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(A not for profit university, established under Section 2 (f) of UGC Act and notified by Government of Rajasthan u/a 5 of 2010)

Campus: NH 8, Delhi Jaipur Highway, Neemrana, District Alwar, Rajasthan – 301705
Web: www.niituniversity.in | 1800 103 5050 (Toll Free) | Email: admissions@niituniversity.in
https://twitter.com/niituniversity | https://www.facebook.com/NIITUniv

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Welcome to
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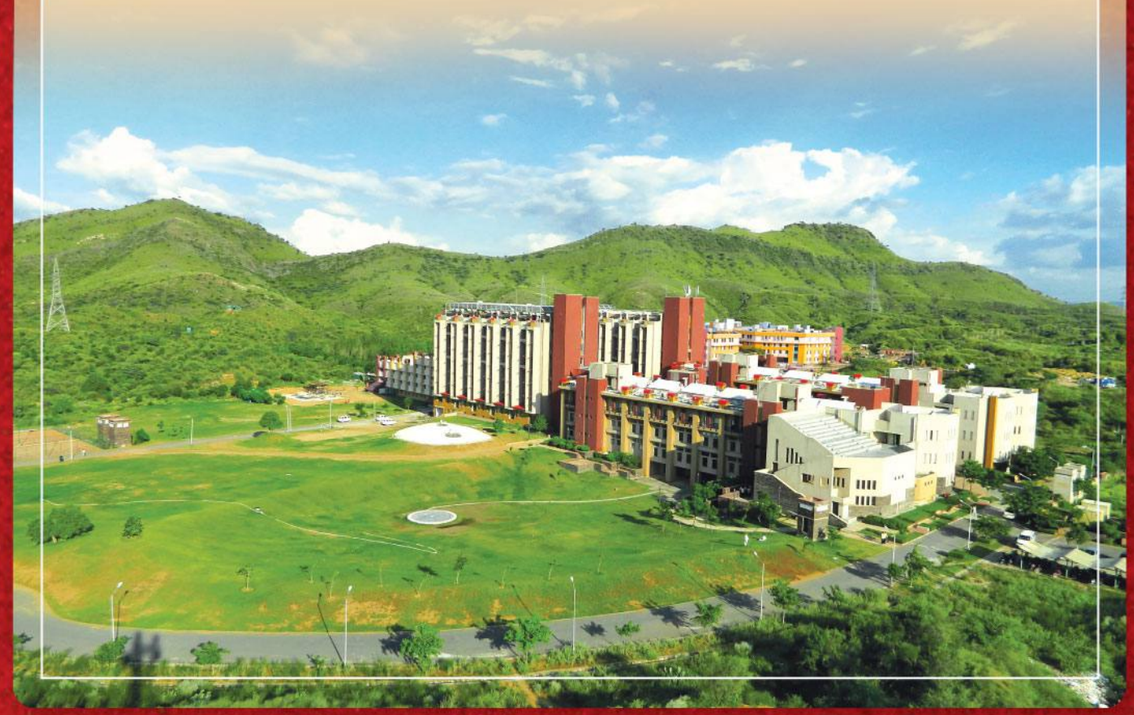

"NIIT University gives a glimpse of what future educational institutions can be"

- Dr Karan Singh
The First Lecture
15th November 2009

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BusinessLine

Prime Minister Shri Narendra Modi felicitates Shikhil Sharma and Ananda Krishna from NIIT University (NU) at the Global Conference on Cyberspace (GCCS) 2017

December 6, 2017: Business Wire India

PM Modi felicitates Shikhil Sharma and Ananda Krishna from NIIT University (NU) at the Global Conference on Cyberspace (GCCS) 2017

Shikhil and Ananda bring laurels to NU by winning the "Startup Pitch" at GCCS 2017 Astra, a web security solution, recognized as the "Most Innovative Startup" Shikhil Sharma and Ananda Krishna students of NIIT University (NU) class of 2016, won the Startup Pitch at the prestigious Global Conference on Cyberspace 2017. Astra, a web security solution, developed by these students was recognized as the "Most Innovative Startup" at the conference. The students were awarded by Honourable Prime Minister Shri Narendra Modi. Honourable Prime Minister of Sri Lanka Mr. Ranil Wickremesinghe and Honourable Minister of Law & Justice and Electronics and Information Technology, Govt. of India Mr. Ravi Shankar Prasad were also present on the occasion.

The Global Cyber Challenge is one of the major GCCS 2017 events conducted with the Ministry of Electronics and Information Technology (MeitY), National Critical Information Infrastructure Protection Center (NCIIPC), MyGov, Cyber Peace Foundation (CPF) and Policy Perspectives Foundation (PPF) as collaborators. The Grand Finale of the Global Cyber Challenge was a two-day contest organised on 20th and 21st November 2017 amongst the winning teams of the preliminary rounds. Hundreds of teams from through-out India and from countries like USA, Canada, France, Argentina, Australia and Algeria showcased their talent and competed in the challenge.

The challenge comprised two contests namely Capture the Flag and Peace-a-Thon event. Shikhil and Ananda won the Startup Pitch for exceling in the Peace-a-Thon category.

Congratulating Shikhil and Ananda Prof V S Rao, President, NIIT University said, "I am proud to see our students make a mark at the prestigious Global Conference on Cyberspace. With this win, Shikhil and Ananda have set new standards in innovation and creativity. At NIIT University we have successfully established a new model of higher education that fosters critical thinking, innovation and research centric approach and inculcates lifelong learning. In fact, innovation is a way of life at NU and this has encouraged our students to come up with winning entrepreneurship ideas."

Beaming Shikhil Sharma and Ananda Krishna thanked the organizers of Global Conference on Cyberspace for the award. They also thanked the faculty of NIIT University for their constant support, encouragement and guidance.

Conceptualized as an institution of excellence, NU provides exceptional education based on the Four Core Principles that make learning Industry-linked, Technology-based, Research-driven and Seamless. NU, is well poised for meeting the emerging needs of the knowledge economy through its focus on building strong industry linkages and a research oriented approach.

About NU

Established in 2009, NIIT University (NU) is a not-for-profit University covered under section 2(f) of UGC Act and notified by the Government of Rajasthan. A premier institution of higher learning and research, NU seeks to create original thinkers who will lead the knowledge society of the future. The University inherits three decades of rich expertise and global know-how of its principal sponsor, the NIIT Group.

Nurtured by some of the foremost thought leaders and corporate-practitioners of the country, the multi-disciplinary University focuses on emerging areas of technology and management. NIIT University is a part of a 100-acre campus at Neemrana, Rajasthan, 90 km from Gurugram on NH8.

Nestled in the Aravali hills, the fully residential green campus offers an idyllic and intellectually vibrant environment for pursuing higher education and research. Set up with the vision to be the role model of learning, research, innovation and sustainability, for the knowledge society, NU is dedicated to building great careers and ensuring excellent job opportunities to all its students. It has been developed as an institute of excellence to provide exceptional education based on its Four Core Principles that make learning Industry-linked, Technology-based, Research-driven and Seamless.

NU offers the entire spectrum of academic programs. At the undergraduate level, it offers B.Tech (Computer Science & Engineering, Electronics & Communication, Biotechnology), BBA (Marketing & Marketing Analytics, Family Business & Entrepreneurship, Finance, Banking & Fintech, Business Analytics, Communication & Media Studies and Digital & Social Media Marketing), 4-year Integrated M.Sc (Computer Science), 4-year Integrated BBA - MBA, 5-year Integrated B.Tech - M.Tech and M. Tech (Educational Technology and Geographic Information Systems). NIIT University also offers a 5-year dual degree B.Tech & M.S program (In collaboration with University of Missouri, Kansas City) wherein students undertake academic work at NU for 3.5 years and then continue at UMKC for 1.5 years. In addition, NIIT University also offers MBA, Ph.D programs and several Industry Sponsored Programs.

http://www.thehindubusinessline.com/business-wire/prime-minister-shri-narendra-modi-felicitates-shikhil-sharma-and-ananda-krishna-from-niit-university-nu-at-the-global-conference-on-cyberspace-gccs-2017/article9984128.ece

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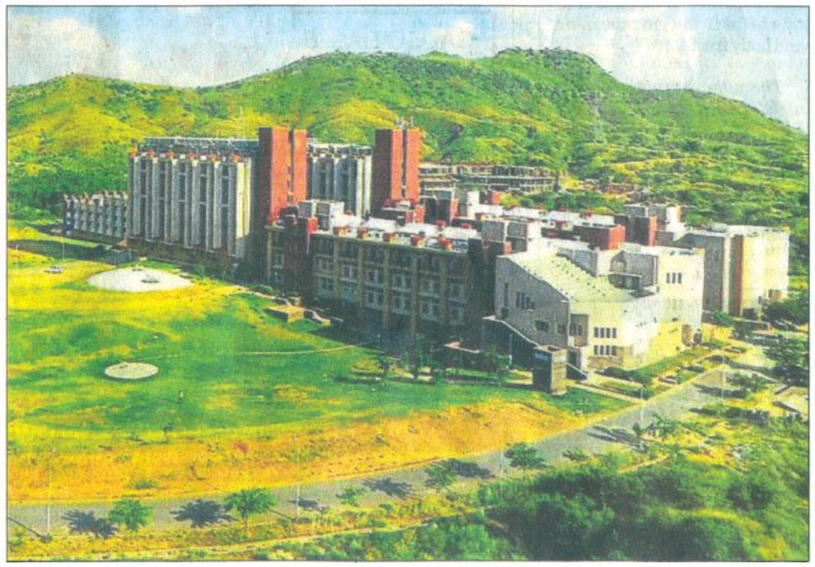
NIIT University creates employable students with industry-academia linkage

UNIVERSITY OF THE FUTURE Pawar's NIIT University is focused on developing learning structures that are technology-enabled and research-driven, which will equip students to solve problems in their daily lives thus plugging the gaps that ails India's education system today

AMITY UNIVERSITY Presents hindustan times campus calling HT GUIDE TO ADMISSIONS

Nandita Mathur
nandita.m@htlive.com



The NIIT University at Neemrana in Rajasthan WIKIPEDIA COMMONS

NEW DELHI: Even as India struggles to create jobs for the lakhs of people joining the ranks of the unemployed each year, the mismatch with those passing out from colleges, is only growing. There seems to be little correlation between job seekers and the requirements of companies with universities staying rigidly stuck with outdated curriculums and teaching structures.

In this milieu, an experiment by a recently set up private university in Rajasthan, may be worth keeping an eye on.

It's the university of the future that has its eyes set on plugging the gaps that ails India's education system today, mainly producing students that are readily employable. Located about 100 kms from Delhi, in Neemrana district of Rajasthan, the 100-acres NIIT university (NU) founded by R.S. Pawar, chairman and co founder of NIIT group is based on a strong industry-academia linkage. With the job market shrinking not only in India but globally too and Indian education unable to provide holistic learning which includes crucial skills that creates employable people, Pawar is clear that NU will provide outstanding educational value that emphasizes on building real life skills, fostering research and developing talent for sustainable growth of industry and society through the use of technology.

The not-for-profit university was founded in 2009 and has grown steadily from 40 students to over 200 in 2016. It offers undergraduate and post graduate work integrated programs with leading organizations like ICICI bank, IBM, WNS and PwC. For example, NU offers an MBA in Business Analytics in collaboration with WNS and MBA (banking & finance) in collaboration with ICICI bank. Pawar says that the placement rate is exceptionally high at around 97.3%, as it leverages some of the strengths of NIIT Ltd (that offers learning management and training delivery solutions to corporations, institutions and individuals) namely, its solid technology platform and strong ties with industry.

However, deep connectedness with industry characterizes the academic ethos of NU.

Industry plays a significant role in identifying new courses, designing curricula, facilitating hands-on training for students, sponsoring research, and providing senior managers as visiting and mentor faculty at the University. NIIT University has built unique partnerships with various industries to offer industry-sponsored programmes at all levels -- graduate, postgraduate and doctoral.

The University is focused on developing learning structures that are technology-enabled and research- driven, which will equip students to solve problems in their daily lives. The curriculum is also thus designed so that students can extract the maximum possible benefits from it. NU's curriculum is research-based, there are joint programmes with industry, electives are co-created with industry that includes real life problems as course assignments. In the final year, students have a 6 month long internship that allows them to work on real life problems at different industries. The internship gives both the students and the companies to familiarize themselves with each other in the process and most students are absorbed in the companies they intern at.

NU also has an elaborate admission process that includes giving weightage to class 10 and 12 examination results. In addition, there is a panel interview that is conduced online due to the growing numbers. Pawar says an interview is important to judge things like social sensibility, goodness and integrity.

Even at the Masters programme, the candidates are required to have a work experience of about 2 years. The selection is done jointly by company and the faculty, and at the time of admission the candidate is given the appointment letter which states what their job and salary will be at the two years. ICICI bank is one such company that is part of this programme.

Similarly, NU has designed a B.Tech CSE programme in collaboration with NIIT that is aligned to what the IT industry today needs. "It is possible for industry and academia to work together," affirms Pawar.

Surprisingly, NU is low key and does not believe in advertising or rankings. Pawar says rankings distort or commoditize the process of education. So what's next for NU? Pawar's dream is to sort the problem on the intake side, which means that the university is looking to collaborate with schools. "At least 75% of the students should be coming from the schools we start working with,' says Pawar, adding that they will work with students from classes 8-12 and let them come to the university in the summer and winter breaks so that both the student and the university have a mutual discovery process. A university with a difference, Pawar also does not believe in any tie ups with foreign colleges or universities as he does not want to use anyone else's label. "We have to be a fountainhead and I believe in Indian pride and individuality."

Hindustan Times, New Delhi, *July 15, 2017*

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NIIT University, Neemrana

Offering industry-aligned higher education to ensure exciting career opportunities

Set up with the vision of being the leading center of innovation and learning in emerging areas of the knowledge society, the not-for-profit NIIT University (NU) is dedicated to building great careers and ensuring excellent job opportunities to all its students. It has been developed as an institute of excellence to provide exceptional education based on the four core principles that make learning industry-linked, technology-based, research-driven and seamless.

Strong linkages and connect with the industry has enabled NUtons to achieve 100% UG placement since inception. All NUtons go through a mandatory 6-month industry practice with mentorship from NU Faculty as a part of their programmes. This industry-oriented approach enables the students to graduate with the skills, knowledge and hands-on experience sought by employers worldwide.

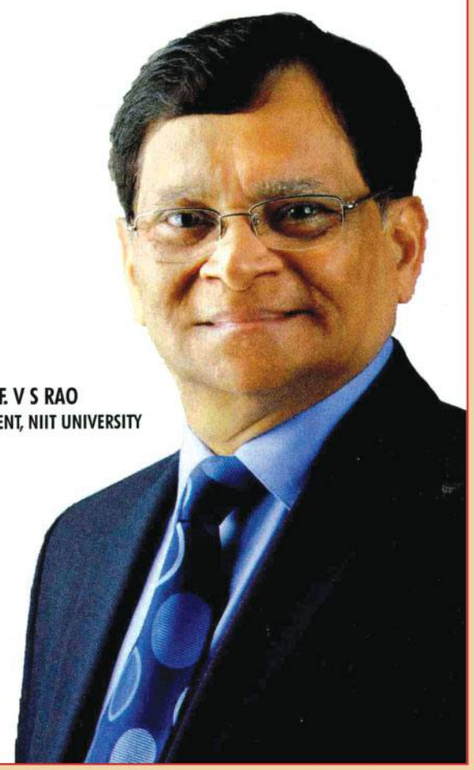
NU believes that collaboration between the universities and the industry can have a deep impact on the progress of our economy and help both the industry and academia to grow and prepare for the future. NU currently has partnerships with 421 industry partners for placements and industry practice.

NU has launched a suite of Industry Sponsored Programmes to create a talent pool aligned to the needs of the requirements of the industry. Some successful Industry Sponsored Programmes offered by the University are MBA (Business Analytics) with WNS, MBA (Intelligent Data Science) with NIIT Technologies, MBA (Finance & Banking) with ICICI Bank, M.Tech (Cyber Security) with PwC, PGDBRM with Federal Bank, PGD (Banking & Finance) with United Bank of India and PGD (Banking & Finance) with Bank of Maharashtra.

The institution's deep research-orientation has also enabled it to foster innovation and inculcate the culture of entrepreneurship in the DNA of its learners. The R&D projects at NIIT University enable students to work in the research being undertaken by the faculty as co-investigators. Faculty share their research problems and the students are given an opportunity to choose the problem that interests them the most. After which, they work with the faculty over the course of a semester on the research problem. They get to do literature survey, devising instruments to collect data, data gathering & analysis and finally presenting their research findings to a faculty panel. All the undergraduate students go through the research project as a part of the programme.

Prof VS Rao, President, NIIT University, says "At NIIT University we work closely with the industry to offer programmes that will arm our students with the necessary skill sets and make them job-ready in the fast-evolving digital economy. Our understanding of the talent requirement of the industry, focus on research and critical thinking has ensured 100% placement for our students. It gives me great pleasure to witness that theuniversity has evolved well as a role model of industry-linked education that fosters research, innovation and sustainability."

Having made innovation a way of life, NU is actively nurturing such student entrepreneurs who have launched start-ups that can trace their origins to the labs of the university. Several students from NU have entered the world of work with their boots on and start-ups under their belts. Among the successful start-ups that have been started by NUtons are Peer XP Technologies, SpectroSmart, AT-Lead and Czar Securities. Of note are AT Lead, a drone design and manufacturing center founded by Atif Khan and Czar Securities, a cyber security solutions venture set up by Shikhil Sharma and Ananda Krishna. The duo in fact won the Start-up Pitch at the prestigious Global Conference on Cyberspace 2017, where Astra, a web security solution developed by these NU students, enabled them to be recognized as the 'Most Innovative Start-up' at the conclave. The students were presented the award by none other than the Prime Minister of India, Narendra Modi.



PROF. V S RAO
PRESIDENT, NIIT UNIVERSITY

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UNIVERSITIES OF THE FUTURE

Moving away from conventional methods of teaching, private universities are remodelling their entire curriculum, integrating academics with industry and completely transforming the classroom culture

GLOBAL LEADERS
The university has a number of student exchange programmes

1 NIIT University, Neemrana, Rajasthan

The curriculum at NIIT University (NU) has the right mix of research and industry-relevant subjects, taught through project-based learning. Undergraduate students are expected to work on an R&D project in the first year. With individualised curriculum, one-third of credits of the programme can be customised by the students. V S Rao, President, NU, says, "We have established a new model of higher education that fosters critical thinking, innovation and research-centric approach." And NU offers a separate, optional minor certificate programme that runs parallel to the degree course. Students get credits through co-curricular activities as well.

WHAT'S NEW **NU has started four-year integrated MBA and BBA programmes with mentorship and six-month immersive industry training for students completing Class 12, offering them comprehensive management education combined with in-depth specialisation in a specific domain.**

ENTRY Through Admission Interaction Process (AIP) for bachelor's and integrated master's programmes

WEBSITE *www.niituniversity.in*

By Shelly Anand

2 Manipal Academy of Higher Education, Manipal, Karnataka

Starting as a single institute township in 1953, the Manipal Academy of Higher Education, commonly known as Manipal University, has grown manifold over the years and is all set to come up with three new campuses in Jamshedpur, Bengaluru and Sri Lanka. "Excellence in research spectrum is the next step for us and we are committed to encourage research activities on the campus. We have got an initial funding of ₹5 crore from the Government of Karnataka for setting up a new bio-incubator—space for developing start-ups in the medical field," says H Vinod Bhat, Vice-Chancellor, Manipal Academy of Higher Education. The university has a number of important international collaborations; University of Maastricht, Netherlands and University of Chicago, US, being the important ones for student exchange programmes.

HIGH ON TECH
Students working on a project

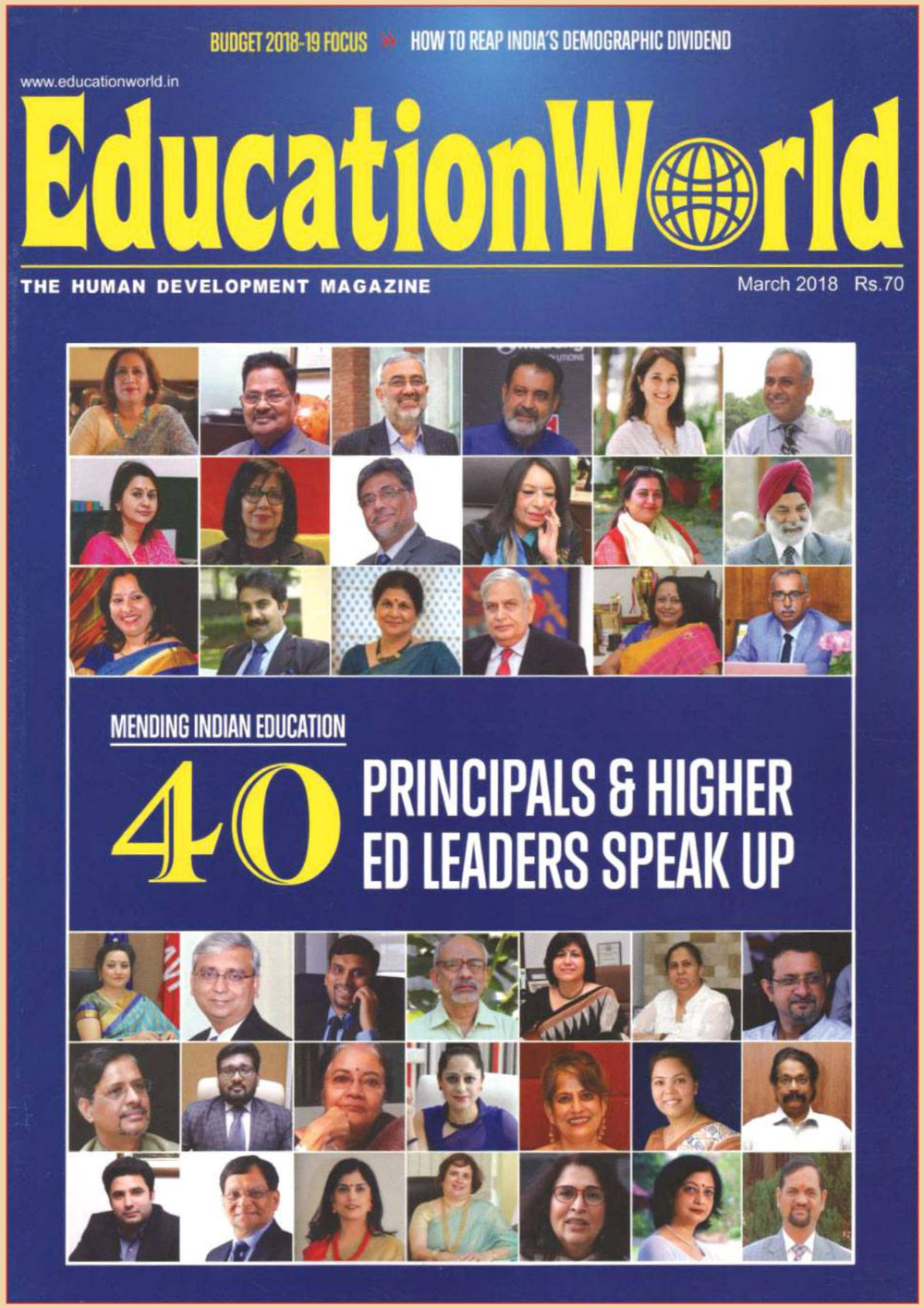
TAKE NOTE
Started Prasanna School of Public Health which offers courses in public health, social work and hospital administration.

ENTRY For B Tech programmes, candidates have to appear for Manipal Entrance Test (MET) and for MBBS, the entry is through National Eligibility cum Entrance Test (NEET)

WEBSITE *www.manipal.edu*

By Harshita Das

India Today Aspire, *March 2018*



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The first priority should be faculty recruitment with strong emphasis on quality, determined by research and teaching capabilities. Second, for faculty in higher education institutions to work in teams, build research ecosystems and create synergy for impact. Third, we need to network globally with high quality academic institutions around the world to raise our sights and standards. Fourthly, develop institutional administrative systems to support academic excellence. And lastly, ensure sound infrastructure that supports all the above initiatives.

The low international ranking of India's higher education institutions is to a great extent attributable to the under-preparedness of school-leavers for higher education. What in your opinion are the urgent reforms required in K-12 education?

There's urgent need to create a culture and environment in K-12 education where learning is enjoyable rather than stressful. It is also important that students are not forced to make choices in class XII in a manner that determines their graduation choices and consequently their career choices. That's too early in their life. There must always be flexibility to switch dreams.

How realistic is it to hope that the Indian economy will realise its demographic dividend in the near or medium-term future?

The demographic dividend will certainly confer labour cost advantages. But the big question is whether we can reform our educational ecosystem to enable the next generation to ideate innovations necessary to transform the Indian economy.

PROF. V.S. RAO

Focus on our context and needs

An alumnus of Andhra University, BITS-Pilani and the University of Bielefield, Germany, Prof. V.S. Rao is president of NIIT University, Neemrana (estb.2009), with 38 years of teaching and administrative experience at BITS-Pilani and Hyderabad campuses.

How satisfied are you with the Rs.85,010 crore provision made for education in the Union Budget 2018-19 of which a major share — Rs.49,530 crore — has been allocated for higher education?

It is encouraging that in the Union Budget 2018-19, finance minister Arun Jaitley has focused on education and health, critical for growth of the Indian economy.

In higher education, if we are to achieve 30 percent GER by 2020, participation of the private sector is essential. Therefore, a financial framework needs to be put in place to encourage public private partnerships while designing a robust regulatory framework to ensure that the quality of education isn't compromised. Promoting state-of-the-art private education institutions that provide professional and employability-based skills education is essential for developing India's future human capital.

Not even one of India's 800 universities is ranked among the Top 200 World University Rankings of the London-based ranking agencies QS and *Times Higher Education*. What are your Top 5 priorities for remedying this dismal situation?

Instead of becoming fixated with rankings based on parameters which may not be relevant to Indian conditions, we should focus on our context and needs, such as creating knowledge relevant to our economy, designing innovative teaching-learning processes, building real-time linkages with industry, etc. All of this can be done in quick time and at lower cost without mindlessly emulating foreign universities whose context is very different from ours.

It's important to note that the QS and *Times Higher Education* World University Rankings accord heavy weightage to research. But the great majority of Indian universities are teaching institutions with research being the domain of the CSIR (Council for Industrial & Scientific Research) and other dedicated research institutions.

The low international ranking of India's higher education institutions is attributable to the under-preparedness of school-leavers for higher education. What in your opinion are the urgent reforms required in K-12 education?

The Union budget's proposal to treat education in a holistic manner from pre-nursery to class XII is a positive step towards improving school education.

Moreover, as recommended by Unesco, we need to "create a supportive accountability system for teachers and administration by schools" and all other stakeholders in the K-12 education system. There should be a determined effort to improve infrastructure, recruit high quality teachers and use technology to revitalise school education. With this budget's focus on holistic education, I am confident we will soon witness significant improvements in the country's K-12 education system.

How realistic is it to hope that the Indian economy will realise its demographic dividend in the near or medium-term future?

According to the well-known management consultancy firm Deloitte Touche and Tohmatsu's third edition of *Voice of Asia* series, most countries in Asia are grappling with ageing populations, and imminent workforce shortage. India is of the few South Asian countries sitting atop a demographic goldmine with an average age of 27.3 years compared to 35 years for China and around 47 years for Japan.

However, to reap our demographic advantage, we urgently need to educate and equip our workforce with the knowledge and skills required by industry, agriculture and the social sector to develop the national economy. Focus on creating strong academia-industry linkages, re-skilling and co-operation among all stakeholders in education to enable India to realise its demographic dividend.

NIIT University launches data analytics degree

HT Correspondent
letters@hindustantimes.com

NEW DELHI: NIIT University (NU) has recently launched a two-year work-integrated MBA programme in intelligent data science in partnership with NIIT Technologies.

The MBA programme is focused on nurturing talented professionals to become next generation data science leaders who will drive business transformations.

NU also offers MBA in business analytics in partnership with WNS.

The MBA programme provides specialisation in applied data science, applied business analytics, applied big data and infrastructure analytics.

The programme has increased in size by close to 40% from previous batch and many students are already working on billable projects while doing their internships.

Another data programme offered by NU is the BTech in data science in collaboration with IBM.

The students are shortlisted by IBM and go through a set of electives during the seventh semester.

The first year of MBA in data science will be facilitated at the NU campus and is designed to develop industry focused intelligent data science and artificial intelligence skills covering domain, programming skills, machine learning.

The second year of the programme includes full time internship at NIIT Technologies Ltd along with an opportunity to work with global client base in real business situations to implement data science skills across its focus verticals travel, insurance and banking and financial services.

Programmes at NU are linked to four core principles to ensure that learning is industry-linked, technology-based, research-driven and seamless.

Hindustan Times, New Delhi
April 18, 2018

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UNIVERSITY/CAMPUS

NIIT UNIVERSITY awarded as many as 300 degree certficates

NU AWARDS FIRST DOCTORAL DEGREE AT 7TH CONVOCATION

The NIIT University (NU) awarded its first PhD in Educational Technology in the 7th convocation ceremony held at the Neemrana campus. Eminent scientist Dr Raghunath Anant Mashelkar was the Chief Guest of the occasion where more than 300 students were also awarded degree certificates for successful completion of various programmes. While 213 students received B. Tech degree, M. Tech degree was awarded to 13 students, 62 students received MBA (Finance and Banking) and 45 students received degree in PG Diploma (Banking and Relationship Management). Wishing the students a very successful career ahead, Dr Mashelkar said, "India has come a long way from being a third world country to a time where we will soon be world's third largest economy. Indian innovation or 'Indovation' is the key in providing excellence at affordable cost and I congratulate NIIT University on promoting the spirit of Indovation." Rajendra S Pawar, Founder NU and Chairman, NIIT Ltd, Professor. VS Rao, President, NU, and others were also present on the occasion.

Careers 360, National, *October 2017*

NIIT emphasizes on Five Dreams of Sri Aurobindo

NINTH ANNUAL lecture hosted by NIIT University

NIIT University (NU) hosted the 9th Annual Lecture. Eminent personalities and thought leaders congregated to witness and discuss how the four core principles that shape education at NIIT University - Industry-Linked, Research-Driven, Technology-based and Seamless – are coming alive to create a new model in higher education. With a focus on innovation and research-driven approach to education, NU is emerging as a hotbed for entrepreneurship. By emphasizing on 'Five Dreams of Shri Aurobindo' NIIT plans to establish a new model in higher education that encourages research and fosters entrepreneurship.

Careers 360, National, *December 2017*

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Charting careers in digital economy

OUR BUREAU

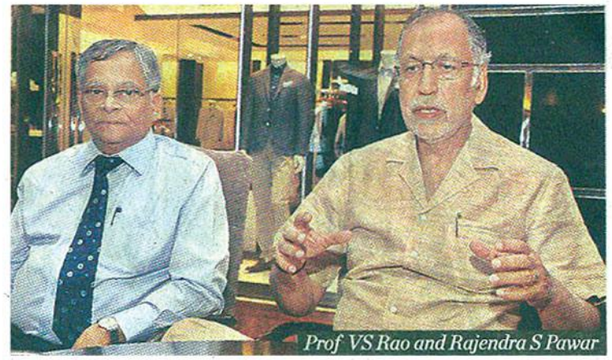
A career counselling session was conducted by NIIT University (NU) for engineering aspirants over the weekend.

BVR Mohan Reddy, Board Member of NU, Rajendra S Pawar, Founder of NU and Chairman of NIIT Ltd, and Professor VS Rao, President of NU addressed the session.

Speaking on the future of the industry, Reddy said, "Latest technologies like Internet of Things (IoT), Big Data, cloud, and software defined world will change the way we live work. However, there is a strong role to be played by government, corporates, associations and academia to develop digital infrastructure and ecosystem."

"NU is taking a leadership role towards building competencies for the future to meet the requirements of Industry 4.0," he said.

Elaborating on the rationale for holding the seminar and speaking on careers, Pawar said, "The advent of technology has galvanised the education space offering opportunities as well as challenges. We are faced with the urgent need to impart education that is seamless, holistic, and closely aligned to what the industry of the future needs. Therefore, our BTech programmes have been designed in close association with the industry to help our students chart meaningful careers in the fast evolving digital economy."



Prof VS Rao and Rajendra S Pawar

Professor Rao said, "At NU, we have been working towards creating university of the future that fosters critical thinking, innovation and research centric approach to shape individuals who can adapt to the fast-changing global economy and contribute meaningfully to the growth of their organisations and the society at large. In fact, innovation is a way of life at NU and this has encouraged our students to come up with winning entrepreneurship ideas. The university promotes and introduces young minds to new vistas of knowledge, and has encouraged them to think critically and apply that knowledge to everyday life."

The Hans India, *May 08, 2017*

Cognizant BOS & BFA Awards

Dr. Prosenjit Gupta, Area Director, CSE has been conferred **"Best Faculty Award (BFA)"** by Cognizant on 24th May 2017.

This award is presented to appreciate and encourage faculty members who nurture the best of talents among the student population.

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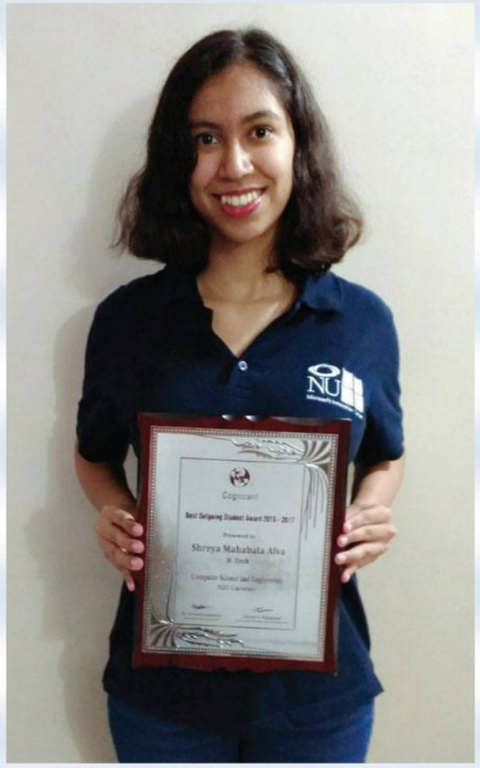
Shreya Mahabala Alva from B Tech (CSE) 2017 batch has been conferred **"Best Outgoing Student (BOS)"** award by Cognizant on 24th May 2017.

This award is presented to one student of the final year B Tech, who demonstrates high potential in various categories of excellence.



NUs Week, 120-137

NU Students' Achievement

PeerXP Technologies – a startup company by NU students has been selected for the Global Accelerator Program and Incubation from Commence-Mint which is led by Senior Leadership of Infosys and Accel Partners.

They have raised a Seed Funding of 1 million INR along with an extra merit-based funding opportunity of 10 million+ INR.

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NU Conferred Eco Campus Award

NIIT University recognized as **"Eco–Corporate of the Year – Eco Campus"** at 3rd YES BANK Natural Capital Awards 2017 for its environment friendly and sustainable Green Campus at Neemrana.

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↘ RAJENDRA S. PAWAR
Chairman & founder,
NIIT University

Interview

VISION

"Ed Institutions will have to be responsible"

Surfing one of the greenest university campuses, and gazing at the amazing art work and research posters, it was indeed arduous to fathom those to be creations of Engineers! On enquiring, Mr. Rajendra Singh Pawar verbalized the 'research, innovation and entrepreneurship' foundation of the university.

Rajendra S Pawar is the Chairman and co-founder of the NIIT Group and the founder of NIIT University, a green university. Through the NIIT's innovative franchising model, he unleashed a wave of entrepreneurship around the world. Pawar has been a member of Prime Minister's National Council on Skill Development, Planning Commission's Task Force on Skill Development and International Business Council of the World Economic Forum. He was a founder member of NASSCOM and has been actively involved in Indian Chambers of Commerce. He is popular for industry-academia alliance and is closely associated with India's well known educational institutions such as IIT Delhi, Indian School of Business and the Scindia School, Gwalior.

On the four core principles of the University.

Our four core principles stands to be Industry Linked, Technology Driven, Research Driven and Seamlessness. In fact, seamlessness is deeply rooted to our motto and is termed as 'Anadi Anant' on our emblem of a mobius ring.

On the need of 'research and innovation'

There is a reason why research did not flourish in a closed economy. The times and circumstances generate the need. Before 1990, during the license raj, research was limited to PhD students which went up to the stage of publishing a book. In order to convert research to a commercial activity, you needed to have that part of the system functional. Enterprise seeking new ideas was not a part of the license raj, which was rather appropriate at that point in time. Meanwhile the world started moving towards an open economy but we remained closed till 1990. After we decided to open our economy in 1990, we didn't need a permission to manufacture. People could make anything. The situation thereafter arose where capacity was more than demand leading to more choices. Now days, when to go for shopping, we are finicky about what we buy because we have a lot of choices which we didn't have in the earlier days. So, this opportunity of making choices by the consumer forces competition which in turn forces innovation. With enterprises valuing the superior or quality products leading to comparison, more and more application of mind was required and the logical flow therefore was research.

PHOTOGRAPH: TARUN GUPTA

We are working very hard to change the character from great teaching institutions to institutions who also have to research. Now more than need, there's a compulsion for research. Companies of today are looking for innovative researchers and educational institutions will have to be responsible for it.

On entrepreneurship

We inspire our students to become job creators than job seekers. However, this also depends on the inclination of the student. If the student is completely tilted to the technical side and not comfortable with taking risks, we completely support them. On the other hand, we make sure to provide all opportunities to evoke and hone all the necessary skills for students with slightest inclination towards entrepreneurship. Students are offered crash courses in finance, banking and other entrepreneurial skills along with their core technical course. Ultimately, it is the responsibility of the educational institutions to identify the skills and give every opportunity to nurture them. If it comes to them, they're job creators.

On choosing the apt student during admission

Well, this is a huge point of departure from other institutions. Although there were lots of debate around 'how', we all agreed that the social capability of the students must be assessed. While written exams, school records are quite easy to test the technical skills, how would we test social sensitivity, innovativeness in a student? Personal interview was a ready choice for us but it has its flip side too. After lots of debate and discussion, a very senior professor suggested to tape record every interview. If needed at any time, we can justify the reason behind admitting a student. We are happy to give one-third of the total weightage to social capability, however, we do plan to give it half the weightage. We will be pressing for closer economic ties with America benefitting from each other's economy. Again, Irish people have worked in America. We don't think there will be any change and we will be really able to deal economically. ■

School records are quite easy to test the technical skills, how would we test social sensitivity, innovativeness in a student?

↘ *sreerupa@businessworld.in*

CENTENNIAL EDITION

Young Turks

CORPORATES REDEFINE HIGHER EDUCATION

During the last decade, a series of corporate players got into the university space, and the results are exceptionally encouraging...

by Ashish Jha & Abhay Anand

Corporates and higher education do not go hand in hand. Higher education is strictly for non-profits and most corporates do work for generating profit for their stakeholders. And globally, though some corporations do get into setting up of their own universities, it is generally not the trend. Globally, corporations just provide funds and research ideas to universities. But, in India the case is slightly different. Until 2000 most educationists, especially in the private sector, were individuals to whom education was their profession or vocation. And some of them have also evolved into education conglomerates. But real business houses, whose primary vocation is something else, have only come in to the picture very recently.

Birth of corporate universities

Corporates do have a history of giving money to Indian higher education. The Birlas, the Tatas, the Singhanias have all contributed to building schools and even affiliated colleges. At the university level, the contribution has been quite minimal. Tatas did fund the Indian Institute of Science, Bangalore and the Birlas the famous Birla Institute of Technology & Science, Pilani. There are others too. But they were exceptions rather than rules. As a rule Indian corporates have never gotten heavily into the tertiary education domain, especially in terms of green field investments. So, when and why did this trend change?

The recent trends

It is only the last decade-and-a-half that a slew of big corporate houses got into creating institutions of excellence, especially at the university level. The first off the block was the Indian School of Business(ISB),Hyderabad. It was spearheaded by two ex-Mckensky executives and fully funded by a host of corporate houses. The success of ISB, in some sense, spurred on other corporate houses to get into the university domain in earnest. NIIT Group, Reliance Group, Hero Honda group, Vedanta...the list is long

What makes these forays interesting, is that fact none of these corporates have direct interest in higher education. The models are also different

Models of institution building

What makes these forays interesting, is the fact none of these corporates have any direct interest in higher education. Their models are also quite different. An Ashoka University (AU), for example, is a classic example of a group of entrepreneurs coming together to donate money and build a corpus. On the other hand, a Shiv Nadar University (SNU), or an Azim Premji University (APU) are set up under the aegis of a well-funded foundation. They also differ in terms of their approach to higher education. An SNU, for example, seeks to emerge as a professional university, offering programmes on science and engineering and have a strong hold on management. On the other hand, an AU is an out-and-out liberal arts school with no professional orientation. Which model will work better, and why? As they say, just wait and watch.

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USP

Founded by thought leaders and corporate-practitioners of the country, the multidisciplinary University focuses on emerging areas of technology and management.

The University offers Industry-linked courses like MBA Program in Business Analytics in collaboration with WNS, MTech (GIS) in collaboration with esri Inc, California, PGDBA in collaboration with United Bank of India and Bank of Maharashtra, and MTech (Educational Technology) in collaboration with leading companies and schools in the country. The University is also building research capabilities in areas such as Biotechnology, Mobile Healthcare, Cognitive Radio, Technology-driven pedagogies, and Next-generation Networks.

NIIT UNIVERSITY

Overview

Established in 2009, NIIT University (NU) is a not-for-profit University notified by the Govt. of Rajasthan. NU inherits three decades of expertise and global know-how of its principal sponsor, the NIIT Group. It is a part of a 100-acre campus at Neemrana, Rajasthan. Nestled in the Aravali hills, the fully residential green campus offers a vibrant environment for pursuing higher education and research.

Prof VS Rao,
President NU

At NU, we have been working towards creating University of the future that fosters critical thinking, innovation and research centric approach. This focuses on shaping individuals who can adapt to the fast-changing global economy and contribute meaningfully to the growth of their organizations and the society at large.

Moving ahead the University aims to create more industry tie ups and research, discovery and entrepreneurship through collaborative action. Our mission is to establish NIIT University as an institution of excellence which will redefine higher education in India. The top of the agenda is to foster a research mind-set, and partner with industry leaders, especially in sunrise industries, to develop study programmes aligned with the skill-sets required by the new knowledge economy. We see NU emerging as a new model in Higher Education.

Academic Structure/Programme/No of students

NU offers the entire spectrum of academic programmes. At the undergraduate level, it offers B.Tech (Computer Science & Engineering, Electronics & Communication, Biotechnology), 4-year Integrated M.Sc (Computer Science), and 5-year Integrated B.Tech - M.Tech (Computer Science, Electronics & Communication, Biotechnology, Educational Technology and Geographic Information Systems). In collaboration with University of Missouri, Kansas City, it offers a 5-year dual degree B.Tech & M.S programme wherein students undertake academic work at NU for 3.5 years and then continue at UMKC for 1.5 years. At the postgraduate level, it offers M.Tech, MBA and Ph.D programmes as well as several Industry Sponsored Programmes.

Select clubs:

- Mozilla Club: Partners with Mozilla to organise seminars and workshops on various IT-related topics
- NU Saahas: The Adventure Club which encourages students to explore the beautiful terrain surrounding the campus, by carrying out weekly treks to the nearby Aravalli features.
- Rangmanch NU: The Theatre Club for all theatre enthusiasts at the University

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Photograph: ANIL DAYAL

THE HEART OF LEARNING

Over half of young students—each mindful of his/her special interests—are opting for courses fit for new-age careers

Students at a vocational course class at NIT Hamirpur; below, an IT class in progress

BY LOLA NAYAR

THEY are young, impatient and, instead of blindly blundering down a path chosen by forebears, know their minds. The trend of youngsters pursuing careers that combine their interests with opportunities to earn gainful employment is on the rise. Together with changing market trends, particularly the digital transition as well as labour requirement, a slow change is being observed in the courses being offered by universities. Introduced over the last couple of years by very mainstream places like Delhi University and Mumbai University, they are reflective of the varied aspirations of the young or those seeking a change from mundane jobs. Top among vocational courses being offered by government and private varsities is retail management, reflecting the sharp growth in this sector. Other popular courses are healthcare management and IT courses—from basic computer systems to programming and data sciences.

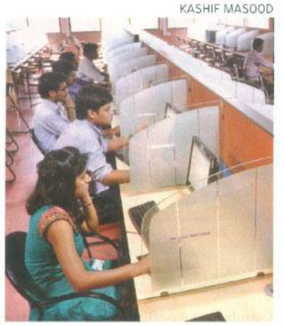
Entrepreneurship being the new buzzword, there are both graduate and post-graduate courses on offer with interesting specialisations. For instance, in Delhi, Ambedkar University offers a post-graduate course in Early Childhood Care and Education, while Jamia Millia Islamia offers a vocational degree in Solar Energy. These are apart from those offered by the College of Vocational Studies under DU. Last year, the Delhi government launched several short-term vocational courses, the most popular being those catering to the hospitality and retail sectors.

"Lately, several colleges offer vocational courses. The focus on these has gained momentum since last year. As a lot of parents remain wary of sending their children for diploma courses, the UGC has this year made a push to introduce vocational degree courses," says Jitin Chawla of Centre for Career Development.

Unlike India, many countries have a system of awarding vocational degrees. Australia has, in fact, reorganised its system over the last 15 years to integrate vocational courses with the degree stream. For instance, after a year of education, a student can get a diploma and after three years of education get a degree. This is now being considered in India as part of the national skill development initiative.

Chawla points to the fact that though the CBSE has introduced vocational subjects in schools, like food processing, not many parents allow their children to opt for them, as at the time of admission to undergraduate courses, marks are reportedly reduced from the aggregate when a student has had a vocational subject.

KASHIF MASOOD



At the college level too, most takers for vocational courses are from government schools or from not too well-off families. This is because the government system is not able to attract children from posher socio-economic backgrounds. The apathy is reduced to an extent when the same course is offered at a top private university or college. "Most Indians are not ready to accept their child's desire for doing a vocational programme. An alternative career is still to take root in India. Most students go for it after graduation, when they are better aware and in a position to make informed choices," states Chawla, citing the case of a child who had come for career counselling and voiced

Outlook, National, *July 10, 2017*

NEW TURNS

LAYING IT OUT Vocational courses in hospitality is a big draw

JITENDER GUPTA

the desire to pursue a career in gaming, but was overruled by his parents.

Ironically, though a vast number of youths enter the job market each month, neither the government nor the private sector is focusing adequately on vocational or skill development. While private universities look at courses purely from a placement point of view, in government colleges and universities, any proposed change takes decades to be implemented, says Mohan Tiwari of Students' Destination, a career counselling start-up.

"There is need for more focus on new-age careers, anything apart from STEM (science, technology, engineering and math). So far, everyone has been focusing too much on STEM; going forward, I feel we should have qualifications that are purely vocational," says Tiwari. He is among experts who feel vocational qualifications are in and will remain so for the next 20 years and more, as they are skill-driven qualifications and have a direct corelation with employability.

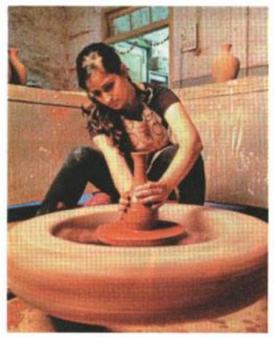
Breaking cliched career moulds, many children are venturing into fields like carpentry and handicrafts, which were earlier restricted to certain communities. Now, enterprising youngsters with a background in design are visiting villages and towns off the beaten tracks to discover and learn dying art forms and using their formal training to create products in tune with emerging trends. This is helping revive dying arts and crafts, while providing new career opportunities. Some institutions, like the JJ College of Arts, are helping with interesting courses like ceramics, pottery and puppetry.

Many students just out of school and graduating from colleges are no longer just talking about getting any job but becoming writers and pursuing other interesting activities after their hearts. Many go to great lengths to seek information on new opportunities.

The idea today is to ensure that youngsters are all finding their separate niches, their unique metiers, as it were, as not everyone needs to fit into that old, hackneyed Indian binary—'an engineer or a doctor'. This is increasingly being understood by parents; therefore, career counsellors are striving to make children aware of their strengths, abilities and mindset, as also career opportunities that fit those abilities and inclinations.

"Aspirations are not any less among children today, it's just that their career goals may be different. Around 20-25 per cent people want to constantly upgrade themselves to keep ahead of changing trends and market requirements," says Tiwari, an alumnus of IIM Ahmedabad who himself switched to career counselling after 14 years in the corporate world.

"Going by data of students coming to us in the last two years, over 50 per cent opt to go to new-age careers, be it shoe designing to film-making, becoming a blogger, a YouTuber, an e-advertiser etc. Everyday, we are talking about a large number of new careers. More than 50 per cent kids are moving away from traditional or conventional careers. That is a huge jump," Tiwari adds.



A student at a pottery class

Whether it be fashion designing or communications management, new trends drive new career opportunities. These are careers that require a continuous upgrading in skills and modes to become a better professional and be able to outshine not just the competition but also oneself.

The need to have an industry-ready workforce is seeing a shift in the way courses are being designed. For instance, NIIT University's BTech in computer science, with emphasis on digital transformation technologies, has been designed to create a new breed of IT engineers sorely needed by the industry. The programme is focused on building a strong foundation in mathematical and algorithmic concepts. Similarly, its MSc programme in computer science is designed to provide students an overview of computing, an understanding of concepts, principles and skills in their application and extension, and a practical experience in applied computing. This redesigning is in keeping with the evolving industry and marketing needs, just like the new certificate and diploma courses in data analytics, cloud management, digital marketing etc being offered by many private universities. Wherever there is user interface, there is a felt need for specialisation. This applies to courses like multimedia and animation, which are greatly in demand.

In all, around 60-70 per cent of people opt for vocational courses after graduation while 30-35 per cent opt to do them after school. Age seems to be no bar for a career switch, going by the number of people opting for new education or specialisation before making the change. Free, bold thinking on careers is here to stay.

Outlook, National, *July 10, 2017*

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COVER STORY

NIIT UNIVERSITY
Neemrana

Established in 2009, NIIT University (NU) is a not-for-profit university situated 100 kms from the Capital . "NU offers a new model of learning to correct the student's tunnel vision problem and allows them to educate themselves throughout their lives," says President VS Rao. Placements here are handled by the Centre for Industry Collaboration (CIC), headed by a full-time placement specialist. "Our deep understanding of the industry and strong Industry-linkages are the primary reason for the exceptional placement of 97.3 per cent last year," says Founder and Chairman, Rajendra S Pawar. It also offers joint programmes with industry experts, a flexible curriculum design with industry inputs, co-created electives with industry mentors, multidisciplinary curriculum architecture and undergraduate research and development projects.

- **Top courses** B Tech in CSE, ECE, biotech, B Tech-M Tech dual degree integrated programme and MSc in computer science and
- **USP** Innovation and start-up incubation; a 20-credit course for six months at industry site on a real-life problem, co-mentored by industry experts and NU faculty
- **Entry** NU considers consistent academic performance in boards (10th and 11th) for undergraduate and additional performance in graduation for postgraduate programmes along with written and verbal communication, and technical and analytical skills
- **Fee** ₹1.56 lakh to ₹3.46 lakh a year for B Tech courses depending upon scholarships
- **Website** *www.niituniversity.in*

India Today Aspire, *May 2017*

TOP DRAW Students strike the happy pose at NIIT University, Neemrana

Goal: Summa Cum Laude

With a market-oriented, cross-discipline approach, corporate-led private varsities are changing education

BY ARINDAM MUKHERJEE & LOLA NAYAR

THEY are well funded, have excellent infrastructure and promise an alternative and a new approach to higher education. Welcome to the world of corporate-led private universities, a reality India is gradually waking up to.

While traditional government-owned and -funded universities have been the mainstay of Indian education, in the last decade or so, private universities, mostly promoted by Indian corporate houses have carved a niche in the burgeoning Indian education business. Most are funded by large corporate houses through their philanthropic arms and are set up largely on the Western model of education. These include Shiv Nadar University, Azim Premji University, NIIT University, O.P. Jindal University, Future Innoversity and Brij Mohan Lall Munjal University, among others.

Most top business houses now want to get into higher education either as a business venture, corporate social responsibility (CSR) requirements or as part of philanthropic activities. Promising unique value proposition in education, many are focused on requirements of specific sectors, while others are more broad-based in courses and syllabus.

The top advantage of private/corporate universities is that of providing a very high benchmark of standards.

Says Rupamanjari Ghosh, vice-chancellor, Shiv Nadar University, Greater Noida, "In the 1990s and 2000s, philanthropy was not on businesses' agenda. Now, they are quite alive to it. People started pitching in and now it has got structured. Many of these universities are not CSR; they want to bring in good education system in India."

Many show their foreign linkages and promise a new approach to education inspired by the cross-discipline approach followed by private US varsities. In India, where demand for higher education far outstrips supply, these universities are opening new avenues for students.

One of the most important aspects driving these universities is availability of corporate funds. While government universities function on tax payers' money, which is hard to come by and has strict accountability standards, corporate houses are liberal with funds. Their centralised decision-making often makes it easier for sanction of funds and fast rollout of projects.

But, unlike state universities, funds could be limited over a long period for private universities. Says Pramath Raj Sinha, founding dean, Indian School of Business, and co-founder, Ashoka University, "In private, there is some pressure on making the economic and financial model self-sustaining over time, so that private funding and donations are not going into a bottomless pit."

Dilip M. Nachane, director, IGIDR, Mumbai, says that private educational enterprises have been an integral part of our higher education system. In recent times, many have been accorded deemed university status and the official policy has become more receptive to their presence, resulting in a proliferation of private varsities both Indian and foreign.

But there is considerable difference among the institutions in terms of quality of training, scope of subjects taught, administrative set-ups, and social commitment. Some have emerged as world-class centres of excellence, while others have fallen short of the mark. Yet, there is sufficient commonality among the educational services provided and the problems posed by these institutes.

Nachane, a former vice-chancellor of

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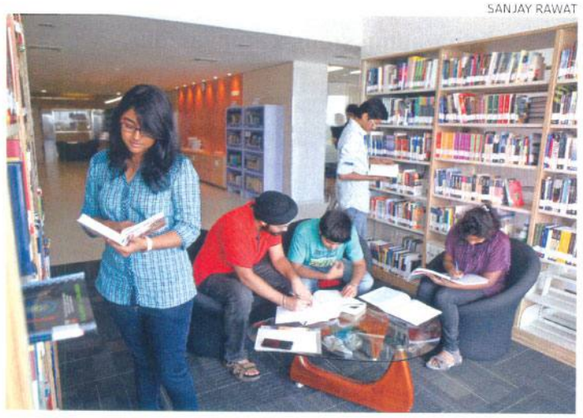
INDIA'S BEST
UNIVERSITIES
The Private View

SANJAY RAWAT



WORK STATION In the library at Shiv Nadar University, Uttar Pradesh

Manipal University, states that in theory, private universities are ideally positioned to provide high quality education. They enjoy advantages like a more comfortable funding structure compared to state and even central universities. Further, they are relatively free of political interference—that bane of state universities. Consequently, they face far less student and teacher agitations. Not being hampered by unwieldy bureaucracy, "they can respond quickly and flexibly to emerging needs in education. For example, many universities immediately started courses on intellectual property rights as it emerged as an important issue at the WTO. Similarly, in recent years, Data Analytics has become important in the corporate sector, prompting several private universities to start courses. Contrast this with the situation in public universities, where syllabus modernisation remains hostage to unwieldy boards of studies and obstructionist bureaucracies," says Nachane.

Perhaps the most important advantage of private and/or corporate-funded universities is that of providing a competitive benchmark of standards, which could spur public universities to improve standards. "There is no denying that many private universities are oriented primarily to serve the needs of the corporate sector. This means that the emphasis is mainly on management education. Natural science subjects receive little attention and the liberal arts virtually nil," opines Nachane.

Sinha, however, says that private universities are trying to bring in a difference. "We have over 800 universities in India. Around 70 per cent of them are private. Of these 500-plus universities, we have a handful of private universities trying to do things differently, while 99 per cent of private universities are as good or bad as the government ones."

Of course, the use of government money essentially drives universities towards safer practices, with limited scope for experimentation. Hence, universities have stuck to rote teaching and learning processes with limited efforts to align it with modern needs. This is where private universities have moved ahead.

Ghosh states, "An independent philanthropic sector is needed to increase experimentation without bothering about using tax-payers' money. Only then can one take calculated risks."

The other thing is curriculum and approach. There is hardly any multi-disciplinary research happening at India's old universities—a common feature in private US universities. Although the IITs have only recently introduced humanities and English, corporate and private universities in India have started with such an approach. "Today's problems are not restricted to any one discipline and unless you have a multi-disciplinary approach there cannot be any inter-disciplinary problem solving. Our engineering curriculum has creative designing. We teach social sciences, hardcore sciences and then engineering. The teaching and learning process have all changed. This will make students 360 degree human beings rather than one-dimensional," says Ghosh.

Free of political interference, private universities can respond quickly to emerging needs in education/training.

In corporate universities, it is not students alone who are made familiar with application of knowledge but also faculty members, who are encouraged to work for six months to a year in industries related to their specialisation to understand evolving industry needs, challenges and market realities.

ACCORDINGLY, some new corporate universities are involving even undergraduates in research and have engineering, humanities and management under the same roof to encourage inter-disciplinary interactions. Says Prof V.S. Rao, vice-chancellor, NIIT University, "The best practices of industry form part of the corporate universities. Because of industry linkage, we send our students to the industries for a period of six months to work on live projects, which is of direct interest to the industry, as a regular employee."

Others emphasise on social contributions through education. Anurag Behar, vice-chancellor, Azim Premji University, states, "Our university has been established with a clear social purpose--to contribute to social change for a more just, equitable, humane and sustainable society--through our teaching programmes, research and deep engagement with the real world. Our research programmes go deep into issues of education, sustainability, governance, economic development and livelihoods. Our programmes are often the first choice for students interested in contributing to society."

While private universities are trying to change education modes, they face

PRABHJOT SINGH GILL

TRIBHUVAN TIWARI

Foreign faculty at Lovely Professional University (left), Jalandhar; students at Ashoka University (right), Sonipat

an acute shortage of quality faculty. While traditional universities, buttressed by their old reputation, manage to find some quality faculty, private varsities have often found it difficult to attract good talent. Most, therefore, tend to depend on guest and overseas faculty members.

Shiv Nadar University for instance, taps on to the Indian diaspora and has a strong team of NRI faculty. Ghosh also boasts that her university has more IIT PhDs than the IITs themselves, while the IITs face a shortage of faculty. Last year, IIT Delhi had a shortage of 400 faculty members, while IIT Bombay had a shortage of 350.

BUT this approach has its own critics. Says Nachane, "Because of the over-reliance on foreign teachers, syllabi and courses taught in the social sciences (such as economics) have marginal relevance to Indian realities. The better among private universities tend to become elitist enclaves, taking the cue from foreign universities, with very little interaction with other universities (public or private) within India."

Is getting into a private university easy? Given the stringent systems of admission, in most cases it is not. Shiv Nadar, for instance, has its own admission test system, which evaluates students on many parameters, many do not allow anyone scoring less than 80 per cent in class 12 to apply. Others have similar systems. Says Ashoka University's Sinha, "Ashoka's admission process is more holistic than most. It's not just based on marks, rank or an entrance test, but evaluates various aspects of a student's potential." Mostly, only the most meritorious or talented are selected in the best of corporate-led private universities.

That brings us to that most important aspect—cost of education. On an average, the cost of education in private universities is many times that of state-funded universities. While a three-year undergraduate course in a government university costs less than Rs 30,000 on an average, a private university can charge anything from Rs 4 lakh at Amity University to upwards of Rs 25 lakh for Ashoka University. Others, like Shiv Nadar University and Jindal University, have similar cost structures.

Rao defends, "Public universities are publicly funded, while corporate universities have to depend on private funding. So we have to depend on tuition fees or philanthropic contributions by the private sector."

Ashoka's Sinha concurs, "High quality higher education is expensive, and around the world it has always been for the elite. Even in India, the cost of high-quality education incurred at an IIT or IISc or IISER or IIM will come to Rs 25 Lakh for 3 years. This...is public information." As many private universities are philanthropically funded and are truly non-profit, Sinha points out that many of them spend a lot on scholarships to make sure that the common woman can also avail of the opportunity if she merits admission.

A private university is much, much more expensive than a state-run university, but admission systems are stringent too.

Naturally, many criticise the approach of corporate-led universities. Pritam Singh, a seasoned educator and former director of IIM Lucknow, feels their approach to education is flawed. "They have not delivered because you cannot manage universities like you manage companies. You cannot superimpose management principles on a university. That is why some have had to close down their divisions, while others are having problems. There are tremendous problems in governance related issues."

Despite the criticisms, corporate-led private universities have brought in a new approach to higher education along with a strong social connect, which is essential for our times. With their foreign linkages, they have also provided access to external knowledge and new ideas. It remains to be seen if, in the long run, these universities look beyond industry specific interests to deliver on quality education, and help improve the employability of millions of young job seekers. Sustainability of their business models and ability to attract the best of young talent are areas that are still yet to be fully tested. But they have their sights trained on the correct targets.

Outlook, National, *August 2017*

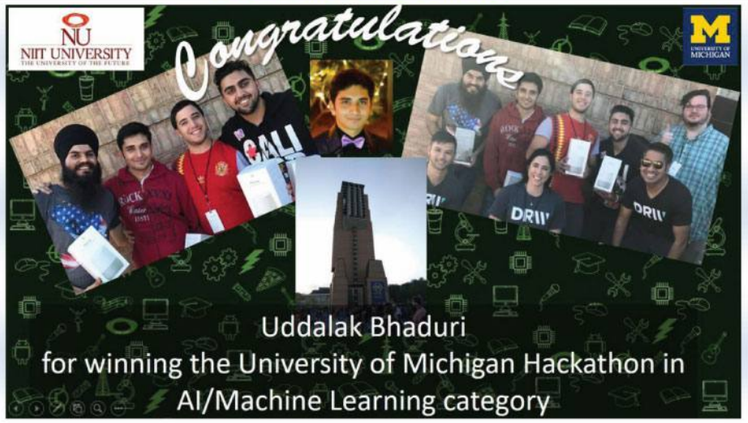
NU Alumni Saharsh Tibrewal, B.Tech (CSE) Class of 2014 has received his first US Patent. This patent was applied along with three other colleagues from Amazon while he was working there as a software development engineer intern as part of Industry Practice in the final semester of B.Tech.

"Performance Based Content Delivery", a system to predict and identify a user's internet performance speed in real-time to adaptively render content over the internet in order to improve the user experience on the fly by

NUs Week, 138-149

allowing server-side components to gracefully degrade the payload of the content being rendered.

NU Students' Achievement



Uddalak Bhaduri B Tech (CSE), Class of 2019 got prize for "The best use of Machine Learning API" from DRW (a US company) and received an opportunity to intern at DRW, USA.

He stood as one of the top ten students at MHacks University of Michigan Hackathon at Ann Arbor, USA and received prestigious Google Home Artificial Intelligence product.

His team includes consists of four members, two students were from Oakland University and one student from University of Illinois Urbana Champaign.

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Sinusoid "1st Tech Fest" of NU

NU's 1st Techfest **"Sinusoid"** was held from 6th – 8th October 2017 at Neemrana campus.

It was a great success with 3 days of packed events like Hackathon, Codejam, Cybersecurity Seminar, GIS workshop, Darwin games, Error stack, Mathjam, Google DM, Unity game development and many more.

NUs Week, 138-149

CSE Doctoral Symposium

NU conducted a doctoral symposium on Computer Science Engineering on 23rd and 24th September.

The symposium witnessed speakers from industry as well as from premier educational and research institutes, in addition to many PhD students who presented their research work. Following eminent speakers were invited on this occasion:

- Dheeraj Sanghi from IITK.
- Manish Gupta from Videokon.
- Huzur Saran from IITD.
- Ghida Ibrahim from Liberty Global, Amsterdam
- Utkarsh Amitabh from Microsoft
- Gautam Barua from IITG
- Rajeev Shorey from TCS Innovations Labs
- R K Shyamsundar from IITB
- Udai Singh from NIIT Technologies

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NU Students' Achievement

NU student-entrepreneurs demonstrated their prototype of NIR spectrometer (funded by Department of Science and Technology) successfully to PM, Shri Narendra Modi and PM of Israel, Mr. Benjamin Netanyahu during the Indo-Israel Innovation Initiative held on 17th January 2018, at the inauguration session of iCreate (International Center for Entrepreneurship and Technology).

Rahul Kumar, Varshnee Raj, Alphonse Dhas Antony and Abhinandan Bhargava have started the company SpectrumSmart with its main product AoNIR.

The PM encouraged NU start-up and named it specifically in his speech which can be found at the PMO video portal: Click here to watch!

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edex LIVE

NIIT University introduces Digital Transformation technologies in their curriculum to meet Industry's growing needs

NIIT University introduced Digital Transformation technologies in it's curriculum to rise-up to the challenges faced by the IT industry in the present scenario

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NIIT University (NU), has introduced pioneering Digital Transformation technologies in its curriculum. Towards this, NU has introduced B.Tech Computer Science and Engineering (CSE) program with emphasis on Digital Transformation technologies, to rise-up to the urgent need faced by the IT industry for Next Gen digitally skilled engineers.

The new B.Tech CSE curriculum will be powered by a project based learning methodology which enables the teacher and the group of students to mould the learning style dependent on the profile of the learners and create an environment to provide constructivism and collaborative learning. The B.Tech CSE program, will be embedded with Full Stack Programming, Big Data, Machine Learning, Natural Language Processing, Artificial Intelligence and Internet of Things (IOT) curriculum to make it more industry relevant. Industry experts will work as mentors, along with NU professors in guiding the students as per the specified methodology. While new students joining B.Tech CSE program will be able to avail the benefit of the new curriculum right from 1st semester, the ongoing batches of students will be imparted accelerated sessions, making them industry-ready, as early as six months from now.

According to a recent release by NASSCOM, the skills of the future would be Big Data Analytics, Cloud nad Cybersecurity Services, IoT, Artificial Intelligence and many other Digital Technologies. A huge demand is foreseen for roles such as mobile app development, social media, data scientists & platform engineering. According to a McKinsey report on 'Technology Jobs & the Future of Work', digital technologies could contribute $550 billion to $ 1 trillion of economic impact per year in India by the year 2025. According to another renowned survey, 69% of IT leaders expect huge surge in the job market in the next 3 to 5 years due to digital technologies.

Welcoming the initiative Mr. Raman Roy, Chairman, NASSCOM said, "Nasscom is playing a critical role in evangelising digital opportunity for the IT sector, and we will support the industry in facilitating skilling and re-skilling efforts through disruptive models. The sector needs a workforce trained in futuristic digital technologies to transform themselves from IT services providers to digital-transformation partners. Higher education institutes can play a key role here and I would like to welcome the pioneering initiative from NIIT University in creating this new-age talent pool."

India is already a home to digitally ready talent pool of 500,000 engineers, this demand is expected to increase to over a million engineers trained in digital transformation technologies by 2020. NU will play a pioneering role in creating a pool of engineers trained in Next Gen digital skills. The university will work closely with industry bodies like NASSCOM to ensure that the curriculum is aligned to the industry needs.

http://www.edexlive.com/live-now/2017/jun/13/niit-university-makes-changes-to-their-curriculum-to-meet-the-growing-needs-of-the-industry-608.html

COVER STORY

"Nothing is impossible, rather, anything is possible"

Every problem that comes, you look at it as an opportunity and not as a math or a civics or a geography or biology problem

By Sreerupa Sil

A PROFESSOR is hard to locate in this university. Groups of young people experimenting with gadgets in the nooks and corners is a regular view in this widespread green campus. Early mornings rise with students trekking across the hill near the campus to enjoy the sun rise. Well, that's possible also from Astachal, a gallery on the terrace for literary meets, debates, talks and Socratic dialogues, which pretty much occur every evening during sunsets. Witnessing a view like this, often make one question- what is futuristic education, what are we thriving for, what are we trying to create as educators? The man behind this whole innovation has been always known for his new and foreseeing ideas way back from 1981, a decade before liberalization of Indian economy, when he started NIIT Technologies. NIIT University was imagined, envisioned and eventually established by Rajendra Singh Pawar, Chairman and co-founder of NIIT group and Founder in 2009. Reformative, as his ideas always are, Pawar speaks to Sreerupa Sil of BW Education on the immediate needs in the education sector, the three reforms and note for higher education leaders.

Q: What is the purpose of education?

Let me start with the story of Aman Nath who visited our university recently to take a faculty development session. A historian by education, he is the one behind re-imagining Neemrana Fort. His latest work involved building an underground hotel on the Sohna road. The building is dug around the well to keep the building's temperature under control, topped by a lawn, literally. The lesson I carried from here was 'nothing is impossible'. That is education when a young child can believe 'anything is possible'. It is also drawing, sketching, calculations and constraints with the tools you have. Education needs to unbottle the genie in a child and unshackle minds. When the world is completely uncertain, preparing a person with fine skills is harmful since you are making them outdated the day they come. Whereas if you unshackle them, make them adventurous, build a strong sense of daring and let them lose, they will cope. Certification, validation, rankings are so industrial that it boxes away the human spirit of learning. Our core principles of being research driven, innovative and entrepreneurial takes student to a new zone of learning to make them more relevant in adapting to change.

Q: The concept of relevance is quite interesting since 'relevance' is rapidly changing.

If one has a sense of daring, only then s/he will be able to cope with the unknown, unlike saying 'this is out of course'! In our life, we are seamlessly dealing with the rich, poor, birds, surrounding etc, you are getting equipped to deal with environment in a comprehensive way. Every problem that comes, you are looking at it as an opportunity and not as a math or a civics or a geography or biology problem. If we train young minds to deal with such problems and doing it in a way that serves the purpose of society. Industrial era on the other hand dealt with completely different 'relevance'. The technology for cement industry lasted 25 to 30 years. One could manage a lifetime un-

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NIIT University campus, Neemrana

derstanding that technology in an industrial era, but it is no more relevant now. Teaching to learn therefore is the most important phenomenon.

Q:That's the most difficult skill to teach, isn't it?
Kids are learning on their own. The biggest challenge is that students are absorbing much more information from outside than from inside the system. A child is a liberated learner- this is a very big challenge for education at present. Now the student compares his teacher to a video on YouTube or Ted Talks and finds them smarter than their professors.

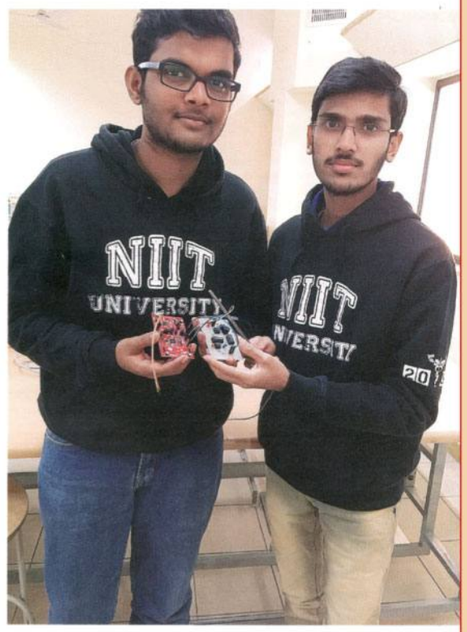
Q: What will then be the role of the institutions?
The potential role of the institution will change. A child can study the laws of physics sitting at home but may not be able to relate them to their daily life. A child may not get inspired since the umpteen videos and content may not intellectually challenge a young mind. Additionally peer learning does not happen online as much as it happens in the institution. That social setting makes one more responsible because of the immediate reaction as against that of 'check again' comment of a computer. Providing a setting for real interaction, dialogues, debates for collaboration, sensitivity and thoughtfulness should be provided by great institution.

Q: Faculties are not really practitioners in our system. How do you take care of that?
Our university has a norm of students working with the industry for 6 months in a year. While the students are out working for companies across the globe, they are mentored and taken care by three people- her mentor in the company, her faculty in the institution and her faculty-guide in the city. The rule in our campus is of fourteen students guided by a faculty. So when the students travel, they keep in regular touch with their on-campus faculty to discuss on the solutions for problems being thrown at them in the companies. This is a huge learning experience for the faculties. Fourteen students placed in cities across the globe communicating with one professor on several real-life problems-the learning is humongous.

Q: To make this even more effective, what kind of reforms are required?
In 1991, India opened up several sectors to foreign investment. The liberalization process unleashed enormous energy in India's corporate sector. Since then a number of Indian companies have earned a name in the global marketplace. We need similar type of policy reforms in the education sector. Players in this sector must be given the freedom to enter, operate and exit.
According to All India Survey on Higher Education (AISHE), India has 38,000 colleges making up 767 universities catering to 33 million students and 1.4 million teachers. Despite of that, India needs more universities.
India needs 'curricular reforms'. In today's world, where technological knowhow is evolving with each day, educational institutions need to be granted the freedom to engage with the industry and change the curricula as and when required. Education Industry must teach what the industry needs.
And finally, the education sector also needs 'financial reforms', especially in higher education. The government should provide scholarships and loans to those who need it the most, and leave academic fee to be determined by market forces. That's what will make our educational institutions relevant and self- sustaining. The need of the hour, therefore, is to rapidly implement this three-pronged reform process- policy reforms, curricular reforms and financial reforms. BW

"A CHILD IS A LIBERATED LEARNER- THIS IS THE BIGGEST CHALLENGE FOR EDUCATION AT PRESENT."

PRAJWAL & CHAGANTI
B.TECH, 2ND YEAR
NIIT UNIVERSITY



Our Project Proposal is **"LOW COST MODULAR BASED WATER QUALITY MONITORING FOR AQUACULTURE AND FISHERIES"** for DST and Texas Instruments India Innovation Challenge Design contest 2016. Basically their main Theme is to think of an innovative idea which has the potential to create the next big product Enterprise.

Now a days it is very important that there are certain parameters to be maintained at an optimum level for the proper growth of the aquatic organism being grown in the ponds by farmers. This project aims at delivering a low cost semi-automatic aquaculture management system for those medium and low scale farmers who cannot afford the presently available automated water quality management systems in the market.

The target customer are mainly the medium and low scale farmers in addition to the aquaculture fisheries looking forward to low cost water quality management system Most of the automated systems currently available either come in- 1. As a device which could control the motor/ aerator/ other device control which increases the cost by a lot, thus can't be implemented by low-scale and medium scale farmers. 2. The other monitoring system comes in as one single package and thus on a long run, any fault would result in higher costs. Thus we have proposed the idea of using modules for individuals and integrating it to one base micro-controller. Which reduces the long run costs considerably.

COMPONENTS USED IN OUR PROJECT-

MSP430G2452 For pH and salinity sensors.
ADS1113 Temperature sensor.
LM741C Used in the pH sensor.
CD4052B Multiplexer to switch between the modules from the base controller.
CC3200 Base Controller for transmitting the data to the user directly and also for displaying it on a LCD.
16x2 LCD To display he data besides also being sent to the user directly through Wi-Fi.

INNOVATIVENESS OF THE PROPOSED SOLUTION-

The modular design is itself a standalone in the market. The idea provides for a cheap to maintain device with low power consumption which would be essentially only the power required to power the IC's. Functionality of the system can be further increased by inducting additional modules, whose design can be included in the upgrades. Thus the user has an option to include only those modules as desired thus prompting for a cheaper product, as the user need not pay for the unwanted parts.

FEASIBILITY-

In the recent decade or so, the sector of aquaculture though has increased both horizontally and vertically, becoming almost 12 folds to what it was in 1980. This also has brought some significant issues with it like a vast un-utilized and under-utilized of land and water resources. In order to tackle the fore mentioned problem, we are determined to develop a low cost water quality monitoring system.

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SREYASH TRIPATHI
B.TECH, 4TH YEAR
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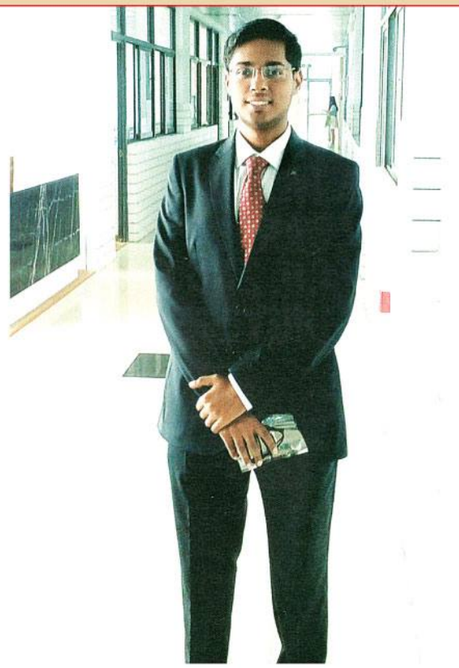


It is said that 'A Stitch in time saves nine'. All over the world, people are applying this principle to personal health, by undergoing regular health check-ups, even when their health seems to be in a good condition. The reason is to catch that disease early, before its' symptoms start manifesting. If a disease is detected early, it will significantly reduce the cost of treatment; leave aside the loss of precious man hours, inconvenience and possibly permanent impairment.

The same principle is valid for any machinery. Today preventive maintenance is performed as per manufacturers schedule or in event of a malfunction, when it becomes 'symptomatic'.

This can be further explained through example of say a disease like Diabetes. Let's say upper permissible limit of sugar level is 140 and a particular individual has his/her sugar level maintained at say 115 for last decade. However, in the previous year the sugar level recorded was 117 and this year its 121, both well within the prescribed limit, where person is declared perfectly healthy. Yet if plotted graphically the rise "trend" in sugar level is observed which can be extrapolated to predict a date by when sugar levels may cross the prescribed limits. Hence preventive measures like diet control, regular exercise etc. could be adopted to avoid or at least considerably postpone the disease.

We use a similar methodology for protecting valuable machinery and industrial plants through constant online monitoring of crucial parameters, much similar to taking an 'ECG'. It involves measurement of various parameters that determine the wellbeing of the machines such as temperature, vibration, sound (noise), Pressure, flow, input values of voltage and current etc. Thereafter software can identify two important deviations from specified parameters:

1. Parameters crossing the prescribed threshold limits (sets alerts to go for root cause analysis of the deviations)
2. Even if parameters are within the prescribed threshold limits is there any trend that can be spotted which has potential of future deviation

Any event of deviation of parameters beyond the benchmark values would suggest of a potential malfunction in one of its subsystems. This will check a major break down in the plant in its nascent stage. In this condition, immediate steps can be taken to correct the error at its early stage which would minimize the cost of repair, downtime, inefficiency, and loss of production.

Early Diagnostic and Warning Systems (EDaWS) goes to the extent of gathering various information like vibration, temperature, pressure, flow, energy consumption, power factor, process performances, historical records and the understanding of maintenance cultures in order to formulate a 'Condition Portrait' in solving predicting and preventing complex problems.

ENGINEERING SPECIAL
COLUMN

EMBRACING BEST PRACTICES IN THE DIGITAL ERA

Dr. Sunil Khanna, Vice President, NIIT University, writes on the steps that advanced educational institutions in India need to take to stay ahead of the race in the digital era...

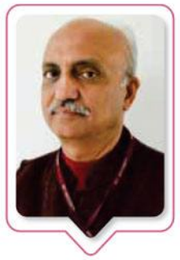
The wave of Digital Transformation is sweeping across the world. Touted as one of the biggest disruptions to face and reshape humanity and described often as the Fourth Industrial revolution, Digital is expected to lead to a paradigm shift in the way we live, work, govern and conduct business.

While the trend itself requires all the ecosystems to embrace Digital, it also brings its own set of challenges. Manpower remains the biggest impediments in the path of Digital Transformation. Just as in the IT era, where it was skilled manpower that became the fuel and fodder for industry growth, in the Digital age, once again it will be rightly-skilled talent that will be the key catalyst of this critical phase.

The Digital movement will require a workforce that is equipped with advanced skills in emerging technologies such as Cloud, Big Data, Analytics, Social, Mobility, Artificial Intelligence, Machine Learning, Robotics and a host of other tech flavours of the day.

This kind of skilling would compel the higher-end schools of learning to provide training that produces 'just what the doctor ordered' for all industry sectors. To build a gargantuan pool of highly qualified Digital Transformation professionals, colleges, universities, B-Schools and other institutions too need to usher in change.

In order to do so, it is becoming critical for them to adopt Educational Best Practices that enable them to stay cutting-edge, with an eye on the horizon. Many, in fact, will have to gravitate towards new business and delivery models, alter their existing processes, go Digital themselves, and leverage Best Practices for teaching and learning.



Premier institutions need to invest in faculty development, in order to stay globally competitive. Faculty has to be constantly 'upgraded', 'upskilled' and placed on the path of continuous learning to ensure that it is always abreast of what's new in education

According to several leading Universities, these Best Practices improve the quality of faculty and teaching. Premier institutions need to invest in faculty development, in order to stay globally competitive. Faculty has to be constantly 'upgraded', 'upskilled' and placed on the path of continuous learning to ensure that it is always abreast of what's new in education. Teachers must be encouraged to enrol for programmes in specialized areas in other institutions that possess this knowledge. Inviting experts for training faculty is also very important.

For instance, teachers have to be trained in Digital technologies so that they can in turn build students with cutting-edge Digital Transformation skills.

Besides faculty training, making learning effective also requires the implementation of a Best Practice. Typically, this involves intensive student engagement in the training process, which in turn is the result of exciting classroom and online programmes.

Ideally, Universities should create an environment that learners find engrossing and makes learning easy. Use of cutting-edge tools and methodologies that simplify complex concepts is one such way. By harnessing state-of-the-art modes of instruction (that include visual, auditory, and kinesthetic tools), institutions can capture the attention and imagination of learners.

As told to Aeshwarya Tiwari

Careers 360, *April 2017*

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Business Standard

NU named best 'Institution for Promoting Industry-academia Interface' at 10th ASSOCHAM Higher Education Summit 2017

ANI | New Delhi [India]
February 28, 2017 Last Updated at 17:17 IST

NIIT University (NU) has been recognized as the "Best Institution for promoting industry-academia interface" at the 10th ASSOCHAM Higher Education Summit 2017. The award ceremony was felicitated by Prakash Javadekar, Union HRD Minister, Government of India. The summit focused on the role and contribution of universities in building entrepreneurial ecosystems.

Established with a vision to bring about innovation in higher education and learning in emerging areas of the knowledge society, NU, is well poised for meeting the emerging needs of the knowledge economy through its focus on building strong industry linkages and a research oriented approach. Over the years, NU has been building extensive linkages with the industry it has active collaboration with leading organizations like: Microsoft Research, IBM, WNS and PwC.

"NU has been developed as an institution of higher education that works closely with the industry to create higher education programs that are aligned to their needs. The industry-academia connect has been designed to create 'leaders of tomorrow' who can adapt to the fast-changing global economy and contribute meaningfully to the growth of their organizations and the society at large. I am grateful that our efforts are being recognized by the industry. I would like to thank ASSOCHAM for this honour and reiterate our commitment to further deepen the industry-academia alliance," said president NIIT University, Prof. V S Rao.

Since its inception in 2009, NU has made significant progress in research and innovation in curriculum development and design. Conceptualized as an institution of excellence, NU provides exceptional education based on the Four Core Principles that make learning Industry-linked, Technology-based, Research-driven and Seamless. The University has been offering Industry-linked courses like MBA Program in Business Analytics in collaboration with WNS, MTech (GIS) in collaboration with ESRI, MBA (Finance & Banking) in partnership with ICICI Bank, and MTech (Educational Technology) in collaboration with leading institutions in the country. The University is also building research capabilities in areas such as Biotechnology, Mobile Healthcare, Cognitive Radio, Educational Technology, and Next-generation Networks.

Recently, NU's 6th Convocation ceremony was hosted at the University campus. Amitabh Kant, CEO NITI Aayog, handed over degree certificates to the graduating students for successful completion of various programmes at NU. The top five students received the Dr. Karan Singh Gold Medal 2016 and one of the students was awarded with the Ram Rajindra Malhotra Medal 2016 for exemplary performances in their respective fields. The students have been successfully placed in leading corporates across India like Amazon, IBM, PwC, Reliance Jio, Airtel, Just Dial, Cognizant Technologies, MakeMyTrip, Grofers, and Shopclues.

NU has been acknowledged as the "Best University in use of Technology in Teaching-Learning Practices" by Industry Association Assocham in 2013. NU has also been recognized as the 'Greenest University' at Clean and Green India Awards 2016.

http://www.business-standard.com/article/news-ani/nu-named-best-institution-for-promoting-industry-academia-interface-at-10th-assocham-higher-education-summit-2017-117022800719_1.html

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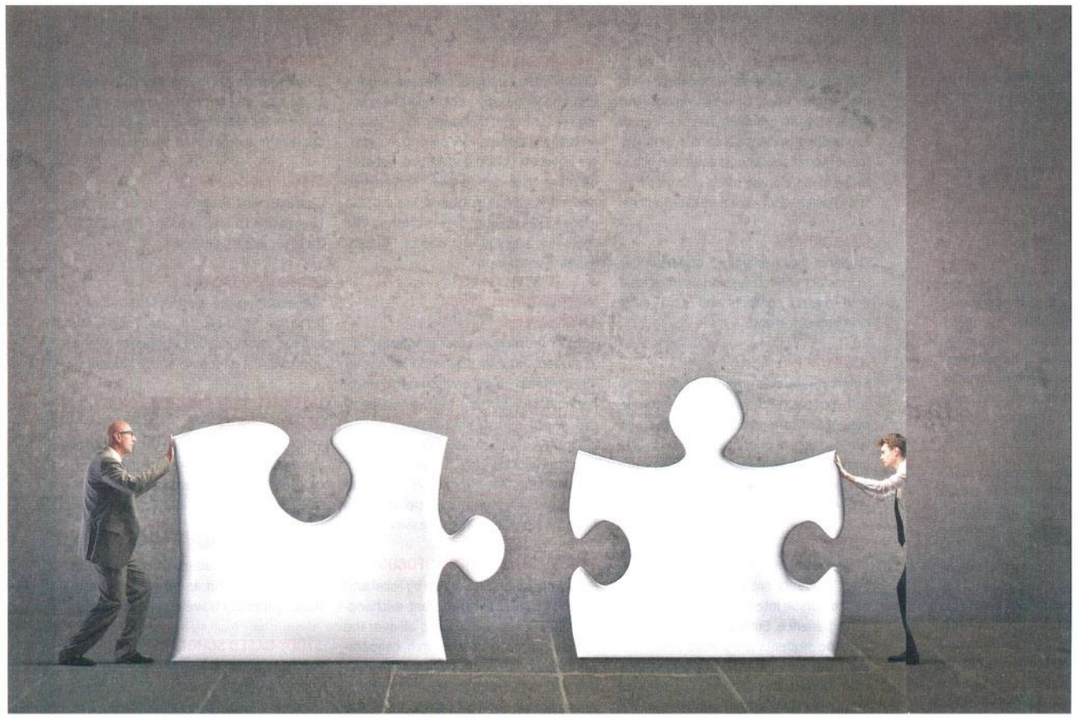
INDUSTRY-ACADEMIA PARTNERSHIP: A 21ST CENTURY IMPERATIVE

Stanford University was instrumental in building an ecosystem of innovation and entrepreneurship in the Silicon Valley. Can such a model emerge in India?



> Academia has to make progress in research and innovation, and curriculum development and design and do so by enlisting the active partnership of the industry. Industry on the other hand needs to know from academic research about what is going to appear on the horizon and how it must gear up in terms of talent for this emerging trend

Dr. VS Rao

The colleges and universities of the world are not just the citadels of education, they are also the seeding grounds for research and innovation. Much of what humanity has seen in terms of invention, can often be traced back to these schools of learning. Often, that's really where it all started.

Natural allies

While clearly, academia continues to be the cradle for conceptualizing and building the future, it is industry that almost always takes these ideas to fruition. Industry is the engine that transforms research to reality and what is on the drawing board into what is tangible.

In that sense, academia and industry are natural allies, with an inter-dependency which is logical and only to be expected. They are tied at the hip, complimenting and drawing sustenance from each other and driving mutual growth.

This truth has of course been proved time and again, though in a way best exemplified by Silicon Valley, USA. Silicon Valley (christened so owing to the large number of high-tech start-ups in the south of San Francisco and the north of the state of California, USA), received much of its impetus through Stanford University. It is accepted fact that the famous University's engineering school—including its erudite faculty and brilliant students—was instrumental in unleashing the tech revolution and building an eco-system of innovation and entrepreneurship around the Bay area.

Silicon Valley is of course the most celebrated instance of this win-win partnership between academia and industry—where proximity between a University and industry emerged through the academic unity. Other nations too have their share of close academia-industry collaborations that have led to breakthrough developments, particularly in the 21st century IT and now Digital age.

Industry disconnect

India, sadly, has not been able to leverage the academia-industry bond to the best extent possible. A common criticism by analysts has been that research in the country's prestigious engineering institutions like the IITs, has remained de-linked from industry. Most advanced schools of learning work in isolation-- like islands that are far from the mainstream.

However, this scenario needs to change. The new Indian government has launched its famous Skill India and Digital India initiatives, both of which require industry and academia to join heads and work together in a big way.

This has become critical in view of the fact that a majority of graduates of Indian universities, both engineering and non-engineering,

Careers 360, National, *March 2017*

are not considered 'industry-ready' or worse still 'employable'. The very purpose of education is to send out skilled people who can be instantly deployed by organizations and be productive in the real world of work. If this talent has to be re-skilled at great costs by companies, the very objective of education is defeated.

Will India fritter away its advantage?

While India is sending out large volumes of people into the job market each year, the majority are not the preferred choice of hirers. This is a waste, especially in view of the fact that we have among the largest number of people in the 20-35-year age group, that have the potential to be transformed into a powerful and transformational force. Without necessary 'employability' skills, India may lose its 'great demographic dividend', a short window of opportunity that simply cannot be frittered away.

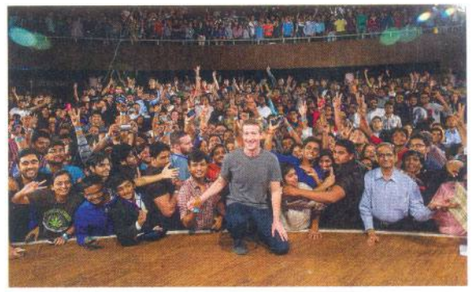
Having said that, India must look for solutions to this massive challenge. And one of the ways is by forging a strong linkage between academia and industry.

It is apparent now that the emerging needs of the knowledge economy can only be met through an enhanced focus on robust industry linkages and a research-oriented approach.

Industry-academia participation

Academia has to make progress in research and innovation, and curriculum development and design and do so by enlisting the active partnership of the industry. Industry on the other hand needs to know from academic research about what is going to appear on-the-horizon and how it must gear up in terms of talent. It must also take on the mantle of advisor, guiding academia on what hard and soft skill sets it needs and the profile of the workers it hopes to see coming out of the educational system. Universities have to collaborate with organizations that are part of different industry verticals, to gain insights into what domain knowledge has to be created. Adding industry-linked courses will also help.

Interestingly, India's leading chamber of commerce for the IT-BPM industry, NASSCOM, has recently tied up with US-based University, Georgia Tech to work jointly with the foreign institution to address the technological and non-technological challenges that surround the adoption of the Internet of Things (IoT) technologies and develop a vibrant IoT ecosystem.



FACEBOOK'S MARK Zuckerberg's at IIT-Delhi. A good example of industry-academia interface

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Importance of internships

The other area that has to be pushed is internships. Besides on campus projects, universities need to organize paid internship for students in premier companies. These internships will give learners a hands-on experience of the new age workplace and what to expect when they begin their career journeys. If after the completion of the internship, the students can be placed in these very set-ups, even better.

Exposure for faculty

Faculty in advanced educational institutions can also be encouraged to take paid sabbaticals to gain exposure in organizations, to understand their work environments and manpower requirements. At the same time, industry practitioners can be invited on an on-going basis by colleges and universities to talk to students, and teachers about the issues of skilling and upskilling and answer their career building queries.

All this has to happen as a massive movement that sweeps across all colleges and Universities (not just the top ones in the land). This thinking and approach must infiltrate into educational institutions in India's tier 1, 2 and 3 cities and townships, ensuring that industry-academia linkages become an important part of the nation's learning fabric. Eventually, it will be through these win-win partnerships that India will remain at the cutting edge of learning and maintain its edge as the global skills capital.

The author is President, NIIT University

Careers 360, National, *March 2017*

BW BUSINESSWORLD

'We Inspire Our Students To Become Job Creators'

Companies of today are looking for innovative researchers and educational institutions will have to be responsible for it, says Rajendra S Pawar, chairman of NIIT Group.

Rajendra S Pawar is the Chairman and co-founder of the NIIT Group and the founder of NIIT University, a green university. Through the NIIT's innovative franchising model, he unleashed a wave of entrepreneurship around the world. Pawar has been a member of Prime Minister's National Council on Skill Development, Planning Commission's Task Force on Skill Development and International Business Council of the World Economic Forum. He was a founder member of NASSCOM and has been actively involved in Indian Chambers of Commerce. He is popular for industry-academia alliance and is closely associated with India's well known educational institutions such as IIT Delhi, Indian School of Business and the Scindia School, Gwalior.

Pawar talks about his education mission in an interview:

What are the four core principles of the NIIT University?

Our four core principles stand to be Industry Linked, Technology Driven, Research Driven and Seamlessness. In fact, seamlessness is deeply rooted to our motto and is termed as 'Anadi Anant' on our emblem of a mobius ring.

Why do you think the need of 'research and innovation' is increasing by the day?

There is a reason why research did not flourish in a closed economy. The times and circumstances generate the need. Before 1990, during the license raj, research was limited to PhD students which went up to the stage of publishing a book. In order to convert research to a commercial activity, you needed to have that part of the system functional. Enterprise seeking new ideas was not a part of the license raj, which was rather appropriate at that point in time. Meanwhile the world started moving towards an open economy but we remained closed till 1990. After we decided to open our economy in 1990, we didn't need a permission to manufacture. People could make anything. The situation thereafter arose where capacity was more than demand leading to more choices. Nowadays, when to go for shopping, we are finicky about what we buy because we have a lot of choices which we didn't have in the earlier days. So, this opportunity of making choices by the consumer forces competition which in turn forces innovation. With enterprises valuing the superior or quality products leading to comparison, more and more application of mind was required and the logical flow therefore was research.

We are working very hard to change the character from great teaching institutions to institutions who also have to research. Now more than need, there's a compulsion for research. Companies of today are looking for innovative researchers and educational institutions will have to be responsible for it.

Do you think in today's time all students must hone their entrepreneurial skills?

We inspire our students to become job creators than job seekers. However, this also depends on the inclination of the student. If the student is completely tilted to the technical side and not comfortable with taking risks, we completely support them. On the other hand, we make sure to provide all opportunities to evoke and hone all the necessary skills for students with slightest inclination towards entrepreneurship. Students are offered crash courses in finance, banking and other entrepreneurial skills along with their core technical course. Ultimately, it is the responsibility of the educational institutions to identify the skills and give every opportunity to nurture them. If it comes to them, they're job creators.

Choosing the right student with the right mindset is primary to the success of an education institution. Is there any specific filter that you use for choosing the apt student for your university?

Well, this is a huge point of departure from other institutions. Although there were lots of debate around 'how', we all agreed that the social capability of the students must be assessed. While written exams, school records are quite easy to test the technical skills, how would we test social sensitivity, innovativeness in a student? Personal interview was a ready choice for us but it has its flip side too. After lots of debate and discussion, a very senior professor suggested to tape record every interview. If needed at any time, we can justify the reason behind admitting a student. We are happy to give one-third of the total weightage to social capability, however, we do plan to give it half the weightage.

http://www.businessworld.in/article/-We-Inspire-Our-Students-To-Become-Job-Creators-/08-12-2016-109419/

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INTERVIEW WITH AN ICON

The Game Changer

NIIT Chairman Rajendra Pawar talks about India's position in the knowledge economy and creating a new model of learning

Illustration ANUP RAY

When he spoke at the inaugural Annual Lecture of NIIT University (NU) in 2009, Chancellor Dr Karan Singh said "it gives a glimpse of what future educational institutions can be". At NU, the University of the Future is not just a tagline, it is also a way of life. Founded by Chairman of NIIT Group, Rajendra Pawar, the university based in Neemrana, Rajasthan, offers undergraduate, postgraduate, doctoral and MBA programmes. But more than that it seeks to create students who will lead in what Pawar calls the "Century of the Mind". These students are trained to develop skills the new millennium needs—creativity, communication, critical thinking and collaboration. In a free-wheeling conversation at his Westend Greens home, Pawar spoke about education for a new kind of world where even as nations harden boundaries, citizens will be more deeply connected to each other. Excerpts from a conversation with ***Editor (Special Projects) KAVEREE BAMZAI:***

How do we prepare children for the Century of the Mind?

We've had two centuries of the machine, in which science and technology (which is the pragmatic implementation of science), has taught humans to manage, exploit and cope with machines. In this era, the curriculum has seen social sciences and humanities give way to subjects that taught how to build and manage machines. In the 21st century, the mind is at the centre.

Where is India in this new world?

We have to marry our traditional knowledge with the benefits of technology. The Indian mind has been colonised and suppressed as many including Pavan Varma and Shashi Tharoor have written before. We were a primarily an oral society so we have lost something but it's still just under our skin. The self-confidence of the Indian mind has to be raised to the correct level, we have to take risks. Education is about looking for new problems rather than just working on solutions to known problems. With 36 years of NIIT Ltd in over 36 countries having impacted about 36 million learners, we have both skill and scale under our belt. Now we have to cater to a new generation which needs lifelong learning.

How does NIIT University fulfil that?

We have the confidence now to build the role model university and set an example through four Core Principles to become the global benchmark. One, we are **industry-linked**. Higher education is considered disconnected from the job market. In the seven batches who have graduated from NU so far, 97.3 per cent have placements. Two, we are **technology-based**, which means that there is extensive use of technology in everything at NU. Three, we are **research-based**. We have evolved the idea of research into research, discovery and entrepreneurship. Till the 1990's, Indian higher education was not challenged because of the complacency that came due to the licence raj. In a competitive market economy, higher education has to deliver exceptional research output. Four, from being a highly fractured and siloed society, we need to become **seamless**. The concept of *Vasudhaiva Kutumbakam*—the world is a family. While the industrial era demanded specialisation and siloed learning, education now demands the divergence of knowledge and a broader understanding. That's why NU is a 24X7 campus where students teach in village schools, plant trees, ensuring seamlessless with nature and society. In most programmes we have industry co-creating curriculum, whether it is in cybersecurity or data science or finance and banking.

"THE PROBLEM IS ONE OF EMPLOYMENT AND NOT EMPLOYABILITY. IN THE ABSENCE OF JOBS EVEN BRIGHT STUDENTS ARE PERCEIVED AS UNEMPLOYABLE."

What about the whole question of 80 per cent of our engineering graduates being unemployable?

That comment is unfair, demeaning and value laden. It is one thing to say that institutions need to improve but another to say engineering graduates are not employable. I will give you a statistic. In 1999, there were 90,000 seats in engineering education in India. In 2017, that number is 1.5 million, and 30 per cent of the capacity is empty. Clearly, there is a demand and supply imbalance because there is grave dearth of jobs for these youngsters. The problem is one of employment and not employability. In the absence of jobs even bright students are perceived as unemployable. There is another aspect to this: two thirds of students are in private higher education institutes and three fourths of institutions are in the private sector, and a large number of poor quality institutions are closing down. The poor quality government institutions however, never close down, perpetuating a steady degradation.

India Today Aspire, *May 2017*

Automation is killing some jobs, but creating others, says NIIT Chairman

Stays optimistic while admitting the need to reskill 4 million-strong IT workforce

Rajendra S Pawar, Chairman, NIIT

KV KURMANATH

Hyderabad, June 7

The bad news is that jobs in the IT sector are not growing in sync with the growth in population and automation is making some job profiles disappear. But the good news is that automation is happening in newer sectors, and that newer job profiles are getting created, says Rajendra S Pawar, co-founder-Chairman of NIIT.

Unfazed by the doomsday predictions on IT jobs, Pawar is optimistic. He feels there was a need to reskill the 4 million-strong IT workforce to make them digitally ready. "It is a big task to re-purpose them to make them relevant and stay longer in work life," he said.

The learning management and training firm is working with IT companies and engineering colleges to train staff and students in machine learning, artificial intelligence and big-data analytics. "We are using online platforms to reach out to employees in large numbers," he said.

"Big manufacturing companies are not creating too many jobs. Jobs are a challenge. Non linearity (more than one skills) and automation are happening very fast," Pawar, a former Chairman of Nasscom, told *BusinessLine*.

"Jobs as we know it, such as conventional programming and banking, have been hit. Newer jobs being created around services have not been labelled or documented yet. Take for example, jobs in the event management vertical; they are 'engaged' in some activity," he said.

Talking on NIIT University, he said the master plan visualised a capacity of 5,000 students. "It will take some time (to reach that target). At present, we have 1,200 students on the campus in various streams," he said.

Hindu Business Line, New Delhi, *June 08, 2017*

TALKING HEAD

An academic shares his views on what Indian academia must do to ride the digital wave

Prof VS Rao
President, NIIT University

As a nation that missed the industrial revolution and caught up with the world only in the IT age, India knows the importance of rightly-skilled talent for shaping the success of a country.

Today, however, that edge is under threat as technological disruptions sweep the world, causing paradigm shifts in the landscape, compelling industries to look for a new value proposition. There is a need for fresh talent that possesses skills that India's digital revolution requires. To reskill the workforce, there is also a need for India's higher education system to keep pace with technological and business trends, emerging and reshaping itself as Education 4.0. In this avatar, India's educational infrastructure has to align itself with the digital wave.

The digital era demands expertise in areas such as automation, machine learning, artificial intelligence, big data and analytics, the internet of things, robotics, cloud and more. What institutions now need to do is develop digital innovators who are equipped with problem-solving, technical, agile and DevOps skills as well as a core product engineering discipline. Their training must involve professional practice or some form of industry internships and constant interactions between academia and industry practitioners.

Education 4.0 means learning must now build the skills that fit the job roles being thrown up by the digital environment. Deep linkages and partnerships, where institutions work closely with industry and its practitioners, are the needed. These can help the Indian educational system understand how to bridge the chasm between the skills employers seek and what they produce for the market.

The Times of India, *June 05, 2017*

STUDENTS & THEIR BOTS BATTLE IT OUT AT INNOVACION

Students of Institute of Engineering and Management (IEM) and Techno India University pit their robots against one another on the football field at Innovacion, the fifth annual techno-management fest of IEM, in association with The Telegraph. The two-day fest that began on March 5 saw participation from 30 national and international institutions in 25 events. Ho Chi Minh City University of Science (Vietnam), Islamic University of Technology (Bangladesh) and University of Central Florida (US) participated in online competitions, while the likes of University of Engineering and Management, Heritage Institute of Technology, Techno India University and Indian Institute of Engineering Science and Technology (IIEST), Shibpur, participated in the on-campus events. Online gaming, virtual reality gaming and stock market stipulations to robotics....

Pallavi Rana, a third-year student of IEM, takes a look at some shots from the photography competition.

Mayank Anand (extreme left), a second-year student of NIIT, steers his bot in the X-Race competition. "We had to take our robots up on slopes, slants, through water bodies and over stones. It was quite challenging," said Mayank.

(L-R) Sagnik Dutta and Sagnik Roy, fourth-year students of IEM, presented an autonomous quad-copter in the science exhibition. "Yes, this does fly. This is completely automated and can lift off and land on its own. All one needs to do is drop a pin on the designated location on Google Maps and the bot does the rest on its own," said Sagnik Dutta.

Rohit Gupta (left), a first-year MTech student of Jadavpur University, and Tapabrata Mukherjee (centre), a second-year student of IEM, look on as their autonomous bot finishes the course at the Tracker event. "Our robot is completely automated. It tracks black lines on a white background and vice-versa," said Rohit.

Archan Chattopadhyay (second from left) and Wriddhi Chakraborty (third from left), third-year students of IIEST, Shibpur, work on their touch switch circuits in the Electrocuted competition.

Ajit Kumar Dubey, a fourth-year student of Calcutta Institute of Technology, tries his hand at virtual reality gaming. "This is the first time I experienced virtual reality gaming. I felt I was in a real world," said Ajit.

Text: Rushabh Shah
Pictures: B. Halder

Telegraph, Kolkata, *March 24, 2017*

IIFL

Shaping a Future beyond NEET

Business Wire | Mumbai | June 24, 2017 11:30 IST


Prof VS Rao, President, NIIT University

It is indeed time for the country to move beyond the obvious, sought-after and thus-far, most advocated path of pursuing a career only in medicine or dental college and fast realise that the pot of gold does not glimmer only at the end of the MBBS (Bachelor of Medicine and Bachelor of Surgery) rainbow!

The numbers speak for themselves, really. A whopping 11.5 lakh aspirants registered for the National Eligibility-cum-Entrance Test (NEET), held in 2017. Last year, NEET was conducted in two phases and the total number of candidates stood at 7.5 lakh. At the same time, the number of seats in medical and dental institutes across the country stands at a mere 56,000. Given that 2017 saw a huge increase in the number of candidates appearing for NEET, securing admission in a medical or dental college will, without a doubt, only become tougher in the years ahead. What becomes of those candidates that do not make the cut? How are they to make peace with the fact that they have missed their chance at a coveted medical or dental seat?

The answer is simple, actually. It is not the end of the world and neither does it mean that their dream can never be fulfilled. Instead of being disheartened, it is time to look ahead and realise that there are a whole host of opportunities available, apart from medical and dental education. Besides a professional course in Allied Health services, pursuing specialisations like microbiology, botany and biotechnology can also open up lucrative alternatives. As a matter of fact, until very recently, it was unfathomable for a biology student to even think of a career in areas like technology and engineering. However, NIIT University (NU), has changed the game and has gone so far as to introduce an integrated Master's Programme for biology students that have been clubbed with computer science. With more and more start-ups setting base in India, the demand for knowledge in both biology and computers together is expected to rise. And this is the reason behind NU's focus on a 4-year Integrated Masters Programme in Computer Science along with the BTech Biotechnology programme.

At NU, the Biotechnology programme is curated to enable students to develop a robust theoretical knowledge base, while at the same time, keeping in mind, the business needs of the biotech sector in the country. Students are competent in biotechnology through training in the areas of Microbiology, Biological Chemistry, Analytical Techniques, Molecular Biology and Bioinformatics. The Biotechnology course in NU, is unique in that it integrates theoretical knowledge with hands-on practical experience. The four year course focuses on Molecular Genetics, Industrial Biotechnology, Plant Biotechnology, Food Biotechnology, Environmental Biotechnology, Computational Biology and Bioinformatics.

The Four Year Integrated M.Sc. programme in Computer Science at NU for the biologist is designed to provide students an overview of computing, an understanding of the concepts, principles and skills in their application and extension, and a practical experience in computing, as applied to biology. The M.Sc. Computer Science Programme at NU uses the university's four core principles: Industry-linked, Technology-based, Research-driven and Seamlessness, as its foundation to develop collaborative opportunities in biology and computer science. Keeping with our core principle of seamlessness, and being aware of the changing nature of jobs and workplaces, at NU, we recognise that school students need to be given the flexibility and support to change their career choices and the four year integrated M.Sc. Programme in Computer Science is designed to address these very needs.

What sets the NU course apart is the fact that it is constantly evolving – being consistently mapped against the rapidly changing needs of the industry. Going forward, the course will emphasise text and data mining tools within biotechnology as these tools use specific algorithms that go through scientific research to provide relevant insights. This, in turn, will increase R&D efficiency by shortening the scientific literature research process, allowing for the development of new hypothesis & discoveries and bring down research costs significantly.

Often students complete a course and find that they do not have the necessary skill sets to operate in the industry. At NU, we are committed to preparing our students with the required technical and analytical skills that enable them to have potential employment in industry, education, research and management. Alongside, we equip students with an adequate background of Biotechnology, Engineering, Humanities, Social Sciences and Management, allowing them to play an effective role as a productive member of society.

On completion of the Biotechnology programme at NU, students have several lucrative career options before them – be it a research scientist, forensic DNA analyst, clinical researcher, microbiologist, marketing manager, science writer, bioinformists, quality control officer or production in-charge in food, chemical, pharmaceutical, aquaculture & agricultural companies such as Hindustan Lever Ltd, Thapar Group, Indo-American Hybrid seeds, Biocon India Ltd, Bivcol, IDPL, India Vaccines Corporation, Hindustan Antibiotics and other Pharmaceutical companies. Additionally, the Integrated MSc programme enables students to work in IT organisations such as IBM, Microsoft, Accenture, Tata Consultative services etc. as Data Specialists, Software Development Engineers, Web Designers, Digital Marketing Specialists and SEO Specialists, among others. Those students who choose biology-related concentration areas such as Bioinformatics and Computational Biology can work in both IT and Biotechnology, Pharma, Healthcare and allied companies in cross-functional roles such as Bioinformatics Analyst and Computational Biologist. They would be part of interdisciplinary teams consisting of molecular biologists and biomedical scientists working towards collaborative innovation, targeted analytics, and the development and deployment of nextgen solutions and platforms in areas such as drug discovery, drug delivery, genome sequencing, etc.

NU is dedicated towards forging strong industry linkages as one of its core principles. This ensures that the University is connected with the best organizations and institutions, and is the primary reason for the exceptional placement of 97.3% last year. We strongly believe that skills and knowledge are the key drivers of socio-economic development in a country. Therefore, our commitment to scaling up Next Gen skills training efforts, starting at the university level, are targeted to meet the needs of future employers, so as to drive economic growth.

http://www.indiainfoline.com/article/news-business-wire-advertising/shaping-a-future-beyond-neet-117062400105_1.html

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DL digitalLEARNING

NIIT University taking the course of entrepreneurship forward

Published: February 07, 2018

Never has there been a better time for entrepreneurship than now! The global environment itself is ripe for entrepreneurship, with myriad forces coming together to make it a reality.

The first factor is the push that is coming from the world of learning. There is a strong and unbreakable link between learning and entrepreneurship. Learning is the foundation for innovation, which in turns bears the seed of entrepreneurship. It is apparent that the world is being swept by the Digital wave, where disruption is the name of the game. Disruption by its nature implies innovation and innovation is the seed and fundamental plank for all entrepreneurship.

The second factor is a technological one, where Digital disruption is leading to innovation and hence, entrepreneurship. Internet, the greatest 'equalizer' that humanity has seen, is having an impact across the globe. The year 2017 saw almost 3.47 billion people use the Internet for a variety of purposes, key among them business. In India alone, the figure for Internet users jumped from 432 million in December, 2016 to around 450-465 million in June, 2017.

The rise of the online brigade has happened in tandem with the growth in entrepreneurship, with one feeding the other.

Most nations in fact, are witnessing start-up revolutions as earlier constraints to the proliferation of entrepreneurship have reduced or been eliminated. Improved connectivity, greater availability of Venture/Angel funding, cheaper broadband, less expensive smartphones and devices, and incentives by governments for start-ups are leading to robust expansion of the entrepreneurship landscape.

The success achieved by the Mobile movement has acted as an another spur for entrepreneurship. Mobile Internet leading to Mobile commerce has given birth to companies that have a host of products and services for this space.

Clearly, the environment is simply charged up for entrepreneurship and all roads appear to be leading to Rome. In this Rome, start-ups are the stars and the growth drivers of economies in the future.

In India, the tech start-up eco-system (stated to be the third largest in the world), is growing by leaps and bounds and reaching maturity. Since 2011, there has been a significant expansion in the number of start-ups, especially technology start-ups, with figures crossing 4,600 companies at the end of 2016. The outlook for tech entrepreneurship is even better, with the number of start-ups expected to cross the 10,500 mark by 2020. These companies are projected to employ over 210,000 people!

In part this will happen owing to the Indian government, which is playing Santa Claus to emerging companies and offering sops and benefits to these organizations. Self certification, patent filing, fee rebates, tax exemptions, a better regulatory climate, and policies that improve ease-of-doing business, are all contributing to the growth of the start-up eco-system. The Indian government's generous funding corpus of USD 1.5 billion is also an exciting promise for the nation's out-of-the-box thinkers and risk takers. Companies that are willing to take the unbeaten path and create products that will not only skyrocket them to fame and fortune, but also bring untold benefits to marginalized within the Indian society.

And entrepreneurship as has been already mentioned, is not only about industry. As the wise say, when entrepreneurship comes, can Universities and schools of higher learning be far behind? Or rather if Universities stand tall, can entrepreneurship and innovation be far behind?

There is no doubt that both academic institutions and industry are joined together at the hip. For years the world has been talking about the unique synergy and interdependence between Silicon Valley, USA (in the state of California) and Stanford University. Stanford in fact is stated to have really played a key role in building Silicon Valley by providing the human resources that became the steely backbone of Silicon Valley. Additionally, it spearheaded research in sunrise areas that became the bedrock of innovation and invention.

Besides Stanford, a host of other Universities in and around Silicon Valley have also made a big contribution by offering training programs, an entrepreneurship focused education system, mentors, capital support and even funding. In many instances, these institutions have been the hubs for incubation, nurturing the minds that will one day take the path of entrepreneurship.

This action is obviously not limited to the US market. Today, India is witnessing the creation of countless entrepreneurial centers that are mushrooming within metros like Bengaluru, Chennai, Mumbai, Pune and Delhi/NCR and even tier 2 and tier 3 cities and towns. These hubs are strongholds of academic learning, housing engineering and non-engineering institutions.

In recent years in fact, India's entrepreneurship eco-system has found champions in spanking new Universities that are seeking to create original thinkers who will lead the knowledge society of the future. Among these institutions is NIIT University (NU), a not-for-profit institution based in the knowledge corridor of Neemrana, in Rajasthan. Set up by the global talent and skills development organization, NIIT, which pioneered the tech education industry in India, NU is aiming to be a role model of learning, research, innovation and sustainability.

Based on the four core principles that make learning Industry-linked, Technology-based, Research-driven and Seamless, NU offers students and professionals an array of cutting-edge academic programs, an experience of entrepreneurship and yes, even a taste of Green.

The University, which has been acknowledged for its Sustainability focus, has ushered in a new paradigm in energy efficiency. And that isn't all.

NU is increasingly becoming known for providing learners with an environment of ideation, innovation and entrepreneurship. The University is indeed sowing the seeds of entrepreneurship on its turf, teaching students to think differently, come up with ideas that create the wow effect, and take these concepts to market fearlessly. Recognizing that there is a thrust on start-ups in India, NU is encouraging its students to be job creators rather than job seekers.

As a University that boasts strong linkages with industry NU is exposing learners to the entrepreneurial world through internships as well as visiting teachers who are drawn from successful start-ups and other organizations. The institution's deep research-orientation has also enabled it to foster innovation and instil the culture of entrepreneurship in the DNA of its learners.

Innovative products are increasingly coming out of NU, conceptualized and created by its students. The University's B-Tech class of 2013-17 for example, has been responsible for imaginative and breakthrough software applications. These include ASAP Messenger (an instant messenger which makes the messaging experience real life). SmartBin (a network of dustbins which integrates the idea of the Internet of Things with Wireless Sensor Networks), and EDaWS, an early diagnostic and warning system (that predicts and prevents complex problems of machineries). All these apps are a result of serious exploration and dabbling in the extraordinary by students.

Having made innovation a way of life, NU is actively rearing such student entrepreneurs who have launched start-ups that can trace their origins to the labs of the University.

Several of NU's students have entered the world of work with their boots on and start-ups under their belts. Among the start-ups that have been incubated in the NU campus are Peer XP Technologies, SpectroSmart, AT-Lead and Czar Securities. Of note are AT Lead, a drone design and manufacturing center founded by Atif Khan and Czar Securities, a cyber security solutions venture set up by Shikhil Sharma and Ananda Krishna. The duo in fact won the Start-up Pitch at the prestigious Global Conference on Cyberspace 2017, where Astra, a web security solution developed by these NU students, enabled them to be recognized as the 'Most Innovative Start-up' at the conclave. The students were presented the award by none other than the Prime Minister of India, **Narendra Modi**.

Going forward, Universities such as NU will grow into hot beds of innovation and entrepreneurship, institutions that ensure that when it comes to 'freshest ideas first', India stands in the lead.

http://digitallearning.eletsonline.com/2018/02/niit-university-taking-the-course-of-entrepreneurship-forward/

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CAREERS360
A Career is a Life

NIIT University provides an environment of ideation, innovation and entrepreneurship - Dr. Sunil Khanna, Vice-President

Related To: NIIT University, Neemrana By: Saakshi Lama Updated On: 09 Mar 2018 12:48 PM IST

NIIT University is a prominent institute established in 2009 to provide industry linked, technology based, research driven and seamless education to students. NIIT University aims to produce role models through their students not just in learning, research and innovation but also in sustainability. This can be clearly seen through their efforts to provide research based education while also maintaining a focus on actively starting many undertakings related to creating a environment friendly and sustainable campus.

Dr. Sunil Khanna, Vice-President of NIIT University explains what makes education in NIIT University unique and exceptional in an exclusive interview with Careers360. Talking about the four principles of the University, role of R&D in the educational curriculum, placement process and more, Dr. Sunil Khanna gives us an insight into how life in NIIT University can be for a student.

Careers360: Currently, the university offers B.Tech and Integrated M.Tech. Are there any plans on including more courses anytime soon?

Dr. Sunil Khanna:NIIT University offers multiple undergraduate, post-graduate and doctoral programmes. Currently NIIT University offers B.Tech programmes in:

- Computer Science and Engineering (CSE) with emphasis on Digital Transformation Technologies and specialization in Big Data Engineering, Data Sciences, Cyber Security and Artificial Intelligence.

- Electronics and Communication Engineering (ECE)

- Biotechnology (BT) with specialization in Industrial Biotechnology, Plant Biotechnology, Food Biotechnology, Environmental Biotechnology, Bioinformatics

The University also offers combined B.Tech programmes in:

- B.Tech & M.S - NIIT University and University of Missouri-Kansas City under which NU B.Tech students will complete the NU B.Tech degree followed by UMKC, SCE, M.S degree in 5 years.

- Integrated M Tech Programme – Students can pursue an M.Tech specialization Computer Science & Engineering, Electronics & Communications Engineering, Biotechnology, Educational Technology, and Geographic Information System

Going forward, NIIT University plans to add more non-Technical Programmes in Humanities and Liberal Arts.

Careers360: How is the academic structure prepared for the students?

Dr. Sunil Khanna:Our four core principles are to make learning industry-linked, technology-based, research-driven and seamless. A deep connect with the industry is the hallmark of NIIT University through a curriculum directly aligned with the needs of industry. Accomplished industry professionals participate in our curriculum design and teach a significant proportion of the program. The NIIT University's Industry Advisory Board comprises corporate leaders from some of the world's premier industrial organizations.

Careers360: Is research and practical training heavily involved in the curriculum?

Dr. Sunil Khanna:Every student of NIIT University has an opportunity to transfer learning from classroom to the workplace in industry in the final six-month semester of B Tech Programme. During Industry Practice, a student works on the real time project of an organization mentorship by a 3-member team including an on-campus faculty, off-campus faculty and an industry professional.

Research is at the core of the University's curriculum and we believe in engaging undergraduate scholars in research work through a well thought out course called the R&D Project. Students start working in research – right from year one at NIIT University and enhance the efforts through creative collaborations with leading research institutes and consortia around the world.

Careers360: The environment policy of NIIT University is well known? How did the initiative start and how does it help? Are the students also directly involved with these programmes?

Dr. Sunil Khanna:The environment policy of NIIT University is a unique initiative where a campus is established on a comprehensive long-term master plan keeping environmental considerations at the centre. The University directly adjoins a 750-acre range of pristine hillocks which form the foothills of the Aravali Range, and we are fully committed to protect and conserve the natural environment Our students are enthusiastic about the green campus and areas surrounding it and are actively involved in following various initiatives that we have undertaken over the past decade. Some initiatives are Greening of the Hill, Drip-Irrigation, Minimizing carbon footprint through Earth Air-Tunnels, Preserving natural resources with water-recycling, Pedestrian Only Campus.

Careers360: What was The Asian Lenses Forum (TALF) and how did it impact the students? Are there plans to re-enact the same again?

Dr. Sunil Khanna:The Asian Lenses Forum is an attempt to sensitize the coming Asian generations on the rich and diverse legacies of Asia with an aim to create a sense of identity, direction and vision as a beacon for the "Asian 21st Century". The Asian Lens Forum also acts as a launching pad for the faculty and student bodies of NU to undertake research and disseminate knowledge about challenges, achievements and roles of Asian societies in the globalized world. TALF has plans to offer a full audit course on the Idea of India, which NU students can take as an optional course.

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Careers360: The R&D project offers the students to work in the research field. How is the process carried on and how many students are currently involved in this?

Dr. Sunil Khanna:The R&D project was devised to enable NU students to work in the research being done by the faculty as co-investigators. Faculty share their research problems and the students are given an opportunity to choose the problem that interests them most. After which, they work with the faculty over the course of a semester on the research problem. They get to do literature survey, devising instruments to collect data, data gathering & analysis and finally presenting their research findings to a faculty panel. All the undergraduate students go through the research project as a part of the programme. NU students can also take advantage of NURap (NU Research Assistantship Programme) or NUTap (NU Travel Assistantship Programme).

- A total of 191 students have presented their research output in National (57) and International (134) conferences since inception.

- In the past two years 34 students have been provided research assistantship under NUrap (NU Research Assistantship Programme)

Careers360: What is the faculty student ratio in the university?

Dr. Sunil Khanna:The ratio is 1: 15.72

Careers360: How are entrepreneurs and startups supported by the university?

Dr. Sunil Khanna: NU is increasingly becoming known for providing learners with an environment of ideation, innovation and entrepreneurship. NU is encouraging its students to be job creators rather than job seekers by exposing learners to the entrepreneurial world through internships as well as visiting teachers who are drawn from successful start-ups and other organizations.

The University's B-Tech class of 2013-17 for example, has been responsible for imaginative and breakthrough software applications. These include ASAP Messenger, SmartBin, and EDaWS.

Several of NU's students have entered the world of work with their boots on and start-ups under their belts. Among the start-ups that have been incubated in the NU campus are Peer XP Technologies, SpectroSmart, AT-Lead and Czar Securities. Of note are AT Lead, a drone design and manufacturing center founded by Atif Khan and Czar Securities, a cyber security solutions venture set up by Shikhil Sharma and Ananda Krishna.

Careers360: How is the placement process in the institute? Can you give us some insights about the placement data?

Dr. Sunil Khanna: NIIT University is dedicated towards forging strong industry linkages as one of its core principles. The Centre for Industry Collaboration (CIC) assists students in their endeavors to enrich their education, careers and lives and make lifelong contributions to society.

NIIT University (NU) has had an excellent placement record since inception. The University achieved 100% placement this year, with the highest domestic salary offered 11 LPA by Insider.in, Bangalore.

Careers360: Do you have any message for the engineering aspirants?

Dr. Sunil Khanna: The emergence of new technologies has obliterated the boundaries between the disciplines that evolved in our engineering education system of the twentieth century. The engineering education should therefore be reconfigured much like liberal arts, law, medicine or science to promote lifelong learning. The engineering graduates of 21st-century must not only be technically competent, they should also be sensitive to multicultural societies, innovation, enterprising, nimble, flexible, and mobile. The engineering education should, therefore integrate technical competence with business and marketing information, innovation and creativity from the Arts, and the interaction to societal and environmental issues.

https://engineering.careers360.com/articles/niit-university-vice-president-interview-dr-sunil-khanna