as Job Offer; hence the same policy is applicable.

Student Eligibility

All registered students graduating from the institute are eligible to participate in the placement activities.
A student can participate in the placement process of a company subject to the following conditions:

- The cell has confirmed his/her registration.
- He/ She meets the requirements/eligibility criteria specified
  - By the company and
  - By the placement policy
- Once a student is selected/ made an offer by A+ company, he/she is out of the campus placement process.

Placement Policy

Acceptance of an Offer
- Offer from A+ Category Company is deemed to be accepted & the student is out of campus placement process.
- A time period will be declared where students have to inform the Cell regarding his/her decision on the offer.
- The placement cell will send an official confirmation mail to the companies regarding the acceptance or rejection by end of March each year .
- A student who has accepted an offer is expected to join on the given joining date.
- If a student does not join after he/she has accepted the offer a penalty will be imposed by the institute.

Non Acceptance due to further studies
- If a student does not accept an offer due pursuing higher studies (in India or Abroad),in this situation the student needs to inform the placement cell as soon as possible (latest by March end) along with the letter/offer received by the university.
- No penalty of any kind will be imposed, if the above is reported to the placement office in the defined time line.
- If a student does not inform the Placement Cell regarding his/her decision in person and in writing within the declared time period, then it will be deemed as rejection of the offer & the penalty will be imposed.

Internships

Internship is not a mandatory part of the IIIT-Delhi curriculum. However, student/s can opt for following kinds of internships only if they fulfill their academic requirement:

1) Summer Internship:
Duration - May - July (06 to 08 weeks)
Eligibility - Only B.Tech. students can go for a summer internship

2) Semester Long Internship:
Duration - January - June (04 to 06 months)
Eligibility -
- B.Tech. students can go for a semester-long internship in their 8th semester (starting from January) post fulfilling academic requirements.
- M.Tech. can only go for a semester-long internship in their 4th semester (starting from January) post fulfilling academic requirements.

Intern Hiring Process
The company needs to get in touch with the placement cell & share their requirements along with JD & stipend.
Information is shared with the students & the process is further initiated by the placement cell.

Internship Policy
We follow the "**One Student One Internship**" policy for all the above-mentioned internships. All offers are deemed to be accepted.
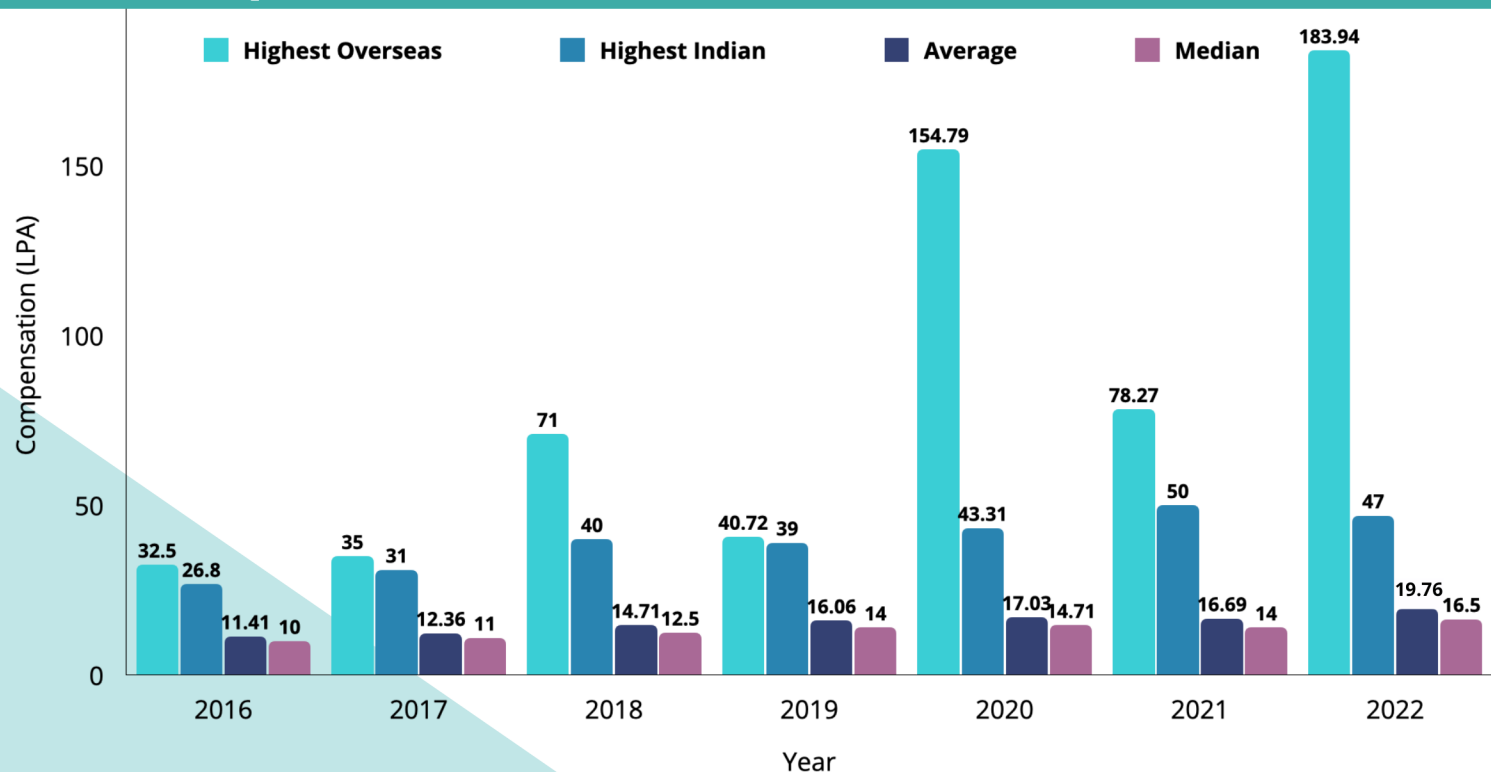
Code of Conduct
A student once registered for the internship needs to participate in the complete process. Failing to do so, leads to debarment from the internship and the placement process.Rejecting an internship offer is not allowed, doing so leads to the debarment both from the further campus internship and campus placement process.
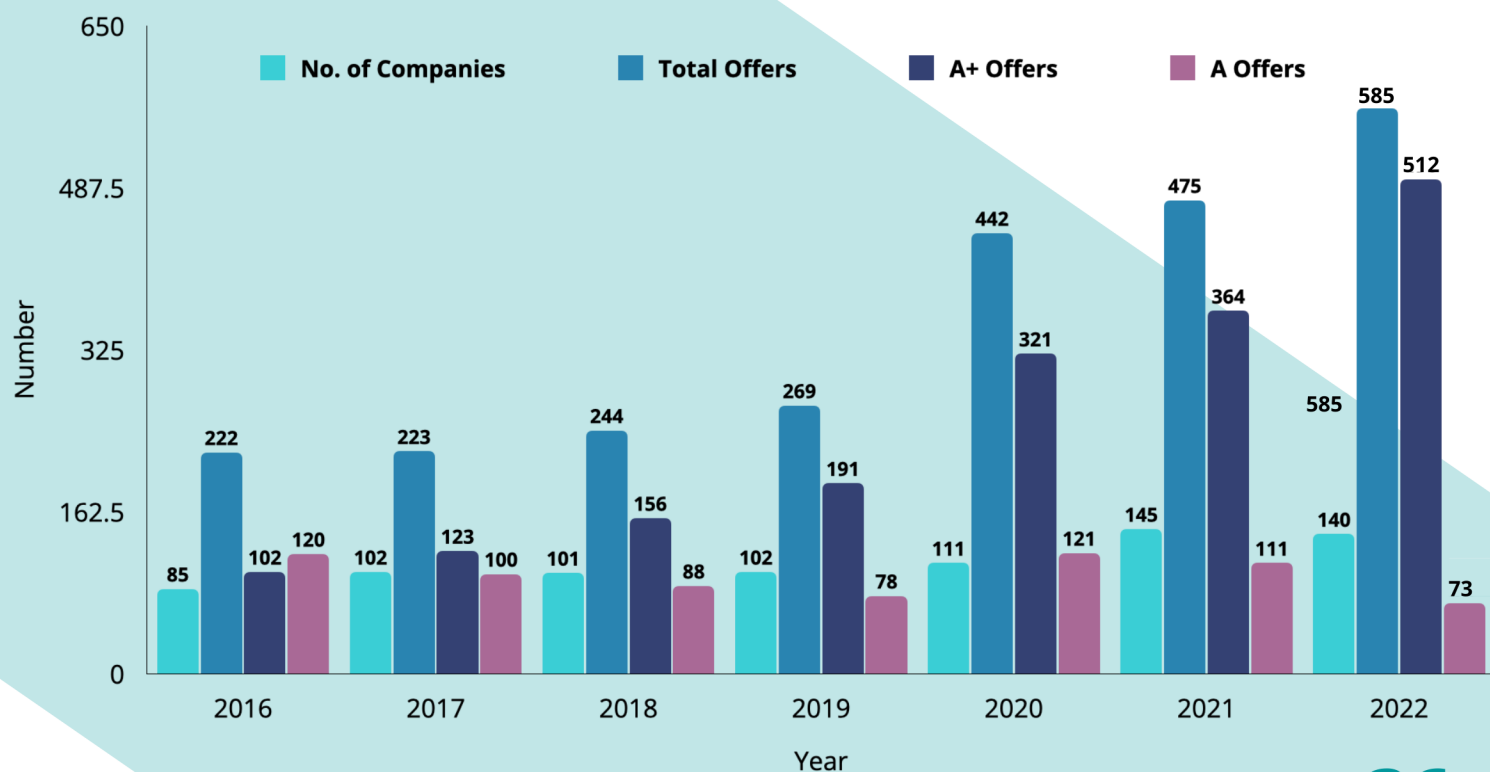
Placement Statistics

Over the Years 2016-22

Compensation (LPA)

Bar chart titled "Compensation (LPA)" with legend: Highest Overseas, Highest Indian, Average, Median

Year	Highest Overseas	Highest Indian	Average	Median
2016	32.5	26.8	11.41	10
2017	35	31	12.36	11
2018	71	40	14.71	12.5
2019	40.72	39	16.06	14
2020	154.79	43.31	17.03	14.71
2021	78.27	50	16.69	14
2022	183.94	47	19.76	16.5

Companies and Offers

Bar chart titled "Companies and Offers" with legend: No. of Companies, Total Offers, A+ Offers, A Offers

Year	No. of Companies	Total Offers	A+ Offers	A Offers
2016	85	222	102	120
2017	102	223	123	100
2018	101	244	156	88
2019	102	269	191	78
2020	111	442	321	121
2021	145	475	364	111
2022	140	585	512	73

Placement Statistics

Percentage Placed

	2016	2017	2018	2019	2020	2021	2022
Overseas Compensation	32.5	35	71	40.72	154.79	78.27	183.94
Highest Indian Compensation	26.82	31	40	39	43.31	50	47
OverallAverage	11.41	12.36	14.71	16.06	17.03	16.69	19.76
Total Companies	85	102	101	102	111	145	140
Total Offers	222	223	244	269	442	475	585
Percentage	88.74	95.45	97.72	97.05	96.62	95.43	98.10

Placement Statistics 2021-22

730 Total Offers

- A: 145
- B: 512
- C: 73
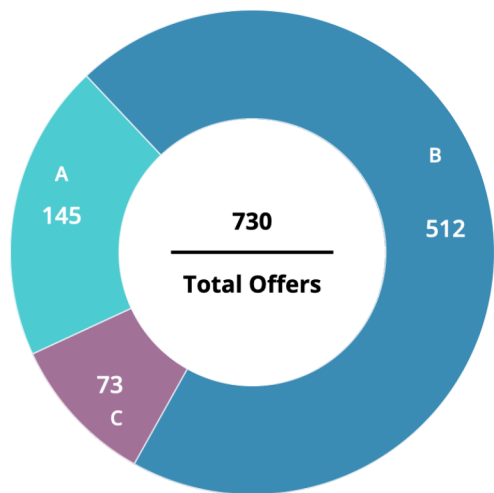
Total Companies: 140+

- A: Internship Offers
- B: A+ Offers (CTC >= 11)
- C: A Offers (6 Lacs > CTC < 11)

	BTech	MTech	Overall
Highest India CTC	47	29	47.00
Highest Overseas CTC	183.94	-	183.94
Average CTC	20.86	17.41	19.76
Median CTC	17.00	15.41	16.75

Percentage Full-time Offers

Undergraduate

- CSE — 100%
- CSAM — 100%
- CSD — 93.62%
- CSSS — 100%
- CSB — 100%
- ECE — 98.41%

Postgraduate

- CSE — 100%
- CB — 87.5%
- ECE — 90.57%

38
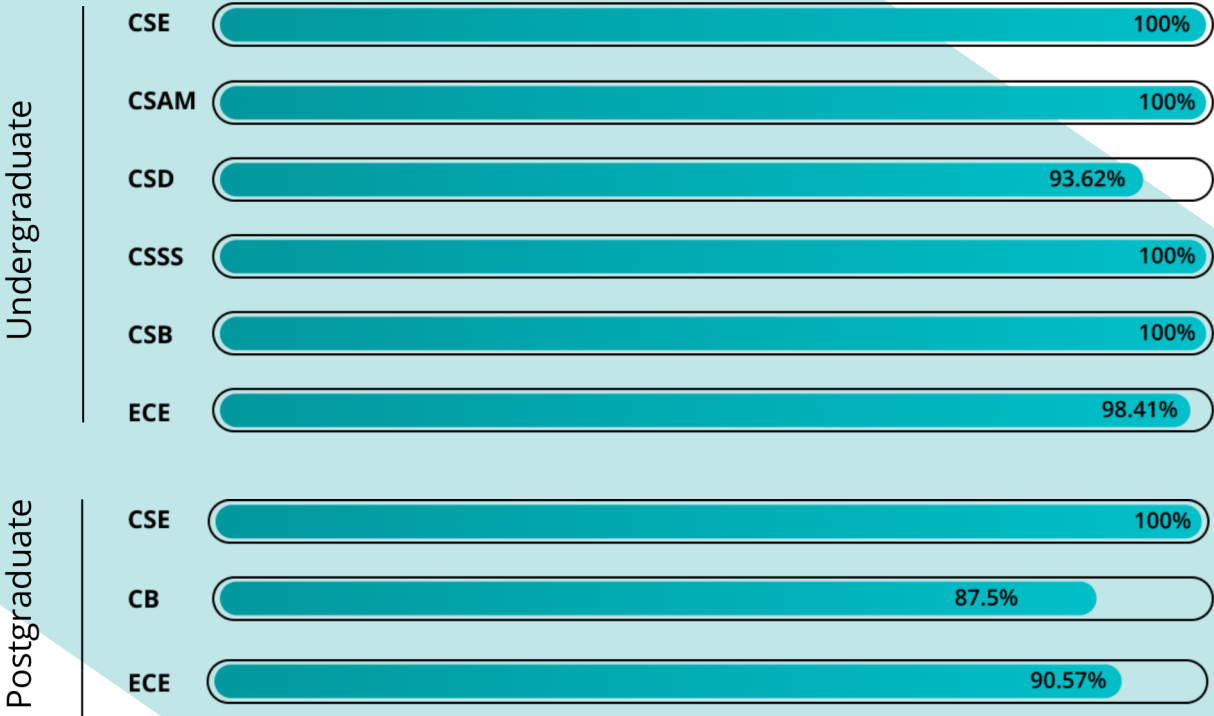
Internship Statistics 2021-22

- A: M.Tech. Final Year
- B: B.Tech. Final Year
- C: B.Tech. Pre-Final Year

140   A

B — 5

392

Total Offers

247   C
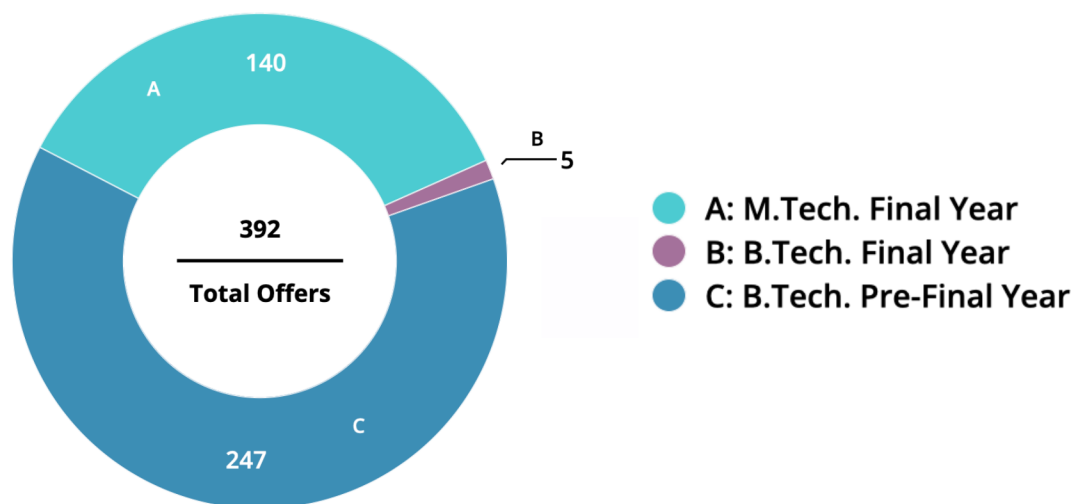
Final Year

	BTech	MTech	Overall
Highest Stipend	125000	100000	125000
Average Stipend	96250	39478	41160
Median Stipend	90000	35000	35000

Pre-Final Year

	BTech	Overall
Highest Stipend	416665	416665
Average Stipend	72830	72830
Median Stipend	50000	50000

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NatWest Group · THALES

planetspark · DELHIVErY

Startup Fair

Startup Fair is an initiative of the Placement and IOP office. It aims to integrate students into the start-up work atmosphere by presenting them with numerous internship opportunities. It is an attempt to bridge the gap between students and start-up ecosystems, and allow them to work in the industry. Connecting start-ups and the youth enables the nurturing of innovations and fresh ideas. This is in line with the Prime Minister's Start-up India initiative.

With things returning to normalcy after COVID-19, this year, the Startup Fair was held in hybrid mode on 20th April 2022. This saw a participation of more than 250 people across different batches and branches. Companies that participated in the startup fair included the likes of Tweek Labs, Scrap Uncle, SpurChat, Expanse Aerospace Pvt. Ltd., Fundwave etc.
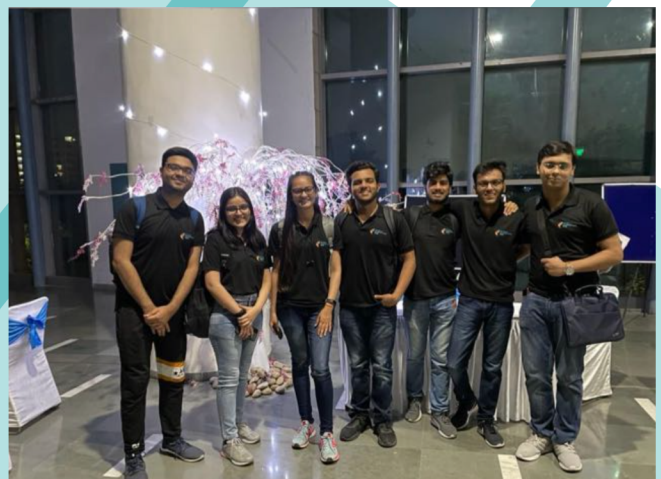
Student Testimonials

Coming to IIIT Delhi as a fresher, our seniors would always tell us that once you've experienced four years in this college, you would be ready for life, and having experienced these four years, I couldn't agree more. IIIT Delhi prepares you for life. The courses are designed for you to push yourself and explore things in ways you haven't before. The primary focus is always on gaining practical knowledge and experience which helps us understand how projects are carried out in the real world. They provide us with opportunities to explore different fields and our interests as well, from finance to psychology or even research in biological sciences for that matter. The opportunities are endless and the support is constant. On top of that, the placement cell works really hard to get companies working in different fields, offering various different profiles so that the students get the opportunity to work in a field they are passionate about.

Garvita Jain, B.Tech CSE, Class of 2022
(Currently working at Goldman Sachs)

IIITD was the turning point of my life. In my two years of masters in computer science, I don't remember a day when I woke up without a new challenge in hand, IIITD moulds you the way you want from world-class research to the best placements in the country. I would personally like to thank Dr. AV. Subramanyam and all the other faculty who put tremendous efforts. Also, the Placement Cell who works so hard to bring fantastic job opportunities for the students. I am so grateful to be a part of this institute.

Arjun Tyagi, M.Tech CSE, Class of 2020
(Currently working at Qualcomm)

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Student Testimonials

Four years at IIIT Delhi have been one of the best experiences of my life. IIITD prepares you for the world; the competitive environment & continuous deadlines push you beyond your limits and help you understand the value of your work. This, combined with the academic effort to push practical projects into each course, enables you to develop the required skills and develop yourself into a professional being. The faculty at IIITD puts a tremendous amount of effort into making courses more industry oriented so as to prepare us better for the corporate world. The Placement Cell makes a huge effort to get better companies year after year, offering numerous job opportunities in reputed organisations.

Munish Thakral, B.Tech ECE, Class of 2020
(currently working at Reliance Jio)

My entire tenure at IIIT Delhi has been a life changing experience. The institute provides ample opportunities to support the students to learn about their interests. From motivating me to understand the basics of electronics to helping me appreciate the intricacies of economics and finance, the professors left no stones unturned to help us achieve excellence. To top it off, the placement cell works really hard to help us get placed in the best companies. In my particular case, I am placed in the finance sector because of my keen interest in it. I would like to express my gratitude to the placement cell for the constant support and various opportunities it provides to all the students.

Mayank Rawal, B.Tech ECE, Class of 2020
(Currently working at Future First)

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Student Testimonials

From the get-go, the curriculum at IIITD focuses on learning by doing rather than on memorising theory. The research facilities and guidance that is available at IIITD is second to none. Undergraduate students are encouraged to word on challenging research problems under the guidance of exceptionally skilled faculty members. Students are allowed to choose from a wide variety of courses ranging from core subjects like 'Linear Algebra' to electives like 'Introduction to Philosophy'. Not just courses, IIITD also supports its students in any career path that they decide to pursue, be it industry, academia or entrepreneurship. The Placement Cell at IIITD is proactive in helping students find the job that fits their skill-set and aspirations perfectly. Around 100 companies visit the campus every year and offer jobs ranging all the way from core profiles like software development to non-technical jobs like consultants/analysts etc.

Akash Deep Singh, B.Tech, Class of 2018
(Currently pursuing a PhD at UCLA)

IIITD finds itself achieving great feats in its small history thanks to its unique approach in teaching and development. At any given time on campus, you would find students working on the newest technologies and fresh ideas. The courses provided are probably the most diverse set students get the freedom to pick and choose! With inclusion of Humanities, Maths, Finance. Biology along with these core courses, the equal emphasis on horizontal and vertical growth is a fresh approach into producing a confident breed of Engineers. Then be it higher education or placements, the infrastructure in place, training and efforts by the placement cell, ensure the bright future of students. Looking back I am forever grateful to this institute for paving the way for me to the career of my choice.

Agam Singh Bajaj, B.Tech, Class of 2018
(Currently working at Goldman Sachs)

Student Clubs

There are 25 active clubs, all of which are initiated and driven by the students. These clubs regularly host intra-college competitions (academic as well as cultural) and sessions open to all students of the institute. We also have student chapters of ACM, IEEE, Enactus, E-Cell and Google DSC.

List of few Clubs at IIITD:

- Astronauts
- Audiobytes
- Finnexia
- Girl-up Udaan
- LitSoc
- Machaan
- Madtoes
- Meraki
- Mic Drop
- Muse
- Philosoc
- Salt n Pepper
- Tasveer
- The 65th Square
- Trivialis
- Bio Bytes
- Byld
- Cyborg
- Dark Code
- Design Hub
- Electroholics
- Evariste
- FooBar
- Leanin
- Women in Tech
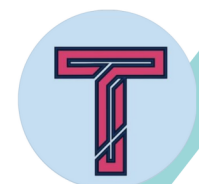
Student Fests

Odyssey | Cultural Fest

The majestic cultural fest of IIIT-D is held in Jan/March every year, with a vision to serve as a platform for those aspiring to turn their visions into tangible reality. Hosting events in the fields of art, design, literature, music, dance and fashion, it is the perfect place to showcase one's talent. Students from various colleges who come to compete and witness a grand Star Night.

Esya | Technical Fest

Esya is a two-day long festival. It stimulates new innovations and carves out hidden talents. Every year, it is held in August hosting approximately 10,000 students from various schools and colleges all over India. Esya is one of the most competitive and widely known technical fests in Delhi organizing 30+ events in the fields of IT, astronomy, and photography.

TEDx

A TEDx event is a day-long gathering held in March/April every year where live TED-like talks and performances are shared with the community. TEDxIIITD brings together a panel of inspiring speakers. The star-studded event is an opportunity to get inspired and network. The team at TEDxIIITD also organises exclusive experiences of Rock Climbing and PhotoWalks.

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Contact T&P

For any assistance regarding
Placements & Internships, please contact:

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Mobile No.: +91-9958859360

Mr Sanjay Chauhan
JM Placement
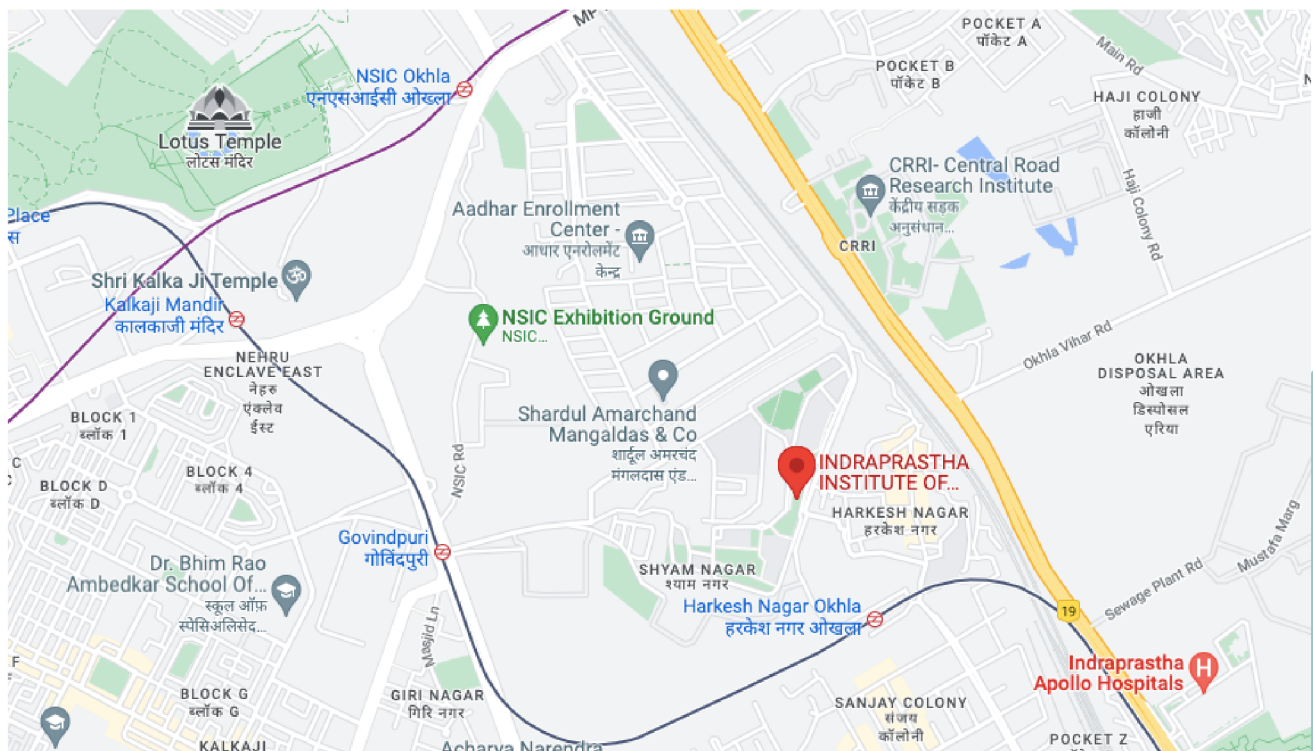(sanjayc@iiitd.ac.in,
admin-placement2@iiitd.ac.in)

Mr. Tapan Kumar
JM(Industry and Outreach Program)
(tapan@iiitd.ac.in)

Mr.Deepak Chaudhary,
Placement Secretary
(admin-placement@iiitd.ac.in)

Location

Okhla Industrial Estate, Phase III,
near Govind Puri Metro Station,
New Delhi, India - 110020

Distance to Institue from IGI Airport
22.1 Kms (46 mins approx.)

Distance to Institue from New Delhi Railway Station
16.6 Kms (34 mins approx.)

Designed by

Ananya Sharma	CSD
Aniket Verma	CSAM
Harman Singh	CSE
Krishnam Omar	CSAM
Meetakshi Setiya	CSE
Neev Swarnakar	CSD

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