

# Newspaper Clips

## August 25-26, 2013

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# Not engineered for jobs

**PRIME CONCERN**  
TECHNICAL EDUCATION  
BY ADITI TANDON

Not too far back in time, an engineering degree was a sure-shot guarantee for employment. Now it's changed. Poor knowledge of English and skills that don't match the market standards are coming in the way of the employability of graduates.

### Ensure right skills

Big Data is an area of collaboration. We need to boost the industry-academic linkage to ensure employability. We are talking to industry leaders. Ensuring the right skills is our priority. We will write to corporate honchos to suggest technocrats who can head top technical institutions such as the IITs and raise their competitive edge.

— MM Pallam Raju, HRD MINISTER

### Wake up

The organisation of international academe has changed whereas the Indian university has remained tradition bound.

— Kaushik Basu, CHIEF ECONOMIST, WORLD BANK

FEW years ago, no one would have imagined that engineers could use their edge in English to pip competitors to top industry jobs. Today this is fast becoming a reality. An increasing body of evidence from the field is suggesting that verbal and written communication, coupled with etiquette, has become as much of a hiring norm for the employers of fresh engineering graduates as the conceptual knowledge of engineering domains.

The National Employability Report for Engineering Graduates published recently by Aspiring Minds, a company that tests job seekers' employability, revealed that around 60 per cent of engineering graduates fail to get jobs because they lack the required level of English. Add to that another finding—only 17 per cent students who graduate from engineering institutions annually have the skill-set the booming information technology (IT) sector is looking for.

These findings echo the concerns contained in the NASSCOM-McKinsey's recent report on the state of employability of India's engineers. It says while work requirement in the IT and business processing outsourcing (BPO) industry in India will increase from seven lakh to 2.3 million until 2013, a shortfall of five lakh workers will remain, not because of dearth of engineering graduates, but because of their lack of employability.

Only one in four engineering graduates and one in 10 general graduates are employable by MNCs, says the National Association of Software and Service Companies-McKinsey document which haunts policy makers. So what is going wrong?

### Not adding up

Technical education institutes annually produce around five lakh engineers. This includes those graduating from the 15 Indian Institutes of Technology (IITs), 30 National Institutes of Technology (NITs) and other Centrally funded institutes along with the 1,500 private institutions approved by the All India Council for Technical Education (AICTE), which regulates 90 per cent of technical education.

With accreditation of technical courses still a far cry, the quality of instruction continues to falter across levels, resulting in a poor pool of engineering talent not fit to meet industry requirements. In 2003, a report submitted by former ISRO chairman UR Rao had questioned the mad rush for new technical institutions, urging the AICTE to stop approving colleges mindlessly.

The report had warned that the rate of increase of engineering graduates was around 15 to 25 per cent as against only 5 to 8 per cent growth rate of the economy. Naturally, they would not be absorbed into jobs.



### Fact of the matter

- Engineers produced annually: 5 lakh
- Jobs in IT, BPO industry by 2013: 2.3 million
- Shortfall: 5 lakh
- Reason: Lack of employability
- Employable by MNCs: One in four graduates
- Graduates lacking level of English required for a job: 60%
- Those with required skills: 17%
- In short supply: civil, mechanical engineers

"A serious situation has arisen because of the mushrooming of private technical institutions. Barring some exceptions, there is scant regard for maintenance of standards in these places," Rao had said. "The advice went unheeded and the government continued to back new institutions to boost the poor gross enrollment ratio in higher education (18 per cent as against 24 per cent, the global average). As a result, while the colleges kept producing the numbers, the quality suffered on account of lack of mandatory accreditation, back-breaking faculty crunch in technical colleges (the sector is short of 1.5 lakh teachers) and wide gap between academia and industry collaboration."

"One of the major problems has been the dilution of core engineering streams by universities. This has led to a decline

### College numbers

IITs **15**  
NITs **30**  
AICTE approved **1,500**

### Where are the jobs

- Big Data business
- Software firms
- Civil engineering

### What is wrong

- Poor pool of engineering talent
- Private technical institutions mushrooming, but quality not up to mark
- Lack of mandatory accreditation

### Faculty crunch

- Wide gap between academia-industry collaboration
- Dilution of core engineering streams by universities
- Obsession with IT, computer science streams

in the level of domain knowledge being imparted to students. The industry-academic collaboration is lacking. We are stressing active practical industrial training sessions as part of the curriculum. We recently circulated a model to bring the courses in line with the changing market and industry requirements," says SS Mantha, AICTE Chairman.

### Losing out

But the industry is not convinced. Top software firms based out of Gurgaon are struggling to hire the right candidates, with most managing to hire an average of two out of every 100 applications.

President of the Apeejay Siva Group, Sushma Berlia, explains, "Apart from domain knowledge, we are also looking for soft skills. An engineer today has to

communicate with the client, engage with the organisation and its goals, work in a team and understand the dynamics of workplace better. Finding the right candidates is a challenge. Also, there is shortage of mechanical and civil engineers even though there is huge requirement of civil engineers."

A research by the group shows civil engineering programmes had the capacity to enroll 13,500 students in 1990s while computer science and IT departments could accept 12,100. By 2008, the IT and computer science programmes ballooned to 1,93,500 while civil engineering programmes climbed to only 22,700.

Another problem is lack of core skills in emerging sectors such as Big Data business. Berlia admits, "NASSCOM has pointed out how software firms are facing

shortage of skilled engineers. India's biggest software firms are looking for more business from areas such as Big Data but there is shortage of engineers to analyse data. We have only 50,000 engineers to undertake such projects whereas the requirement is five times more."

The market for Big Data (decoding huge chunks of information) in India will grow at about 38 per cent a year from \$58.4 million in 2011 to \$153.1 million in 2014, according to a study by technology researcher International Data Corp, which estimated that the world generates 1 petabyte of data every 11 seconds.

### Brushing up

Jobs are surfacing in new-age sectors while classrooms are caught in a time warp. Another major challenge for the ministry is addressing faculty crunch.

"Employers on campus hunts look for students who have done projects. And project outcome is directly related to the availability of faculty," says a senior professor at the IIT Kanpur. The IIT system itself is short of faculty.

Another suggestion which the industry keeps repeating to the HRD Ministry is to make it mandatory for institutions to identify skills a student must have at the end of every semester. "That will make it easy to measure outcomes and help students assess their employability," experts say.

Students admit that the fixation with IT streams is a problem. Sushant Parmar, a passout from an AICTE-approved college in Haryana who failed to get a job, says, "I studied computer science but could not get a job. Mechanical, civil and project engineers are more in demand but the obsession with IT and computer science streams continues."

In 2008, the World Bank had estimated that India would need to train three times as many civil engineers as it does to meet its infrastructure requirements, considering a planned investment of \$500 billion in infrastructure over the next few years.

The question is— are India's colleges ready to alter the content design, styles of delivery and infrastructures? For this to happen, all institutes must first put industrialists on their board of directors, says Mantha, admitting that the AICTE is struggling to enforce accreditation.

The council has still not cleared the hurdle in India's way to becoming a member of the Washington Accord, a multilateral agreement representing agencies that accredit engineering programmes in a select grouping of nations and certify as equally acceptable the programme of each grouping of 12 countries. India's bid was rejected in 2005. It is trying again with the government recently making accreditation for all technical institutions mandatory. Only 10 per cent of institutes are accredited.

# In losses, colleges scrap BTech courses

By SANJEEV SINGH BARIANA

INDICATING the trend of diminishing rush in over 100 engineering colleges affiliated to Punjab Technical University (PTU), more than 35 colleges have sought reduction in admissions from the current academic session onwards. They are offering fee concessions in the name of scholarships and not even 50 per cent seats, out of about 19,800, were filled after the second counselling till July 18.

Official data revealed that only about 10 per cent admissions were done in the first counselling. A majority of them did not manage even a single admission. After the second and final counselling by the PTU, colleges were asked to manage the admissions on their own. The total admission figures will be released after August 31.

The situation is dismal. Atam Vallabh Jain College, Hussainpur (Ludhiana district), and Indo Global College, Abheyapur, have sought the closure of their BTech courses in information technology (IT). The GS College of Modern Technology, Kharar, has also sought the scrapping of its BTech (IT) course and a reduction in electronics and communication engineering (ECE) seats from 120 to 60.

Lala Lajpat Rai Memorial Institute of Management and Technology, Dhudike (Moga), has sought reduction in BTech (IT) seats from 90 to 60 while the Institute of Engineering and Technology, Bhaddal, has sought closure of its electronics and instrumentation course. It has also asked for a reduction in ECE seats from 120 to 60 and BTech (IT) seats from 90 to 60. There are over two dozen more such colleges.

Colleges offering MBA courses may not be directly related to engineering colleges, but these were house to many engineers who wanted to pursue MBA courses. A number of colleges offering



Placement claims by engineering colleges are exaggerated as companies only visit select colleges. FILE PHOTO, FOR ILLUSTRATIVE PURPOSE ONLY.

MBA and MCA courses, particularly in the periphery of Chandigarh, have sought a no-objection certificate (NOC) for the closure of certain cases.

At least 35 colleges are learnt to have sought an NOC from the Directorate of Technical Education and Industrial Training in this regard. These colleges were witnessing dwindling admissions over the past couple of years.

Mohanbir Singh Sidhu, Additional Director (Technical Education), says: "The colleges have been issued a NOC by the department, but the final approval would come from the All India Council for Technical Education (AICTE) after the institutes confirm that students had been adjusted in alternative colleges for completion of their courses."

## Few takers

Course	Seats	Filled
BTech	33,013	4,657
BArch	301	99
BPharm	1,361	136
M.Pharm	788	6
MTech	1,723	421
MBA	5,984	65
MCA	2,348	33

(After second and final counselling by the PTU in July)

"A number of colleges had been opened by people who had nothing to do with education. Some small-time business-

men are learnt to have also pitched in their finances to make fast money. Education is not a business and students are smart. They have many options to change their courses. Many of these colleges were losing students," he points out.

The director of an engineering college says: "Besides a recession in the job market, the process of sieving has started. Only the best will survive. There aren't too many jobs in the market and wrong claims, about placement, by many institutions have been exposed. During placement, companies visited only a handful of colleges."

## Fake scholarships

Faced with empty seats, colleges have started offering engineering seats in the name of scholarships. Instead of any entrance examination, these are largely based on percentage secured in the plus two examination.

The Chandigarh Group of Colleges, Landran, offers a seat in the engineering course for Rs 43,000 per semester, besides Rs 4,000 as admission charges. At the same time, an institute is offering the same course at Rs 30,000 per semester as part of the special fee offer. The students would also get free laptops, an advertisement claims. There are a dozen colleges offering 100 per cent scholarships for SC and ST students, and other attractive offers like a company sponsoring their education.

The director of an institute, requesting anonymity, says: "What do you expect us to do in the wake of the falling strength of students? Instead of a seat going vacant, what is wrong in giving admission to a needy student?"

Dr HS Gill, chairman of Adesh Foundation, shares the sentiment. "Colleges are offering scholarships only to fill seats. There is nothing wrong in providing opportunity to deserving students," he says.

Mohanbir Singh Sidhu said government colleges affiliated to the PTU have done well. Seats in Giani Zail Singh College of Engineering and Technology, Bathinda; Shaheed Bhagat Singh College of Engineering and Technology, Ferozepur; and Beant College of Engineering and Technology, Gurdaspur, were filled easily.



## 'Business' of academics

It is purely a game of the survival of the fittest. Unless curricula and academic deliverance match the market requirements, no college will survive. Some incompetent people are running the academic business. Deliverance is the most important factor. The process of selecting the best has started, as was evident from the choice of institutions during admissions.

- Satnam Singh Sandhu, Director, Chandigarh Group of Colleges, Landran

# SC directs AIIMS not to reserve general seats for OBC students

**PIONEER NEWS SERVICE ■**  
NEW DELHI

The Supreme Court has directed AIIMS not to reserve general category medical seats for reserved category students. An order from the court became essential as the premier medical institution had issued a notice during the ongoing counselling inviting reserved OBC candidates to apply against the unreserved seats.

In the name of reservation, the AIIMS even declared that if the reserved candidate vacated the general category seat to opt for a reserved seat, the benefit of that vacancy would go to the next OBC candidate in line and not to any of the general category students. This meant that several general category seats in MBBS and MD courses would covertly be added in the reserved quota.

The matter was reported to the apex court by a NGO Samta Andolan Samiti and also a student who found the notice put up by AIIMS in the first week of July as affecting his

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right to admission. Initially the apex court directed the Convenor of AIIMS Counseling Committee to allow the student to take part in counselling as it set out to examine the decision of AIIMS to revert general category seats to reserved candidates.

Advocate for the petitioners ML Lahoty and Gopal Shankaranarayanan pointed out to the Court that the matter required to be urgently dealt with since the third round of counselling would commence next week. The Court was informed that already OBC candidates had appeared in

counselling and it was likely that with the counselling notice in place, they may claim a right for admission against general seats.

Lahoty cited early decisions of the Supreme Court which held that reservation in admissions and jobs cannot exceed 50 per cent of the total seats. Later, in Ashoka Kumar Thakur which dealt with 27 per cent OBC quota in IITs, IIMs and central educational institutions, the majority verdict held that vacancies generated in general category cannot be passed to reserved category students. This was done to balance the 50 per cent quota benchmark set by the apex court.

In view of the submissions, the Bench of Justices KS Radhakrishnan and AK Sikri held,

“Vacancies which are available in the General category shall not be filled up from other categories for a period of two weeks.” The order came as a blow to AIIMS as it was prevented from admitting SC/ST/OBC candidates against the General pool.

# Sibal stresses on higher education through fibre-optics

**statesman new service**

NEW DELHI, 24 AUG: Union Minister of Communication and Information Technology, Mr Kapil Sibal, today said that the government is in the process of laying down fibre-optics to connect 2.5 lakh gram panchyats and facilitate the flow of information which will ultimately contribute in providing quality education to students across the country.

Mr Sibal, while addressing the annual cultural function and exhibition organised by Apeejay School, Pitampura, said that the use of optical fiber will help students get quality education. The students need not to be physically present in the classroom under the scheme, he said.

"Using information technology a student based in North-east can have a lecture from a Delhi University professor without physically being present in the classroom and vice versa."

He said that around 400 universities of the country have already been connected through National Knowledge Network (NNK) and more universities will be connected soon. The minister said that there is a sea change in the field of higher education in

the country.

Without naming any university, he supported the change taking place in the Delhi University.

"We are now a global competitor in the field of education and we have to adopt global standards and for this we need to bring some change in our education system", he said. He further said that the growth of the nation does not depend on the GDP but on the gross enrolment ratio of the students in colleges. "GDP of the nation gives you trillions of dollars but the GDP is created in the university and in higher education system and so much depends on the gross enrolment ratio of students," he said adding that in developed country around 40 students out of 100 reach colleges while in India only 12 students as per the 2009 data reach college.

He said that the government is committed to increase this gross enrolment ratio to 30% by 2020. He also suggested the parents to allow their children discover their own genius and do not impose their dreams on them.

"Remember their DNA is different, their dreams are different. Don't discover life for them let them discover it themselves," he advised.

August 26

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## ENTRANCE TEST

# No change in JEE 2014 format, says IIT board

**Vanita Srivastava**

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**NEW DELHI:** The Joint Admission Board (JAB) for IITs which met on Sunday in Delhi to review the IIT entrance test format has decided that there should not be any change in the exam next year.

While the JEE (mains) is likely to be held on April 6, JEE (advanced) exam is likely to be conducted on May 25. It has been decided that JEE 2014 will be conducted by IIT Kharagpur. The next JAB meet will be held in Kharagpur on September 15, which if necessary, will once again revisit the decisions taken on Sunday.

The IIT Council is slated to meet on September 3. The board meeting, attended by 10

IIT directors, JEE(advanced) chairmen and vice chairmen has decided that next year the Joint Entrance Exam (JEE) for admission to different IITs should follow the same format as this year.

There were suggestions to relax the percentile criteria for some school boards which had high 20 percentile cuts offs. There was also a suggestion that the number of students filtered from JEE (mains) to JEE (advanced) be increased from 1.5 lakh to 2 lakh. These were not approved by JAB. The board approved some changes for next year like counselling and registration services.

Most members also felt that one year is a small time to bring about any change.

# IIT entrance format may stay another year

PNS ■ NEW DELHI

The IIT Joint Admission Board (JAB) on Sunday agreed to carry on with the existing two-tier engineering entrance test for another academic year. The final decision will, however, be taken by IIT-Kharagpur, which has been tasked with conducting the JEE Mains in April 2014 and JEE Advanced in May-June 2014.

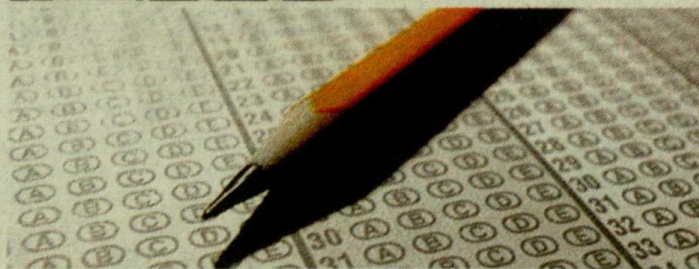
In the two-tier system, which was followed in JEE 2013, a candidate has to be in the top 20 per cent in their secondary examination to get into an IIT.

The first part, JEE Mains, will select students for all Centrally-funded technical institutes (CFTIs), except the IITs. JEE Main has adopted ranking with 40 per cent weightage to secondary examination results and 60 per cent to the entrance examination. The top 1.5 lakh rankers will have to take the second part — Advanced — for admission to IITs.

The HRD Ministry has



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been drawing flak for the controversial IIT eligibility criteria. In a review meeting on August 14, chaired by HRD Minister MM Pallam Raju, it indicated complexities in the format.

The Ministry had asked the JAB to decide on selection norms to clear the confusion before the next batch of engineering aspirants get ready for

the 2014 entrance test. A possible change in eligibility criteria, with a higher cut-off slab concerning secondary school results, was thus on the anvil.

Meanwhile, the Council of IITs is expected to amend fee payment policy of IITs to augment fiscal resources, in a meeting early next month. With the Direct Benefit Transfer Scheme

on its way, those exempt from paying fees under Government policy will get the amount through DBT and have to pay it.

Fee revenue constitutes just 7-10 per cent of total non-plan expenditure of an IIT and they are paid only by 50 per cent students. Under the existing system, fees for about 22 per cent of SC/ST students are fully waived. Besides, up to 25 per cent of students whose parental annual income is less than Rs 4.5 lakh, are entitled to a fee waiver. The remaining students pay the full fee.

IITs meet most of their expenses, such as salaries and staff costs, through financial grants from the HRD Ministry. The Planning Commission as well as the Department of Expenditure in the Ministry of Finance, have highlighted the need to increase fee revenue, according to official sources.

The council could also consider a dedicated technical cadre to free faculty members of extra administrative load and help them devote more time to teaching and research.

Deccan Herald ND 26 Aug 2013 P-6

# No change in IIT-JEE entrance exam pattern

» The IIT Joint Admission Board (JAB) agreed to continue with the same pattern for the IIT-JEE examination for one more year at a crucial meeting in New Delhi on Sunday, PTI reports.

The board made a detailed review of the new pattern of the two-tier Joint Entrance Examination, which was implemented this year, and was of the view that the pattern should be continued next year as well for a closer as-

essment of the system, sources said. JAB comprises heads of the various campuses of the premier technological institute. The meeting was held in the wake of reports that there could be some changes in eligibility criteria for admission to IITs.

Some of the IIT directors had met HRD Minister M Pallam Raju in Delhi last week to discuss a proposal to ease percentile cut-offs for entry into IITs.

Millenium Post ND 8/26/2013

## No change in IIT-JEE entrance exam pattern next year: Board

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### IITS MAY CHANGE FEE PAYMENT POLICY

**NEW DELHI:** A change in the fee payment policy of the IITs could well be on the cards to augment fiscal resources of these institutes as fees under the present system are paid only by about 50 per cent of the students. Fee revenue at present constitutes just 7-10 per cent of total non-plan expenditure of an IIT. Under the existing system, fees for about 22 per cent of students from the SC/ST category are fully waived. Besides, up to 25 per cent of the students, whose parental annual income is less than Rs 4.5 lakh, are entitled to a fee-waiver. The remaining students pay the full fee.

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According to sources, some of the IIT directors had met HRD minister M Pallam Raju here last week to discuss

a proposal to ease percentile cut-offs for entry into an IIT.

IIT aspirants in Andhra Pradesh, Kerala and Tamil Nadu, and those belonging to national boards like CBSE, had to contend with high cut-

offs this year under the new format for admissions. The cut-offs for AP and TN were above 90 per cent this year.

Sources said that since the issue was being legally challenged, JAB on Sunday decided to maintain the status quo.

JAB is expected to meet again on 15 September at the Kharagpur IIT where the matter would be discussed once again. Meanwhile, the IIT council is slated to meet on 3 September.

The meeting is also understood to have decided on next year's examinations. The IIT-JEE (Mains) could be held on 6 April and IIT-JEE (Advanced) on 25 May, sources said. PTI



Amar Ujala ND 26 August 2013 P-10

# आईआईटी-जेईई प्रवेश परीक्षा पैटर्न में नहीं होगा बदलाव

नई दिल्ली। आईआईटी-जेईई प्रवेश परीक्षा के पैटर्न में एक और साल तक कोई बदलाव नहीं किया जाएगा। आईआईटी संयुक्त प्रवेश बोर्ड (जैब) की रविवार को हुई अहम बैठक में वर्तमान पैटर्न को ही बनाए रखने पर सहमति बनी।

सूत्रों ने कहा कि बोर्ड ने दो लेवल वाले संयुक्त प्रवेश परीक्षा के नए पैटर्न की विस्तृत समीक्षा की और इसे अगले साल भी जारी रखने की राय बनी ताकि इस प्रणाली का बारीकी से आकलन किया जा सके। नए पैटर्न को इसी साल लागू किया गया था। जैब में देशभर के विभिन्न प्रमुख तकनीकी संस्थानों के प्रमुख शामिल हैं। जैब की बैठक उन रिपोर्टों के चलते हुई, जिसमें कहा गया था कि आईआईटी संस्थानों में दाखिले की योग्यता संबंधी नियमों में कुछ बदलाव किए जा सकते हैं। कुछ आईआईटी के निदेशकों ने पिछले हफ्ते मानव संसाधन विकास मंत्री एम पल्लम राजू से मुलाकात की थी

## शुल्क भुगतान नीति में बदलाव कर सकता है आईआईटी

नई दिल्ली। संस्थानों के वित्तीय संसाधनों को सुदृढ़ करने के मद्देनजर आईआईटी की शुल्क भुगतान नीति में बदलाव किया जा सकता है। मौजूदा सिस्टम के तहत केवल 50 फीसदी छात्र ही शुल्क का भुगतान करते हैं। आईआईटी के कुल गैर योजना खर्च में शुल्क से प्राप्त राजस्व का हिस्सा मात्र 7 से 10 प्रतिशत है। वर्तमान प्रणाली के तहत अनुसूचित जाति और अनुसूचित जनजाति वर्ग के करीब 22 फीसदी छात्रों का शुल्क माफ है। इसके अलावा 4.5 लाख रुपये से कम सालाना आय वाले अभिभावकों के करीब 25 फीसदी छात्रों की फीस भी माफ होती है। इन सबके बाद शेष छात्रों को पूरे शुल्क का भुगतान करना होता है। एजेंसी

और उनके साथ आईआईटी में प्रवेश के पर्सेंटाइल कट ऑफ में सुधार के प्रस्ताव पर चर्चा की थी। आंध्र प्रदेश, केरल और तमिलनाडु के साथ ही राष्ट्रीय शैक्षणिक बोर्डों जैसे सीबीएसई से निकले छात्रों ने नए फार्मेट के तहत इस साल बहुत ऊंची कट ऑफ हासिल की। इस साल आंध्र और तमिलनाडु के छात्रों का कट ऑफ 90 फीसदी से अधिक रहा। सूत्रों ने कहा कि इस मसले को कोर्ट में चुनौती देने के बाद भी जैब में मौजूदा पैटर्न को एक और साल

बरकरार रखने पर सहमति बनी। जैब की अगली बैठक 15 सितंबर को खड़गपुर आईआईटी में होने की उम्मीद है जहां एक बार फिर इस मामले पर चर्चा होगी। हालांकि आईआईटी काउंसिल की बैठक 3 सितंबर को होनी है। रविवार की बैठक में अगले साल होने वाली परीक्षा की तिथियों पर भी चर्चा हुई। अगले साल 6 अप्रैल को आईआईटी-जेईई (मैन्स) और 25 मई को आईआईटी-जेईई (एडवांस) की परीक्षा हो सकती है। एजेंसी

Hindustan ND 26 August 2013 P-1

# आईआईटी एंट्रेस में नहीं होगा बदलाव

नई दिल्ली | वनीता श्रीवास्तव

भारतीय प्रौद्योगिकी संस्थान (आईआईटी) की प्रवेश परीक्षा में फिलहाल कोई बदलाव नहीं होगा। राजधानी में रविवार को आईआईटी प्रवेश परीक्षा प्रक्रिया की समीक्षा करने के लिए ज्वाइंट एडमिशन बोर्ड (जेएबी) की बैठक हुई। इसमें फैसला किया गया कि अगले साल के लिए प्रवेश परीक्षा की प्रक्रिया में कोई बदलाव नहीं होगा।

बैठक में यह भी फैसला किया गया कि संयुक्त इंजीनियरिंग प्रवेश परीक्षा - 2014 (जेईई) कराने की जिम्मेदारी आईआईटी खड़गपुर की होगी। संभवतः जेईई (मेन) परीक्षा अगले साल 6 अप्रैल को आयोजित की जाएगी। जबकि जेईई

## यह होगी प्रक्रिया

- पहले की तरह दो चरणों जेईई (मेन) और जेईई (एडवांस्ड) में ही होगी परीक्षा
- जेईई (मेन) में शीर्ष 1.5 लाख स्थान पाने वाले दे सकेंगे जेईई (एडवांस्ड)
- संबंधित बोर्ड में छात्र का शीर्ष 20 पर्सेंटाइल में स्थान होना है जरूरी

(एडवांस्ड) की परीक्षा 25 मई को कराए जाने की संभावना है।

जेएबी की बैठक में यह निर्णय लिया गया कि अगर जरूरी हुआ तो अगले महीने की 15 तारीख को बोर्ड की बैठक खड़गपुर में बुलाई जाएगी। जहां पर इस फैसले की समीक्षा की जाएगी। वहीं, आईआईटी परिषद की

## इन पर सहमति नहीं

- कुछ स्कूल बोर्डों के छात्रों को 20 पर्सेंटाइल की अनिवार्यता में ढील देना
- जेईई (एडवांस्ड) के लिए 1.5 लाख की बजाय दो लाख छात्रों को पास करना

बैठक 3 सितंबर को होगी। जेएबी की बैठक में 10 आईआईटी निदेशकों ने हिस्सा लिया।

जेईई (एडवांस्ड) के अध्यक्ष और उपाध्यक्ष ने फैसला किया कि अगले साल भी प्रौद्योगिकी संस्थान में प्रवेश के लिए मौजूदा प्रवेश प्रणाली को ही अपनाया जाएगा।

# आईआईटी की फीस पॉलिसी में हो सकता है बदलाव

नई दिल्ली (एसएनबी)। भारतीय प्रौद्योगिकी संस्थानों (आईआईटी) की मौजूदा फीस भुगतान नीति को बदला जा सकता है। अभी इन संस्थानों में 50 फीसद विद्यार्थी ही फीस का भुगतान करते हैं। आरक्षित श्रेणी के विद्यार्थियों को फीस से छूट मिली हुई है। ऐसे में आईआईटी के कुल गैर योजना व्यय में फीस से प्राप्त राजस्व का हिस्सा महज 7 से 10 प्रतिशत रहता है। नतीजतन, संस्थानों में वित्तीय स्थिति बेहतर नहीं रहती है। आईआईटी काउंसिल की तीन सितम्बर को होने वाली बैठक में इस बाबत फैसला लिया जाएगा।

वर्तमान में आईआईटी संस्थानों में अनुसूचित जाति और अनुसूचित जनजाति के करीब 22 प्रतिशत विद्यार्थियों की फीस माफ की गई है। इसके अलावा इनमें ऐसे 25 प्रतिशत विद्यार्थी हैं, जिनके अभिभावकों की सालाना आय 4.5 लाख रुपए से कम है। इनकी भी फीस माफ की गई है। बाकी बचे करीब 50-52 पर्सेंट विद्यार्थी फीस का भुगतान करते हैं। आईआईटी मुंबई के एक अध्ययन में कहा गया है कि सभी छात्रों को फीस का भुगतान करना चाहिए और जिन्हें फीस से छूट दी गई है, उन्हें छात्रवृत्ति के रूप में प्रत्यक्ष नकद हस्तांतरण योजना के तहत पैसा दिया जाना चाहिए। आईआईटी प्रशासन अपने कर्मचारियों के वेतन और अन्य तरह के खर्चे मानव संसाधन विकास मंत्रालय से मिले अनुदान के जरिए पूरा करता है। सूत्रों के अनुसार योजना आयोग के साथ ही व्यय विभाग, वित्त मंत्रालय ने भी फीस राजस्व को बढ़ाए जाने की जरूरत को रेखांकित किया है। बैठक में परिषद् शिक्षक वर्ग पर अतिरिक्त बोझ को देखते हुए समर्पित तकनीकी कैडर गठित किये जाने पर भी विचार कर सकती है ताकि शिक्षक पढ़ाने और शोध कार्यों में अधिक समय दे सकें।

## अगले वर्ष आईआईटी जेईई प्रवेश परीक्षा में कोई बदलाव नहीं : बोर्ड

नई दिल्ली (एजेंसी)। आईआईटी संयुक्त प्रवेश बोर्ड (जेएबी) ने रविवार को यहां एक महत्वपूर्ण बैठक में आईआईटी जेईई परीक्षा का पैटर्न एक और वर्ष समान बनाए रखने पर सहमति जताई।

सूत्रों ने कहा कि बोर्ड ने पिछले साल लागू हुए दो चरणों वाली संयुक्त प्रवेश परीक्षा के नये पैटर्न की विस्तृत समीक्षा की और यह पाया कि इस प्रणाली के करीबी आकलन के लिए इस पैटर्न को एक और वर्ष बनाये रखना चाहिए। जेएबी में इस प्रमुख संस्थान के विभिन्न परिसरों के प्रमुख शामिल हैं। यह बैठक ऐसे समय हुई है जब यह खबरें हैं कि आईआईटी में प्रवेश के लिए योग्यता में कुछ बदलाव किया जा सकता है। जेएबी की आईआईटी खड़गपुर में 15 सितंबर को फिर से बैठक होने की संभावना है जहां इस मुद्दे पर एक बार फिर चर्चा होगी।

इस बीच, आईआईटी परिषद की बैठक तीन सितंबर को होनी है। माना जा रहा है कि आज की बैठक में अगले साल की परीक्षा की तिथियों पर भी फैसला किया गया। आईआईटी मुख्य परीक्षा छह अप्रैल तथा आईआईटी जेईई एडवांस परीक्षा 25 मई को होने की संभावना है।

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## IIT robots to score a goal in Malaysia

**Vanita Srivastava**

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**NEW DELHI:** Robots made by students of the Indian Institute of Technology, Kharagpur are all set to play soccer in Malaysia at an event from Monday.

Robots built by Kharagpur RoboSoccer Students' Group will represent India and 13 students from IIT-Kharagpur would be in Kuala Lumpur, Malaysia for the world cup. The event has been organised by the Federation of International RoboSoccer Association (FIRA). FIRA organises the world cup soccer for robots every year at different locations across the world.

The world cup has several leagues and is host to a hun-



**IIT-Kharagpur students will represent India in the robot world cup to be held in Kuala Lumpur, Malaysia.**

HT

dred teams from different countries.

The team would participate in two leagues — MiroSot and SimuroSot.

MiroSot is a 5 v 5 match of autonomous robot teams that are smaller than a cube of 7.5cm x 7.5cm x 7.5cm. It is one of the most fast paced

leagues in the tournament, where robots are restricted to a field of play 2.2m x 1.8m.

SimuroSot is a 5 v 5 match played on a simulator. This platform pits the best strategies of the teams against the other in an idealised environment. The one with the best strategy module shall be declared the winner.

“The World Cup offers students an opportunity to showcase their talent at an international stage. The achievements of the team will definitely bring IIT Kharagpur at par with the best universities in the world that offer a platform to work in the field of robotics,” Disha Sarawgi, a member of the team told HT. She said the team had made their robots smaller and metal-based.

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**क्वालालंपुर में अंतरराष्ट्रीय टूर्नामेंट आज से, एफआईआरए हर साल आयोजित करता है रोबोट का वर्ल्ड कप सॉकर**

## आईआईटी खड़गपुर के रोबोट मलेशिया में खेलेंगे फुटबाल

नई दिल्ली | हिटी

आईआईटी खड़गपुर के इंजीनियरिंग छात्रों द्वारा बनाए गए रोबोट सोमवार से मलेशिया में शुरू हो रहे अंतरराष्ट्रीय फुटबाल टूर्नामेंट में अपना जलवा बिखेरेंगे।

फेडरेशन ऑफ इंटरनेशनल रोबोटसॉसर एसोसिएशन (एफआईआरए) हर साल रोबोट के लिए वर्ल्ड कप सॉकर का आयोजन करता है। इस बार भारत की ओर से खड़गपुर रोबोटसॉकर

स्टूडेंट्स ग्रुप द्वारा बनाए गए रोबोट इसमें हिस्सा लेंगे। इसमें कई देशों के रोबोट भाग लेते हैं। इस बार यह वर्ल्ड कप मलेशिया के क्वालालंपुर में हो रहा है।

इस आयोजन में कई लीग हैं। इसमें विभिन्न देशों की सौ टीमों शामिल हैं। खड़गपुर की रोबोट टीम दो लीग (मीरोसोट और सिमूरोसोट) में भारत का प्रतिनिधित्व कर रही है। मीरोसोट में पांच-पांच रोबोट की दो टीमों होती हैं। हर रोबोट का आकार 7.5 सेंटीमीटर के एक घनाकार



टुकड़े से भी छोटा होता है। इन्हें 2.2 मीटर x 1.8 मीटर के ग्राउंड में ही रहकर खेलना होता है। यह टूर्नामेंट के सबसे तेज लीग में से एक है यानी

इसमें रोबोट की रफ्तार काफी ज्यादा होती है। वहीं सिमूरोसोट में पांच-पांच रोबोट की दो टीमों फुटबॉल के एक बनावटी माहौल में अपनी-

अपनी रणनीति के हिसाब से खेलती हैं। जिस टीम की रणनीति अच्छी होती है, वही विजेता होती है।

भारत के रोबोट ग्रुप में 13 छात्र हैं। इसी ग्रुप की सदस्य दिशा सारावजी ने बताया कि इससे रोबोटिक्स के क्षेत्र में आईआईटी खड़गपुर दुनिया की सर्वश्रेष्ठ यूनिवर्सिटीज में शुमार हो जाएगी। दिशा के मुताबिक इस बार रोबोट अलग तरीके से डिजाइन हुए हैं। इनका आकार छोटा करने के साथ मेटल का इस्तेमाल किया गया है।

By **Neha Pushkarna**  
in New Delhi

# UGC excellence tag for private universities

STUDENTS opting for private universities will now know which one is better.

The University Grants Commission (UGC) has decided to allow private universities in all states to seek a tag of 'University with Potential for Excellence' (UPE) under the 12th Plan.

Even private colleges can now get recognition from the UGC for doing good work.

Though the tag will not attract any special funding from the government, the title 'University with Potential for Excellence'

## Five varsities to get the tag in one Plan period

(UPE) will be a boost to a private university's image and its popularity among admission-seekers.

"The Commission also decided that state's private universities and other universities covered under section 12B of the UGC Act may also be considered for grant of status of UPE provided they fulfil the various conditions under the scheme," mentioned the minutes of the meeting held earlier this month.

However, the private universities will not be able to seek the special grant under this scheme as provided to government uni-



Madras University was among the first to get the UGC tag.

versities. There are 165 private universities in the country which have been approved by UGC. However, the competition for these universities is going to be fierce as the UGC targets to give the tag to only five universities during every Plan period.

The Commission also decided

in its last meeting that any university which already has had a UPE tag for five years will be graduate to the next level where it would be called as a University of Excellence. UGC will grant upto ₹220 crore over three phases to universities that have been labeled as UPE and eventually as

'University of Excellence'.

"For private universities, however, the tag will only mean that their good performance in academics and research is being acknowledged," said an official.

The scheme was introduced during the Plan. Since then, Jawaharlal Nehru University,

Hyderabad University, Jadavpur University, Pune University and Madras University have received the coveted tag. Similarly, individual colleges which were selected as 'College with Potential for Excellence' (CPE) will be modified as College of Excellence after the same period of time.

## GRANTS UNDER THE SCHEME

	Phase I	Phase II	Phase III
<b>UPE</b>	₹60 crore	₹60 crore	₹100 crore
<b>CPE</b>	₹1.5 crore	₹1.5 crore	₹2 crore

UPE/CPE: University/College with Potential for Excellence

## UNIVERSITIES WITH THE COVETED TAG

- Jawaharlal Nehru University
  - NEHU Shillong
- Hyderabad University
  - University of Mumbai
  - Madras University

# School students from Delhi, Gurgaon discover two asteroids

Discovery will soon be registered in world's official minor body catalogue maintained by International Astronomical Union.

**NEW DELHI:** Four school students of Delhi and Gurgaon have discovered two asteroids which will soon be listed in world's official minor body catalogue maintained by International Astronomical Union (Paris).

Shourya Chambial and Gaurav Patib of Amity International School, New Delhi, and Balachandra Routhu and Ayush Gupta of Gurgaon's Ryan International School, part of two separate teams, have made two provisional discoveries of asteroids doing the country proud, said Sachin Bahmba, chairman and managing

director, SPACE.

The discovery has been confirmed by the International Scientific Community and the asteroids have provisionally been named as 2013 LS28 and 2013 PR, he said.

SPACE director CB Devgun said they are now waiting for them to be placed in the world's official minor body catalogue maintained by International Astronomical Union (Paris).

IAU is the body officially recognised by astronomers and other scientists worldwide as the de facto naming authority for astronomical bodies, he said.



**Asteroids have provisionally been named 2013 LS28 and 2013 PR**

The two teams used exclusive data to look at specific parts of the sky and

with the help of complex procedure called 'Astrometrica' tracked objects by look-

ing at the images of the sky provided by telescopes-based in the US to see which of the objects moving over time could be a possible asteroid.

The discoveries were made as part of the program All Indian Asteroid Search Campaign (AIASC) conducted jointly between April and August this year by Science Popularisation Association of Communicators (SPACE) and International Astronomical Search Collaboration (IASC).

AIASC was started by SPACE in 2010 in India with

an endeavour to increase love for science, astronomy and research especially among schools students, Bahmba said.

The campaign has been very successful in showing that with proper opportunities and guidance, Indian students can achieve scientific heights and distinctively contribute in scientific discoveries at a very early age, he added.

Besides the two asteroids, 12 preliminary discoveries, 2 Near-Earth Objects (NEO) confirmation and 262 NEO Observations were also done during AIASC phase III.

**SUBJECT WISE**

**W**hile India boasts of the best engineering colleges, a large number of aspiring engineers are eager to pursue their higher education abroad. While some attribute it to global exposure, others consider it necessary to gain an edge in the job market. Classroom diversity, placement prospects and research opportunities are equally important for students who are looking at 21<sup>st</sup> century learning as more than a classroom experience.

In fact, Nihal Shah, who is pursuing BS in computer science at the University of Illinois in Urbana-Champaign, points out that unlike in India, where entrance exams determine the

course that one would pursue, in the US one's interest is the primary determinant. Additionally, he says, the liberal nature of the education system ensures that apart from gaining a thorough knowledge of his/her subject, students also get an opportunity to explore other avenues. Also, Nihal adds that the facilities in terms of equipment, methods of learning, exposure and opportunities are significantly better and varied when compared to India.

and engineering and mechatronics engineering.

**>> APPLICATIONS**

Says Viral Doshi, career counsellor, "For undergraduate applications, a strong academic record from

scores, graduate schools in the US require GRE scores.

Advises Yash Mishra, an MEng biochemical engineering student at University College London, "UK universities use a common universities and colleges admissions serv-

tutes that you are confident of the entry requirements." Adds Nihal,

"Depending on finances, strike off institutes that are expensive right at the beginning. Also, be honest and present your true self in the essay. If any university has an early application deadline, apply before time as it can be beneficial."

The most important thing to do while applying to institutes abroad is to budget and plan the finances for the total cost of education, including tuition and living expenses for the entire duration of the programme. Says Pratibha Jain, overseas counsellor, "Though scholarships are available, do not assume that you will get the funding even if you are a bright student. While most countries allow only 20 hours per week while on a student visa, the money earned is too little to cover any major expense."

# FOREIGN EDGE

**A RESEARCH-DRIVEN CURRICULUM, INTERNATIONAL EXPOSURE AND A MULTI-DISCIPLINARY APPROACH SEEM TO ATTRACT ASPIRING INDIAN ENGINEERS TO INSTITUTES ABROAD, FINDS OUT RUCHI CHOPRA**



**>> CHOICES**

Popular fields such as IT and computer engineering, electronic, electrical, mechanical and telecommunications continue to attract Indian students. However, with the infrastructural boom in urban and rural areas of India, civil engineering is gaining prominence. Says Hannah Dickinson, international officer, South Asia, University of Nottingham, UK,

"While mechanical engineering is the most popular degree among Indian students at our university at the undergraduate level, at the postgraduate level, students tend to opt for MArch programmes, particularly MArch urban design and MArch sustainable tall buildings." Other lesser known yet promising fields that students consider include petroleum, environment, geology, operations research, financial, nano-science

classes IX to XII and good SAT1 and SAT2 scores are crucial. These are the prime drivers for admission and once bolstered by extracurricular activities (ranging from competitions, internships, research and community service), students can get entry in good universities." Apart from IELTS/TOEFL

ice (UCAS) for admission at the undergraduate level. Each applicant can apply to a maximum of five universities through UCAS. Therefore, it is important to wisely choose your options. The best way to do this is by selecting both — your dream colleges that have high requirements as well as those insti-

**LOKESH JOSHI**  
SFI Stokes Professor of Glycosciences,  
Vice-President for Research,  
National University of Ireland,  
Galway

Engineering is among the top ranked professional degrees globally, which can lead to excellent career options for graduates. India has some of the world's best engineering colleges. Therefore, pursuing an undergraduate engineering degree in India in one of the colleges is very advantageous. After an undergraduate engineering degree, it is advisable that students target high-reputation international engineering colleges to pursue their Masters or

PhD because these will equip students with state-of-the art research training and will enable them to get quality jobs internationally. With the advent of information technology, nano-engineering and biomedical engineering, these three branches and other so called transitional branches such as computer, electronics, civil, mechanical and material and chemical engineering are all in high demand at the moment. Students should always look for areas that are just emerging and will be mainstream in the next five to 10 years. This will allow students to be in an advantageous position once they graduate from college, equipped with the most advanced knowledge in a given field.

**EXPERT SPEAK**  
Notwithstanding the fall of the rupee, the US continues to be a favourite choice among students at both the UG and PG level. The country's popularity can be attributed to the diversity of its academic institutions, strong modules, research scopes and placements. Elaborates Pratibha Jain, overseas counsellor, "With the latest post-study work visa rules, a lesser number of students are applying to the UK. Most European countries like Ireland, Germany, Netherlands, Spain and France are offering attractive scholarships and low tuition fees. Canada is offering a three-year work visa post the (UG or PG) education, together with options to apply for residency in Canada within a year of full-time work. Australia is taking remedial steps to present itself as a safe zone for students with less stringent visa norms and more work visas after completing a minimum of two years' study in the country."

**>> PROSPECTS**

While students look at the return on investment prospect amidst a difficult financial situation, experts insist that good engineers will be in demand. Says Shekhar Sanyal, country head and director, Institution of Engineering and Technology (IET), "Engineering is a relevant field in the 21<sup>st</sup> century and that there are no jobs for engineers is a myth. There is, in reality, a dearth of good engineers. Unfortunately, most engineers who graduate from institutes in India have only bookish knowledge. However, the education system abroad focuses on applications. The 'applications' knowledge of these students is inherently higher and so is their potential of coming back to India and getting better jobs."

**NEXT MONTH**  
Study Abroad: Country-wise information, student views, course trends, test tips, scholarships, and more



Times of India ND 26 August 2013 P-4 (Education Times)

**H**owever academically gifted an engineer you are, a degree from a good University is no longer enough to land the engineering job you want — that's the consistent message from companies as far afield as London, Delhi and Beijing. There are so many excellent graduates now — and companies are working under ever-increasing competition from around the world — they need employees with more than just the kind of knowledge learned in the classroom.

Nishan Canagarajah, dean of engineering at the University of Bristol, comments, "I tell all our students that companies want to employ people with a real breadth of attributes, and so I work hard with my colleagues to give our students opportunities to develop different skills."

So what skills are these companies looking for, exactly? Firstly, they're looking for people who know how to transfer their academic knowledge into an industrial setting — and the best

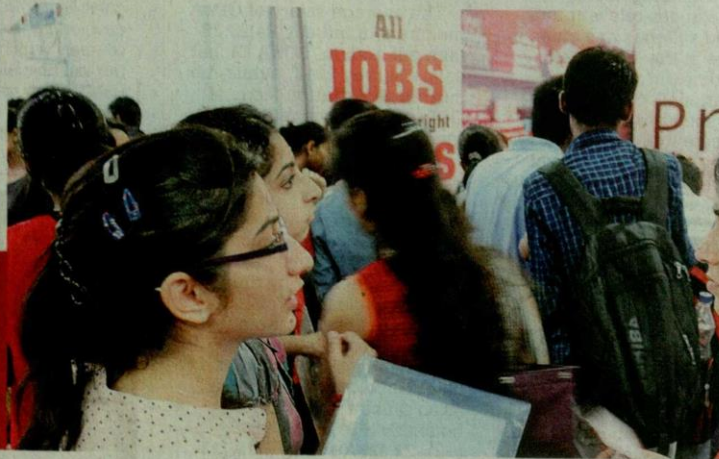
Engineering students who have done some kind of internship really stand out — they are clearly the ones who are already thinking about how to apply their theoretical knowledge in the real world

way to demonstrate that is through a successful internship. Sushovan Roychowdhury, engineering method specialist at GKN Aerospace Bangalore says, "Applicants who have done some kind of internship really stand out — they are clearly the ones who are

## INDUSTRYVIEW

# DREAM EMPLOYEE

**JOHN MCWILLIAMS, industrial liaison manager, faculty of engineering, University of Bristol, UK, on how students should equip themselves with the right skills to meet the demands of the engineering industry**



GANESH CHANDRA

of the curriculum in a sporting or artistic field.

Companies always tell me that they're looking for evidence of achievement entirely outside a graduate's field of study.

Thirdly, employers want engineers who are also great communicators.

Sophie Yang, HR officer for Arup (Beijing) says, "Having strong relevant technical knowledge is essential. However, equally important is communication and team-working skills, because you will often be required to work in a team to solve problems."

Professor Canagarajah sums it up, "Students who want to work for the best companies when they graduate need to be getting out there whilst they're still students, or even before, showing that they are able to work with people and have the drive to achieve things under their own steam."

So academic study and achievement is still crucial to getting a great job after you graduate, but now you need to do a lot more.

already thinking about how to apply their knowledge in the real world; an internship can also help in understanding the skills required — both soft and technical — for employment in engineering companies."

Secondly, they're looking for evidence of an enterprising spirit — this could be a student who has set up their own small company whilst studying, but might equally be someone who has achieved something else beyond the confines

Times of India ND 26 August 2013 P-4 (Education Times)

# A GLOBAL WORKFORCE

According to a *TimesJobs.com* survey, Middle East and North Africa figure as the top international locations for engineers seeking a foreign posting

**A**ccording to *TimesJobs.com* data, 87% of all international job opportunities for Indian engineers are available in Middle East and North Africa. The other top locations are US, Singapore, Germany and Australia.

According to Rajeeb Biswas, director, HR and Administration, Q3 Technologies, Middle East and North Africa are regions with fairly robust economies and significant employment potential, as these regions lack the education infrastructure needed to produce large volumes of skilled workers. These regions, therefore, provide excellent career opportunities to engineering graduates from India.

"Countries like the US, Singapore, Germany and Australia are also witnessing economic growth and are continuing to create additional demand for skilled engineering graduates. While the education infrastructure of these countries is excellent and produces a large number of skilled resources locally, the demand outweighs the supply and engineering graduates from India continue to find good career opportunities there," stated Biswas.

Chris Traynor, career adviser, Newcastle University, UK, is of the opinion that engineers are in demand wherever anything is being manufactured, built, developed, improved, repaired, designed, decommissioned and transported. As a result, engi-



neers are in demand globally and particularly in all of the major industrial economies.

He states that in the UK, engineers are among the most sought-after graduates and indeed, demand of good quality engineering graduates, with strong employability skills, outstrips supply, according to a recent report by the Royal Academy of Engineers. "Mechanical, electrical, electronic, civil and chemical engineers are in demand by employers," Traynor adds.

"In addition to requirements within the engineering profession, many graduate recruiters from other sectors such as finance, IT, logistics, and business also regularly look for engineering graduates, for their strong problem-solving, numerical and logical reasoning skills," Traynor adds.

"While the Middle East and North Africa attract a large number of chemical, mechanical and computer engineers, US, Europe and Australia

attract computer, software and biotech engineers," states Biswas.

According to Muralidharan, a large number of mechanical and automobile engineers opt for Germany because the country is known for excel-

lence in automotive engineering. Singapore offers immense opportunities to candidates with a financial engineering degree.

Talking about career opportunities abroad after a BTech in biotechnology, Ashish S Verma, professor of biotechnology, Amity University, adds, "The most common areas in demand are sales and marketing and support staff to any private company involved in biotechnology products."

He believes that a higher degree like MTech would open up avenues in the areas of production and quality control. A biotech engineer, with expertise in IPR, can pursue legal practices for IPR and patent services abroad, which will be in demand in the future.

"We, being an IT company, look for technically strong candidates in areas such as software development using .Net, Java and PHP. We also look for skills in areas such as SharePoint development, Microsoft Dynamics, CRM and Ecommerce platforms like Hybris. Another area where we see significant international demand is cross platform mobile development and Big Data Analytics," states Biswas.

According to him, the compensation varies from one geographical area to another. However, they see a range anywhere between Rs 50 Lakh to upwards of Rs 1 crore per annum, for international positions.

Highlighting their soft skills requirements, Biswas explains that for international positions, candidates must have good communication skills, presentation skills and general cultural awareness.

FOR INTERNATIONAL POSITIONS, CANDIDATES MUST HAVE GOOD COMMUNICATION SKILLS, PRESENTATION SKILLS AND GENERAL CULTURAL AWARENESS

Source: TimesJobs.com