Every home is a university and the parents are the teachers.

Mahatma Gandhi
IIT Delhi Professor appointed as the new Director for IIT Roorkee, all about Prof. KK Pant

IIT Delhi's Professor of Chemical Engineering, Professor KK Pant is the new Director for IIT Roorkee. President of India, Droupadi Murmu on Wednesday approved his appointment. He would be taking over from present Director, Prof. AK Chaturvedi. Prof. Pant is an alum of IIT Kampur and one of the leading academicians of the country.

Prof. KK Pant appointed new Director, IIT Roorkee

Indian Institute of Technology, IIT Roorkee has a new Director. President Droupadi Murmu on Wednesday approved the appointment of Professor Kamal Kishore Pant as the new director of IIT Roorkee. Prof. KK Pant is at present the Dean Faculty at IIT Delhi and a professor for the Department of Chemical Engineering. He is also the Petrotech (FIPI) Chair Professor at IIT Delhi.

An alumnus of IIT Kanpur, Prof. Pant completed his B. Tech from HBTI Kanpur and his M. Tech from IIT Kanpur. He also did his Ph. D from IIT Kanpur.

Over a long illustrious career spanning over 30 years, Professor Pant has established his name within the industrial research and academia. As one of the leading academicians of the country, Prof. Kant is working on multiple technologies of national and international import. Among them are the work on coal to methanol conversion, e-waste and plastic management, hydrogen generation, CO2 capture and conversion, biomass valorization, etc., using catalysis and reaction engineering.
He has to his credit over 220 publications with over 11746 citations and numerous patents. He has also completed over 50 high impact projects and consulted on projects of over Rs. 1.02 billion for private as well as Government of India.

He has many awards and accolades to his name. Among them are the prestigious Gandhian Young Technological Innovation (GYTI) award, which was conferred to him twice. He also has been awarded thrice with Dr. A V Rama Rao award for best Ph.D. supervision, Dr. S. S. Deshpande Award, Herdilia Award by Indian Institute of Chemical Engineers, and many more.


Professor Pant is also an Adjunct faculty at University of Saskatchewan in Canada, Joint Faculty at CRDT IIT Delhi and Honorary Faculty at University of Queensland in Australia. He would be taking over from Prof. Ajit Kumar Chaturvedi.

**IIT Delhi launch Certificate Programme in Machine Learning and Deep Learning**


The programme will equip learners to gain efficiency in Python programming and an understanding of the fundamentals & challenges of ML.

The Indian Institute of Technology has launched the Certificate Programme in Machine Learning and Deep Learning to provide skills for learners to design and implement various techniques to develop competencies in these technologies to foster growth in this domain.

The six-month Certificate Programme in Machine Learning and Deep Learning will build competencies in Python programming, including skills to load and pre-process the data from online and offline databases using pandas. It will also equip learners to design and train neural networks using Keras and TensorFlow modules and design various techniques for real-world applications.

Machine learning and deep learning find their applications for product recommendations, online fraud detection, image & speech recognition, natural language processing, virtual assistants, etc. As per Future of Jobs 2020 by the World Economic Forum, machine learning and other new-age technologies have led to several new opportunities and a demand for skilled professionals across sectors. Reports suggest that AI and machine learning investments will grow in India at an impressive CAGR of 33.49 per cent till 2023.

The Certificate Programme in Machine Learning and Deep Learning will be conducted on a state-of-the-art Interactive Learning (IL) platform and delivered in Direct-to-Device (D2D) mode. It follows a proven pedagogy consisting of class exercises, presentations, simulations, hands-on projects, and case studies. The programme
will help learners vastly enhance their skillsets by learning subjects such as Deep Learning, Applications of Machine Learning, Data Analysis & Applied Math, and Python Programming.

Indian Institute of Technology Delhi observes that since organisations are investing significantly in machine learning and deep learning technologies to address future challenges, the rapid adoption of tech across industries will lead to opportunities and demand for skilled and highly qualified personnel. The Certificate Programme in Machine Learning and Deep Learning will enable the skilling of talent towards making India among the largest markets for the adoption and use of cutting-edge technologies.

Indian Institute of Technology Delhi

Indian Institute of Technology Delhi is one of the 23 IITs created to be Centres of Excellence for training, research and development in science, engineering, and technology in India. Established as College of Engineering in 1961, the Institute was later declared as an Institution of National Importance under the “Institutes of Technology (Amendment) Act, 1963” and was renamed as “Indian Institute of Technology Delhi”. It was then accorded the status of a Deemed University with powers to decide its own academic policy, to conduct its own examinations, and to award its own degrees.

Since its inception, over 48,000 have graduated from IIT Delhi in various disciplines including Engineering, Physical Sciences, Management and Humanities & Social Sciences. Of these, nearly 5070 received Ph.D. degrees. The number of students who graduated with B.Tech. degree is over 15738. The rest obtained master’s degree in Engineering, Sciences and Business Administration. These alumni today work as scientists, technologists, business managers and entrepreneurs. There are several alumni who have moved away from their original disciplines and have taken to administrative services, active politics or are with NGOs. In doing so, they have contributed significantly to building of this nation, and to industrialisation around the world. IIT Delhi has been ranked consistently in top 5 management institutes and rank 1 institute in Research and Professional Practice as per NIRF 2022 and NIRF 2021 Management Category rankings.

Continuing Education Programme (CEP), IIT Delhi

Executive education is a vital need for the companies to build a culture that promotes newer technologies and solutions and builds a workforce that stays abreast of the rapidly transforming needs in the technological, business and regulatory landscape. Committed to the cause of making quality education accessible to all, IIT Delhi has launched Online Certificate Programmes under eVIDYA@IITD (ई-विद्या@IITD), enabling Virtual & Interactive learning for Driving Youth Advancement @IITD for Indian as well as international participants.

These outreach programmes offered by the Indian Institute of Technology Delhi (IIT Delhi) are designed to cater to the training and development needs of various organisations, industries, society and individual participants at national and international levels with a vision to empower thousands of young learners by imparting high-quality Online Certificate Programmes under eVIDYA@IITD (ई-विद्या@IITD), enabling Virtual &
Interactive learning for Driving Youth Advancement @IITD for Indian as well as international participants.

These outreach programmes offered by the Indian Institute of Technology Delhi (IIT Delhi) are designed to cater to the training and development needs of various organisations, industries, society and individual participants at national and international levels with a vision to empower thousands of young learners by imparting high-quality Online Certificate Programmes in cutting-edge areas for their career advancement in different domains of engineering, technology, science, humanities and management.

41% reduction in acute asthma events due to air purifier use: AIIMS-IIT Delhi study


Community-based interventions reduced all-cause mortality by 6 to 11 per cent, cardiovascular mortality by 11-17.9 per cent, respiratory mortality by 22-22.8 per cent and infant mortality rate by 20 per cent, the study found.

Household-level interventions for air pollution contributed to a reduction of 41.6 per cent in acute asthma attacks, finds a study. (Express photo by Praveen Khanna, for representational purposes)

Household-level interventions for air pollution, such as Hepa filters and electrostatic air filters, contributed to a reduction of 41.6 per cent in acute asthma attacks, a study by doctors and researchers at the All India Institute of Medical Sciences (AIIMS) and Indian Institute of Technology (IIT) Delhi has found.

Dr Harshal Ramesh Salve, additional professor, Centre for Community Medicine at the AIIMS, and a team of researchers from IIT Delhi conducted the study on household-level interventions, alternative transport strategies and vehicle rationing.
The study was conducted under a project to tackle air pollution in Delhi-NCR by the office of scientific adviser to the government of India.

Community-based interventions reduced all-cause mortality by 6 to 11 per cent, cardiovascular mortality by 11-17.9 per cent, respiratory mortality by 22-22.8 per cent and infant mortality rate by 20 per cent, the study found.

The study also found that there was an increase in FEV1 (forced expiratory volume) by 4.4 per cent due to these interventions. It is a measurement taken from a pulmonary function test to calculate the amount of air that a person can force out of their lungs in one second. The per cent change in microvascular and lung function was around 1.4 per cent and 0.8 per cent, the study said.

Of the 25 studies, seven were on community-based interventions, including alternative transport strategies, vehicle rationing, diesel ordinance scheme, opening of bypass roads, congestion charging scheme on vehicles and industrial interventions such as two control zone policy and regional regulatory law implementation.

18 of the studies were on air purifiers and electric heater use such as Hepa filters, electrostatic air filters, ionisation air purifiers, electric heaters, cook stove use such as eco-stove, improved biomass stove, rocket mud stove implementation and improved wood cookstove.

According to Dr Salve, there is a need to document the evidence more robustly. He said that the responsibility lies with the scientific community to provide evidence on air purifiers and with the government when it comes to advocacy for using these. “This is because there is no robust evidence to justify its use. So we need to move in that direction,” he added.

“There there is a need to give more information to the public on its cost-effectiveness. There should also be communication on how to use air purifiers; whether it has to be used in a closed environment, whether gross ventilation should be there and about its maintenance, the cost and everything. So our emphasis should be there on giving proper communication to the general public about the use of air purifiers,” he said.

23 IITs to organise research and development fair between October 14-15 at IIT Delhi


Union education minister Dharmendra Pradhan will grace the inaugural session of InvenTiv 2022.
23 Indian Institutes of Technology (IITs) will be organising research and development fair, InvenTiv, between October 14-15 at IIT Delhi premises. Union education minister, Dharmendra Pradhan will address the inaugural session. The R&D Fair will showcase projects on various areas such as climate change, sustainability, smart city architecture, rural agriculture, affordable healthcare, drone technology, etc.

**InvenTiv 2022 themes**

There are 10 broad themes identified in focused areas for the event:

- Defence and aerospace
- Healthcare (including devices and digital health)
- Environment and Sustainability (including air, water, rivers)
- Clean Energy and Renewables (including Hydrogen and EV)
- Manufacturing (including smart, advanced and industry 4.0)
- Artificial Intelligence (AI), Machine Learning (ML), Blockchain technologies (including quantum computing)
- Smart Cities and Infrastructure (including smart mobility)
- Communication Technologies (including education and 5G)
- Robotics, Sensors and Actuators
- Semiconductors, Flexible electronics and Nanotechnology
InvenTiv 2022 projects

A total of 75 projects brought out by 23 IITs are selected for the event, along with 6 showcase projects. Out of the 6 showcase projects, IIT Kanpur will lead a presentation on the ongoing R&D in drone technology and how diverse its utilities have become; IIT Bombay on the Bahubhaashak project, which enables speech-to-speech translation, NPTEL, SWAYAM, MOOCs videos in vernacular languages, in-line with the vision of National Education Policy (NEP) 2020.

IIT Madras will lead a presentation on 5G Core and allied technologies; IIT Delhi on the R&D in the broader areas of climate change, agriculture, rural technologies, sanitation etc; IIT Kharagpur on affordable healthcare devices and technologies; and IIT Hyderabad on the technological innovations in the electric vehicle (EV) sector.

The selected projects will be presented before the audience in designated booths during the 2-day event. Representatives from Confederation of Indian Industry (CII), Federation of Indian Chambers of Commerce & Industry (FICCI) and National Association of Software and Service Companies (NASSCOM), will be present at the event.

The audience will also include administrators and students from universities and colleges from small towns, global IIT alumni, faculties of various CFTIs, scientists from DRDO, ISRO, CSIR and ICAR, etc. The 2-day event will hold interactive as well as one-to-one sessions among the academia and industry representatives.

“The event would also host administrators and students from institutions from tier 2 and tier 3 cities for them to have a closer glimpse of the R&D ecosystem of IITs and in turn inculcate similar innovation-driven outlook towards developing projects of national interest. It would facilitate a comprehensive understanding of the requirements at the grass roots level in key areas such as agriculture, rural development, sanitation, resource management etc., and would engage them to develop innovations that make a positive impact on a larger section of society,” said an official statement.

InvenTiv 2022 event

A steering committee headed by Pawan Goenka, Chairman, Board of Governors (BoG), IIT Madras and BVR Mohan Reddy, Chairman, BoG, IIT Hyderabad and IIT Roorkee, has been assigned to look after the event.

Commenting on the prospect of the event, Goenka commented, “..We are expecting active participation from industry, academic and R&D institutions, as well as government to seek more collaborative and multidisciplinary avenues for furthering the vision of "Make in India" and Atmanirbhar Bharat.”

Reddy said, “..With this Fair, we bring the key stakeholders from industry, government institutions, and academia closer to collaborate for building an Atma Nirbhar Bharat. The Fair provides an opportunity to learn, exchange ideas and innovate for accelerating country's progress in the ‘Amrit kaal’.”
Murty said, “.. This R&D Fair is envisioned to enhance the public perception of the IIT ecosystem and to look for potential collaborative avenues among key stakeholders.”

**DoT's R&D Arm Inks Pact With IIT Delhi For Design And Development Of Indigenous Telecom Solutions**


The Centre for Development of Telematics (C-DOT) and the Indian Institute of Technology, Delhi (IITD) have signed a pact for cooperation in various areas of telecom. The two organisations have signed a memorandum of understanding (MoU) to work together in areas including IoT/M2M, AI/ML, cyber security and 5G and beyond technologies.

C-DOT is the telecom research and development arm of the Central government's Department of Telecommunications (DoT).

It has undertaken several cutting-edge R&D endeavours leading to the creation of a diverse product portfolio covering a wide array of technologies in the domains of optical, switching, wireless, security, network management and innovative telecom software applications.

C-DOT has been instrumental in the development of home-grown 4G and 5G systems in collaboration with local industry, academia and startups.

IITD, an institute of national importance and Institute of Eminence (IoE), has been keenly working in the field of communication and associated technologies.

Bharti School of Telecommunication at IITD has taken up its major initiative of multi-disciplinary advanced research and solution development for emerging national needs, in collaboration with industry and other premier R&D organizations.
The Ministry of Communications in a statement on Tuesday (27 September) said that this MoU aims to evolve a mutually productive framework for collaboration between R&D and academia to spur the design and development of wholly indigenous telecom solutions.

This will be an effective platform for exchange of knowledge and skill amongst students, faculty and researchers right from the stage of ideation and conceptualization, the ministry said.

The platform would act as a catalyst to further the transition of novel ideas into market-ready solutions, it added.

IIT Delhi collaborates With Swedish Team To Assess Delhi’s Air Quality


Stepping into the direction of climate intervention and pollution, the Indian Institute of Technology, Delhi on Friday announced that it has held discussion with a team from Sweden to assess the air quality of the national capital. The institute has teamed up with Team Sweden (Embassy of Sweden and the Swedish Trade and Invest Council - Business Sweden) and discussed the current air quality situation in Delhi and identified possible areas of joint intervention.

It has been announced that the workshop explored new-age clean air startups and defined potential joint interventions in the fight towards clean air. Participating Indian startups and Swedish companies showcased best practices in air quality management and discussed various aspects of poor air quality in Delhi.
The workshop saw participation of seven leading Swedish solution providers and eight innovative startups under IIT Delhi’s incubator accelerator FITT, along with representatives from National Clean Air Programme (NCAP).

The premiere institute, in a statement, stated,"Different technological interventions (monitor, protect, and prevent air pollution) and various possible areas of collaboration were identified. Plans for joint awareness campaigns across schools/education institutes and possibilities of joint R&D and co-development of technological solutions that are able to address issues at local level were discussed."

Earlier in the week, it was reported that the air quality index (AQI) has been rapidly deteriorating in the national capital. As of September 19, Delhi recorded hazy air quality. An AQI of zero to 50 is regarded as "excellent", 51 to 100 as "acceptable", 101 to 200 as "moderate", 201 to 300 as "poor", 301 to 400 as "extremely poor" and 401 to 500 as "severe". Air pollution levels that are "severe" can worsen asthma, impair lung function, and exacerbate lung illnesses.

The conference also explored matchmaking of startups under the IIT Delhi umbrella with Swedish technology companies for accelerated commercialization and market deployment.

**Yoga, Ayurveda Could be Effective in Treating High-Risk Covid-19 Cases, Claims IIT-Delhi Research**


The researchers claimed that high-risk COVID-19 patients undergo severe anxiety, which may further deteriorate their condition.

**IIT Delhi researchers suggest that in addition to the treatment for COVID-19, Yoga and Ayurveda maybe instrumental in relieving such patients from anxiety and aid in speedy post-treatment recovery**
Yoga and Ayurveda maybe effective in the treatment of high-risk cases of COVID-19, suggests a research study by IIT Delhi on successful treatment of 30 high-risk COVID-19 patients. This study was conducted by a team of researchers at IIT Delhi and Dev Sanskriti Vishwavidyalaya, Haridwar.

The researchers claimed that that high-risk COVID-19 patients undergo severe anxiety, which may further deteriorate their condition. They further suggest that in addition to the treatment for COVID-19, Yoga and Ayurveda maybe instrumental in relieving such patients from anxiety and aid in speedy post-treatment recovery.

The findings of the study have appeared in the Indian Journal of Traditional Knowledge. The research team consists of Dr Sumitra A Bentur, Private practitioner, Greater Noida (West), Uttar Pradesh, Dr Alka Mishra, Dev Sanskriti Vishwavidyalaya, Haridwar, Uttarakhand; Dr Yogish Kumar, Advait Clinic, Delhi, Dr Sonika Thakral, IIT Delhi, Sanjiv, IIT Delhi and Shaheed Sukhdev College of Business Studies, University of Delhi, Prof Rahul Garg, IIT Delhi.

As per the institute, the patients were prescribed Ayurvedic medicines through telemedicine, and administered a personalized therapeutic yoga programme using video conferencing. Almost all the patients were classified as high-risk owing to one or more of co-morbidities such as diabetes mellitus, hypertension, chronic kidney disease, coronary artery disease (which are known to lead to severe outcomes in cases of COVID-19), and/or age above 60, said IIT Delhi.

“The treatment given to the patients was personalized (in accordance with the classical texts) and took account of each patient’s medical history and the symptoms presented, which made it more effective as compared to a fixed standardized treatment plan,” said the IIT.

The treatment included ayurvedic medicines, daily yoga-sessions including deep relaxation techniques, pranayama and basic asanas and some lifestyle modifications. Based on the administered treatment, the cases were categorized into YAS (Yoga-Ayurveda based treatment, with possibly allopathic supplements: 4 patients), YASP (Yoga-Ayurveda based treatment, with possibly allopathic supplements and paracetamol: 6 patients), YAM (Yoga-Ayurveda based treatment, and Modern Western Medicine (MWM), that is, allopathy as adjunct: 6 patients), MYA (first tried MWM, later switched to Yoga-Ayurveda: 14 patients). added the institute.

The patients, most of whom presented with many symptoms prior to the yoga and Ayurveda treatment, were followed-up telephonically regularly until recovery. More than half of symptomatic patients started improving within 5 days (90 per cent within 9 days), more than 60 per cent reported at least 90 per cent recovery within 10 days, added IIT Delhi.

Six patients with oxygen saturation (SpO2) below 95 per cent, benefited through Makarasana and Shithilasana; none progressed to composite endpoints (consisting of admission to Intensive Care Unit, invasive ventilation or death). Considering that approximately 19.3 per cent of the patients with these comorbidities progress to composite end points, the p-value was found to be 7.21 x 10⁻³.

“The study also demonstrates an urgent need to scientifically examine the Traditional Indian Knowledge systems at the top academic institutions. A timely and suitably designed randomized controlled trial evaluating
the efficacy of Ayurveda and Yoga based personalized integrative treatment for COVID-19 would have equipped the people with much more credible and dependable information about their use in managing COVID-19” said Prof Rahul Garg, IIT Delhi, who conceptualized the project.

“Most patients reported that the therapy had a profound impact on their recovery process, with many experiencing improvements with respect to their comorbidities too. By the end of the treatment, several patients had decided to adopt Yoga in their lifestyle, and several turned to the Ayurveda doctors in the team for management/treatment of their comorbidities”, said Dr Sonika Thakral who coordinated with the patients for routine follow-up.

“On the whole, the belief of the patients in the efficacy of these traditional systems of medicine was extremely enhanced,” said Dr Alka Mishra who administered Ayurveda treatment to some patients. “We are observing an increasing trend towards ancient systems of medicine”, said Dr Yogesh Kumar who also administered Ayurveda treatment to some patients.

“The said interventions are believed to have collectively accelerated the recovery process by checking anxiety, instilling peace of mind and enhancing the overall well-being of the patients,” said Dr Sumitra A Bentur, private practitioner, who designed the Yoga intervention and conducted Yoga sessions for some of the patients.

“There are many reasons why students are choosing computer science over other engineering branches, and some of them are as follows:

1. **High Demand and Scope**: The field of computer science is in high demand, and there are numerous job opportunities available. This has led to a high number of students opting for this field.

2. **Futuristic Career Opportunities**: With the advancement in technology, there are many new fields emerging that require expertise in computer science. This has further increased the demand for computer science graduates.

3. **Financial Benefits**: The starting salaries and career growth opportunities in computer science are higher compared to other engineering branches.

4. **Flexibility and Work Options**: Students can choose from various work options in computer science, such as software development, data science, machine learning, etc., providing them with great flexibility in their career path.

5. **Academic and Research Opportunities**: Many universities and research institutions have strong programs and facilities in computer science, providing students with excellent opportunities to pursue academic and research careers.

6. **Entrepreneurship**: Many students opt for computer science because it encourages entrepreneurship and innovation, allowing them to start their own businesses or pursue their own projects.

7. **Adaptability**: The skills acquired in computer science are versatile and can be applied across various industries, making it a great option for students who want to explore different fields in the future.

8. **Global Reach**: With the increasing globalization, computer science has become a global language, allowing students to work and travel internationally.

9. **Technology and Innovation**: Computer science is at the forefront of innovation, and students interested in technology and solving complex problems are naturally drawn to this field.

10. **Personal Interest and Aspiration**: Many students have a genuine interest in computer science and are driven by their passion for technology and problem-solving.

These reasons, along with the pressures of job availability and financial benefits, have led to the trend of students choosing computer science over other engineering branches.
Former IIT Delhi director V Ramgopal Rao, Monday raised a question on the increasing number of candidates choosing Computer Science Engineering (CSE) and IT engineering. Rao believes that the situation is the same in almost every college that has visited or heard about.

“Colleges are hardly able to fill even one-third of the available seats in branches other than Computer Science and IT. No one wants to do even Electronics. The situation is worse in Civil, Mechanical etc. Many colleges don’t know what to do with a large number of faculty working in these departments,” he said in a tweet.

He also brought focus to the issue that while it is easier for mechanical or civil engineers to move to the CSE or IT branch-related jobs, the same cannot be said for a vice-versa situation. “If everyone studies IT/CSE and if all the companies and products they build are e-commerce and IT related, where does it leave us?” he asks.

Engineering is about finding solutions

Rao also explains that the motive behind raising this issue is that India being a developing country has several unresolved issues at the grassroot level and much needs to be done in several fields such as healthcare, agriculture, energy, defence, space, civil infrastructure, transportation, waste processing, semiconductors, manufacturing, drone technologies and many more. He believes that if people do not choose other fields of engineering then the solutions to existing problems in these fields will not be easily found.

“Engineering isn’t about civil, mechanical, CSE etc. Engineering is all about providing optimal and sustainable solutions to society’s needs. Most of the problems don’t even come with a disciplinary tag. They often need a multi-disciplinary team to develop a solution. If all disciplines merge into CSE and IT, our innovation potential may get grossly affected,” he explained.

Industry 4.0

He also talks about how ‘Industry 4.0’ is transforming the way different engineering field function and now with the changing times, the work experience and skills are also changing. “Industry 4.0 has completely transformed the mechanical engineering and many of my Mechanical friends work on micro-machines and microfluids which require a microscope to look at. A lot of civil engineers now work on environmental issues and work on a multiplicity of environmental issues. Metallurgy has got morphed into material science. Future is all about smart and meta materials,” he said while explaining his point as an example.

How to bring change?

While identifying this changing trend is a major step in changing the outlook of future engineering aspirants, it is also important to find actual solutions to these changing trends and thought. The former director of IIT-Delhi has urged AICTE and UGC to make movies highlighting the changes that are taking place in other parts of the world, and also shine a light on the innovations that are happening in other disciplines of engineering.

Not just this, Rao also believes that students should be made aware about all branches/disciplines of engineering from early on in their life, preferably from the school level. “Bring children to our top institutions
and show them how modern mechanical, civil engineering labs look (like) and what researchers in these departments work on. It’s time to act in a concerned manner through national level initiatives,” he concluded.

**IIT-Delhi, UK Research and Innovation team, up to solve water logging issues in urban areas**


This mobile app will help by reporting the real-time incidence of flooding, in and around their surroundings, by capturing the waterlogging information and uploading it to a central server.

![Representative image](expressfile)

This project is funded by the UKRI through the Global Challenges Research Fund (GCRF). (Representative image. Express file)

The Foundation for Innovation and Technology Transfer (FITT) at the Indian Institute of Technology, Delhi (IIT-D) has joined hands with the UK Research and Innovation (UKRI) launched a mobile application ‘IITD Aab Prahari’ to solve the water logging issues in urban areas in India.

The two teams are coming together to address and find solutions for water logging in urban areas, especially during the monsoon season. For this, they have launched a project named ‘Water Security Hub’, which was started in the Department of Civil Engineering (IIT Delhi) to develop new approaches to tackle the challenges and barriers to water security and sustainable development in the National Capital Territory (NCT) of Delhi.
Citizens will be able to feed real-time data into the Aab Prahari App. (Source: IIT Delhi)

This project is funded by the UKRI through the Global Challenges Research Fund (GCRF). Now, under this project, a mobile app has been launched. This mobile app will help by reporting the real-time incidence of flooding, in and around their surroundings, by capturing the waterlogging information and uploading it to a central server.

In this app, the information will be fed by locals and then the information fed by the citizens will help the researchers at the Water Security Hub in the effective development and deployment of an early warning system to predict the urban floods through validation of their model. With the help of this information, the local administration will be able to take any quick action to mitigate the flooding situation.

Additionally, a website named “Jalsuraksha” — jalsuraksha.iitd.ac.in — was also launched on the occasion. It serves as a single platform with all the information related to the research work undertaken by the Water Security Hub team at IIT Delhi to ensure water security in the NCT of Delhi.

**IIT-Delhi Organises First-Of-Its-Kind Special Drone Show in Bengaluru (Watch Video)**  

The formation included a 'Bus' and a 'Ministry of Road Transport and Highways' in honor of Union Minister Nitin Gadkari, 'Earth', and many more.
Indian Institute of Technology (IIT) Delhi students organised a first-of-its-kind special drone light show in Bengaluru on Thursday, September 8. The formation included a 'Bus' and a 'Ministry of Road Transport and Highways' in honor of Union Minister Nitin Gadkari, 'Earth', and many more.

Watch Video of Drone Light Show Below:
https://www.youtube.com/watch?v=8NgyxrhvlI4&t=6s

PM Narendra Modi writes to IIT-Delhi on 8 years of Unnat Bharat Abhiyan

Prime Minister Narendra Modi has written to Indian Institute of Technology (IIT) Delhi on completion of eight years of the “Unnat Bharat Abhiyan,” which is aimed to play the role of an enabler in transforming the rural landscape.

The role of IIT Delhi as the national coordinating institute under the scheme deserves appreciation, the PM said in his message to the institute.

“Education and knowledge are pillars which support the nation’s progress. We are striving tirelessly to make India a knowledge hub and to empower higher educational institutions to play a larger role in nation-building. When it comes to development of rural areas, we believe in “Atma Gaon Ki, Suvidha Sheher Ki” – facilities that empower aspirations and boost ease of living are reaching villages and serving the people,” Modi said in his message.

We must accept that caste system still pervades our society: Justice DY Chandrachud

The Supreme Court judge said that to know the reality of caste, we must talk to people who have been subject to discrimination, to stigmatization and assaults on the grounds of caste.
Caste system still pervades our society and we must come face to face with that reality and try to secure justice to those who have been discriminated based on caste, Supreme Court judge Justice DY Chandrachud said on Tuesday.

He opined that to know about the ground reality, interaction with people who faced such discrimination is necessary.

"We must come face to face with that discrimination that still permeates and pervades in our society and to find justice to those who are discriminated on the ground of caste. I think that is far more important than anything else," he said.

Justice Chandrachud was delivering the inaugural talk at the Office of Diversity and Inclusion of Indian Institute of technology (IIT) Delhi on the topic 'Realising Diversity -Making Differences matter in Higher Education'.

The judge was specifically responding to a question from the audience on how to end caste discrimination prevalent in the society.

To this Justice Chandrachud replied that he doesn't intend to show disrespect to the question but the whole theme that caste must be eliminated is very often perceived to be a theme which the upper caste propagates.

He said that to know the reality of caste, we must talk to people who have been subject to discrimination, to stigmatization and assaults on the grounds of caste.

"Caste defines their identity and everyday of their lives they are reminded of their castes by the perpetrators of those who practices discrimination on the ground of caste," the judge added.

The answer, he said, is not to make a casteless society but to empower those who have been subjected to centuries of discrimination.

"That discrimination still continues as we just heard several examples from our day to day lives," he said.

The answer must lie in us being aware of extent of discrimination on the basis of caste which still is perpetrated in our society today, he added.
IIT-Delhi keen to become ‘knowledge partner’ of the Parliament

IIT-D director Rangan Banerjee said the institute wants to provide inputs to parliamentarians across party lines on several pressing issues, including climate change and artificial intelligence.

Speaking at the closing ceremony of IIT-Delhi’s diamond jubilee celebration on Saturday, education minister Dharmendra Pradhan also mentioned IIT-D’s plan of establishing a campus in Abu Dhabi.

The Indian Institute of Technology in Delhi (IIT-D) wants to be the “knowledge partner” of Parliament, the premier institution has told the education ministry, which has welcomed the proposal.

“A few days ago, the IIT-D director asked us how the institute can work closely with the Parliament of India. I asked them to write a letter and they did. I have forwarded that letter to the speaker,” education minister Dharmendra Pradhan said at the closing ceremony of IIT-D’s diamond jubilee celebration on Saturday.

Educational institutions like the IITs should become the “knowledge partners” of the “temple of democracy”, the minister said. “We must work together to further strengthen academia, industry and policymaker connect to realise 21st century aspirations and make India the number one economy in the world,” he said.

Explaining the idea behind the proposal, IIT-D director Rangan Banerjee said the institute wants to provide inputs to parliamentarians across party lines on several pressing issues, including climate change and artificial intelligence.

“We basically feel that it is our responsibility to engage with parliamentarians and make them aware of what is happening in various fields. Our faculty colleagues at IIT-D are working on several important aspects of technology. If we want to look at knowledge going to society we need to interface with Parliamentarians,” Banerjee said. “Parliamentarians are very rooted and they can also give their inputs on various issues. It will be a win-win situation.”
The ministry has in principle agreed to the proposal, Banerjee said. “We have got a group of faculty to work out how to get ahead. We will start with some engagement initially. We can see such a strong interface between academia and policymakers and parliamentarians in many European countries. We have studied those models, but we have to work out our own model,” the director said.

During the event, Pradhan also mentioned IIT-D’s plan of establishing a campus in Abu Dhabi. “It is a matter of great pride that today many developed countries are evincing interest towards establishing and hosting offshore IIT campuses in their countries. This is a reflection of the prowess, strength and quality of our prestigious IITs,” he said.

IIT-D had started consultations with the department of education and knowledge in Abu Dhabi after the government asked it to explore the possibility of setting a campus in the United Arab Emirates, HT had reported last month.

During the jubilee celebrations, IIT-D’s research and innovation park was inaugurated by President Droupadi Murmu. “The research and innovation park will further add momentum to amplify the societal impact of R&D at IIT Delhi,” Pradhan said.

**IIT Delhi announces reduction in fee charges after students protest**


Institute of Information and Technology (IIT) Delhi on Friday announced the reduction in the fee of new postgraduate students who joined during the second semester of 2021-22 or later.

IIT Delhi arrived at this decision on the basis of recommendations of the committee set up by the Director to look into the representation made by a set of M.Tech students.

"As a result of the protests in IIT Delhi, the tuition and other charges have been significantly reduced on recommendation of the committee in appointed to oversee the issue. The M.Tech. full-time tuition fee has been reduced from ₹25,000 per semester to ₹17,500 per semester," IIT Delhi stated.

"Similarly, the tuition fee of other PG programmes has been reduced. In addition to the tuition fee, there is a reduction in other components of fees as well," It further stated.

Earlier, the students at IIT-Delhi had protested against the increase in fees for the M.Tech programmes, which they claimed were over two times this academic year.

The hiked fee structure was implemented in January 2022 and had been decided by the institute’s board. Previously, the educational expenses for M.Tech programs were ₹10,000 for each semester. Under the new charge structure, applicable to students conceded in 2022-2023, it was increased to ₹25,000 for every semester.

The students conducted a “silent protests" on campus asking for a revision in fee hike.
Also, the hostel fee was likewise been expanded from ₹10,500 for each semester to ₹13,250 for every semester. Also, the monthly stipend which students get for doing Teaching Assistant duties and lab work remained the same at ₹12,400 per month. The 150% hike in tuition fee made the students anxious leading to protests.

**IIT Delhi must strive to establish India at forefront of industry 4.0: Dharmendra Pradhan**


Union Minister of Education and Skill Development & Entrepreneurship, Dharmendra Pradhan on Saturday urged that IIT Delhi must strive to establish India at the forefront of industry 4.0.

Addressing the IIT Delhi’s Diamond Jubilee celebrations closing ceremony, Pradhan urged that IIT Delhi must strive to establish India at the forefront of industry 4.0. They must prepare students for providing solutions to challenges of the future and also for taking responsibility of the world, he added.

Pradhan expressed gratitude to President Droupadi Murmu for her guidance on the occasion. It will further motivate our education fraternity in realizing the goals of AmritKaal, he said.

The Union Education Minister also congratulated IIT Delhi on its illustrious 60 years journey. It has played a crucial role in furthering national progress, he added.
Pradhan said that inauguration of the Research & Innovation Park today will further add momentum to amplifying the societal impact of R&D at IIT D.

He further said that it is a matter of great pride that today many developed countries are evincing interest towards establishing and hosting offshore IIT campuses in their countries. This is a reflection of the prowess, strength and quality of our prestigious IITs, he added.

The Union Minister highlighted that India, today, is on a growth path led by innovation. It accounts for the largest number of real-time digital transactions in the world. Indigenously developed 5G is further going to catalyze the digital revolution in India. Our IITs are epicenters of modern economy. They must reimagine their roles, he added.

Pradhan stressed that the ‘Panch Pran’ outlined by the Prime Minister Narendra Modi to make India a developed nation by 2047 also lays down the future roadmap for our academic institutions. He urged that IITs must accept the challenges and move forward with bigger resolves for realising national goals.

**IITs Have Been Pride of the Nation: President Droupadi Murmu**

**September 3, 2022**  
The President said that the IITs helped India prove to the world the capability of India in the domains of education and technology.

The Indian Institutes of Technology have been the pride of the nation, said the President of India, Droupadi Murmu. She was speaking at the closing ceremony of the Diamond Jubilee celebrations of IIT Delhi in New Delhi today.

“India has a great talent pool which is yet to be fully tapped. We need to make our institutes future ready with new teaching and learning metrics, pedagogy, and content,” she said. The President said that the IITs helped India prove to the world the capability of India in the domains of education and technology. In multiple ways, the story of the IITs is the story of Independent India.

Faculty and alumni of IITs have shown the world what India’s brainpower can do. Students who studied in IITs are now at the forefront of the digital revolution sweeping the world. The impact of IITs has gone beyond science and technology. “IITians are leaders in every walk of life – in education, industry, entrepreneurship, civil society, activism, journalism, literature, and politics," she said.

As one of the original IITs, IIT Delhi is a mentor to some of the recent members of the club - IIT Ropar and IIT Jammu. IIT Delhi has contributed significantly to building up the image of the IITs as centres of excellence across the world, she said.

IIT Delhi has always seen itself as part of the larger community and it has been extra sensitive to its responsibility toward society. She shared that the latest example of IIT’s social concern was seen during the initial phase of the pandemic. Rising to the challenge of containing the virus, IIT Delhi came up with some important research and development projects. It even designed and developed rapid antigen test kits, PPEs, antimicrobial fabrics, high-efficiency face masks, and low-cost ventilators. "The IIT Delhi’s contribution in India’s fight against the Coronavirus has been a model of how engineering and technology institutions too can play a role in a public health crisis," she added.

The President of India said that by 2047 when we will celebrate 100 years of Independence, the world around would have changed drastically, all because of the Fourth Industrial Revolution.

Just like 25 years ago we never imagined the contemporary world, we cannot visualise today how Artificial Intelligence and automation are going to transform life. "With our high population numbers, we need to have foresight and strategies in place to deal with the forces of future where disruptions will be a new normal. The nature of employment will get completely changed," she said.

She added "If we take steps to protect ourselves from vagaries of the future, we can reap rich demographic dividends. We need to make our institutes adaptable to the future. This will require a new teaching-learning matrix, pedagogy, and content that are future-oriented. I am sure that with our famed IITs, we will be able to nurture the younger generation with the necessary knowledge base and the right skills to face the challenge. India will benefit immensely from the next wave of the technological revolution,"
Pointing out that climate change poses a serious challenge, she said that as a developing country with a high population base, India’s energy requirement for economic growth is very high. The President added that we need to shift from fossil fuels to renewable energy and in the years to come, as the world anxiously looks for technological solutions to environmental challenges, she believes India’s young engineers and scientists will help humankind achieve a breakthrough.

**IIT Delhi committee submits report on MTech fee hike; board approval next**


IIT Delhi MTech students began a silent sit-in protest against 150% fee hike on August 31, 2022. PhD tuition fee has been hiked by 64%.

Two days after the Indian Institute of Technology (IIT) Delhi MTech students’ protest against the fee hike, the institute said that they are waiting for the IIT Delhi Board to approve the recommendation made by the committee constituted to look into the matter.

“On the request of the MTech students to review the tuition fee, the Institute formed a committee, which looked into the matter. The committee has given its recommendations, which are awaiting the Board's approval,” the IIT Delhi said in an official statement.

The current fee was decided by the Board and was implemented in January 2022, it said. IIT Delhi MTech students began a silent sit-in protest against 150% fee hike on August 31, 2022. The students demanded immediate rollback in the fee hike.

According to the protesting students, the total academic fee for full time MTech students being admitted this semester 2022-2023 has been hiked by 100% to Rs 53,100 (excluding hostel fees) from what was charged earlier, Rs 26,450. “Within this amount, the 'tuition fee' has been hiked by 150% from Rs 10,000 to Rs 25,000 for one semester,” it claimed.

Moreover, the tuition fee for full-time PhD students has also been hiked by 64% from Rs 20,150 to Rs 30,850 (inclusive of hostel seat rent). They also said that the hostel boarding and mess charges also have sharply increased this year.