











Front and Back Cover Picture and Collage Courtesy: Prof. Bappaditya Manna, IIT Delhi Content: Prachi Sinha, Office of Dean Faculty, IIT Delhi



Indian Institute of Technology Delhi Hauz Khas, New Delhi-110 016, INDIA Phone: 011-26591729 E-mail:pro@iitd.ac.in



cygnusadvertising.

# UNLIMITD





1.1



# UnlimIITD





"

Here at IIT Delhi we

simple philosophy:

Hire brilliant minds.

them to flourish and

then step back and

watch them grow

into world-leaders

have adopted a

create the right

atmosphere for

Welcome to IIT Delhi. If you are looking for an opportunity to work in a world-class institution in India, you have come to the right place! Here at IIT Delhi we have adopted a simple philosophy: Hire brilliant minds, create the right atmosphere for them to flourish and then step back and watch them grow into world-leaders. The first part of this three part formula is ably conducted by my colleagues in their respective departments and centres, many of whom you know as prominent researchers in their areas, and the third part of this formula is in your hands. As the Head of this great institution, let me share our collective vision regarding the second part, the critical link, that takes you from a new hire to a leader in your field.

First, let me tell you about the place you will live your life when you join us: We are located in the vibrant part of the national capital that is popularly called South Delhi.

It is a picturesque 325 acre campus, with some of the country's finest schools, a crèche on campus and many world class research institutions and hospitals within a 2 KM radius. The campus location takes care of most of your worries — from infant or school-going children to working spouses and old parents.

Once your personal life is taken care of, you will, naturally, think of the research environment we offer. We recognise that contemporary research extends beyond theoretical work and we have striven to create a pool of high-end central research facilities with open access to our entire research community. Our experimental facilities, worth US\$ 30 Million, including a 1-Petaflop high performance computation facility, don't just provide you all the resources you need for your research, they also stand as a concrete promise that the expansion and augmentation of existing facilities and the deployment of new facilities is the institute's topmost priority. For the purposes of further growth, IIT Delhi also has created two extension campuses in Sonepat and Jhajjar, measuring an additional 100 acres, which are to be primarily used for research and outreach activities. Major infrastructure projects amounting to over US\$ 100 Million are currently being taken up in the institute to accommodate the expansion needs of the institute.

But growth without vision is incomplete so let me share our vision with you: Our primary goal is to facilitate and grow research in individual disciplines while at the same time encourage and catalyse interdisciplinary research. We lay great emphasis on technology startups and are currently building three massive Science and Technology parks to foster closer industry interactions. We hope to be a global player by creating and transferring cutting edge technologies and providing our mindshare to policy development in an increasingly technologydriven world.

Come and be a part of the IIT Delhi fraternity. We welcome bright minds and nationality is no restriction.

Prof. V Ramgopal Rao

# **Director's** Message



True motivation comes from achievement, personal development, job satisfaction, and recognition 99

- Frederick Herzberg, Founder of Employment Motivation Theory

### Why you'll love working at IIT Delhi...

Research thrives in our 30 academic units that garner faculty and students across disciplines to explore new academic limits and address the most challenging problems of the world. As per QS World University Ranking 2018, IIT Delhi was ranked 39 in terms of Citations per Faculty.

IIT Delhi goes the extra mile to unlock the entrepreneurial mindset of students and faculty. Foundation for Innovation and Technology Transfer (FITT-IITD) which is an industry interface of the institute, offers a platform to budding entrepreneurs by providing them infrastructural, management and networking support to convert their ideas into reality. It has incubated around 100 startups so far. Through FIRE (Faculty Innovation and Research Driven Entrepreneurship) faculty is egged on to work on solving societal problems. They get one year of paid leave and two years of unpaid leave along with a grant of 5 million INR to develop their startup.

IIT Delhi recognizes the importance of being tuned to the fast-changing needs of the industry. To cater to this, a cadre of Professor of Practice has been introduced to promote integration of academia with practical experience. The IIT now seeks individuals with significant professional experience outside the academia to teach at IIT Delhi.

Apart from providing numerous opportunities and platforms for faculty to grow continuously, each faculty is given a seed grant of 2 million INR at the time of joining to jump start their professional growth. The institute also backs research of the students and faculty through high end equipment maintained centrally.

## Why you'll love living in IIT Delhi...

IIT Delhi is a green and vibrant campus in the heart of Delhi. The campus is an oasis in the hustle and bustle of the capital city, providing the best of both worlds, a quiet and safe space to live in with easy access via public transport to any other part of the city. In this issue, we introduce you to the birds on campus.

IIT Delhi has sporting and recreational facilities to keep you in good shape. An Olympic sized swimming pool, tennis courts, squash, basketball, cricket and football fields, table tennis, badminton, to name a few. Spacious apartments and residential bungalows alongside the academic area cuts away the urban commute. IIT Delhi also has modern crèches to take care of your kids while you work, as we strive to provide the ideal work-life balance for our community.

We welcome you to the most vibrant part of capital, the "South Delhi", where heritage blends with modern conveniences in a celebration of diversity, innovation and creativity.

Take the metro from IIT main gate to the airport or the 'parathe wali gali'!

Come and find yourself by losing yourself!



© Prof. Bappaditya Manna

How many faculty teach at IIT Delhi?



The Asian Koel, known for her melodious voice, enchants you with her song "Shubh Swagatam", meaning "heartiest welcome" on your arrival to the Indian Institute of Technology Delhi!

66

04

Photo courtesy: Dr. Manish Kumar, IIT Delhi

5

# The best way to predict the future is to create iit!

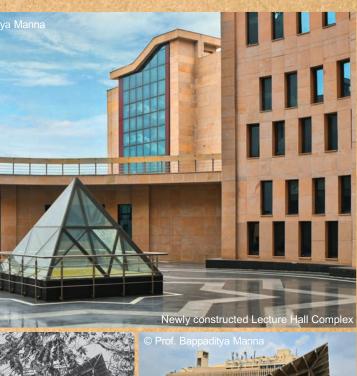
The first Director of IIT Delhi, Prof. RN Dogra with the blueprint to become a world class institution

© Prof. Bappaditya Manna

Start And And And And

The Indian Institute of Technology Delhi was established in 1961, as part of the league of those institutions which would shape the future of scientific and technological progress in the country. In 1963 it was accorded the status of "Institute of National Importance" having full autonomy in deciding its academic policy.

With 57 years of accomplishments behind, in 2018 it added another feather to its cap and was awarded the "Institution of Eminence" status by the Government of India. Moving on, IIT Delhi works to make knowledge a means for serving society. The institute looks to mobilize resources from industry through a network of high achieving alumni to give shape to its vision. Our pursuit is to think beyond our professional commitments and make this planet a better place to live!





What is the percentage of women in PhD in IIT Delhi?

07

Just as the Tailor bird knits her nest with leaves and straws, we knit our future with world class infrastructure and its ever-growing campus.

6-6

Of students pursuing PhD, 40 percent are women Data as of Dec 2019 Photo courtesy: Gowhar Fazili, IIT Delhi

09



Rendered images of building 99B and 99C with photograph of LHC and foliage in the middle

With a campus spread across 325 acres in the heart of the capital city, IIT Delhi is a touring treat. You can stroll across laboratories, libraries, research centers, hostels and residences past the sports grounds, open gyms, lawn tennis courts and numerous outdoor cafes. Students can opt to work out at the well-equipped Student Activity Center (SAC), or relax with a coffee.

The academic campus would have almost doubled in space from the year 2010 when new buildings that will host the Life Sciences and Design departments are handed over in the mid of 2020.

The 50 acre Sonipat campus of IIT Delhi is welcoming the I-Tec Techno Park in a year's time. With 15 start-ups lined up out of which 10 are already operational, it promises to host more than 50 start-ups and individual research projects around deep technology and machine learning.

The alumni of IIT Delhi contribute to the institute in different ways. Sumant Sinha, a notable alumnus of IIT Delhi (class of 1987) has established the "Renew Center of Excellence for Energy and Environment" to promote academic collaborations in the domain of renewable energy, and Mr. Arun Duggal (class of 1967) set up the "Centre of Excellence for Research on Clean Air" (CERCA) to restore the blue skies of the city.



How many startups have been incubated at IIT Delhi so far?





#### Inter IIT Sports Champion at play (53rd Inter IIT Sports Meet, IIT Guwahati, 2018)



The roof of the I-Tec Techno Park is reminiscent of the iconic ship-like structure of Dogra Hall



Driven by curiosity the wise old owl stays awake when the world is asleep. He is observant and sees through the dark. We learn from him as we aim to solve the world's biggest problems!



Photo courtesy: Dr. Manish Kumar, IIT Delhi

102 startups have been incubated so far through Foundation for Innovation and<br/>Technology Transfer (FITT), IIT DelhiData as of Dec 2019

## IIT Delhi looks forward to students becoming technology, business and academic innovators

Though consistently ranked as one of the top institutes in the country and globally, IIT Delhi is constantly looking to better itself and grow in diverse areas. A part of the institute's vision is to become a holistic center of learning, with a whole range of new disciplines. We have recently set up the Department of Materials Science and Engineering (DMSE), the Department of Design (DoD), the School for Public Policy (SoPP), Centre for Sensor, Instrumentation and Cyber-Physical System Engineering (SeNSE) and Center for Automotive Research and Tribology (CART). Introduction of new degree and certificate courses, especially for working professionals brings the IIT experience to those who missed the cut after school. Along with a specifically designed three-year program of Executive MBA, a degree program in Entrepreneurship is also in the offing.



Prof. Arogyaswami J. Paulraj (class of 1973) Professor Emeritus Department of Electrical Engineering Stanford University Padma Bhushan recipient (2010)







Sachin Bansal (class of 2005) Co-Founder Flipkart



**Binny Bansal** (class of 2005) Co-Founder Flipkart



Mohit Aron (class of 1995) CEO & Founder Cohesity

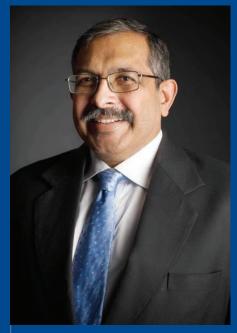


**Rohit Bansal** (class of 2006) COO & Co-Founder Snapdeal



Vinod Khosla (class of 1976) Co-founder Sun Microsystems





**Prof. Devang Khakhar** (class of 1981) Professor, Chemical Engineering IIT Bombay Former Director IIT Bombay



Raghav Verma (class of 2010) Co-Founder Chaayos

What is the number of UG students and PG students currently at IIT Delhi?



The Rosy Starlings fly to JJT Delhi from faraway lands for an environment that is conducive to their growth. We believe in "atithi devo bhav" meaning "guest is supreme". Come, let us host you too

There are 4130 UG and 5542 PG students at IIT Delhi



The institute's global footprint is a matter of both pride and inspiration, achieved through years of quality research. Active collaborations with industries across the globe are being forged with new opportunities. The institute formally identifies itself as an 'Equally Opportunity Employer', which welcomes bright minds as faculty and students irrespective of geographical boundaries or gender. With a level of 40 percent women in the PhD program we are inching towards achieving gender parity.

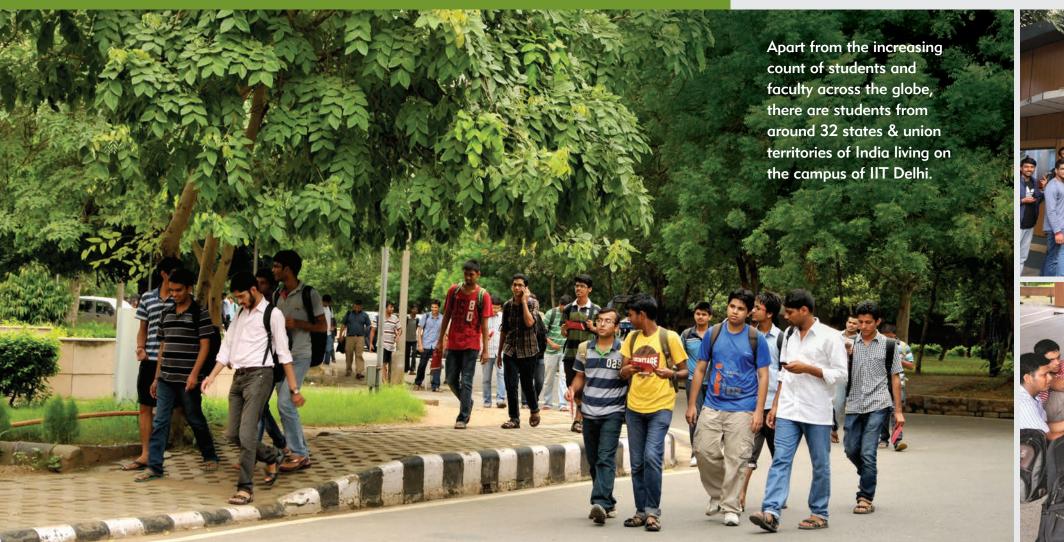
The newly launched International PhD. Fellowship Program (IPFP) is our way of welcoming students from abroad to study at IIT Delhi. It has set a target of 500 foreign PhD student enrollments in the coming 5 years.



66

Our ability to reach unity in diversity will be the beauty and the test of our civilization 🌖 🌖

– Mahatma Gandhi





The widely-popular Japanese venture 'Shiru Café', Shiru meaning 'to know', brings IIT students and the Japanese service philosophy together through company representatives. While students sip their free coffee at Shiru, they also get an opportunity to explore various career options and business ideas.



How many international students are studying at IIT Delhi?



JJT Delhi is the place where birds of different feathers flock together. We embrace diversity and nurture the art of thinking independently together!

Photo courtesy: Prof. Samrat Mukhopadhyay, IIT Delhi

1575

Statistics.

#### Is it that you have industry experience but no PhD, and you're rethinking your role in the corporate world? We have the solution

Stretching conventional academic practices, IIT Delhi has introduced the cadre of 'Professors of Practice'. The addition of this exciting dimension to the classroom structure, will enable students to learn from individuals with years of professional experience outside the academia. Find your niche in one of 30 academic units and start a new chapter of your life. If you believe your business can be enriched with constant academic input and also want to reclaim the campus experience, move a part of your company back to campus.

TCS and DRDO have taken up huge chunks, but we still have halls and floors for you to nestle into in the Technology Park in Hauz Khas as well as Sonipat Campuses.



It is time to take the innovation ecosystem in the country to the next level and raise the bar for everyone. If you have a great idea in deep tech space, IITD will take care of the rest. The Platform for Harnessing Deep technologies (PHD) Incubator Program provides comprehensive support for converting your idea into a startup, including a fellowship and accommodation to the budding entrepreneur as well as funds for the development of proof of concept.

– Prof. V Ramgopal Rao, Director, IIT Delhi



Crutches grip the surface just as well as your feet and let you enjoy full freedom of movement.

Flexmotiv Technologies Private Limited, incubated at Foundation for Innovation and Technology Transfer (FITT), IIT Delhi.

153 IPs have been filed by IIT Delhi in 2019

If you have other ideas, please share with us. We are open for business...!



How many patents have been granted to IIT Delhi so far?

The Sunbird is attracted by the rich flora of the campus and showers pollen grains wherever she goes, we too are attracted by sustainable ideas and pledge to leave IJT Delhi as a better place for the next generations!

Photo Courtesy: Prof. Samrat Mukhopadhyay, IIT Delhi

We can see that the roofs of most of the IIT Delhi buildings have turned blue. In keeping with our identity of a science and technology institute that constantly thinks of alternatives and new ways of doing things, we have installed solar panels on most of the roofs. The generation through these numerous solar panels amounts to around 2700000 kWh of electricity every year.

With easily distinguished trash cans for biodegradable, non-biodegradable and e-waste, campus residents are in tune with the responsibilities of a zero waste management plan for the campus. Vermicomposting and water recycling plants have been implemented on campus making students aware of the environment around them.

17.1

Stroll around the campus at its greenest ever

......

11 11 17

PRINCE DR

Be it the rush for an 8 am lecture or the fatigue after the 6:30 pm class, there's a bicycle ride ready from any location. With around 30 bicycle stations, students and faculty can rent a ride from most key points in the campus - hostels, the lecture hall complex or Shiru Café. Experience the hassle-free app based service of "LetUsCycle" with multiple pick and dropoff points. There's a bicycle for every distance and duration!



How many degrees have been awarded by IIT Delhi over the years?

Popularly known as 'Kotwal' meaning 'the police', she protects all baby birds from predators. And so we learn to serve the vulnerable in the society and stand with them hand in hand.

A total of 51516 have been awarded degrees from IIT Delhi since 1966 Data till Convocation 2019

28

Photo courtesy: Prof. Rajesh Khanna, IIT Delhi

Students at IIT Delhi are not only known for their bright minds but also for their strong social values and sense of commitment towards society. Communities like National Service Scheme-IIT Delhi (NSS-IIT Delhi) and Board of Student Welfare (BSW) have believed in growing together with society. Board of Student Welfare identifies issues faced by students related to academics, social life, mental health and career, and addresses them through welfare activities whereas NSS-IIT Delhi provides hands-on experience to young students in engaging with community around us. NSS has more than 30 ongoing projects, and collaborations with as many as 50 NGOs, social startups with a volunteer base of more than 1000 students. Be it charity drives or planting of trees, teaching kids of underprivileged or training adults who can't afford higher education, our students have been proactive in serving the society. It also organizes Kaizen, the annual social festival which appreciates and showcases the continuous improvements in our society and narrates the journey of leaders who brought about transformations in society. Our student volunteers have touched thousands of lives so far and have always been forerunners to demonstrate the change they have wanted to see in others.

Join us for a new perspective to life!

> For more info: http://nss.iitd.ac.in/





What is the area of all campuses of IIT Delhi?

31



As a peacock woos us with his striking colors and suave dancing, we welcome you to witness the majestic and the most spectacular youth festival of the country... Welcome to Rendezvous!

Photo courtesy: Prof. Bappaditya Manna, IIT Delhi







If you presumed that IIT was only about intellectual excitement in the classroom and the labs, you are in for a big surprise. 'Rendezvous', IIT's annual cultural festival organized in the month of October is bigger than ever.

This gala event brings together more than 70,000 spectators, 13,000 participants and 170 artists from over 20 countries. Perhaps the biggest annual cultural event in Delhi, Rendezvous is a celebration of more than 225 events making it a much-sought-after platform for students to showcase their talents.

Being a part of Rendezvous is what makes you a true-blue IITian

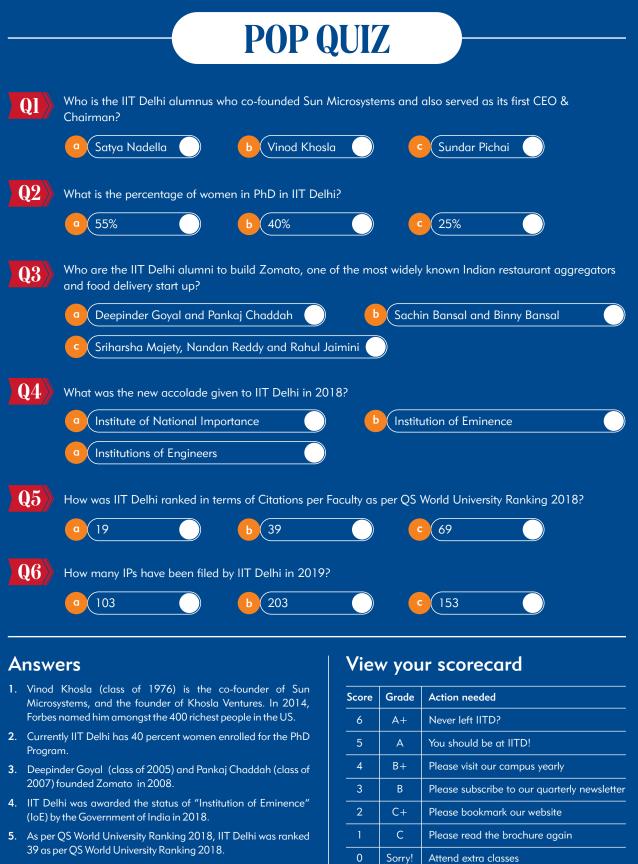
resents





This was Indian Institute of Technology Delhi for you. To explore IIT Delhi further, we welcome you. Let us create something together so that we make the world a beautiful place to live!

> Do get in touch with us for queries and proposals Email: ddsp@admin.iitd.ac.in



- 6. A total of 153 IPs have been filed by IIT Delhi in 2019.