

Newspaper Clips

July 25, 2011

Hindustan ND 25-Jul-11 P4

आईआईटी के छोटे कोर्स बनाएंगे डिग्री को बड़ा

नई दिल्ली | अनुराग मिश्र

भारतीय प्रौद्योगिकी संस्थान, दिल्ली इस सत्र से कुछ माइनर कोर्स शुरू करने जा रहा है। आईआईटी के ये माइनर कोर्स डिग्री को बेहतर बनाने के साथ-साथ छात्रों को समझ को उम्दा करने में मददगार साबित होंगे।

आईआईटी के स्नातक डीन शांतनु चौधरी ने बताया कि इस वर्ष से आईआईटी कुछ माइनर कोर्स शुरू करने जा रहा है। ये कोर्स एटमॉस्फेरिक साइंस और मॉडर्न बायोलॉजी से संबंधित होंगे। साथ ही नैनो टेक्नोलॉजी, बायोलॉजिकल साइंस से जुड़े कोर्स भी छात्रों के लिए उपलब्ध

होंगे। उन्होंने बताया कि डिग्री में इस बात के बारे में जानकारी प्रदान की जाएगी कि आपने किस संकाय से इंजीनियरिंग की है और उसके साथ कौन सा माइनर कोर्स किया है।

होगा फायदेमंद

उन्होंने बताया कि उदाहरण के तौर पर यदि कोई छात्र मैकेनिकल इंजीनियरिंग का कोर्स कर रहा है और वह माइनर कोर्स के तौर पर बायोलॉजिकल साइंस को लेता है तो यह भविष्य में उसके लिए फायदेमंद होगा क्योंकि बाद में काम करने के दौरान मैकेनिकल इंजीनियरिंग में उसे बायोलॉजिकल साइंस की बुनियादी बातों के बारे में

जानकारी होगी जो कि उसके लिए बेहतर साबित होगा। इससे छात्र की इंटरडिसिप्लिनरी स्किल बेहतर होगी। उन्होंने कहा कि पूरी दुनिया में क्लाइमेट चेंज पर बात चल रही है। इंजीनियरिंग के कई संकायों द्वारा इस पर काम भी चल रहा है ऐसे में एटमॉस्फेरिक साइंस की जानकारी भी छात्रों के लिए खासी कारगर साबित होगी।

चौधरी ने बताया कि अगला युग जुलॉजी का माना जा रहा है और दुनिया भर में इस पर काफी शोध हो रहा है। ऐसे में माइनर कोर्स बनाते समय इन पर प्रमुखता से ध्यान दिया गया है। उन्होंने कहा कि माइनर कोर्स चुनना पूरी तरह वैकल्पिक होगा।

Publication: The Times Of India Delhi; Date: Jul 25, 2011; Section: Education Times; Page: 34;



Too hot to handle

Getting through one of the top institutes or schools is only half the battle won. Once the session begins, students may find it difficult to sustain their performance. **Upasana Sanyal** writes on how institutes and B-schools are helping students to de-stress and cope with the daily pressure

In academics, the competition is tough. But when it comes to technological institutes, scientific research centres and B-schools, it is tougher. This is because such students not only need to tackle daily stress and pressure, but also sustain a good performance in order to find a foothold in the professional world later on in life.

In keeping with the times and to help students cope with the pressure, IIT Delhi offers counselling to students. Says Rupa Murghai, counsellor, IIT-D, "We come across many such cases where even after clearing the IIT entrance examination, students are under stress."

Narrating an incident, she says that last year, a bright student went through a lot of stress to clear the IIT entrance exam. When he joined the institute, he became very depressed. He would lock himself up in his room and not eat. He even stopped attending classes. "I realised that regular counselling sessions won't help. So I engaged him in a new activity daily. It took some time, but he picked up his normal routine and became happier," she recalls.

Experts feel that getting through one of the top institutes or schools is only half the battle won. Initially it may convey a sense of triumph, but once the lectures and projects start, it barely leaves one with any time, thus causing stress.

According to Dheeran Marwah, alumnus of IIM-Ahmedabad, the academic pressures can be attributed to the courses that tend to pack in too much. "In two years' time, a range of subjects are taught along with in-

POINTS TO REMEMBER

TIME TRACKER

- ✓ Draw up a practical and flexible schedule, but stick to it

YOUR CHOICE

- ✓ If a project allows you to choose a subject, choose according to your interest, not what may get you good grades

TIME FOR A BREAK

- ✓ A five-minute break after each study-hour can work wonders

dustrial training," says Marwah.

"This is why several B-schools in India conduct short orientation programmes to not only familiarise students with the curriculum, but also prepare them for what lies ahead," points out Anirban Bhattacharya, professor HRM, XLRI, Jamshedpur.

On a concluding note, Shashi Mathur, dean of students, IIT-D, feels that due to stress, students often find it difficult to manage their time judiciously. This is where counselling sessions can be of help. Also, the institute has a mentorship programme where seniors mentor freshers.

"The idea is to encourage a comfort level between seniors and juniors to help freshers handle the pressure," says Rachit Gupta, a third year student of IIT-D.



Counselling helps students manage their time better, a lack of which often leads to stress once classes start in earnest

— With inputs from Vishakha Sharma, Delhi

Hindu, ND 25/07/2011 p-14

'Restore powers of IIM-A board'

For recommending names for Director and Chairman posts: Barua

Manas Dasgupta

AHMEDABAD: The Indian Institute of Management, Ahmedabad, has demanded restoration of the powers of the board of directors in recommending a list of names for the final selection by the Centre for the posts of the IIMA Director and the Chairman of the board.

Talking to journalists here on Thursday, IIMA Director Samir Barua said the institute was still awaiting the Centre's nod to the Memorandum of Agreement suggesting the changes sent to the Union Human Resource Development Ministry for approval. He said the Gujarat government had already given its approval "in toto" to the memorandum.

He said the IIMA in the memorandum suggested that the board should have the powers to recommend three each for the appointment of the Chairman of the board of governors and the IIMA Director from which the Central government would have the option to pick one. He said this was the practice followed in the past but lately the Centre had assumed all

the powers to appoint a committee to recommend any name for selection by the government for the posts.

Mr. Barua disagreed that the IIMA was piqued by the alleged "governmental interference" for which it had recommended the changes. "It is the question of accountability," he claimed and said the person responsible for delivering the goods should be accountable to the board and that would be possible only when the board had a say in his or her appointment.

He said he was not aware what process other IIMs suggested for the appointment of chairmen and directors because each IIM had separate memoranda of agreement. The IIMA had also recommended downsizing the board of governors from the present 25 to 15 for "better performance" including four nominated members, two each by the Central and the State governments.

Refuting the allegations made by Union Minister Jairam Ramesh and the Infosys founder-chairman about "deteriorating standards" of the IIMs and the IITs in the country, Mr. Barua said the

criticism was directed more at the IITs and the "IIMs just happened to be tagged along." The slideback in respect of research and publications was the main reason for Mr. Ramesh's adverse remarks about the institutions, he said.

Mr. Barua said he was "reasonably happy" because the IIMA alone published an average of 50 to 60 research papers per year as against the Union Minister's claim of just about "15-16 papers by all the IIMs together."

He decried the move by the IIM, Indore, to launch bachelor's degree in management. He said he was of the firm view that the IIMs should continue to offer only post-graduate courses because it was not possible for the students coming out fresh from the schools to get training in advanced management. He pointed out that courses like the Bachelor in Business Administration was in vogue in the country for a number of years now but had not proved to be very attractive.

About the current year's batch size of the IIMA flagship course, the Post-Graduate Programme in

Management" (PDP), Mr. Barua said 352 of the 372 students, about 95 per cent, admitted for the course in the coming year come with engineering background, with only nine having commerce background, 10 science and one in agriculture. He said 270 students held average work experience of 25 months while the remaining 102 had no work experience. Of the total number of students, 41 were females and the reservation category wise was 103 from the other backward classes, 48 scheduled castes, 20 scheduled tribes and nine "differently abled."

Even in the Post-Graduate Programme for Executives (PGPX), as many as 82 students in the batch size of 101 were engineers, he said. The students for the course were selected from 908 applications; 244 were called for interview. Several new electives including "courses in advanced valuation," "key account management," "fundamentals of insurance" and "cross border mergers and acquisition and integration" would be offered to the PGPX students in the current academic year.

Times of India ND 25/07/2011

P-15

Einstein proved right, test shows time travel is sci-fi

Hong Kong physicists say they have proved that a single photon obeys Einstein's theory that nothing can travel faster than the speed of light — demonstrating that outside science fiction, time travel is impossible.

The Hong Kong University of Science and Technology research team led by Du Shengwang said they had proved that a single photon, or unit of light, "obeys the traffic law of the universe".

"Einstein claimed that the speed of light was the traffic law of the universe or in simple language, nothing can travel faster than light," the university said on its website.

"Professor Du's study demonstrates that a single photon, the fundamental quanta of light, also obeys the traffic law of the universe just like classical EM (electromagnetic) waves."

The possibility of time travel was raised 10 years ago when scientists discovered superluminal — or faster-than-light — propagation of optical pulses in some specific medium, the team said.

© Deborah Betz Collection/Corbis



SOUND THEORY ON LIGHT

It was later found to be a visual effect, but researchers thought it might still be possible for a single photon to exceed light speed.

Du, however, believed Einstein was right and determined to end the debate by measuring the ultimate speed of a single photon, which had not been done before. "The study, which showed that single photons also obey the speed limit c , confirms Einstein's causality; that is, an effect cannot occur before its cause," the university said. AFP

Gulu Ezekiel

Goodbye, Atlantis

The 30-year-old shuttle programme opened space up to the world

It was with mixed feelings that I watched the space shuttle *Atlantis* make its final landing last week, marking the end of the shuttle era that began 30 years ago.

Five years before *Columbia* made its maiden flight into space in April 1981, my brother Jawahar and I had the honour of attending a lecture by the fourth man on the moon, Alan Bean, at Calcutta's USIS centre. Bean was part of the *Apollo 12* crew that followed Neil Armstrong and Buzz Aldrin onto the moon in 1969 and was on a speaking tour to educate the public about Nasa's forthcoming space shuttle programme.

The last *Apollo* moon mission had been in 1972 and after that glamorous era, full of gung-ho astronauts brimming over with the 'right stuff', there was a lull in Nasa's activities.

Skylab was still orbiting — Bean himself had been a crewmember in 1973 — but was to crash to Earth in 1979.

Nasa could not have chosen a better candidate to spread the word. Bean was smart, he was dashing and best of all, he

was affable. At the end of the talk as space fans — including Jawahar and I — crowded round to get his autograph, his police bodyguard tried to push us away. But Bean would have nothing of it and was delighted when we requested him to autograph the front page report of his moon landing from *The Statesman*.

During his lecture Bean was at pains to explain that the shuttle was open to anyone who was qualified and turning to his audience said: "Who knows, even one of you here may ride on it one day." That was met with a loud guffaw but I still recall exchanging excited glances with my brother.

It was the moon landings that fired our enthusiasm for space travel as it did with millions

around the world. Those early American astronauts (and cosmonauts from the Soviet Union) had loads of machismo and their sense of heroism and derring-do appealed to us as pre-teens brought up on the superhero exploits of Superman, Batman and Spider-Man. These were our real life flesh-and-blood superheroes.

My second encounter with an astronaut was when Mary L. Cleave visited Madras in December 1987. It was just over a year after the *Challenger* shuttle disaster that killed seven crew members and Nasa was in the throes of a crisis. Cleave had flown on *Atlantis* in 1985.

The programme suffered its second tragedy with the destruction of *Columbia* in 2003, killing all

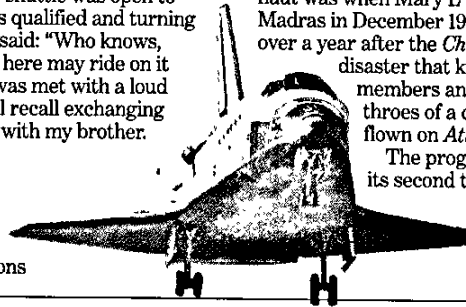
seven on board including our very own Kalpana Chawla.

The space bug has been passed onto the next generation and Jawahar's elder son Arjav was thrilled to extend the family connection when he met Bean in 2009 during celebrations to mark the 40th anniversary of the first moon landing. Bean's face lit up when reminded about his Calcutta visit and asked Arjav to pass on his best wishes to his father.

Bean was right, back in 1976, after all. The shuttle programme really did open space up to the world. The five space-craft flew 355 people from 16 countries on 135 missions. It was also responsible for assembling the International Space Station and helped in numerous scientific missions, most notably the magnificent Hubble telescope.

But then the craft only flew in near-earth orbit. For two boys growing up in Durgapur and Calcutta in the 1960s and 70s, nothing has ever matched the romanticism and heroism of those early manned moon missions.

Gulu Ezekiel is a Delhi-based author
The views expressed by the author are personal



Hindu, ND 25/07/2011

P-10

Those magnificent flying machines



he 30-year-long saga of a truly extraordinary space transportation system, which people around the world know as the space shuttle, has come to an end. True, the shuttle did not make access to space more like air travel, as the U.S. National Aeronautics and Space Administration (NASA) once promised. Yet it was a marvel of aerospace engineering, the world's first reusable spacecraft that went up like a rocket and was able to glide back to earth, ready to go again. The five space shuttles built have carried 355 people from 16 nations, men as well as women. Seven of every ten of the world's spacefarers travelled on the shuttle. It launched many satellites, including India's U.S.-built Insat-1B communications satellite, and three of NASA's great space observatories. The Hubble space telescope, which was launched by Discovery in 1990, would not today be taking those breath-taking images of the cosmos without the shuttle's unique capabilities. During five later shuttle missions, the last in 2009, astronauts made demanding spacewalks to fix corrective lenses on the Hubble, carry out maintenance tasks, and fix new instruments. Without this space-going truck, the giant International Space Station, which weighs close to 400 tonnes on completion, could not have been assembled piece by piece.

On conventional rockets, known as 'expendable launch vehicles,' the actual payload, such as a satellite, that goes into orbit constitutes only a small percentage of their weight at launch. The rest of the rocket, much of it propellants, is consumed and jettisoned during the flight. Imagine where air travel would be if a new aircraft was needed for each journey. The space shuttle was intended to change this state of affairs. But being reusable did not translate into lower cost. Indeed, at an estimated \$1.5 billion per launch, the shuttles were staggeringly more expensive than expendable launchers. One reason was that, unlike aircraft, each shuttle needed months of careful refurbishment before it could fly again. The care that went into preparing the shuttles for flight had to be greater because there were humans aboard. The death of 14 astronauts when Challenger and Columbia were lost showed all too clearly that manned spaceflight was still a dangerous endeavour, no matter how routine it might appear. But with the end of the shuttle programme, the world, including the U.S., will now rely solely on expendable rockets. That is unquestionably a step backwards. Hopefully, the dreams of a reusable craft that goes beyond the capabilities of the space shuttle and makes access to space both routine and cheap will be pursued again some day.

Isro working on reusable spacecraft technology: Chief

PRAVEEN BOSE

Hassan (Karnataka), 24 July

AFTER US space shuttle Atlantis made its final touch-down before being retired, the Indian Space Research Organisation (Isro) said it was working on India's own reusable technology.

"We are also working on developing our own reusable spacecraft, as it will bring down the cost of putting payloads in space," ISRO Chairman K Radhakrishnan told reporters here on Friday.

"Our PSLV and GSLV programmes are based on the technology for expendable vehicles. But we are also studying technologies in reusable launch vehicles," Radhakrishnan said. In the next two years India would have a technology demonstrator, the Isro chief added.

He said there were several problems in developing the special materials and fuel for the spacecraft and the launch vehicle during re-entry. "We need to develop material for the structure that can be reused."

Isro will also perfect the

cryogenic engine technology which will be crucial to this project. The agency has been working on this project for the past many years. During 2010, a GSLV launch failed in mid-air as its main cryogenic engine failed to fire up and go full length.

"During that flight, the main cryogenic engine was ignited and this was a major achievement. But the ignition did not sustain as the fuel booster turbo component failed. Corrective measures have been taken and it has been redesigned," he said.

"We need to have the ground testing of the cryogenic engine with the modified fuel booster turbo pump which is planned for the latter part of the year. The flight stage of the cryogenic engine is expected to be ready by March 2012. We will assemble this cryo stage on to the GSLV after satisfactory testing at ground testing stage," Radhakrishnan said, adding that the flight testing would take place in the second quarter of 2012.


COURSECURSOR

EMBED KNOWLEDGE

ThinkLABS, a Sine IIT Bombay incubated company, has tied up with the University of Salford, UK, to offer a new course. Aaditi Isaac reports

ThinkLABS, a Sine IIT Bombay incubated company, has tied up with the University of Salford, UK, to offer a new course — MSc in robotics and embedded systems.

"The programme focuses on developing a talent pool with the right skill-sets in the areas of robotics and embedded systems. We would also like to develop a cadre of students who want to excel in the research and development domain in robotics and embedded systems. The course exposes students to practical applications of industrial robotics and embedded systems, opening doors to a very niche sector of employment. According to Nasscom, the Indian embedded systems industry is expected to have a CAGR of over 21.7% and would create over 780,000 jobs. This course also provides the best of knowledge by studying in both UK and India," says Gaurav Chaturvedi, director, Think LABS.

Students get exposure to practical applications of industrial robotics and embedded systems — a niche area

The course will be offered in four modules — embedded 'C' and 'RTOS' programming, designing advanced embedded systems, artificial intelligence and mobile robotics. Students will also be required to present a dissertation emphasising on experiential learning. The one-year programme will be conducted both in Mumbai (first four months) and the University of Salford in UK (eight months).

Faculties from University of Salford, ThinkLABS and guest faculty from the industry would be involved in teaching the course. Typically, all the modules would be conducted by certified module leaders, assisted by other

AT A GLANCE

- Four modules
- Minimum 6.5 in IELTS
- Four months in Mumbai, eight in UK
- Degree from University of Salford

faculty when required.

Talking about the edge that students will get on completing the course, Chaturvedi says, "This programme provides students with in-depth knowledge of robotics and embedded systems, necessary for them to advance their careers in the fast growing robotics and embedded systems industries. The course provides a number of career opportunities in various industry segments like consumer electronics, robotics and automation, avionics and manufacturing. The programme structure provides students with experiencing the best of both Indian as well as UK education."

ThinkLABS will help students find placements after the course is over. Talking about job opportunities, Chaturvedi says, "Graduates can expect to find employment in a range of industries and areas such as robotics design, control systems design and integration, manufacturing automation, software engineering, mechanical and mechatronics engineering, process control, engineering management and research.

Students, who have minimum of a first division or an honours graduate degree in engineering, information technology, computer science, science or mathematics can apply. Consideration will also be given to candidates



who do not possess the above but have the equivalent in relevant industrial and/or professional experience. Such candidates will be considered using the university's APL and APEL procedures. In addition, an applicant whose mother tongue is not English has to take the IELTS test and score 6.5 or equivalent. The University of Salford will award the degree to the student.

www.thinklabs.in

