IIT Delhi wins GE Edison Challenge with ₹10 lakh prize

The seventh edition of the GE Edison Challenge held at the GE India Technology Centre, Bengaluru, saw IIT Delhi emerge as winner with a prize of ₹10 lakh.

As a part of the challenge, student teams were required to come up with an idea to make affordable power available 24×7 in India. The winning team’s solution proposed an integrated small-scale biodiesel production unit to be deployed in restaurants, hotels etc for conversion of waste cooking oil into biodiesel and also in rural areas in combination with a seed crusher for conversion of oil seeds into biodiesel.

Sukla Chandra, general manager, GE Global Research Bengaluru, said “It is fascinating to see these young innovators develop solutions to improve day-to-day life and seize an economic opportunity that stays untapped. This platform encourages young innovators to think big and leverage this challenge to showcase their ideas and take them to the next level.”

Knowledge Institute of Technology, Salem, was chosen as the runner-up and won a prize of ₹5 lakh for their solution — Novel design of a high efficiency vertical axis wind turbine. This unique design is capable of generating power three times greater than the existing wind turbine designs. It maximises the wind to electrical energy conversion ratio and overcomes the pressure imbalance on the existing blade designs.

“Availability of reliable power has been a major issue in developing countries. In the view of the recent focus on concepts like smart cities etc., absence of affordable, accessible and reliable power will emerge as a key impediment. Hence, this year we challenged the students to develop relevant solutions to address energy issue in the country,” said Mariasundaram Antony, general manager, India Engineering Operations, GE Power & Water.

The evaluation was on the basis of innovation and novelty, feasibility and potential impact of idea, customer value, commercialisation of the idea and quality of compilation.

Mohit Soni, Harshit Agarwal and Abhishek Kumar Sharma from IIT Delhi won the GE Edison Challenge 2014.
IIT, IIM students a big hit with e-commerce firms

Gauri Kohli

His love for online shopping helped Sachin Chandra get a job with a leading e-retailer. A computer science student of IIT Bombay, he is among the few engineering and management students who have got placed in e-commerce firms. He will be joining Flipkart as a software development engineer.

E-commerce firms are definitely on a hiring spree this year. With Flipkart announcing the filing of an application with Singapore-based companies’ regulator ACRA to become a public company after raising $700 million for long-term strategic investments in India, e-commerce is set to grow further with internet penetration and consumerism.

“This may be because most of the e-commerce sites were started four to five years back and they need people who are smart and innovative. People who have experience in databases and all the topics related to e-commerce have a better idea about the problems that could arise and also have ideas to improvise the overall site experience. This is why they are hiring IIT’s students too. The average package would be somewhere around ₹12 lakh to ₹18 lakh per annum for software engineers, which includes employee stock option schemes,” says Chandra.

Students are being selected in areas such as online and offline marketing, brand management, technology development and analytics. From e-commerce majors like Flipkart and Amazon to start-ups like Housing.com and Urbanladder, a good number of IIT and IIM students are going for e-commerce jobs over other sectors. Reshmi S, a final-year BTech student in aerospace engineering at IIT Madras, got placed in Housing.com as assistant manager operations recently.

“I chose Housing mostly because it was a start-up and the role seemed interesting. When I did some research about Housing, I got good reviews about the work culture and the company in general. Housing has seen tremendous growth. Even companies such as Flipkart and Ola have grown very fast,” she says.

Dhanesh Kumar, a student of IIT Bombay, did an internship with a major e-commerce company and feels he gained a lot from it. “I had an internship at Amazon this summer and received a full-time job offer from them in recognition of my performance during the internship. I will be joining my team as a software developer. The work culture was very productive, the team helpful, the work engaging,” says Kumar, who has got a package of more than ₹25 lakh.

IITans were hired in good numbers by all e-commerce companies, says Kumar, adding that a technical background engineer can squeeze the last bit of performance out of an e-commerce portal, leading to better user experience. Also, there is lot of technical knowledge that goes in developing this kind of platform with many issues pertaining to server loads, millions of users and security.

IIM students too, are getting plum offers. Tanuj Madan, studying at IIM Calcutta, says “I did my summer internship with the operations department of Amazon and was awarded a pre-placement offer. The company set aside a commitment of $2 billion for its Indian operations in July. My internship in Amazon provided me with a great opportunity to learn. Amazon embodies an energetic and dynamic work culture. I was able to work with the finest minds in the industry learning the operational nuances of e-retail,” says Madan.
The big deal about e-jobs

BULLISH ON HIRING Expanding at a compound annual growth rate of 34%, the e-commerce sector is hiring aggressively from the IITs and IIMs

Rozelle Laha
rozelle.laha@hindustantimes.com

If Facebook’s ₹2.1 crore offer to Astha Agarwal of IIT Bombay this year made heads turn, the e-commerce giants too thrilled graduates with big packages.

“We firmly believe that as we expand and grow in the country, talented engineers and MBAs from these institutes will play an instrumental role in driving Amazon’s growth in India,” says Raj Raghavan, director-human resources, Amazon India.

Amazon has been hiring from the Indian Institutes of Technology (IITs), Indian Institutes of Management (IIMs), Indian School of Business and other prominent engineering colleges and B-school for quite some time. As per sources, the online retail giant offered ₹25 lakh per annum each to three graduates at the Motilal Nehru National Institute of Technology (MNNIT), Allahabad, and National Institute of Technology (NIT), Calicut.

The sector is expanding at a compound annual growth rate of 34%, as per data from a joint report by the Internet Mobile Association of India and the Indian Market Research Bureau, and companies are hiring aggressively. “The e-commerce space will grow up to 55% to 60% in the coming years,” says Ashvin Vellody, partner-management consulting, KPMG. Snapdeal, which first caught the attention of graduates by offering nearly ₹50, 000 per month as stipend to summer interns, hired 120 graduates from IITs as against 25 last year. It plans to hire 500 engineers and 100 B-school graduates across functional areas like marketing, product development, strategy, operations, finance and category management. It will also hire from the National Institute of Fashion Technology and the National Institute of Design.

“We look for good behavioural skills, willingness to go an extra mile to succeed, innovation and an ability to thrive in a challenging environment,” says Saurabh Nigam, vice president-HR, Snapdeal.com. Flipkart has hired 200 IIT graduates and will be recruiting more as it is planning to increase the overall headcount to 25,000 by 2015 with technology as a priority. “We do not expect ready talent, as the major learning happens during the job. Our approach is to focus on individual competencies and there isn’t a defined skill-set that we look for,” says Surinder Bhagat, senior director-HR, Flipkart.

The start-ups too have gone bullish. Companies like Vizury Interactive Solutions, Zivame, BrowserStack and CodeNation actively participated in placement sessions across major IITs. Real estate portal Housing.com has hired 120 graduates and offered annual salaries ranging from ₹12 lakh to ₹20 lakh based on profiles. “We have participated in hiring activities across all major IITs, including Delhi, Kanpur, Bombay, Madras and Kharagpur,” says Adriitya Sharma, co-founder, Housing.com. The online ticketing company BookMyShow plans to add 200 more employees to the company by the end of 2015 and 60% of them will be freshers. AllDayCoupon.com is willing to hire fresh graduates at packages ranging from ₹4 lakh to ₹12 lakh per annum (with productivity-linked bonuses) from tier-2 and tier-3 colleges.

As Rituparna Chakraborthy, president, Indian Staffing Federation, says, “Time for consolidation hasn’t yet kicked in e-commerce and hence, we shall see consistent increase in hiring in this sector. The biggest demand will be at the bottom of the pillar.” Estimated hiring may cross 80,000 in the next one year, she added.
Professor Akio Tanabe of Japan’s Kyoto University and convener of Contemporary India Area Studies (INDAS), who was in the Capital recently, talks about Indo-Japan relations, how the two countries can contribute to the world and exchange opportunities. Excerpts from an interview.

Tell us about INDAS. We realise that it is necessary to conduct comprehensive area studies on contemporary India and South Asia in order to gain a better understanding of the dynamics of the 21st century. In 2010, the INDAS (Contemporary India Area Studies) programme was launched at the initiative of the National Institutes for Humanities, which is under the Japanese government. It aims to develop a comprehensive understanding of the present dynamism of India from a holistic and long-term perspective. This research project is conducted, in collaboration with the National Institutes for the Humanities (NIHU), by the INDAS Network which consists of six research centres at Kyoto University, The University of Tokyo, Hiroshima University, National Museum of Ethnology, Tokyo University of Foreign Studies and Ryoukoku University.

How is Japan seen as a study destination for Indians? The Japanese academia was not good at initiating links with the outside world. Japan and India had links with Europe and the US but less within Asia. Japan has a network of six centres which are keen to establish links with Indian academia. We want to see more face-to-face exchanges rather than just exchanges on paper. We want to globalise our academic links and invite more Indian scholars and researchers to Japan. We hope to get governmental, civil and personal support for this.

In August this year, there has been an agreement of intent to establish cooperation between the Indian Council of Social Science Research (ICSSR), Indian Council of Historical Research (ICHR) and Japan Society for the Promotion of Science (JSPS). We want to substantiate this agreement in a way so that there will be actual exchanges.

What about Indian students in Japan...? There are many students from China, Nepal and Bangladesh from Asia, but few from India. One reason is the language barrier and lack of civil support. Till now, the medium of instruction in Japan was Japanese. We now want to adopt English as a second language and be bilingual so that we can get more students from India and other countries. The standard of learning has improved both in India and Japan. When we think of sending Japanese students abroad, we only think of Europe and the US. We need to change our cultural conscience and look at other destinations too.

What do you expect from the new Indian government? There are many opinions about the new government. A lot of people in Japan are happy that Prime Minister Narendra Modi chose Japan as his first destination outside south Asia. He visited Kyoto first before entering Tokyo. Kyoto is a very important cultural centre... we can call it the cultural capital of Japan and I am glad that he is planning the smart heritage city on the Kyoto model.
This paddle helps you climb glass walls like a gecko

San Francisco: Stanford University students have created paddles that help humans scale glass walls like a gecko. The “gecko gloves” use the same scientific principles employed by the sticky feet of nature’s most impressive climber, a news agency reported on Monday.

“One of the most important attributes of their adhesive is that it’s controllable, like tape that you can turn on when you want it to stick, and turn off when you don’t,” said Elliot Hawkes, a member of the research team. The Stanford students have patents pending and have already begun negotiations with toy companies.

A Swiss entrepreneur has scheduled a meeting with the team in January to discuss possible rock-climbing applications. There is also a project in the works with Nasa and the Jet Propulsion Laboratory in Pasadena to use a version of the gloves to grab things in space.

“It turns out that gecko-inspired adhesives are one of the very few technologies that will work in space, where you’ve got a vacuum and very low temperatures,” said Mark Cutkowsky, a mechanical engineer in the team of four.

Nasa’s adhesive grippers to catch space debris

Nasa is developing gecko-inspired adhesive grippers that could grapple objects in space such as defunct satellites and orbital debris which pose a serious risk to spacecraft. Scientists at Nasa’s Jet Propulsion Laboratory in Pasadena, California tested the grippers in periods of weightlessness aboard Nasa’s C-9B parabolic flight aircraft in August.

“Orbital debris is a serious risk to spacecraft, including the International Space Station,” said Aaron Parness, a JPL robotics researcher who is the principal investigator for the grippers.
Coming, a device to manufacture organs

Tech Helps Assemble Small Tissues To Form Body Parts

Washington: A new device may someday build replacement human organs such as livers or kidneys just as electronics are assembled—with precise picking and placing of parts, scientists say.

The new device called “Bio3” allows assembly of larger structures from small living microtissue components, researchers said, adding that the future versions of Bio3 may finally make possible the manufacture of whole organs such as livers, pancreases or kidneys.

“In contrast to 3D bio-printing that prints one small drop at a time, our approach is much faster because it uses pre-assembled living building parts with functional shapes and a thousand times more cells per part,” said Jeffrey Morgan, a Brown University bioengineer.

The device seems at first glance to be a small clear plastic box with two chambers: one side for storing the living building parts and one side connected to some tubes and a microscope-like stage that allows an operator using knobs to precisely move it up, down, left, right, out and in.

The plumbing in those tubes allows a peristaltic pump to create fluid suction through the nozzle’s finely perforated membrane. That suction allows the nozzle to pick up, carry and release the living microtissues without doing any damage to them.

Once a living component has been picked, the operator can then move the head from the picking side to the placing side to deposit it precisely.

The team showed several different structures, including a stack of its dots, rings and a stack of four honeycombs. Because these are living components, the stacked microtissues naturally fuse with each other to form a cohesive whole. Each honeycomb slab had about 250,000 cells and the stack of four achieved a proof-of-concept, million-cell structure more than 2 millimeters thick.

Complex stacks with many more cells are certainly attainable, Morgan said.

If properly nurtured, stacks of these larger structures could hypothetically continue to grow, Morgan said. The team has made structures with a variety of cell types including brain cells, RGN ovarian cells, and even MCF7 breast cancer cells.

Prototype ready, self-driving car set for road test

San Francisco: Google on Monday announced that the first completed prototype of its self-driving car is ready to be road tested.

“We’re going to be spending the holidays zipping around our test track, and we hope to see you on the streets of Northern California in the new year,” the Internet titan’s autonomous car team said in a post at Google+ social network.

The prototype is a manifestation of plans that California-based Google revealed in May to build its own autonomous car minus typical features such as steering wheels. They won’t have a steering wheel, accelerator pedal, or brake pedal... because they don’t need them. Our software and sensors do all the work,” Google’s Chris Urmson said in a blog post. Technical specifics of the prototype were not disclosed on Monday. For Google, the car marks a shift away from adapting vehicles made by others in its quest to pioneer individual transport that needs only a stop-and-go function. Google said early this year that the top speed of the battery-powered prototypes will be 25 miles (40km) per hour and that they would be designed for utility, not luxury.

The blog post on Monday showed a white, rounded bug-looking vehicle. “We’ve now put all those systems together in this vehicle — our first complete prototype for fully autonomous driving,” Google said.

Several automakers have been working on autonomous or semi-autonomous features, such as self-parking, but no fully autonomous car has hit the market yet. If widely adopted, stand to be as transformative to consumer life as the smartphone,” said Mike Hudson, who tracks the automotive industry for eMarketer.
UGC renames scheme after Sangh ideologue

Akshaya.Mukul
@timesgroup.com

New Delhi: University Grants Commission has renamed the Knowledge Upgradation for Skilled Human Action and Learning (KUSHAL) to Deen Dayal Upadhyay Centres for Knowledge Acquisition and Upgradation of Skilled Human Abilities and Livelihood (DDU-KAUSHAL).

UGC took the decision in its full commission meeting on Monday.

The idea of 100 centres for KUSHAL in universities and colleges was moved by HRD minister Smriti Irani in September during the retreat of vice-chancellors of central universities but UGC on its own has extended the scheme to self-financing institutions, but without any financial assistance. In the process, even the name of the scheme has been changed to accommodate the name of Sangh ideologue Upadhyay.

As per the scheme, all universities and colleges which receive general development assistance from UGC and which have either been accredited by the National Assessment and Accreditation Council or National Board of Accreditation or have applied for accreditation will be considered for aid under DDU-KAUSHAL.

All universities and colleges which receive general development assistance from UGC and have either been accredited by the NAAC or National Board of Accreditation or have applied for accreditation will be considered for aid under DDU-KAUSHAL.

Even UGC-approved community colleges or institutions conducting Bachelor in Vocation Studies will get assistance.

UGC meeting also decided that chairperson Ved Prakash will be present in Varanasi for the foundation of Inter University Centre (IUC) on teacher education in Banaras Hindu University. Though the matter of approval of setting of IUC in Varanasi was sent to members through mail and they were given only two days to respond, the full commission was told that UGC has already printed 2,000 pamphlets and brochures about the new centre and sent it out to various universities.

Last year an IUC on teacher education was set up in Kakinada, Andhra Pradesh in the constituency of former HRD minister M M Pallam Raju but it is yet to take off and even the director has not been appointed.
E-reading at night can leave you sleepless

Washington: Use of a light-emitting electronic device such as e-books in the hours before bedtime can adversely impact sleep, overall health, alertness and the circadian clock, a new study has found.

Researchers at Brigham and Women's Hospital (BWH) compared the biological effects of reading a light-emitting electronic device (LE-eBook) compared to a printed book.

“We found the body’s natural circadian rhythms were interrupted by the short-wavelength enriched light, otherwise known as blue light, from these electronic devices,” said Anne-Marie Chang, corresponding author, and associate neuroscientist in BWH’s Division of Sleep and Circadian Disorders.

“Participants reading an LE-eBook took longer to fall asleep and had reduced evening sleepiness, reduced melatonin secretion, later timing of their circadian clock and reduced next-morning alertness than when reading a printed book,” Chang said.

Previous research has shown that blue light suppresses melatonin, impacts the circadian clock and increases alertness, but little was known about the effects of this popular technology on sleep. The iPad readers had reduced secretion of melatonin.

The use of light emitting devices immediately before bedtime is a concern because of the extremely powerful effect that light has on the body’s natural sleep/wake pattern, and may thereby play a role in perpetuating sleep deficiency. Although iPads were used in this study, researchers also measured laptops, cell phones, LED monitors, and other eReaders, all emitting blue light. PTI
Countdown to IIT

According to a study, 37 per cent IITians start to prepare for the JEE exam one year before the date of the examination. LOKESH KHANDELWAL lists some tips that will help you plan your next six months for the big test.

START NOW!
This is probably the last opportunity you will get to be adequately prepared for the examination. So, stay focused, work as much as you can and start preparing right now.

POLISH UP YOUR BASICS
If you are confident of your basics, then the rest will automatically fall into place. Make sure you are confident of the basic formulas, concepts and theories in Physics, Chemistry and Maths. Once you have that in control, the rest of the syllabus can be managed easily, provided you work hard and sincerely.

TIME MANAGEMENT
According to a study, 37 per cent IITians start to prepare for JEE exam one year before the date of the examination. So you ought to be really serious at this moment if you really want to clear the exam. It is advised to divide your time into slots for different subjects and devote some time to physical activities to relax your mind. Make a study plan and stick to it until the last day.

TAKE EXPERT GUIDANCE
It's better to follow the experts in the field and do what they say without taking any chances. So, join the right coaching institute which will guide you with their expert tips. Follow each and every piece of advice given by your faculty members.

IMPROVE SPEED WITH ACCURACY
Speed with accuracy is very important at this juncture because generally papers are lengthy and twisted. Accuracy is required so as to avoid negative marking and thus reducing your loss. Speed will be achieved by regular practice and accuracy comes by paying full concentration while attending classes as well as while attempting more papers. Regular study will help you anticipate questions and answers faster. It will improve your analytical skills by a significant margin.

SOLVE OLD QUESTION PAPERS
Solving last 10 years' question papers before the exam will help you immensely. Since these papers will include questions that have been asked in the previous IIT Exams, it will help you analyse and anticipate the questions better. The pattern followed and the level of difficulty will give you an idea of what you can expect in JEE 2015.

EXAM TRICK
Never read sample test papers at leisure; always write them under the 'time pressure'. Don't be surprised if you find a two-mark question taking more time (generally because there is some clever trick involved, which may not come quickly to you) than a four-mark question. There has to be a well-defined strategy of navigating through them and scoring marks. Most successful candidates solve the paper in iterations. They traverse through the same question paper at least twice or thrice during the exam, picking the easiest ones in the first iteration, then the tougher ones and finally the real tough cookies.

OVERCOME THE FEAR
Find out as much information about the structure of JEE as possible. There should be no surprises in this area! You must know beforehand the number of questions, the type and style of questions, previous year’s sample questions etc. Just remember the exam may surprise you anytime with the changed pattern so prepare for everything possibility you know. It is better to clarify early on what you do and don’t know and what you can and can’t do, rather than discovering this for the first time in the actual exam. Only by testing yourself and identifying the gaps will you know what to work on.

On the day of examination, keep your cool and attempt the questions. Remember, at the end of the day that it is just another exam. Don't be disheartened at any point. It is a difficult exam but not impossible to crack. So, go ahead and earn the success you truly deserve.

The writer is co-founder and executive director, Resonance Educational Pvt. Ltd.
आईआईटी में एंट्री का राज

इस सभी में पढ़ रहे स्टूडेंट्स ने खोले आईआईटी में पहुंचने के राज, जागरणजोश जोट काम द्वारा कराये गए सर्वेक्षण में बाहर आए कई दिलचस्प तथ्य...

प्रतियोगी उपयोगकर्ता

11वीं में प्रवेश की तैयारी

सर्वेक्षण के माध्यम से यह जानकारी मिली कि देश के सर्वश्रेष्ठ बोर्ड ग्रेड मार्क जीतने वाली इस इंजीनियरिंग प्रोग्राम परीक्षा का अनुसन्धान निष्पादित कर चुके हैं 63 प्रतिशत छात्र अपनी पूर्ववर्ती का आर्थिक अंतर 11वीं कक्षा से शुरू कर देते हैं। इन छात्रों में से 53 प्रतिशत ने जोट-संबंध के दर्जनों में टेस्ट सीट में महत्वपूर्ण माना और इसके लिए पृथ्वी ने टेस्ट सीटों में हिस्टरिया विभाग द्वारा दिए गए टेस्ट सीटों के कारण बोर्ड एवं छात्रवृत्ति परीक्षा की सामाजिक अध्ययन।

ये हैं आईआईटी में प्रवेश के सबसे मंगल

1. तैयारी शुरू करने का चाहिए समय - कक्षा 11वीं
2. तैयारी के लिए रोजाना 4-5 पढ़े की पढ़ाई प्रवतित
3. निजी अध्ययन संगठन
4. पिछले साल के प्रश्नपत्र को हल करना भी महत्वपूर्ण
5. अंतर्विद्यालय विकल्प से भी सहायता मुहिम

विषय से संबंधित एसीईआईटी की 12वीं छात्र की पूर्ववर्ती का अपना समाज के लिए पवित्र है।

उपयोगी पुस्तकें

सारे के दौरान मानक पृष्ठांक के रूप में किताबें ने निम्नलिखित पुस्तकें का समाधान के लिए उपयोगी बनाया:

- शिक्षक: एच. री. विभा सुमेरिका: आईआईटी की प्रवतित
- बिश्नेत: आईआईटी की पुस्तक
- अर. सी. अर्जुण मैथुमोक्ष: हैं एवं यदि तय एवं एसीईआईटी

सर्वेक्षण में समस्त अभिलेखित ज्ञान का अभ्यास सार्वजनिक आंदोलन द्वारा संबंधित प्रवेश प्रवतित है।

4-5 घटे रात्री

सर्वेक्षण के अनुसार यह भी पता चला कि आईआईटी की तैयारी के लिए रोजाना 4-5 घटे की पढ़ाई प्रवतित है। अभिलेख सारे ने निजी अध्ययन संगठनों में हासिल की आंदोलन से अपने तैयारी के माध्यम कराया।

- आईआईटी काफ़यत: अभिलेख नवजोत सामग्री, विभिन्न अध्ययन सामग्रियों, स्वतंत्र टिप्पणियों, पिछले साल के प्रश्नपत्र, टॉपर्स के संबंध के आधार पर जोट-संबंध के महत्वपूर्ण विषय से संबंधित सामग्री है।
- निरन्तर प्रश्नपत्र प्रवेश परीक्षाओं के जून महत्वपूर्ण आंदोलन के लिए लगा अंदोलन करें - engineering. jagraunjosh.com
आईआईटी में सफल होने के टिप्स

दिल्ली: आईआईटी जेडीएच के न्यू पैकर्ट की तैयारियों के लिए विद्यामंडिर क्लासरूम द्वारा बनवाई राय विद्या भवन स्कूल ग्रेटर कैलाश और वैकटेंश्वर इंटरनेशनल स्कूल दास्ता में सेमिनार का आयोजन किया गया। सेमिनार में दिल्ली प्रदेश स्कूल आर. के. पुराना और वर्सत कुंज, बिन्दा विभाग निकेतन, मदर इंटरनेशनल स्कूल के छात्रों को हिस्सा लिया।

स्टूडेंट्स के साथ अभिभावक भी सेमिनार में पहुंचे। इसमें जनवरी से 11वीं कक्षा के 500 छात्रों के हिस्सा लिया। विद्यामंडिर के संस्थापक बुज्जेन्द्र गुप्ता ने छात्रों को आईआईटी में सफलता के टिप्स दिए। बुज्जेन्द्र गुप्ता ने बताया कि आईआईटी में जाने वाले छात्रों को स्कूली शिक्षा के दौरान सी आईआईटी परीक्षा की तैयारी करनी चाहिए। इसके बाद उन्होंने बताया कि आईआईटी परीक्षा की ओर उन्हीं छात्रों को रुख करना चाहिए, जो विद्यार्थी
IITs continue to be NRIs' first choice


CHENNAI: The Indian Institutes of Technology may not figure in the top 200 on several international university rankings but they remain the first choice when it comes to undergraduate education for the children of overseas Indians returning home, particularly IIT alumni.

One of the main considerations for NRIs to come back to India is to encourage their children to get into IITs. Like Indian students, foreign nationals too have to write the JEE (Main) and figure among the top 1.5 lakh candidates to sit for the JEE (Advanced) and clear that test to get into the IITs.

Dilip Kumar's parents, for instance, shifted from Dubai to India five years ago with the objective of getting him into an IIT. He trained for the last couple of years and joined IIT Kharagpur this year. The Muralishankars also relocated to Coimbatore from the US four years ago to help their daughter Smriti prepare for the IITs.

"Many IIT alumni who have lived overseas prefer to send their children to the IITs even if they can afford a foreign education," said R Nagarajan, dean of international and alumni relations at IIT Madras.

An IIT alumnus who has lived abroad said he wanted his daughter to study in IIT because "you cannot go wrong if you put your child through IIT".

Another said he insisted his son complete his undergraduation at an IIT, because it is a good entry point to US universities. "My experience showed me that foreign institutions respect a degree from an IIT because the students are more prepared to handle the rigour of higher studies anywhere in the world," he said.

And that, say academics, is one of the main considerations for this move.

A degree from the IITs carries weight in top institutions in the world, as the institutions have been identified as providing good grounding for higher studies anywhere on the globe.

Professor Nagarajan said an MIT professor once told him he would prefer an IIT graduate over one from a US grad school when it comes to graduate admissions. "The chances of an IITian getting into, say, Berkeley are high. This is because the curriculum is comprehensive and there are no holes, whereas in the US the curriculum is so flexible that students can even replace core courses with others," he said. For instance, a student in a US university may be able to give up the course on mass transfer, which is part of the core chemical engineering curriculum in IIT and cannot be skipped.

Speaking of his own experience in Yale University after graduating as a chemical engineer from IIT-M, professor Nagarajan said, "Graduate studies in the US is tough, but while some of my classmates from other countries were struggling I was able to cope up. It wasn't because I was more brilliant than they were, but because I had gotten into the pattern of thinking in a certain way. I would not have been able to keep up if not for IIT."

Many believe that getting students to prepare for JEE (Advanced) from Class 6 trains them to think analytically, helping them excel in higher studies in overseas institutions.
Previous worries that IITs may be lagging behind foreign institutions in promoting entrepreneurship are now being dismissed because of the supportive ecosystem for startups on campus, said IIT faculty.

**Top 5 trends at IIT placements this year**

Startups hire aggressively; variable pay zooms while base salaries stagnate


IITs began their final placements on December 1, 2014. In the first phase of placements, IITs have seen a surge in the number of companies coming on campus. Some other trends that this year are:

1) Most IITs have managed to place around half their batch size. According to IIT Kharagpur, its students received maximum number of job offers as compared to other IITs.

2) Startups came in droves: Start-ups including Housing.com, Flipkart, Ola Cabs, Commonfloor, Meru Cabs, Snapdeal and Stayzilla among others hired aggressively. At IIT Madras, start-ups hired 114 of the 880 students or 13% at the end of the first phase of placement. A total of 65 startups participated in placements.

3) IIT Bombay, for the first time, included manufacturing companies like GE, Airbus and Qualcomm in the coveted first day placement process. GE made 19 job offers.

4) Variable pay zoomed and base salaries stagnated: With companies including various allowances in the pay package, variable component in the salary offered went up. For instance, US-based computer technology firm Oracle, which made a job offer of Rs 1.83 crore, gave a base salary of Rs 80 lakh and 4,000 shares in stock options, taking the overall compensation package to Rs 1.83 crore.

5) Students declines job offers to join startups and social organisations.