



NEWS CLIPS

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India's IITs join Covid-19 fight

April 29, 2020 <https://www.timeshighereducation.com/news/indias-iits-join-covid-19-fight#survey-answer>

About 200 projects contribute to research and aim to engage students during campus shutdowns

Indian Institutes of Technology are spearheading initiatives to help control the coronavirus pandemic in their country, and to encourage student participation during a nationwide lockdown that has closed the nation's universities since March.

V. Ramgopal Rao, director of the Indian Institute of Technology Delhi, told *Times Higher Education* that there are more than 200 IIT projects across the nation related to Covid-19.

"Our start-ups and faculty/student teams are in the forefront when it comes to fighting Covid-related technological issues," he said, citing work in personal protective equipment (PPE), low-cost ventilators, detection technologies and analytic tools. "Almost every week for the past two months, a new technology or solution has been put out by one IIT or the other for fighting Covid," he added.

IIT Delhi announced on 23 April that it was the first higher education institution to receive approval from the Indian Council for Medical Research (ICMR) for a polymerase chain reaction test for Covid-19.

The development comes as India looks to scale up testing in a country of more a billion people – an effort thwarted last week when Indian states were asked to stop using about a half million testing kits from China because of quality concerns. India has had about 28,000 Covid-19 infections and 800 deaths, as of 27 April.

"[It] should change the Covid testing paradigm in India," Professor Rao said of IIT Delhi's test. "We hope to get this out into society in another two weeks' time frame."

The test is probe free and "extremely low-cost," with a targeted price point of US \$5, or £4. IIT Delhi is issuing non-exclusive licenses to about a half-dozen companies.

While IITs are largely known as engineering schools, some of the more progressive institutions are putting more focus on the humanities, including in their work on Covid-19.

Sudhir K Jain, director of the Indian Institute of Technology Gandhinagar, told *THE* that “the current pandemic highlights the unexpected and different intersections that shape modern life and societies, so liberal education is absolutely essential”.

Professor Jain is the principal driver behind a multidisciplinary initiative called Project Isaac, named after Sir Isaac Newton, who was famously productive when the Great Plague kept him from his studies at the University of Cambridge.

The project encourages students to undertake Covid-19 research, open start-ups, or acquire new skills in areas such as writing, art and music. It also includes contests and awards for coding, innovation and research. About 60 per cent of the institution's students have voluntarily participated.

“As we looked at ways to engage our students during the academic disruption, we decided to use this as an opportunity to underscore the importance of creativity and the arts, which end up being downplayed in the busy rhythm of classwork and exams during the regular semester,” Professor Jain said.

“Students who go through an IIT education end up in a very wide range of professions and careers. The development of these type of skills prepares them even better for the interconnected future ahead.”

At the institution, located in the western state of Gujarat, all incoming students go through a five-week foundation programme that includes training in creativity, communications and ethics, while all undergraduates are required to take about 20 per cent of their coursework in the humanities and the social sciences, despite the fact that they are engineering majors.

IIT Delhi to conduct interview for MTech & Ph.D courses

April 28, 2020 <https://www.timesnownews.com/education/article/iit-delhi-to-conduct-interview-for-mtech-ph-d-courses/584164>

IIT Delhi will conduct the interview for MTech and Ph.D. courses this time through video conferencing. The interviews for PG courses will not be conducted this year due to the COVID19 pandemic.

Indian Institute of Technology, IIT Delhi will conduct the interview for MTech and Ph.D. courses this time through video conferencing. The interviews for PG courses will not be conducted this year due to the COVID19 pandemic and the admissions for MTech programs will be done through GATE scores.

The application process for PG admission is open until May 10, 2020. Candidates can apply online through the official site of IIT. As per schedule, the interview will be conducted from May 18 to June 17, 2020.

IIT Director Professor V. Ramagopal Rao said, “Every year 500 students are selected for Ph.D. programs out of 20,000 students who apply for it. Because of the high number of students, the Institute will be screening at the initial level followed by video conferencing of the selected students. Efforts will be made to interview thousands of students in all departments. However, for MTech, we

will directly take students on the GATE score as a large number of students apply. This year we will not hold the interview process.”

Furthermore, admission to MTech / M Design will be done through GATE (Graduate Aptitude Test in Engineering) / CEED (Common Entrance Exam for Design) score. Students including graduate students, part-time, sponsored and international candidates from IITs will be shortlisted on the basis of the score. Admission to Master of Science - Research (MS-R) will also be on the basis of interviews through video conferencing. The academic unit can also do this on the basis of the GATE score if desired. MSc - Economics has not been decided yet.



IIT-Delhi's PRACRITI to predict district, statewide COVID-19 transmission rate

April 25, 2020 <https://www.aninews.in/news/national/general-news/iit-delhis-pracriti-to-predict-district-statewise-covid-19-transmission-rate20200425225656/>

Prof Anoop Krishnan and his team of researchers at IIT-Delhi have developed a web-based dashboard called -- PRACRITI--which can predict the district and state wise transmission rate of COVID-19.

PRACRITI stands for Prediction and Assessment of Corona Infections and Transmission in India.

"PRACRITI is a web-based dashboard developed by researchers at IIT-Delhi. It gives details of state and district wise predictions of COVID-19 spread in India. Specifically, it gives the transmission rate of each of the district in India, and that enables the authorities and the public to know how to control and mitigate Coronavirus transmission in India," Prof Krishnan told ANI.

"It gives a three-week prediction of COVID-19 spread of each district in the country. These predictions are updated on a weekly basis to account for any variations in India including changes in the government policies and weather conditions," added Prof Krishnan.

Talking about the inspiration behind making PRACRITI, a Civil Engineering student at the IIT-Delhi, Hargun Singh Grover said: "To develop the prevention and mitigation strategies for COVID-19, it is important to understand what exactly the scenario in each district is and how the scenario can change if the lockdown conditions are changed."

Talking about the efficiency of PRACRITI, Research Scholar in the Civil Engineering Department Ravinder Bhattoo said: "The efficiency depends on data and model's assumptions. It is possible to predict the near future but for a longer duration, it is difficult as with respect to time dynamics of the disease changes. Hence, constant up-gradation of the model is important."

According to the PRACRITI portal, a key parameter of interest on COVID-19 is the basic reproduction number R_0 (R nought) and its countrywide variability. R_0 refers to the number of people to whom the disease spreads from a single infected person. For instance, if an active COVID-19 patient infects two uninfected persons, the R_0 is two. Hence, the reduction of R_0 is the key to controlling mitigating the COVID-19 spread in India.

PRACRITI provides the R_0 values of each district and state in India based on the data available from sources such as the Ministry of Health and Family Welfare (MoHFW), Government of India; National Disaster Management Authority (NDMA), and World Health Organisation (WHO).

According to Prof Hariprasad Kodamana from the team, the predictions of PRACRITI (/topic/pracriti) are based on a newly developed mathematical model called Adaptive, Interacting Cluster-based SEIR model. The model divides the population into four classes, susceptible, exposed, infected, removed.

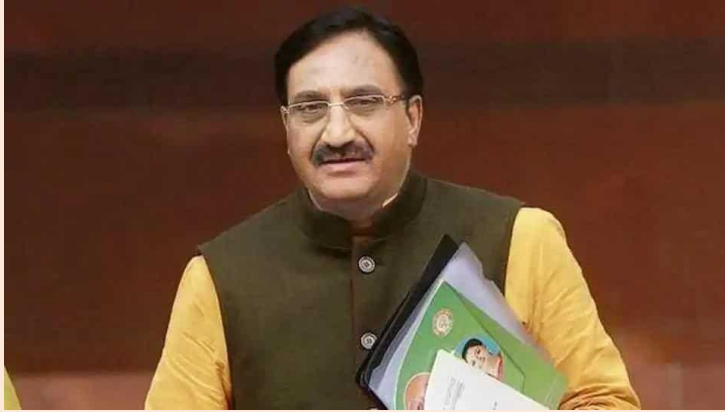
'Susceptible' refers to the people who have not been exposed to the coronavirus, while 'exposed' refers to those who have been exposed to the virus from an infected person. On the other hand, 'infected' refers to those who are actively infected with COVID-19, and 'removed' refers to those who are no longer a carrier of the virus, said Prof Kodamana.

Prof Krishnan hopes that the PRACRITI dashboard will help authorities and the public to prepare themselves better in controlling and mitigating COVID-19 in India.

HRD considers asking IITs not to hike fees this year

April 24, 2020 <https://www.hindustantimes.com/education/hrd-considers-asking-iits-not-to-hike-fees-this-year/story-kLtkzAYRcKCZzBrZMjHsk.html>

Several of the IITs, whom HT spoke to, appeared open to the idea though they said they were yet to receive any intimation in this regard.



The premier Indian Institutes of Technology (IITs) may not hike their fees in the upcoming academic year as the Union Human Resource Development (HRD) ministry is considering requesting them to take this step keeping in mind the extraordinary situation due to the COVID-19.

Several of the IITs, whom HT spoke to, appeared open to the idea though they said they were yet to receive any intimation in this regard.

IIT Delhi said it had decided to not hike the fees for its post graduate courses.

“There is a view in the HRD ministry that premier institutions can step forward and take decisions which will benefit the student community as a whole. There is a view in the ministry that being premier institutions, the IITs should try not to hike fees. There have been discussions on this and the ministry could request the IITs to not implement a fee hike this year,” said a government official.

The decision for the fees of the undergraduate courses are taken jointly in the IIT council, which is headed by HRD minister Ramesh Pokhriyal Nishank while individual IITs take a call on the fee structure of other courses they offer.

“The matter is at present in the discussion stage,” said another top official in the HRD ministry.

Meanwhile, some the IITs were already doing their own thinking in this regard.

“IIT Delhi will not be increasing any fee this year. We will maintain 2019 fee structure,” said Prof V Ramgopal Rao, director of the premier institute referring to the post-graduate courses.

IIT Bombay Director Prof Subhasis Chaudhuri said his institute will go by the decision of the IIT council. “Whatever the IIT council decides, we will follow,” said Chaudhuri.

The director of another IIT, who wished not to be quoted, said he understood the reason and logic behind the step but would like to see what most IITs do in this regard.

“The HRD ministry has already requested private schools not to pressure students into paying fees. It also wants them to not go for big, arbitrary hikes in view of the situation. In this light ministry would be walking its talk, if its own institutions took the lead,” said the first official cited above.

The official added that not just the IITs, the Indian Institutes of Information Technology too could be requested to spare the students a fee hike this year.

IIT-Delhi's low-cost testing kit gets ICMR approval

April 24, 2020 <https://timesofindia.indiatimes.com/city/delhi/iit-delhis-low-cost-testing-kit-gets-icmr-approval/articleshow/75339591.cms>

Indian Institute of Technology Delhi (IIT-D) has developed a low-cost Covid-19 detection kit costing barely a few hundred rupees using indigenously developed technology. The kit was approved by the Indian Council of Medical Research (ICMR), the apex biomedical research body which is at the centre of the fight to contain the Covid-19 outbreak, on Thursday.

The institute is now in the process of identifying an industry partner and aims to get production rolling this week. The assay or procedure has been validated at ICMR with a sensitivity and specificity of 100%. This makes IIT-D the first academic institute to have obtained ICMR approval for a real-time PCR-based (Polymerase chain reaction) diagnostic assay.

IIT Delhi's team of 10, including four faculty members, identified unique regions (short stretches of RNA sequences) in the Covid-19 /SARS COV-2 genome. These regions are not present in other human coronaviruses, providing an opportunity to specifically detect Covid-19.

"This method uses primers targeting unique regions of Covid-19 that were designed and tested using real-time PCR. This highly sensitive assay was developed by extensive optimisation using synthetic DNA constructs followed by in vitro generated RNA fragments," said professor Vivekanandan Perumal, lead researcher from the Kusuma School of Biological Sciences.

The team began working on the detection assay kit in January-end. "From the very beginning, we kept all our labs accessible for the IIT Delhi community to carry out all kinds of research for Covid-19. Close to 20 projects in this area are on at our campus," said IIT-D director Ramagopal Rao. Regarding technology used for the detection kit, he said, "we know tests will cost a few hundred rupees and that too can come down if production volumes are higher. IIT Delhi has internally funded this research and we have applied for a patent."

This is the first probe-free assay for COVID-19 approved by ICMR. The detection assay eliminates use of fluorescent probes which slashed the cost of putting together the kit. "We instead use a fluorescent dye along with highly specific primers to detect COVID-19," said professor Manoj Menon.

IIT Delhi-made antiviral nano-coatings to be used in medical masks, N95 respirators

April 24, 2020 <https://www.campusvarta.com/campus-updates/iit-delhi-made-antiviral-nano-coatings-to-be-used-in-medical-masks-n95-respirators/>

The Department of Science and Technology (DST) has approved support for upscaling an antiviral nano-coatings developed by professor Ashwini

Kumar Agrawal of Indian Institute of Technology, Delhi. This nano-coating will be used producing anti-COVID-19 Triple Layer Medical masks and N95 respirators in large quantities.

Silver is known to have strong antimicrobial activity against bacteria, viruses, fungus, and so on. Professor Agrawal developed N9 blue nanosilver at SMITA Research Lab, IIT Delhi, under the nanomission project, and will be carrying out the upscaling work in association with two industrial partners Resil Chemicals Pvt Ltd. Bangalore and Nanoclean Global Pvt Ltd, New Delhi.

Resil chemicals will provide N9 blue nanosilver. Nanoclean Global will provide face masks and PPE materials for the application of nanocoating and will help in the design and fabrication of samples at their facilities.

“DST has initiated and nurtured nanoscience activities in the country in the last two decades producing quality human resources, infrastructure and knowledge in this globally competitive area. Today India stands 3rd globally in the number of scientific publications in nanosciences. The use of highly effective antimicrobial nanoparticles on PPEs, masks etc is a useful application that will provide an extra layer of protection for the high risk settings, such as for the medical workers”, said professor Ashutosh Sharma, secretary, DST.

Professor Agrawal, along with his team, proposes to evaluate antiviral properties of this compound against COVID-19 in association with AIIMS, New Delhi, and ILBS, New Delhi. The N9 blue nanosilver, which is a highly potent antimicrobial agent, will be further modified to form nanocomplexes with Zinc compounds to achieve a synergistic effect.

Subsequently, these nanomaterials will be applied as coatings on facemasks and other PPEs to improve their ability to protect the wearer from accidental contamination from COVID-19 virus droplets. The researchers will evaluate the shelf life of the coatings and their efficacy with different storage conditions such as temperature, humidity, and time and prepare facemasks and PPEs and provide these for field trials.

1900 Swayam courses, 60,000 Swayam Prabha TV videos to be translated into 10 regional languages: HRD Minister

April 22, 2020 <https://www.indiatoday.in/education-today/news/story/hrd-minister-translate-swayam-courses-swayam-prabha-tv-videos-into-10-regional-languages-1669717-2020-04-22>

HRD Minister Ramesh Pokhriyal reviewed the Swayam education web portal and the DTH TV channels and decided to get the thousands of courses and videos online translated into 10 regional languages.



HRD Minister Ramesh Pokhriyal reviewed the Swayam education web portal and DTH TV channels and decided to get the thousands of courses and videos online translated into 10 regional languages. (Photo: PTI)

HRD Minister Ramesh Nishankh Pokhriyal held a detailed review on Monday of the national online education platform Swayam and the 32 DTH Television Education Channels Swayam Prabha in New Delhi and decided to get the thousands of courses and educational videos translated into 10 regional languages for the ease of students from all over India.

Professors and national coordinators from IIT Madras, IIT Delhi, IIM Bangalore and IIIT Hyderabad also participated in the Swayam review meeting along with MHRD Secretary Shri Amit Khare, UGC Chairman, DP Singh, AICTE Chairman Anil Sahasrabudhe, NCERT Chairman Hrushikesh Senapaty, the chairman of NIOS, and other senior officials of the ministry.

A brief presentation of the progress of these schemes was made. In the lockdown condition, there has been a tremendous increase in demand and the usage of Swayam courses and Swayam Prabha videos.

What decisions were taken regarding the Swayam educational website?

Currently, 1902 courses are available in Swayam, which have been offered to 1.56 crore students since launch.

Currently, over 26 lakh students are taking 574 courses on offer. In all, 1509 courses are available for self-learning.

Swayam 2.0 also supports the launch of online degree programmes. Mapping of Swayam courses to AICTE model curriculum has been done and gaps identified. A similar exercise for non-technical courses is underway by a committee of UGC.

It was decided that all the 1900 Swayam courses and 60,000 Swayam Prabha videos would be translated into 10 regional languages and made available to the students so that more benefit can be derived from the same.

The more popular content and those for engineering courses taught in the first year shall, however, be prioritized for translation.

- It was also decided that UGC and AICTE will follow up with universities and institutions to accept SWAYAM credits. This will enable students to do part of their course through MOOC and part in various colleges.
- Also, to encourage faculty to provide more courses under SWAYAM, appropriate incentives for their career will be provided.
- Further, UGC has been asked to prepare guidelines regarding online and Distance learning guidelines to increase Gross Enrolment Ratio.

Who will carry out the Swayam translation work?

It was decided to decentralize the task of translation to the National Coordinators, who may be allowed to use all possible services like students, government or private agencies, available technology to undertake translation of content.

The whole project will be started immediately and completed in a time-bound manner. The popular courses and videos would be done first.

In order to complete this exercise in the shortest possible time a number of educational institutions across the country would be asked to contribute.

Each NC shall submit an action plan to MHRD (E-mail: NMEICT@nmeict.ac.in) by 23rd April.

An advisory shall be issued to all Directors of IITs to provide all help to the NCs in the task of translation of content, creation of new content in gap areas, and acceptance of credit transfer.

What decisions did HRD Minister take regarding SWAYAM Prabha TV channels?

The Swayam Prabha is a group of 32 DTH channels devoted to telecasting of high-quality educational programmes on a 24x7 basis using the GSAT-15 satellite.

Every day, there will be new content for at least four hours which would be repeated 5 more times in a day, allowing the students to choose the time of their convenience.

The following decisions were taken:

- Possibility of redistribution of channels to match available content, and viewership shall be explored.
- It was also decided to **enrich the content in Swayam Prabha by collecting content from whosoever willing to contribute the same under Vidya Daan Programme**. Subject expert committees shall be formed by each NC to approve the content received, before getting it uploaded on Swayam Prabha
- The broadcast over DTH will be popularized through all available channels, including radio, social media.

- The video content on SWAYAM Prabha shall be mapped to curriculum, and the academic calendar
- For the translation of content of four IIT-PAL channels, CBSE, NIOS shall provide all assistance to IIT-Delhi. This matter shall be followed up by JS(IEC) in MHRD.

The decisions of the meeting will be reviewed by the Ministry for implementation.

IIT Delhi to resume classes from July 2

April 20, 2020 <https://www.hindustantimes.com/delhi-news/iit-delhi-to-resume-classes-from-july-2/story-fAxEEemO2QRKETIAUfebBfL.html>

According to the revised academic calendar the institute shared with students and teachers on Sunday, the summer break is declared from April 25 to June 28.



HT had last Sunday reported that IIT-D was considering restarting the current academic session from the first week of July. (HT file photo)

The Indian Institute of Technology in Delhi (IIT-D) on Sunday shared its revised academic calendar for the remaining semester that was suspended midway due to the coronavirus disease (Covid-19) outbreak and announced that it will resume classes from July 2 onwards.

HT had last Sunday reported that IIT-D was considering restarting the current academic session from the first week of July.

According to the revised academic calendar the institute shared with students and teachers on Sunday, the summer break is declared from April 25 to June 28. "Teaching for the second semester of academic year 2019-2020 will resume on 02.07.2020. Prior to that, students to be asked to return to campus in a phased manner as per a schedule to be finalized and communicated in due course," the institute said in an email sent to all students and teachers on Sunday.

“The resumed second semester of academic year 2019-2020 will have a 6-day teaching week (Monday – Saturday) with extra slots in the evening and Saturdays,” it added.

While the exams for final-year students are slated to end by the end of July, for first-year students they will go on till August. The registration for the next academic year is expected in August.

IIT-Delhi’s startup launches affordable mask ‘Kawach’ to fight COVID-19

April 18, 2020 <https://indianexpress.com/article/education/iit-delhi-startup-launches-affordable-face-mask-kawach-to-fight-covid-19-6368293/>

The mask is priced below Rs 45 to ensure its availability for masses. The team is also working on new prototype designs to make it washable and reusable at least 10 times.



IIT-Delhi incubated start-up developed N95 equivalent masks for Rs 45

In light of the shortage of personal protective equipment (PPEs) in the country during the COVID-19 pandemic, an Indian Institute of Technology (IIT) Delhi start-up has launched KAWACH – an “affordable and effective face mask” at par with N95 masks.

ETEX, a start-up for “designing and developing smart textile solutions for healthcare”, said the facemask would come in use now “considering unprecedented challenges in supply of PPEs (personal protective equipment) during the COVID-19 crisis”.

“The cost of N95 mask used for the protection against COVID-19 in the Indian market is quite high, making it unaffordable for the masses. People are using surgical masks also but due to loose-fitting of such masks, not securing proper cover around the nose and mouth; this may allow COVID-19 virus to enter or leave from the side edges. Furthermore, the use of sewn cloth face covering or handkerchief is useful only to an extent, not providing sufficient protection due to absence of nonwoven layer,” the institute said in a statement.

“KAWACH mask is at par with N95 in terms of proper fitting, and engineered filtration layer that could provide up to 98% filtration efficiency (3-micron size particle; ASTM F 2101). The mask price is kept affordable (below Rs.45) so that it can reach masses for enhanced protection,” it further said,

adding that the “product efficiency is backed with the strong technical inputs from the core textile team in the Department of Textile and Fibre Engineering”.

Professor Bipin Kumar from the Textile and Fibre Engineering Department said, “India has several massive challenges ahead – disposal of PPEs (including mask and coveralls) after one-time use and ensuring the minimum use of nonwoven technology for making PPEs. Though a nonwoven layer is a must for ensuring desired filtration level but the loose fibrous structure makes the product disposable after one use.”

“Disposing of synthetic polypropylene nonwoven could have a detrimental effect on the environment. Finding other textile solution that offers reusability, biodegradability, affordability and scalability for PPEs is the need of the hour; this could ensure meeting both the demand and also safeguarding our environment. Development of KAWACH mask is a result of our indigenous manufacturing capabilities,” he said.

The team is also working on “new prototype designs for the mask to make it washable and reusable for at least 10 times”.

“This could be a game-changing solution for COVID-19 crisis for protecting a massive population of our country in the most economical and effective way. The team is also exploring other textile technologies for developing coveralls. The start-up is seeking funding support from DST, BIRAC, Corporate CSR, etc. to scale up,” IIT-D said in its statement.

7 IITs including IIT Delhi, IIT Bombay, IIT Madras decide to Boycott Times Higher Education Ranking over transparency issues

April 17, 2020 <https://www.jagranjosh.com/news/7-iits-including-iit-delhi-iit-bombay-iit-madras-decide-to-boycott-times-higher-education-ranking-over-transparency-issues-153675>

IITs to Boycott THE Ranking: As per the latest update, 7 IITs i.e. premier technology schools of India, have decided to boycott The Times Higher Education Ranking (THE Ranking) over issues concerning transparency and parameters for ranking. According to reports, leading Indian Institutes of Technology (IITs) including IIT Bombay, IIT Delhi, IIT Guwahati, IIT Kanpur, IIT Kharagpur, IIT Madras and IIT Roorkee, have decided that they will not be participating in THE World University Rankings this year (2020). The news has been confirmed by the technology institutes through an official release issued by them. The decision has been taken jointly by these institutes after Times Higher Education failed to convince them about the transparency and ranking process for the technology institutes.

According to sources close to the institutes, the decision to not participate in the THE World Ranking 2020 for technology institutes was taken after last year, few younger IITs and private technology institutes were ranked higher than the older ones including IIT Mumbai, IIT Delhi and IIT Madras. Last year, none of the top 7 IITs i.e. IIT Bombay, IIT Delhi, IIT Guwahati, IIT Roorkee, IIT Kanpur, IIT Kharagpur and IIT Madras, were ranked in the top 300 engineering institutes.

Following this, there was a lot of backlash from the institutes, some even expressing their displeasure with the ranking system. However, in other global ranking including QS World University

Rankings as well as in the national-level NIRF Rankings, these 7 IITs continue to dominate the rankings. This had raised serious questions about the ranking process and the parameters followed by the institute for the same.

Grey Areas in Ranking Need to be Addressed

Officially, the press release says that there are several 'grey areas' that needs to be addressed in terms of ranking matrix and clarity is needed on ratio and the calculation being used for the ranking. This issue was cited and discussed in detail with THE officials who couldn't convince the institutes about their ranking parameters. As per Times Now report, a senior official has said that "the institutes will reconsider their decision next year if Times Higher Education is able to convince them about the parameters and transparency in their ranking process."

As IITs, IIMs focus more on professional courses, drop-out rate declines


April 14, 2020 <https://indianexpress.com/article/education/as-iits-iims-focuses-more-on-professional-courses-drop-out-rates-declined-iitd-ac-in-iitm-ac-in-6355263/>

HRD Minister Ramesh Pokhriyal in his written reply to Lok Sabha stated, "This has been achieved by taking a number of corrective measures to minimise dropouts, which includes the appointment of advisors to monitor the academic progress of students and peer assisted learning."

In the last five years, there was a significant decline in the drop-out rates at national institutes like Indian Institute of Technologies (IITs), Indian Institute of Managements (IIMs). The drop-out rates in IITs in 2015-16 was 1626 (2.25 per cent) which went down to 910 (0.68 per cent) in 2019-20.

While in IIMs, it was 1.04 per cent in 2015-16, which was reduced to 0.78 per cent in 2019-20, as per the Ministry of Human Resource and Development (MHRD) data. HRD Minister Ramesh Pokhriyal in his written reply to Lok Sabha stated, "This has been achieved by taking a number of corrective measures to minimise dropouts, which includes the appointment of advisors to monitor the academic progress of students and peer assisted learning."

PERCENTAGE OF DROPOUT IN SOME INSTITUTES			
YEAR	IIT	IIM	OTHER INSTITUTIONS
2015-16	2.25	1.04	7.49
2016-17	1.60	1.06	8.56
2017-18	1.71	1.03	6.76
2018-19	1.46	0.50	5.36
2019-20	0.68	0.78	2.82



Data as shared in the Parliament. (Graphic by Gargi Singh)

According to IIT-Delhi director V Ramgopal Rao, the improvement in the dropout rate is due to various measures taken by them including classes on professional courses, English language, peer-supported learning, better campus placements. “Of the dropouts, most left as they could not follow classes as teachers teach in English. Keeping that in mind, IITs started classes on English language in 2019 for students who lack fluency. This helped them and many scored better in the second year than their first semester,” the director commented.

The institute also approached the senior students to conduct sessions, which included doubt clearance classes by various batches for those who could not perform well in the classes. Meanwhile, when it comes to the postgraduate (PG) level, the dropout rate — which is always higher than undergraduate (UG) — is due to candidates getting better placements and not having co-ordination with GATE-based recruitment system, the director mentioned.

To combat this, the institute has suggested the formation of a Common Offer Acceptance Portal (COAP), to centralise the GATE-based recruitment process. The common window (COAP) will connect the PSUs, candidates and the institute; this system helped institutes like IIT-Madras to reduce the dropout rate in postgraduate level, the official informed.

The IITs blame the unsynchronised admission process by the Public Sector Undertakings (PSUs) as the major reason behind the dropouts.

In the Indian Institute of Technology (IIT-Madras), where there were no dropouts since 2018, the institute’s scenario changed when it started providing professional courses to students which benefited them in getting jobs. “We provide classes on various topics related to industries, and language skills. The students update themselves with various pros and cons of the industries, and English,” said the official from IIT-Madras admission cell.

The university has also started the Common Offer Acceptance Portal (COAP) to check the dropout rates among MTech students. “The COAP portal provides a common platform which connects students, the institute and recruiters. The recruiters get the opportunity to submit the offer letter, and the candidates get the opportunity to revert in a timely manner,” the official noted.

In 2018, out of the 301 students who got admission across MTech courses in IIT-Delhi, 74 students dropped out leaving 24.58 per cent of the seats vacant. At the IITs in Mumbai and Madras, the number of seats left vacant were 45.01 per cent and 19.25 per cent, respectively.

Meanwhile, the dropout rates in the Indian Institute of Managements (IIMs) went down to 0.78 per cent, with at least 13 IIMs not counting any dropout rates in the last academic year 2019-20. IIM Sambalpur Director Mahadeo Jaiswal said, the last dropouts was witnessed in 2016, when 30 per cent students left the courses midway. But from 2017, the institute has not witnessed any dropouts.

The significant and rapid improvement is due to the various professional based classes conducted by the B-school. “The institute conducts classes on various IT and professional courses, and other peer supported learning and bridge courses. The initiatives by the institute help students in their professional world and lead to decline in the dropout ratio,” the director said.

Education Minister Lauds IIT Delhi for R&D Accomplishments against COVID-19

April 11, 2020 <https://www.ndtv.com/education/education-minister-lauds-iit-delhi-for-r-d-accomplishments-against-covid-19-2210107>

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Union Human Resource Development Minister Ramesh Pokhriyal 'Nishank' has lauded Indian Institute of Technology Delhi (IIT Delhi) for its research accomplishments against the COVID-19 infection. "I thank the director of the institute Prof. V. Ramgopal Rao along with the students & faculty for stepping up during #CoronavirusOutbreak," the Education Minister has tweeted.

Dr Ramesh Pokhriyal Nishank

✓ [@DrRPNishank](#)

Watch the video below to see how [@iitdelhi](#) is helping the nation face the challenges posed by the growing pandemic of [#COVID19](#).

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[5:06 PM - Apr 10, 2020](#)

IIT Delhi has initiated key research and development projects on various aspects-- PPE's, production of three layered surgical masks and high efficiency face masks (N95), antimicrobial fabric development, SARS CoV2 detection assay, preparation of sanitizer, designing low cost ventilators and screening inhibitors for nCoV-19 structural proteins vis-a-vis designing virus-like particles for attempting vaccine development.

So far, the institute has developed 3 layered good quality surgical masks for hospitals & health workers, high efficiency face masks (N95), antimicrobial fabric for protection against hospital acquired infection, 3 ply mask, laminated knitted textile based coverall and hand sanitizers.

These products have developed by researchers working under the Department of Textile Technology, Department of Chemical Engineering and School of Biological Sciences.

Team working with Professor Vivekanandan Perumal in School of Biological Sciences has also developed detection assay for COVID-19.

Professor Manidipa Banerjee is leading teams on Computational prediction of possible nCoV-19 structural proteins inhibitors from Azadirachta indica (Neem) and designing virus-like particles as vaccine candidates against nCoV-19.

Likewise, Department of Design is working on developing low cost ventilator under the guidance of Professor PVM Rao.

There are a number of long term and short term projects going on in the institute against the COVID-19.

Delhi government installs disinfectant tunnels at Azadpur vegetable market

April 11, 2020 <https://www.newindianexpress.com/cities/delhi/2020/apr/11/delhi-government--installs-disinfectant-tunnels-at-azadpur-vegetable-market-2128666.html>

Rai told the media that depending on the success of the system, the Delhi government will install such machines in all the mandis of Delhi.



Delhi Minister Gopal Rai walks through the disinfectant tunnel | Parveen Negi

The Delhi government on Friday installed two sanitisation tunnels spraying disinfectant automatically on people at the gates of Azadpur Mandi — Asia's largest wholesale market. Every person entering or exiting the Mandi will have to go through the tunnel to get sanitised, Delhi Development Minister Gopal Rai said.

Rai told the media that depending on the success of the system, the Delhi government will install such machines in all the mandis of Delhi. "The Azadpur Mandi is functional as it supplies the essential items for the residents of Delhi. The Delhi government has installed two full-body sanitization machines at the gate of the mandi. Every person entering and exiting the Mandi will have to pass through these machines. This will protect the people from the COVID-19 infection," he said.

Rai added that the machine was developed by Indian Institute of Technology, Delhi. The minister said one disinfectant tunnel costs the government around `1.5 lakh. "I have instructed the traders to maintain and ensure social distancing. The government has also marked circles in front of the shops. In one circle, one person will stand and this is to ensure social distancing." Rai said special attention will be given to the cleanliness of the mandi from now on.

"I have instructed all the labourers and traders to wear masks. The Delhi government is distributing masks to everyone here. To sensitise the workers here, we are distributing pamphlets and disinfectants are being sprayed daily at the mandi." He said the government is also providing morning and evening meals to the drivers and labourers of the mandi. In Delhi, over 700 people have been infected with the novel coronavirus.

Developed by IIT Delhi

Delhi Development Minister Gopal Rai added that the machine was developed by Indian Institute of Technology, Delhi. The minister said one tunnel costs the government around 11.5 lakh and more tunnel will be installed.