

Admission Brochure 2016-17

PART-I — About the University



NIRF RANKING
No.1
PRIVATE
UNIVERSITY
Delhi/NCR, Haryana
MHRD, GOVT. OF INDIA



Top & Only Private University in Haryana & Delhi/NCR in Best 100 Universities, All India



Narendra Modi
Prime Minister of India



Smriti Irani
Minister of Human Resource Development



RANK	NAME	CITY	STATE	SCORE
1	Indian Institute of Science Bangalore	Bangalore	Karnataka	91.81
2	Institute of Chemical Technology	Mumbai	Maharashtra	87.58
3	Jawaharlal Nehru University	New Delhi	Delhi	86.45
4	University of Hyderabad-Hyderabad	Hyderabad	Talangana	85.45
81	Indain Institute of Foreign Trade-New Delhi	New Delhi	Delhi	51.82
82	THE NORTHCAP UNIVERSITY	Gurgaon	Haryana	51.63
83	Jamia Millia Islamia-New Delhi	New Delhi	Delhi	51.51
96	Ambedkar University Delhi (Aud)	Delhi	Delhi	47.83
99	Indian Law Institute -New Delhi	New Delhi	Delhi	47.19

**NIRF - Ranking by
Ministry of Human Resource Development,
Govt of India**

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E: ncu@ncuindia.edu



Rebranding

The NorthCap University, Gurugram has come a long way since its inception in 1996. As a stake holder, you have known as ITM University, as an institution continuously evolving and challenging conventions The NorthCap University our name, we believe captures the essence of our vision, our guiding principles and our mission for excellence. It is inspired by our geographical location in the north of the country in the National Capital Region. Our new logo has the "Bridge", a mnemonic which represents the connection between the 'classroom and the real world' using multidisciplinary value based education imprinted with an industry relevant curriculum. In a span of nearly two decades, we have grown to be one of the foremost educational institutions in the country. As a testimony of this fact, you will be delighted to know that the recent NIRF ranking under the Ministry of Human Resource Development Govt of India, The NorthCap University has been listed as the Top Private University in Haryana and Delhi NCR. It also features in the top 100 out of 740 Universities in India. Further, we have been Ranked No 1 Emerging University in India by the Higher Education Review Bangalore, in their April 2015 issue. This has been possible due to continued hard work and unstinted support and advice given by all stake holders of the University over a period of time.



The NorthCap University features in ASIC, UK's International Newsletter



Accreditation Service for International Colleges (ASIC), London, UK recognises the efforts of The NorthCap University, Gurgaon in achieving a high rank in the National Institutional Ranking Framework carried out for the first time by Ministry of Human Resource Development, Govt of India. ASIC, UK has carried the item in their international Newsletter in April 2016:

ASIC Accredited NorthCap University honoured in new ranking system

"In the recent ranking list announced under the National Institutional Ranking Framework (NIRF) by Ministry of Human Resource Development (MHRD), Govt of India, The NorthCap University, Gurugram is listed as the only Private University in Haryana amongst Top 100 Universities, All India. The NIRF has been launched by the MHRD for the very first time. In a ceremony held on 4 April 2016, the Honourable Minister of Human Resource Development, India Smt Smriti Zubin Irani issued the rankings."



Quality Benchmarks



Ranked top and only Private University amongst Best 100 Universities India by Ministry of Human Resource Development, Govt. of India

Careers360

Ranked No. 8 in AAA category All India, for Outstanding Private Multidisciplinary Universities in March 2016



School of Law, NCU Ranked No. 5 amongst Top Law Schools of Eminence, All India and No.2 in North India by GHRDC Law Schools Survey 2016



Ranked No. 8 All India, for Research Productivity among Category 'A' Private Universities in CII-ICI Report 2015



Awarded No.1 Rank in All India Emerging Universities, Higher Education Review - April 2015



Established under Haryana Private University (Third Amendment) Act No. 25 of 2009



Recognised by the University Grants Commission, Govt. of India, under 2 (f) of the UGC Act 1956 and empowered to grant degrees under Section 22 of the Act.



Bar Council of India

Recognised by the Bar Council of India, Govt. of India



Member of Association of Indian Universities



Recognised as the BEST@govcampus



Accredited by Accreditation Services for International Colleges (ASIC), United Kingdom, in the category of 'Premier' Universities



Member of International Students Exchange Programme



Member of the Association of Commonwealth Universities



Institutional Member of American Society for Quality (India)





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Prof Kaptan Singh Solanki
Governor of Haryana



हरियाणा राजभवन,
चण्डीगढ़।
HARYANA RAJ BHAVAN,
CHANDIGARH.

Message

I am extremely happy to note that ITM University*, Gurugram has emerged as one of the leading universities in North India. It is good to see that ITM University has been providing high quality education in Engineering, Management and Law. I am impressed by the way; this University has grown from strength to strength since its inception to become a unique multidisciplinary University of higher learning in North India. I am happy to see an absolute ragging-free environment in the University and its excellent intake and placement records. The ratio of female employees and students in different streams is praiseworthy. With relevant and innovative courses, excellent infrastructure and qualified faculty, ITM University shows its commitment to academic development in India in general and Haryana in particular.

I am confident that the University will continue to deliver quality education to serve as an intellectual resource base in India and the world, I wish ITM University, Gurugram all the best in its endeavours to achieve academic goals and excellence.



(Prof. Kaptan Singh Solanki)

* Now THE NORTHCAP UNIVERSITY





Founder Members



N K Dewan



V Daulet Singh



Shiv Saran Mehra



Avdhesh Mishra



Neera Makhija

Vision, Mission and Core Values

Vision

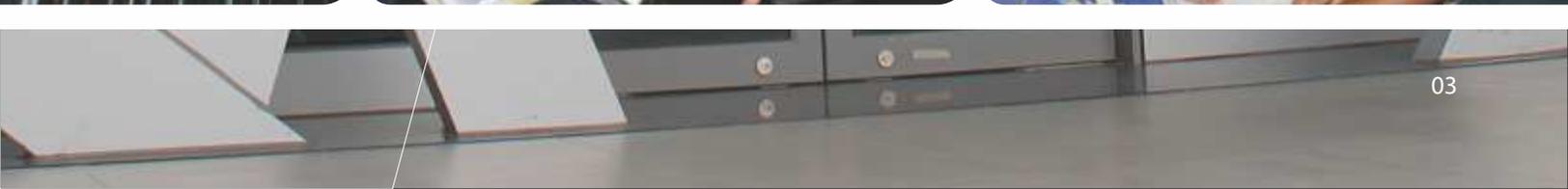
To be known globally for learning innovations, academic excellence and socially relevant research outcomes; strive to become the preferred destination for students, faculty, employers and collaborators & pride of alumni and the community.

Mission

- Focus on quality of learning and innovation in all programmes with rigour and relevance.
- Develop competent professionals - innovative, analytical and independent; committed to excel in all their endeavours.
- Develop linkages globally with government, industry, academia and alumni for knowledge generation, dissemination and application.
- Encourage multi-disciplinarity in programmes and projects to explore new frontiers of knowledge.
- Continuously improve physical, academic and information infrastructure in pursuit of academic excellence.
- Create a nurturing environment for lifelong learning.
- Focus on entrepreneurship and socially relevant projects.

Core Values

- Integrity in all endeavours.
- Humility, compassion and concern for all.
- Passion for quality and excellence.
- Quest for innovation.
- Leadership and Team Spirit.
- Autonomy with Accountability.
- Perseverance.





Message from the Chancellor



NK Dewan

Chancellor, The NorthCap University

It gives me immense pleasure to welcome you to The NorthCap University, one of the most progressive and innovative places of higher learning in Delhi-NCR. Being a multidisciplinary university engaged in cutting edge research it provides a life-changing opportunity to aspiring professionals in the core sectors of science, technology, management and law.

In an era where new knowledge lies at the intersection of different disciplines, NCU's focus is on collaborative, multidisciplinary and integrated learning. Trans-disciplinary learning and research strategies make work more interesting, useful to society and in accordance with best global practices. Strong emphasis is laid on empowering students with intellectual skills and professional abilities that will enable them to seamlessly integrate and grow in a corporate environment - education that bridges the gap between the classroom and the boardroom.

Besides academics the University provides excellent physical infrastructure and support to pursue sports, hobbies and co-curricular activities for their holistic

growth and development. The University grooms students with skills for lifelong learning and continuous development, inculcates values so that they are good human beings, responsible citizens who, through their impactful work, will leave 'footprints on the sands of time.'

As a prospective student, parent or guardian I wish to assure you that if our students have the will, our team of distinguished and dedicated faculty will help them take the giant leap from the classroom to the real world and realize their dreams.

Warm regards





Message from the Pro-Chancellor



Prof. Prem Vrat
PhD, IIT Delhi
MTech, IIT Kharagpur
FNAE, FNASc,
FWAPS, FISTE, FIIE
Pro-Chancellor, Professor of
Eminence and Chief Mentor

Welcome to The NorthCap University, a major private university of North India with a perfect blend of quality education, research opportunities, quality faculty, industry collaboration and practical exposure. It is a matter of great pride for our young University to featured amongst the top 100 Universities in the country, in the first ever rankings released by the MHRD, Government of India in April 2016. The most notable feature of this ranking placed us as the top Private University in Haryana and Delhi NCR, and 17th amongst all Private Universities in the country. This would besides helping us reach benchmark in International excellence, will help the students make informed choices about University, where they would like to study. To encourage a vibrant intellectual culture, the University has on board domain-specific faculty as well as experienced stalwarts from the corporate world. We continuously enhance our academic capabilities and instructional skills which will enable us to maintain our expertise and currency in respective disciplines.

A holistic perspective with the right degree of flexibility is the key driver of our academic policies. We offer innovative programmes of study and research to ensure that every student is well equipped for the opportunities in the

emerging future. The entire course structure is regularly reviewed and updated keeping in view the latest developments in the industry.

NCU is an institution that nurtures talent and we provide our students a platform for global interaction amongst educationists and intellectuals. We try to build a strong character in our students and groom them into professionals who can adapt themselves in meeting global challenges in a highly competitive world of tomorrow. We empower students to 'work smart' for a lifetime of personal and professional fulfillment.

We offer our students a plethora of activities that are opportunities to hone their multi-dimensional talents and skills, follow their interests, develop a positive attitude and critical thinking abilities, with a global view of things. We inculcate in them a desire to succeed that is far greater than the fear of failure. Let me assure you that whatever course of study you choose, you can be certain that it will be a life changing experience for you. In your quest for quality education and learning I invite you to be a part of The NorthCap University and experience the excitement of success.

Best wishes in your chosen careers!





Message from the Pro Vice-Chancellor



Brig. SK Sharma (Retd)
BArch (Hons), IIT, Kharagpur
MTech (Urban Planning)
School of Planning &
Architecture, New Delhi
Pro Vice-Chancellor & Professor



It is my privilege to welcome you to The NorthCap University, a premier University of North India, dedicated to its vision of being known globally for academic excellence and socially relevant research outcomes.

The University has an impressive history of beginning from a technical institute to the No. 1 Private University in Haryana. In the recent ranking list announced by MHRD, Govt of India. The NorthCap University has been listed as the only Private University in Haryana, amongst top 100 Universities in India. Several prestigious awards have been conferred on the University in successive national surveys. NCU has been ranked 8th in India in the CII Citation Index Survey for Research Publications for 2015 – a singular achievement indeed for a young university. NCU indeed plays a pivotal role in advancing the cause of quality higher education in the country.

The University offers a wide range of professional programmes in diverse areas of Engineering, Law, Management and Applied Sciences at Undergraduate, Postgraduate and PhD levels, that are designed to empower students with the necessary knowledge and skill sets to meet the needs of the industry and to address real life issues. We have imbibed multi-disciplinarity in all our programmes and projects as we believe that the leaders of tomorrow not only require a deep understanding of their chosen fields but knowledge of other areas that help in creating better collaborative synergies.

NCU has a global vision and is actively pursuing the establishment of a network of collaborative teaching and research partnerships with reputed universities across the globe. The faculty members are renowned teachers and distinguished scholars eager to involve students in research, academic and creative activities. The curriculum of the University combines powerful interdisciplinary

vision, in-depth pursuit of knowledge and extraordinary opportunities for individual growth. We offer blended learning by using e-learning with regular teaching but with emphasis on hands-on training.

The University has excellent infrastructure, a very well equipped Central Research Facility; Centre for Creativity, Innovation and Entrepreneurship; labs and workshops, libraries, sports, clubs and extracurricular facilities etc. We recognize that it is our responsibility to help our students realize their goals and aspirations in an increasingly competitive world. Emphasis is on industry-integration and course-design in tune with industry needs. We help our students understand how to put theory to practice and align them as per the requirements of the industry. Hands-on practical activities in laboratories and internship in industries offer opportunities to work in various settings that help develop work relationships plus practical experience in core subject areas before graduating. We have been able to achieve an enviable placement record, both nationally and internationally of well over 90% of eligible students.

We nurture our students to excel in different realms of life and prove their caliber by winning laurels for the University. I assure the aspiring students seeking admission for the academic year 2016-17 of an environment of learning, innovation and research with a futuristic vision. The University has a proud record of evolving efficient, confident and highly knowledgeable technocrats, managers and entrepreneurs with global thinking and a futuristic mindset that will contribute to nation building with a strong adherence to corporate ethics. You will find learning at NCU an invigorating experience. My best wishes to all for a challenging journey at The NorthCap University, a centre of academic excellence and creativity.



Message from the Registrar



Col. Bikram Mohanty (Retd)
Registrar, The NorthCap University

THE NORTHCAP UNIVERSITY is an ambitious, dynamic and friendly university. We have ensured the development of a collaborative environment conducive to learning, exposure to the best international practices and promotion of innovation and creativity. NCU attracts a wide cross-section of students from all over the country, particularly from the Northern states and provides a platform to participate in diverse academic programmes.

The University maintains a high standard of discipline on its campus and hostels and offers a free and congenial atmosphere in a gender-equality environment with a complete ragging-free campus, conducive to learning of the highest order. It provides a plethora of activities, events, symposia etc. to encourage learning beyond the classroom and on graduating offers tremendous opportunities through stellar placements.

The University's thought leadership consists of top academicians and industry leaders from varied

professional fields. Many of them are on the panel of leading national governance bodies. We combine academic excellence with innovative teaching to provide you with the experience, skills and confidence you need to bridge the gap between the classroom and the corporate world. We invite you to be a part of this forward looking university as the years ahead will be the most crucial part of your education that will shape the rest of your lives.





Why Study at NCU?



A vibrant and diverse student community can always be seen immersed in multiple specialized activities, making the campus a cheerful and friendly place pulsating with positive energy that encourages professional advancement.



Choosing a right career and a right institution is a crucial decision for a student. At this juncture of life, your decision to select the right University will decide your future. If you have the inner passion to excel, not only in the academic field, but also have a desire to give wings to your creative instincts, we offer you the right platform at The NorthCap University. We are proud to be consistently ranked among premier institutions of higher education in North India. Independent and creative thinking is encouraged for people to interact, not just to share information but to create new knowledge. Academic life is full of opportunities that offer horizontal and vertical mobility. Our innovative curriculum supports the sustainable development of science and technology. It extends the desired freedom and flexibility to engage in one's passions and innate skills or give free rein to one's creative energies.

There is never a dull moment on the campus. Extracurricular activities, for all round development of students, are encouraged. The University provides excellent physical infrastructure and the necessary support to pursue sports, hobbies and diverse activities that are essential for all-round personality development.

'Students First' is the motto and driving force behind all activities at the University. Our objective is to transform our students into not only competent professionals, but also good human beings. We empower our students to achieve professional and personal success, ready to change the landscape of the future. We inculcate morals, values, ethics and principles in our students to achieve success in all realms of life. Students are constantly motivated to meet the rigours of academics and in their endeavours they are closely supported and mentored by a strong and progressive team of teachers and peer tutors.

We maintain close industry relationships so that classroom learning and teaching can be converted into practical training relevant to your future career. Collaborating and sharing resources, processes and systems with other universities and communities have accelerated research, innovation, quality of teaching and learning and the overall student experience. We have an impressive record of campus placements, of which the students and the University can indeed be proud of.



Academic Advisory Board External Members



Mr Analjit Singh
Padma Bhushan
Chairman, Vodafone,
Chairman, Max New York
Life Insurance



Dr Devi Singh
Former Director - IIM,
Lucknow
Vice-Chancellor
JK Laxmipat University,
Jaipur



Mr Vikram S Mehta
Chairman,
Brookings India &
Former Chairman,
Shell Companies
in India



Mr Suresh C Rajpal
Chairman & CEO,
Visnova Solutions, Noida
Former President & CEO
Hewlett-Packard (India)



Prof. KL Chopra
Padmashree
Former Director,
IIT Kharagpur,
SS Bhatnagar Awardee



Prof. MK Jain
Ex- Dy. Director
IIT Delhi & Professor of
Mathematics



Prof. TK Datta
Dogra Chair
& Emeritus Professor,
Dept. of Civil
Engineering, IIT, Delhi



Mr Indu Bhaskar
Scientist F & HOD,
Department of Scientific
& Industrial Research,
Team Leader
(TPDU Program), DSIR
New Delhi



Prof. Karmeshu
Honorary Distinguished
Research Professor,
The NorthCap University,
Prof & Dean,
School of Computer
& Systems Sciences,
JNU, New Delhi
SS Bhatnagar Awardee



Mr Ajai Chowdhry
Padma Bhushan
Honorary Adjunct
Professor,
The NorthCap University,
Founder – HCL,
New Delhi



Prof. Kehar Singh
Ex-Dean & Emeritus
Fellow, IIT Delhi
SS Bhatnagar Awardee



Prof. MS Sodha
Padmashree
Former Vice-Chancellor,
Barkatulla, Bhopal, Indore
and Lucknow Universities
SS Bhatnagar Awardee



Prof. SK Joshi
Padma Bhushan
Former – DG, CSIR
& Hon. Distinguished
Scientist (CSIR)



Prof. Siraj S Hasan
Distinguished Professor
and former Director,
Indian Institute of
Astrophysics, Bangalore



Prof. AS Brar
Vice Chancellor,
Guru Nanak Dev
University,
Amritsar, Punjab



Prof. Ranbir Singh
Vice Chancellor
National Law University,
New Delhi



Dr PS Rana
Chairman & MD,
Pathera Developers &
Former Chairman & MD,
HUDCO



Dr Krishan Kumar
Executive Advisor,
Maruti Automotive
Centre for Excellence



Mr Vishnu R Dusad
CEO & MD,
Nucleus Software
Exports Ltd, Noida



Dr Krishan Lal
DST Ramanna Fellow
& Former Director,
NPL, New Delhi



**Hon'ble Justice
M Karpaga Vinayagam**
Former Chairperson –
Appellate Tribunal
for Electricity



Dr Girdhar J Gyani
Director General,
Association of
Healthcare Providers
(India)



Prof. SK Kak
General Council Member
at NBA



Prof. RC Budhani
Former Director
NPL, New Delhi
Professor Dept. of
Physics & Centre of Laser
Technology, IIT Kanpur



Mr Mangu Singh
Managing Director,
DMRC, New Delhi



Prof. PB Sharma
Vice-Chancellor
Amity University,
Gurugram



Prof. SG Deshmukh
Director
ABV IITM, Gwalior



Mr Bunty Peerbhoy
Director,
Maa Group Holdings



Mr Satish Kaura
Padmashree
Chairman
Samtel Color Ltd



Prof. Pradeep Kumar
Professor, Department
of Mechanical &
Industrial Engineering
IIT, Roorkee



Recognitions, Partnerships & International Linkages



Besides obtaining recognition by accrediting agencies and statutory associations, the University has been collaborating to share knowledge and resources with other universities and academic communities throughout the world. This is part of an important strategy to accelerate and sustain success. The University is committed to providing students and faculty a unique life changing experience that will help them remain competitive and relevant to society. Our endeavour in this direction has resulted in successfully forging progressive alliances with premier institutions round the globe, a brief of which is presented in the succeeding paragraphs.



ITB Ireland: The University has an effective MoU in place with ITB Ireland and is collaborating significantly in the mobility of students and faculty. The first students exchange started in September 2011 for semester abroad programme, continues and the feedback received from the students, on the institution and the exposure is indeed very positive. Various collaborative schemes for UG and PG students have accordingly been rolled out. Both institutions signed an ongoing MoU for further 3 years in the august presence of Mr. Ciaran Cannon T.D., Ireland's Minister for Education and Skills and the Ambassador of Ireland in India.



University of Warwick: A visit by Professor Neil Storey, the erstwhile Director International Recruitment, School of Engineering, University of Warwick, UK, initiated the cooperation between the two universities. Taking the deliberations forward, an agreement was signed in 2012 for a period of three years. The collaboration focuses on the academic mobility of students, joint guidance for PhD students, and research cooperation between the two universities. Our University showed interest in research in the area of Fluid Dynamics, Sustainable Energy Engineering Design, Structures and Materials and Systems, Measurements and Modelling. A number of schemes have been jointly worked out for one or two years study abroad. Fees and other expenses have been specified and uploaded on the website for the students to exercise their choice.



National Board of Accreditation (NBA): The University has been granted a two-year accreditation for BTech programmes in Electronics & Communication Engineering, Information Technology, Computer Science & Engineering, Mechanical Engineering and Civil Engineering upto December 2015 and is now ready for extension for coming years.



ASIC UK : A respected international accreditation body for academic institutions worldwide, continues with its accreditation of The NorthCap University, with a status of 'Premier University'. The University was awarded a grade of 'Commendable' in seven out of eight measurable areas of a university's operations.



IBM: Keeping pace with rapid technological advancement the University has tied up with IBM Career Education to set up an IBM Lab for Emerging technologies, which will become a Centre of Excellence. Besides conducting Faculty Development Programmes IBM will conduct courses for ECE, CSE, MBA students, which will give the students a cutting edge in their professional courses.



Spoken Tutorials IIT Bombay: An MoU is signed between Spoken Tutorial Project, IIT Bombay and The NorthCap University. The agreement is helping the University in conducting software training programmes in collaboration with IIT Bombay.



Michigan Technological University: An MoU with the University of Michigan Technological University Houghton, Michigan, USA was signed in March 2016, to implement the 3+1+1 programme in Computer Science. The course structure of both of The NorthCap University and the MICHIGAN TECHNOLOGICAL UNIVERSITY have been mapped and a comprehensive study plan evolved for facilitating student mobility.



An MOU between the University of Regina (U of R), Canada and The NorthCap University (NCU), Gurugram is in a advanced stage of finalization. NCU students of MTech ECE and CSE are eligible to apply for a Master of Engineering degree in Electronics Systems Engineering and in Software Systems Engineering, respectively. Selected students will proceed to Canada after 2 semesters and get a Canadian degree in Master of Engineering.



University of Chester: An MoU with the University of Chester, UK, was signed in 2012, following the visit of Professor Phillip Harris, Executive Dean (Faculty of Business Enterprise and Lifelong Learning). The Chester Business School has over 1500 students with campuses at Chester and Warrington, and has a good reputation at undergraduate and postgraduate-level courses. It is a university which squarely meets our requirement for students' academic mobility and research cooperation. Taking it forward, the School of Management has worked out schemes of a semester or year abroad in UG and PG studies. The course structures of both the universities have been mapped, and areas of students' mobility identified.



Chartered Institute of Arbitrators (India): An MoU was signed with the Chartered Institute of Arbitrators (India) branch of CI Arb, UK, a non-profit organization which focuses exclusively on creating awareness on arbitration as an effective means to settle disputes, and runs programmes and courses on arbitration in India. Students from the School of Law would benefit a great deal by this tie-up. While doing their BBA-LLB (Hons) course, they would be in a position to add to their professional graph in one of the most sought-after futuristic areas, the field of arbitration.



n+i: A delegation of French engineering institutes visited the University in 2012, and signed an MoU on long-term academic and research cooperation as well as student exchange programmes, specifically at the post-graduation level. The n+i engineering network, which is a consortium of over 70 French Grandes Ecoles (elite engineering institutes), is the largest network in France.



ISEP: We are direct members of ISEP, under which the students can be sent for a semester or year abroad to over 54 ISEP universities in 30 countries at affordable costs to the students. The host universities transfer credits after students complete all requirements. Students who have cleared their first two semesters at The NorthCap University are entitled to apply.



American Society of Quality (ASQ) India Ltd: A students' chapter was established with The American Society of Quality (ASQ) India Ltd to provide a certificate programme for students. A Management Development Programme (MDP) for executives, to certify trainers and develop PG Diploma programmes in 'Total Quality Management' (TQM) is in place. The scope has been further enhanced, as the student led society has been outperforming by participating and organizing ASQ international events at the University. We are the first university in India to be selected by ASQ to sign an MoU and form a thriving Students' Chapter.



Association of Commonwealth Universities: We are a proud member of the Association of Commonwealth Universities and are actively participating in all its affairs. The University won the prize in the Social Outreach category in a competition held in the UK. It also bagged an Honourable Mention prize for its 2012 Annual Report.



Association of Indian Universities (AIU): The University is now a member of the Association of Indian Universities (AIU). This has enabled us to refer to AIU for educational guidance to help improve standards of instruction, examination, research, textbooks, scholarly publications, participation in youth festivals or sports activities, publishing bibliographies of doctoral theses, and other such programmes as may contribute to the growth and propagation of knowledge.



Power Grid Corporation of India Ltd: An MoU for academic collaboration with Power Grid Corporation of India, Gurugram, a Navratna Public Sector Enterprise and one of the largest transmission lines utilities in the world is in place since December 2013. The collaboration benefits our students in internship and includes management development, research and training programmes.



About the University



The NorthCap University (NCU), rebranded itself on 31 August 2015 vide Haryana Government Ordinance No. 2 of 2015, followed by UGC Govt. of India notification dated 26 August 2015. NCU is an unitary university situated in Sector 23-A, Gurugram, Haryana. It was founded in 1996 by Educate India Society as an Engineering Institute to provide higher education in Engineering and Management. The institute gained the status of a State Private university in the Academic Year 2009-10, under Act No. 25/2009, by the Legislature of State of Haryana and accorded UGC approval under Section 2(f) of the UGC Act 1956. In a span of a few years, we have grown to be one of the foremost educational institutions in North India. As a testimony of this fact, we have been ranked No.1 Emerging University in India by the Higher Education Review in April 2015 and achieved the First Rank in Private Universities in Haryana by a number of surveys and publications.

The University imparts education in undergraduate and postgraduate courses in engineering, management, sciences and law. It is recognized by various government and regulatory bodies for teaching and awarding degrees. The University is approved by the University Grants Commission (UGC) and recognized by the Bar Council of India (BCI). The University is a member of the Association

of Indian Universities (AIU) and has been granted accreditation for BTech programmes by National Board of Accreditation (NBA). Aside from being a Member of the American Society for Quality (I) Pvt. Ltd, it is accredited by Accreditation Service for International Colleges (ASIC), UK and a Member of Association of Commonwealth Universities (ACU), UK and the Student Chapter International Students Exchange Programme (ISEP), UK. The University has academic collaborations and associations with several well-known international universities like University of Warwick (UOW), UK; "n+i" engineering network of French Universities; Institute of Technology, Blanchardstown (ITB), Ireland; CIARB, UK and Michigan Technological University, USA etc.



Location

The University is located in Sector 23-A, Gurugram, Haryana, which is about 7 Km from Indira Gandhi International Airport. It is well connected and easily approachable. It is located in a clean and pollution-free environment at about 3 Km from National Highway 8. The University's campus is spread over 10 acres with a covered area of over 22,000 square metres which amply caters to all its academic and administrative needs. A '360° walkthrough' on our website, (www.ncuindia.edu) will give you a virtual tour of the beautiful laid out campus.



The NIRF frame work outlines a methodology to rank institutions across the country. The parameters for ranking broadly consists Teaching Learning and Resources, Research and Professional practices, Graduation outcomes, outreach and inclusivity and perception. Ranking have been worked out for six category of institutes, Engineering, Management, Pharmacy, Architecture, Universities and Colleges.

It is a moment of pride and satisfaction, that in the recent NIRF (National Institutional Ranking Framework) under the Ministry of Human Resource Development (MHRD) Govt of India has listed "The NorthCap University", Gurugram, as the top private University, in whole of North India in the University Category. All India, NCU is ranked 82nd out of 233 participating University of the total 740 University in the Country. This has given us the Confidence to take the University to a great level of academic excellence.

Physical Infrastructure

The University accommodates an excellent academic infrastructure of over 60 classrooms, 18 tutorial rooms, 68 labs, 25 workshops, ample faculty cabins, seminar hall, conference rooms, a 420 seat state-of-the-art auditorium and a double basement parking.

The University has a fully air-conditioned academic infrastructure with round-the-clock power backup. The spacious classrooms are equipped with modern multi-media teaching aids. It also has a computer centre with nearly 1000 high-end computers and the whole campus is wi-fi enabled. It has a 60 MBPS dedicated leased line, digital and multimedia library and networked computer labs.

The open-air Amphitheatre provides an enchanting ring side view to the spectators at the numerous student led cultural events at the University. The campus provides for a music club, photo club, yoga centre, and the Yukti Social Club. It has sports facilities for nearly all indoor and outdoor sports. The cricket-cum-football ground is arguably one of the finest grounds in the NCR, with floodlight facilities for night sports. A new air-conditioned two-storeyed cafeteria and gymnasium block covering an area of more than 15,000 sq ft provides a unique dining experience to faculty and students alike. It has been designed with modern interiors and energy efficient concepts. The gymnasium at the lower ground level with a yoga room and indoor sports rooms provide a modern comfortable experience. In addition we also have branded outlets of Amul and Nestle situated on the University campus. NCU also has a branch of the Syndicate Bank with an ATM operating from its premises for the convenience of its faculty and students.

NCU is an environmental friendly institution. A 150 KW rooftop solar PV system with a net metering facility has been installed to provide alternate source of power to the University in line with the State and National objectives of using solar energy. In order to ensure zero wastage of water, we have installed an effective rain water harvesting system as well as sewage and waste water treatment plants. The University is surrounded by lush green gardens and this is the 16th consecutive year when the University has been declared the winner of the HUDA garden competition in Gurugram.





Library and Information Resource Centre

The NorthCap University Library & Information Resource Centre (LIRC) is among one of the best Private University Libraries of Delhi-NCR. It has a collection of 88,747 books in print, covering all areas of engineering, law, management and social sciences etc. and provides its users the latest and modern services like online library access to online journals and e-books, Webopac facility, federated search engine 'KNIMBUS' which offers single window access to all subscribed resources. LIRC has a dedicated Multimedia Library where 20 computers have been installed for online access to international journals from various databases like ABI/INFORM, American Society for Civil Engineers (ASCE), American Society for Mechanical Engineers (ASME), Proquest engineering collection, Manupatra and Lexis Nexis for Law students, Sage online journals and E-Brary (e-books database) having 1,18,000 e-books. All these resources have IP based access and are accessible from anywhere, through remote access facility.

LIRC is a member of reputed libraries network DELNET (Developing Library Network) and the American Center Library, to augment access to outside resources. LIRC subscribes to over 170 reputed print journals and magazines and to multiple copies of 15 national dailies. LIRC uses the Libsys software, bar code based circulation system, provides reprography service, scanning and printing facility, and above all a Book Bank facility that will help you to concentrate on your studies as it will provide you five books in each semester, for permanent retention.

The Library has a seating capacity for 250 readers and is open from 8.00 am to 10.00 pm on all working days. It is very well lighted with comfortable furniture and assisted by a team of helpful and dedicated library staff. LIRC also organizes events such as the annual book fair, guest lectures and knowledge conferences.

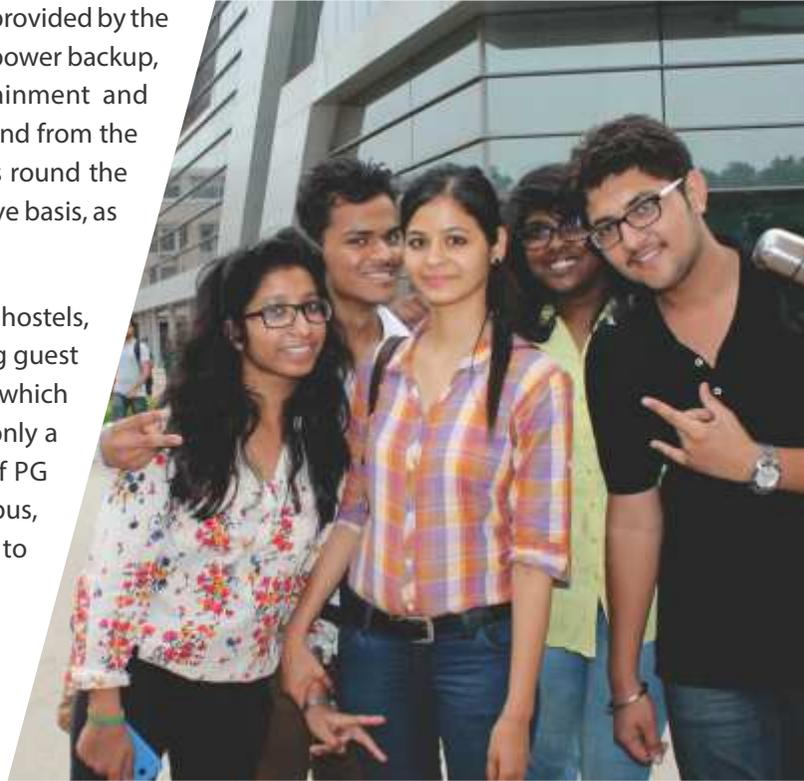
Accommodation

You can get comfortable, secure, safe and healthy accommodation in NCU's hostels. There are separate hostels for boys and girls with limited capacity to accommodate students. We provide high-quality accommodation, on a shared basis, with clean and hygienic dining facilities is provided by the University. The rooms are well furnished, with a 24-hour power backup, treated water, Wi-Fi, intercom, indoor sports, entertainment and recreational facilities and a bus for your conveyance to and from the University. All hostels are provided with security guards round the clock. Accommodation is allotted on a first come first serve basis, as a limited number of seats are available.

If we are unable to accommodate you in the University's hostels, you can find alternative lodging nearby. About 30 paying guest facilities in close proximity to the campus are available for which you will need to exercise your own options. NCU plays only a limited role as a facilitator, providing a ready reckoner of PG accommodation availability in the vicinity of the campus, and has absolutely no other interest, role or responsibility to discharges other than facilitate your stay .

Extracurricular Activities

For your holistic development and to make sure that you excel in extracurricular activities, besides academics we encourage you to participate in different intra- and inter-university sports, cultural and technical events in close coordination with faculty. Throughout the academic year, the campus hosts a wide variety of activities, including guest lectures, films, musical and cultural events and other special programmes. The University has several professional hobby clubs and societies which provide opportunities for both enjoyment and the discovery of new interests and skills. These include the Literary Society, Music Society, Drama and Dance Society, Photography Club, Social Service Society, Sports Society and Self Development Group. We encourage and provide support, guidance and facilities to our students to showcase their skills and talent. We offer you varied options to participate in the performing arts like theatre production, music ensemble, dance group, or to become involved in committees that sponsor speakers or organize cultural festivals.





Internet and Computing Facilities

The University has a fully wi-fi enabled campus providing uninterrupted access to the Internet for all students. There are nearly a 1000 state-of-the-art systems connected through the NCU computer network, and students have direct access to this facility. Committed to the automation of various academic, financial and administrative processes, the University has an advanced Enterprise Resource Planning (ERP) system based on cloud computing, through a tie-up with Digiuniv.

Virtual Labs

NCU is a nodal centre for Virtual Labs, an initiative of the Ministry of Human Resource Development under the National Mission on Education through Information and Communications Technology, wherein eight IITs are currently involved. The University utilizes the facilities available at the IIT labs through remote triggering.

CISCO Networking Academy

CISCO certification is sought after by IT professionals and greatly improves your prospects if you want to build a career in the industry. The CISCO Networking Academy, at the University caters to the growing demand for ICT professionals and also to improve the career prospects of IT students.

NCU Health Services

A health centre with three doctors on rotation are available on the campus. The team of qualified and dedicated doctors provide allopathic as well as homoeopathic treatment, as required. The Medical Room provides superior emergency care, with examination beds, medical equipment and medicines to cater to any emergency, with first-aid services for injuries, accidents etc. and thereafter for moving the patient for further course of treatment. For routine medical cover, just meet the doctor on duty in the Medical Room and they will take care of you. The University has a well-equipped ambulance van that is available to reach sick students to hospitals or to handle evacuation from the hostels of the University.

Specially-abled Students

Resources for specially-abled students are part of NCU's commitment to help all such students achieve their academic potential. The University welcomes applications from students with special needs and assures them that it will provide access to all programmes for which they enrol. Special effort is made to provide opportunities for participation in extracurricular activities, and to encourage their personal development and independence. Compliance with the guidelines for students with disabilities is ensured by the University.

Learning Management System

NCU offers an innovative learning system as a supplement to classroom teaching – an e-learning portals the Learning Management System (LMS) which provides students with online access to the course content offered at the University and to important academic information including lecture notes, recommended reading, tutorial sheets and assignments. We want students to use this portal to prepare themselves before coming to the class, so as to have a better understanding of complex concepts.

Faculty

In our quest to impart the highest quality education to our students, we have taken immense pains to bring together a team of high calibre faculty members, selected through a stringent screening process. The NorthCap University's faculty is ranked highly, as a large number of them come with a rich experience of having worked in some of India's most prestigious institutions such as the IITs and IIMs. They combine exemplary teaching skills with academic research and consulting practices and work hard to integrate classroom studies with the needs of the industry, making your educational experience relevant and timely. The criteria for appointment, retention, tenure and promotion are designed to attract educationists of the highest calibre, who continuously strive to enhance their knowledge and teaching effectiveness.





With over 200 faculty members on board, with a vast range of teaching experience in national and international institutions, we have a productive academic leadership, including emeritus professors and distinguished professionals from diverse fields. The qualifications for various faculty positions comply or exceed the prescribed standards of the UGC and the BCI. Many of the faculty members are qualified from premier academic institutions like the IITs . A number of senior faculty will teach you in the first-year so as to give you a strong foundation while initiating you into variety programmes.

Faculty Mentoring Scheme

Besides the large in-house fraternity, we have a rich panel of eminent professors and industry experts as visiting faculty. We also invite distinguished professionals and academics to mentor our faculty in a nurturing environment, to enrich and enhance their expertise under the Faculty Mentoring scheme. In addition to regular classroom teaching, renowned experts in various fields are also invited from time to time to deliver Guest Lectures and conduct workshops so that you get the opportunity to interact with experts and get real-life exposure.

Whilst the principal responsibility of the faculty is teaching, members are also encouraged to serve as consultants to other organizations from time to time, so as

to help keep abreast with the latest trends in the environment where our students will be absorbed after graduating. Their qualifications and experience, as well as the superior teacher-student ratio contribute to the quality of education at the University. Our faculty members are sensitive to your academic and developmental needs and easily accessible and very concerned about your welfare and development.

Student Counselling

To make you comfortable and easily settle down in the University, a faculty mentor will help you in a nurturing, informal yet intense relationship just as in the *Guru Shishya parampara*. The same mentors will guide and counsel you, whenever you require, throughout your stay at the University, in all semesters. To provide a healthy, productive work environment and to offer better support to help cope with stress and emotional issues we have a Psychologist cum counsellor on the campus whom you can readily approach.

Learning @ NCU

We ceaselessly strive to pioneer the teaching learning processes to bring them at par with international standards. Curricula are constantly updated to keep abreast with industry trends and to ignite your mind with innovative ideas that prepare you to meet global challenges in the future. You will be exposed to real-life applications and industry interactions for practical understanding and learning.

You will get personal attention at NCU. Besides the mentoring programme to help resolve any difficulties that you may have from time to time, our University enjoys the distinction of being amongst the few universities to limit lecture groups of about 50 students, further divided into smaller tutorial and practical groups for more effective transfer of knowledge.

Being a multidisciplinary university, we have taken great pains to ensure that the courses are designed to not only help you understand the core courses but also their applications in other streams. In this manner, with better assimilation, you will acquire broad based knowledge. Inculcating the desire for excellence and accomplishment through integrity, honesty and achievement is of paramount importance. To achieve excellence in research we encourage originality of ideas and approaching a subject with an open mind. We want you to innovate and conduct research in a collaborative and supportive environment. Research is encouraged not only in all the Schools but in multidisciplinary groups as well. Lastly you will acquire basic skills of at least one foreign language (French, German & Spanish) being all major programme of the University.

Programme Educational Objectives and Outcomes (PEO and POs)

In line with the Vision, Core Values and Quality Policy of NCU, Programme Educational Objectives and Outcomes (PEO and POs) have been framed for our UG and PG programmes.

Examinations

Major Test Question Papers have a differentiating question (15% weightage) an optimised mix of qualitative and quantitative content and an evolved coverage guideline. Examinations being a non-value adding process, the two minor exams are of 1 hour each. This is in line with some of the benchmarked universities and IITs. Please check the details rules for examination.

Balanced card system

The Schools have a defined set of objectives evolved by the faculty at the beginning of the year. Every month the actual progress is monitored against the plan. This tracker system facilitates balanced progress throughout the year.

Online courses initiation plan

NCU offers online courses in the areas of Computer Science & Engineering (Cloud computing concept/ software security (Univ.-Maryland/Illinois)), Electrical, Electronics & Communication Engineering (Introduction to LINUX (Linux foundation, US) and other Engineering disciplines. The credits earned by you can be transferred to your respective courses at the University as per the Departmental guidelines.

Online tests

There are two online tests per course per semester that provide a simplified evaluation system adding to your academic efficiency. It has helped to further build an online culture at NCU and has removed barriers in going online for our other quality processes.

Relative Grading and Moderation

The University follows the rationalized relative grading system across all disciplines for your fair and balanced evaluation of students. The quality bar for distinction is 8.5 and above CGPA on a 10-point scale and all courses should have been passed in the first attempt. For all academic rule and regulations visit the Dean office and refer to relevant

documents. Secondly being a centre for higher learning students should be prepared to attend the University on at least 6 days a week (any six days) for academic and / or curricular activities.

Attendance Rules

A student is expected to attend all lectures tutorials, practical classes and VA courses. However to account for illness, and contingencies of a serious and unavoidable nature, the attendance requirement for a student to make him/her eligible to attend the Major Test is 70%. This requirement **will not be relaxed under any circumstances what so ever.**

A student not satisfying the minimum attendance requirement in a particular course, will be detained in that course.

Interactive teaching-learning and self-learning

We follow a system of prior assignments and/or self-study. You have to self-prepare certain topics before class or tutorials, based on which you will be questioned or quizzed. For this we encourage you to use NPTEL (the National Programme on Technology Enhanced Learning) as a resource for supplementary reading material. This system helps us to continuously improve our teaching-learning systems and processes.

Special Lecture Series

Expert talks are delivered by invited experts from outside as well as our senior faculty members on various topics so that you benefit from the expertise of experienced speakers.

Value Added Courses

To sharpen your competitive skills and enhance your employability and make you industry-ready, we have comprehensive value-added (VA) programmes, over and above the basic curriculum. VA course modules help to bridge the gap between your domain knowledge and the requirements of companies – which also include soft skills such as communication, presentation, interpersonal skills, etc. These supplementary modules or short courses not only enhance employability and improve career prospects, but also groom you for national and international level examinations like the Common Admission Test (CAT), Graduate Record Examination (GRE), and Graduate Aptitude Test in Engineering (GATE).

For close monitoring of our academic processes, structured student feedback systems are in place. Timely feedback and action ensures continuous improvements and a more effective learning experience for you.

Equal Opportunities:

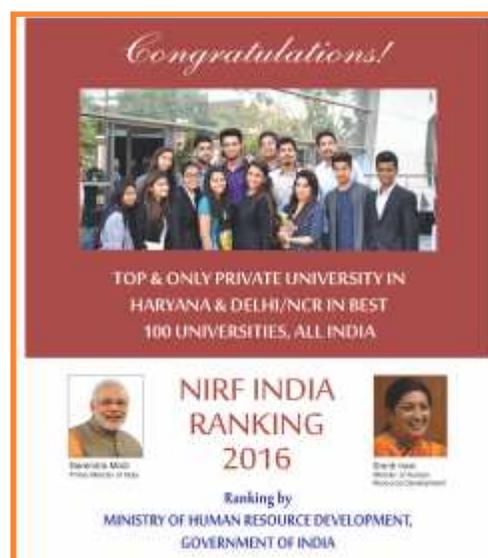
At NCU, we are committed to equality of opportunity to all sections of society. We welcome applications from all irrespective of caste, creed, language, gender, nationality or religion, with a potential to succeed in higher education and provide full protection & rights of participation to Persons with Disabilities as per the PWD Act of 1995



Major Achievements in 2015-16

The NorthCap University, Gurugram continues to nurture its ambition to be known for learning innovations, academic excellence and socially relevant research outcomes. It is driven by its passion to be in the top of the league by embracing global best practices and championing the highest ethical standards. Some of the milestones in 2015 are:

- NCU featured amongst the top 100 Universities in the country, in the first ever rankings released by the Ministry of Human Resource Development (MHRD), Govt. of India in April 2016. The most notable feature of this ranking placed us as the top Private University in Haryana and Delhi NCR, and 17th amongst all Private Universities in the country. This would besides helping us reach benchmark in International excellence, will help the students make informed choices about University, where they would like to study.
- Ranked No.8 All India under AAA Category amongst Private Universities 2016.
- Ranked No.8 All India, for Research Productivity among Category 'A' Private Universities in CII-ICI Report- 2015 of March 2016.
- Recognised as No. One, in the Top 10 Most Promising Educational Institutes in Delhi / NCR 2015, by Higher Education Review, Bangalore September 2015.
- The University was adjudged the Best Private University in Haryana out of 18 private universities of the State in the Annual Survey conducted by Dialogue India, a Delhi based publication in their special issue of July 2015.
- The University has been ranked as the Top Private University in Haryana and one of the Top Emerging Universities of Eminence in India, in the ranking by Competition Success Review, July 2015 issue.
- In Outlook Best Professional Colleges 2015 Survey published in the Special Issue of Outlook news magazine, July 2015, The NorthCap University was ranked No. 56 among all Engineering Colleges in India, including IITs and NITs.
- Chronicle All India Engineering Colleges Directory 2015-16 ranked NCU in A++ category and amongst the 10 Top Colleges in terms of Infrastructure.
- EDU Tech in collaboration with RAND, a premier ranking agency in USA, has ranked The NorthCap University as a Top Engineering College in Haryana in their June 2015 issue.
- Education World in their May 2015 edition ranked The NorthCap University amongst the 50 Best Private Universities in India.
- The NorthCap University is Ranked No. 1 University among Top Emerging Universities in India, in a survey by Higher Education Review, April 2015. The University has been specially commended for specializing in the fields of Technology, Management and Sciences.
- NCU's School of Management has been ranked No. 3 amongst the Private B-Schools in Haryana and No. 20 amongst Top B-Schools of Eminence in India, in Competition Success Review (CSR) GHRDC Survey - November 2015.
- The University was ranked in A5 category by All India Management Association (AIMA) in their Business Standard Best B-School Survey 2015 and published in the Special Issue of Indian Management, June 2015.



Schools & Programmes



A frontrunner amongst educational institutions in Northern India, The NorthCap University (NCU) has carved a niche for itself for being a multi-disciplinary university with an unrelenting will to excel. NCU has adopted a contemporary global pedagogy across all disciplines and emphasis is laid on student-centric learning with a combination of theoretical knowledge and its application. We believe that trans-disciplinary learning and research strategies make work more interesting, useful to society and in accordance with best global practices.





Dr Ravindra Ojha
ME (Industrial Engineering & Management), Asian Institute of Technology, Bangkok
BTech, Mechanical Engineering, Regional Engineering College, Warangal (Gold Medallist)
Director, School of Engineering and Technology

With the Government's policy of Make in India gaining momentum, the coming decade is of the manufacturing or product industry and The NorthCap University's School of Engineering and Technology aims to be at the forefront by producing highly skilled professionals ready to seize every opportunity and meet the huge demand coming up in the near future. The product industry will take over from the service sector and become a larger revenue generator and a major employer of engineering graduates. There is a push for higher quality product engineers and we are preparing our young graduates for this giant leap which is now the theme of our University's logo. To this end we have modernized our curriculum in line with industry needs, mapping objectives to curriculum, teaching-learning, examinations, labs etc.

Above all, we strive to produce innovators who have pioneered cutting-edge technology. The idea is not just to teach a specific technology, but an interdisciplinary approach to problem solving and we are focused on teaching-learning and self-learning, to keep up with the break-neck-pace at which technology is advancing. This ability is developed by stressing on the fundamentals and using loads of hands-on project work, instead of just teaching about the theoretical aspects of technology. The core idea is that practicals learning is an intrinsic part of theory, they are not separate entities. Our lab courses are more rigorous as they are made in consultation with industry experts with emphasis on real life problems.

I am confident that our tech graduates will be ready to meet future challenges and will not only be offered higher compensation but will also be offered greater job variety.



IBM: Keeping pace with rapid technological advancement the University has tied up with IBM Career Education to set up an IBM Lab for Emerging technologies, which will become a Centre of Excellence. Besides conducting Faculty Development Programmes IBM will conduct courses for ECE, CSE, MBA students, which will give the students a cutting edge in their professional courses.



The School of Engineering and Technology (SOET) is the largest component of NCU's academic arena and with its five academic departments namely Applied Sciences, Civil and Environmental Engineering, Computer Science & Engineering, Electronics and Communication Engineering, and Mechanical Engineering is committed to enhancing the quality of the teaching learning processes and to promote innovation driven research. After graduating from SOET you will be ready to take on the wide ranging changes taking place nationally and internationally. Every programme blends critical thinking and analysis with innovation, application and leadership qualities. NCU has a vibrant academic ambience for innovation and research in all branches of science and technology, at all levels. We provide high degree of academic flexibility and lay strong focus on internships and major projects. After second and third year you will compulsorily go through the rigours of summer internships.

Outcome based learning

Following global best practices, the School follows the Outcome Based Education system that will prepare you for the future and for the constant change which is inevitable in our society. Good teaching methodology, fair and reliable assessment and continuous feedbacks form a significant part of our system. We define educational objectives and outcomes at both the course and programme levels which we update periodically with the help of inputs from faculty and

feedbacks from all stake holders. The major enablers for improving our teaching learning processes and the curriculum are our students' placements, their programme specific educational outcomes, higher education pursuits and entrepreneurship success rate.



An MOU between the University of Regina (U of R), Canada and The NorthCap University (NCU), Gurugram is in a advanced stage of finalization. NCU students of MTech ECE and CSE are eligible to apply for a Master of Engineering degree in Electronics Systems Engineering and in Software Systems Engineering, respectively. Selected students will proceed to Canada after 2 semesters and get a Canadian degree in Master of Engineering.

American Society for Quality (ASQ) Student Chapter

At NCU you will also get high end training programmes of ASQ (I), a leading authority on quality in all fields, organizations, and industries. These programmes lead to certifications which are considered a universal benchmark. NCU is the first university in India to be selected by ASQ to form a Student Chapter and usher in world-class processes in every part of academic and professional life that will objectively enhance your profile at the time of placements.

Peer Tutor Scheme

Following 'Best Practices' in leading international universities wherein along with the scheduled teaching by professors various kinds of supplementary tutoring and academic skill development support, outside the classroom are also available to all students, we have 'Peer Tutors'. Through this initiative our meritorious, talented and highly capable students are recognized and rewarded and they use their skills to help weaker students. Peer Tutors guide and support, empower and encourage, within an interactive peer learning context but do not substitute for classroom teaching or regular faculty.

GATE Preparation

We encourage and prepare you to compete in the GATE exam conducted by IITs which is considered the national bench mark for demonstrating merit in UG Engineering education at the national level. We reimburse GATE application fee if you qualify. All students of BTech appear for GATE exam. Akash Sheoran, a student of BTech Mechanical Engineering has achieved the All India Rank (AIR) 65 in the 2015 GATE.





Emphasis on Experiential Learning

For a more effective and interesting way of teaching learning and to be better aligned with industry and employment needs, there is a worldwide shift towards 'experiential learning' in contrast to traditional classroom teaching. For more 'hands on' work and practical orientation to the teaching learning process we have aligned with global trends and launched a pilot course based on MIT open courseware with high quality lab work and challenging projects, as part of the subject.

Online Courses offered

In order to broaden your horizon and give international exposure we offer online courses from various universities across the world, which include MIT, Harvard, UC Berkeley and University of Texas. You may enroll in these courses along with a faculty mentor and will be evaluated both online and by the mentor at

the University level. Suitable number of credits will be allotted to you after successful completion of the courses as per departmental norms.

Entrepreneurship and Innovation

Education place a crucial and considerable role in developing entrepreneurial activity of students. Individual capacities including personal traits are often considered to be the key drivers of success for business startups. The University provides valuable support to budding students to become entrepreneurs. In this direction 60 students of our University took part in the Startup Weekend programme held under the aegis of the Government of Haryana and brought laurels to the University by bagging the first & third position.



**Department of Electrical,
Electronics and
Communication Engineering**



Dr Swaran Ahuja
PhD, MTech, IIT Delhi
Senior Professor,
Head, Department of Electrical,
Electronics and Communication
Engineering,
Dean Academics

EECE Dept. is amongst the best at NCU and has won Best Dept Award many times over the last so many years.

Almost 100% of our graduates are offered campus placements every year in reputed Indian and multi-national companies. Our large well qualified faculty team with diverse experience in academics and industry are actively involved in research in emerging areas. The curricula of our programmes is comparable with the best universities and regularly aligned with industry requirements.

We provide outcome based education which is supplemented with hands-on training in the industry through intensive internships, industry-based projects, industry visits and guest lectures by eminent experts on latest technologies. We lay strong focus on practical oriented education with a large number of well-equipped laboratories supplemented with e-learning programmes promoted by different IITs.

Electronics and Communication Engineering is a core and ever growing field of engineering in the modern world and is making rapid strides in terms technology and growth with ever increasing job market . The Department of Electrical, Electronics and Communication Engineering (EECE) , a well-established department in NCU's School of Engineering and Technology provides you the opportunity to realize your full potential and excel in life and realize the benefits of this growth. Our ECE engineering graduates trained to work in teams with other specialists to design, fabricate, produce, test and supervise the manufacturing of complex products and systems are sought after not only by electronics and telecom industry but also by computer and IT industries. We follow practical-oriented teaching practices that enhance your employability and help you to be readily placed in top companies. The focus is on holistic development of our students through various initiatives like innovative curriculum , personality development programs , well planned curricular and co curricular activities , numerous outreach activities , supplementary learning in tune with industry requirements and exposure to the best available resources.

Come and join our highly professional and disciplined team of faculty and students and experience the joys of innovative teaching and learning , research in emerging technologies and have a rewarding career.





Our Faculty Team

The Department has one of the largest and the best faculty teams in North India, drawing its distinguished faculty members from the IITs, NITs and other leading institutes, as well as from industry background. The faculty development and quality improvement programmes regularly hone the teaching skills of our faculty. Most faculty members have published a large number of research papers and many have written textbooks which are widely used in universities.



State-of-the-art Laboratories

All laboratories in the Department are equipped with excellent equipments, instruments, kits and software tools and are constantly upgraded to match the requirements of the new curricula. Advanced level optical link simulators, DSP and FPGA kits and PCB fabrication facility will take your laboratory experience to a whole new level. Latest software packages including KEIL, MATLAB-2014, Optisystem-12, Xilinx ISE, ModelSIM, Qualnet, Optisim, Cadence, Tanner EDA, PSPICE (ORCAD), OPNET, MASM, LABVIEW, UMPS, NS-2 and CST will provide you the latest project and research tools. Virtual Labs, in collaboration with IIT Delhi, have enriched and enhanced

practical involvement. The labs are supervised by well-qualified technical staff and are kept open till extended hours so that you get more hands-on working opportunity on lab equipments.



Project Labs

The Department focuses on practical orientation and innovative projects which you can develop at various stages during your stay at NCU. Minor projects are developed during first year in-house training, fifth semester and major projects are developed in the final year of the BTech programme. For MTech programmes you will develop a minor project during second semester and take dissertation work during third and fourth semesters. These minor projects, major projects and dissertation work are supported through a well-equipped project labs with industry benchmarked software packages. The labs have different sections where you can develop your hardware, perform simulations or develop software programmes.



Research Projects @ EECE Department

Practical orientation and developing hardware and software prototypes through various projects help in building better engineers. The Department will help you

understand the methodology of converting your projects into finished marketable products. We encourage you to work on industrial sponsored/ collaborated projects as some of our students have been greatly benefitted from such collaborations. A few entrepreneurial projects have been selected for funding by MSME and best projects awards are given to outstanding projects.

The dept has a large number of Post Graduate students and Ph.D research scholars who under the guidance of our distinguished faculty are engaged in research in new and unexplored technology areas. The dept has a large number of research publications in reputed journals to its credit. Some of our innovative projects have also been patented.

Departmental Magazine

You can contribute to the Department's magazine 'Livewire'. It is a multidimensional biannual publication which provides a platform to share technical knowledge and express views on various non-technical topics also. The new segment called the 'coffee section' has puzzles, self-composed poems, short stories and much more. Livewire conducts events to promote the art of photography as well as literary events of various societies at NCU. Livewire's readership is not just amongst engineering professionals but also extends to different strata of society across the nation.

Professional Societies

The Department of EECE is an active member of various professional societies like The Institution of Electrical and Electronics Engineers (IEEE), The Indian Society for Technical Education (ISTE) and Society of Electronics Engineers (SEE), IETE etc. The Department has opened

NCU-IEEE-Firmware, an active IEEE student chapter. The International Society of Optics and Photonics (SPIE) student chapter is another EECE professional society run jointly with the Department of Applied Sciences. It is advancing an interdisciplinary approach to the science and application of light. You can actively participate in their activities which are organized regularly.

Industry Liaison

The Department maintains close interaction with the industry at all levels of academic activity, including curriculum design which is reviewed by relevant industry experts, classroom teaching supplemented through guest lectures, technical workshops by industry experts, student project work through industry association, industrial visits and summer internships. The Department has Linkages with industries like Ericsson and Nokia Siemens Networks (NSN) for training of our students. The Department has recently expanded its industry linkages by having an informal understanding with Mentor Graphics and Linkages with Power Grid Corporation of India Limited, a prestigious Govt of India Undertaking for collaboration in a number of areas of mutual interest. A MoU with IIT Delhi for conducting of Virtual Labs has been effective for the last few years.

Placements

Good engineering professionals from this Department are highly sought after by electronics and telecom companies. Graduates of our BTech and MTech programmes are placed in some of the leading telecom companies, IT companies, VLSI design companies, electronics design and equipment manufacturing companies, government jobs and the education sector, among others. Many of our BTech





students, after scoring well in GRE and GATE, are regularly selected by prestigious institutions abroad as well as in India for higher studies, as well as in premier MBA institutions through CAT exams. Many of our MTech students, particularly girl students have got attractive teaching jobs in various engineering colleges across the country.



The placement record of the Department of ECE students is impressive, with almost 100% of the eligible students being consistently placed every year at attractive packages in all previous batches. For the batch 2012-2016, passing out in June, 2016 also, the placements which are currently in progress are expected to touch 100% with many multiple offers. Some of the students have been recruited by core design companies with starting annual packages of over Rs 10 Lakhs.

Value Added Programs

The dept. puts great emphasis on all round development of students and enhancing their employability through supplementary courses in soft skill and personality developments through various value added courses.

The value added courses also include many computer and IT related courses including programming languages like

Java , DBMS, mobile apps design , Linux , Android , robotics , cloud computing and so on as recommended by industry from time to time. These courses open up employments opportunities for our ECE students in computer and IT industry also in addition to the core electronics and telecom companies. ECE students therefore have the best of both the worlds in terms of campus placements resulting in 100% placements with many multiple offers.

MOUs with IITs

The dept takes regular initiatives to improve its teaching learning process by providing exposure to our students to the best in the country. Accordingly the dept has MOUs/Associations with some of the IITs for programs as follows

Spoken Tutorials with IIT Bombay

NCU has signed an MOU with IIT Bombay for their 'Spoken Tutorial Program', a program sponsored by MHRD , Govt of India. Under this program IIT Bombay offers courses in various software training programs free of cost to our students. These include courses e.g Linux , Python , Scilab , QCAD , C++ and so on. These, typically, one semester courses are conducted for our students through webinars/ self study materials and students completing these courses successfully are issued certificates by IIT Bombay. These courses are taken by students beyond their normal curriculum.

QEEE program of IIT Madras

NCU has also entered into an association with IIT Madras for this QEEE program (Quality Enhancement in Engineering Education) under which our course teachings for various subjects are supplemented with special lectures by professors from IITs as per prescheduled time table. This provides opportunities to our students to get exposure to renowned experts in that area. Students completing these programs are given certificates by IIT Madras.

Virtual Labs from IIT Delhi

The dept also has an MOU with IIT Delhi for remote access of IIT lab facilities through their Virtual Lab platform. Virtual labs experiments of IITs have been integrated as part of curriculum at NCU in many

subjects. The students and faculty of the dept. are trained to use this platform through regular sessions by expert teams from IIT Delhi.

Association with IBM

NCU has entered into an association with IBM , a global leader in IT, to provide cutting edge technology courses in subjects like cloud computing , big data , Internet of Things(IOT) , cyber security etc. to students of ECE branch to train them in most promising areas of the future through hands on training programs. This will bring in industry perspective into the classrooms giving an employability edge to our students and open up many new exciting opportunities for them.

USPs of the EECE Dept.

- *Nearly 100% campus placements every year in reputed Indian and multi-national companies for last more than 15 years. The companies hiring our students span wide range with Electronics, Telecom, VLSI design, Electrical, IT, Consultancy, Marketing and many other industries including iconic names. Many of our students are pursuing higher studies in premier Indian and Foreign universities and some have also successfully set up their own enterprises.*
- **High Calibre Faculty** A large group of well qualified faculty with diverse experience in academics and industry and actively involved in research in emerging areas.
- **Curriculum** Comparable to those of the best universities and regularly upgraded / aligned with industry requirements. A unique curriculum for ECE, with mix of electronics & communication engineering courses and also currently in industry demand computer engineering courses to enhance the employability of our students creating placement opportunities both in electronics and telecom industry as well as in computer and IT industry.
- **Outcome based Education** supplemented with beyond-the-curriculum training in industry-focused domains as well as soft skills and emphasis on intensive internships, industry-based projects, guest lectures by eminent experts on latest technologies and other outreach activities for holistic development and to provide an edge in placements.
- **Strong focus on Practical** oriented education with a large number of well-equipped laboratories including exclusive project labs, supplemented with e-learning programs promoted by various IITs and supported by excellent infrastructure like modern classrooms, well-equipped library etc.



- **Association with IBM** a world leader in IT for offering cutting edge industry oriented courses in areas like Cloud Computing, Internet of Things, Big Data etc. to our ECE students to enhance their profiles and employability for a future job market.



- **An MoU between the University of Regina (U of R), Canada and The NorthCap University (NCU), Gurugram** is in a advanced stage of finalization. NCU students of MTech ECE are eligible to apply for a Master of Engineering degree in Electronics Systems Engineering. Selected students will proceed to Canada after 2 semesters and get a Canadian degree in Master of Engineering.





Prof. Pramod Bhatia
PhD, Purdue University, USA
MS, University of Illinois,
Chicago, USA
Associate Professor
& Head, Department
of Mechanical Engineering

NCU's Mechanical Engineering graduates get high end placement offers in reputed companies as we skill you to take off running from day one. We have an updated and industry ready syllabi and offer our students the flexibility of choosing courses from a large number of departmental and interdepartmental Electives and also provide the option of choosing your subject of specialization. Emphasis is on your holistic development through co-curricular activities and professional societies in the Department. We maintain a high level of industry-academia collaboration through a wide range of activities including industry associated projects, industrial visits, expert lectures, workshops, conferences and MoUs.

The demand for quality Mechanical engineers in the manufacturing sector would continue to remain high as there is significant growth potential in this sector. Globalization has brought rapid changes in the scenario of the Indian industry, where a company will be out of business if its machinery and manpower are not world class. Therefore, companies will be looking for Mechanical engineers like you who we specialize in the latest cutting edge technology and empower great analytical and technical skills.

We offer industry relevant programmes with updated syllabi, laboratory and computational facilities as we are committed to offering you a platform to develop and hone your skills and get ready to face market challenges when you graduate. You will get excellent industry exposure through various industrial visits, expert lectures, seminars and workshops on relevant subjects and technologies, which we regularly organize for you.

In addition to a sound knowledge of applied sciences and technology you will learn to work as a member of a team and become a well-equipped and talented graduate with the right attitude. For leadership positions in the manufacturing industry we also prepare our mechanical engineers with good oral and written communication skills so that you can present your ideas in a logical and structured manner.

Laboratory Facilities

We focus on practical orientation, and our major projects are supported by well-equipped project labs like the Machine Shop, Fitting/Sheet Metal Shop, Foundry Shop, Pattern making/Carpentry shop, Welding Shop, Fluid Machines Lab, I.C. Engine Lab, Automotive Lab, Auto Fuels and Lubrications Lab, Computational Fluid Dynamics Lab, Heat and Mass Transfer, Refrigeration and Air-Conditioning Lab, Material Science Lab, Elements of Mechanical Engineering Lab, Engineering Drawing Lab, PG and Mechatronics Lab, Energy Conversion Lab, Strength of Material Lab, and CAD Lab. We offer you opportunities to test your technical skills in real-life challenges like applying your technical knowledge to design and build an off-road, all-terrain vehicle.

Departmental Magazine

If you are a creative writer you can contribute to the Department's biannual magazine 'MechTalk' which also has contributions from industry experts and faculty. It is a medium to share news, views, activities and events of the Department. You may share your short stories, views, puzzles, quizzes etc.

Societies and Clubs

The Department has active student chapters of professional societies like the Robotics Society, Society



for Automotive Engineers (SAE), American Society for Mechanical Engineers (ASME), Solar Energy Society of India (SESI), Indian Society of Heating, Refrigeration and Air-conditioning (ISHRAE), and Indian Society for Technical Education (ISTE). Participating in the activities of these societies will develop your technical and non-technical skills as well as help build professional relationships.

Research @ the Department

Faculty members pursue research in their area of expertise, publish books and research papers in various national and international journals and conferences. The Department is granted financial support to organize national- and international-level conferences by the Government and private agencies. Apart from pursuing research activities the faculty also take up consultancy projects from the industry.

Technical Projects by students

We offer you opportunities to take up challenging projects as some technical projects are appreciated and sponsored by various industries and Government ministries, like the Ministry of Micro, Small and Medium Enterprises (MSME). Every year, a group of students undertake a formula racing car project, which they showcase at the BAJA competition organized by SAE. Recently our multi-disciplinary team 'ELECTROTECH' comprising of students from Mechanical Engineering and Electrical and Electronics Engineering received acclaim in a national level automation project competition organized by M/s Mitsubishi Electric Ltd.

Such opportunities will provide you a platform to test your knowledge, hone your skills and give you a real world experience.

Placement Opportunities

After graduating as a Mechanical Engineer from NCU you will be in demand at design bureaus, manufacturing and software industries in the public and private sectors. The automobile industry, heavy engineering, steel plants, power companies, oil and gas companies are some of the sectors which welcome mechanical engineers in large numbers. If you choose you may pursue higher studies in India or abroad.

USPs of Mechanical Engineering

- **Good placements:** In reputed companies including Core Companies like: Maruti, DENSO, Jamna Auto Industries, Subros, Samsung Engineering and L&T etc.
- **Updated and Industry ready syllabi:** Offer flexibility in choosing courses through a large number of departmental and interdepartmental electives.
- **Option of choosing specialization:** In Thermal Engineering, Design, Industrial / Production Engineering & Automobile Engineering at BTech and MTech Level.
- **Emphasis on holistic development:** Through promotion of co-curricular activities and professional societies in the department.
- **Strong Industry-Academia interaction:** Through wide range of activities including Industry associated projects, industrial visits, expert lectures, workshops, conferences and MoUs.





**Department of Computer
Science and Engineering and
Information Technology**



Dr Latika Singh
PhD, National Brain
Research Centre,
Gurugram,
MIT, GJU, Hisar
Associate Professor and
HoD, Dept. of CSE & IT

The Department has a research culture with strong research groups in data sciences and cyber security and Government funded projects and research papers in international/national journals. We have experienced and well qualified faculty with excellent concept delivery through ICT and the latest computing equipments to support research and teaching-learning activities including a High Performance Computing Lab, CISCO Networking Academy, Cloud Lab, RFID lab etc. The faculty's concerted efforts bring out the best in our students by keeping them in touch with the latest developments in global technologies. The choice of courses is based on latest industry trends. You have the flexibility to choose from different Elective and Value Added Courses on latest industry trends like Data Analytics, Big Data and Cyber Security.

We maintain effective industry alliance with MoUs for guest lectures, curriculum revision, internships, placement, live projects with a record of 100% placements. We have international collaborations with universities in the US and Ireland for student and faculty exchange.





The Department of Computer Science and Engineering and Information Technology offers a broad undergraduate curriculum, based on theoretical foundation of computer science and engineering and practical applications, including the designing and implementing of products and software. The curriculum and scheme of studies is framed with the help of experts from the industry, to keep it aligned with their needs. We promote active industry - institute collaboration by identifying areas of interest and taking part in sponsored research projects and consultancy services.

Research @ the Department

Research is the primary activity and focus of the department. Faculty members are active researchers in their respective domains of expertise and lead various. Research within department is grouped into seven clusters namely: Cybersecurity, Data Mining, Soft Computing, High Performance Computing, Computational Optimization, Software Engineering, Information Security, Speech and Image Processing and Bioinformatics.

Projects

Faculty members often work in collaboration with researchers from other groups and departments on

interdisciplinary projects by DST, AICTE, DRDO and MSME. Five patents have also been filed by the department and many best paper awards have been won by the faculty and students.

Research and Computing Laboratories

The department has well-equipped research laboratories for Network Programming, Database Management Systems, Software Engineering, Computer Graphics, Java Programming, Information Security and cryptography, Operating System, Object Oriented Programming, Compiler Design, Computer Networks, Internet and Web Programming, Mobile Computing, Software Testing, C/C++ Programming, Modeling & Simulation, Advanced Algorithms, .NET Programming, Object Oriented Software Engg. During last year we have set up High Performance Computing Lab (HPC) with 1 teraflop computing power. The NCU CISCO Network Academy was inaugurated as a joint venture between THE NORTHCAP University and CISCO and High Performance Computing Lab has also been established with 1 teraflop computing power. The spoken tutorials in collaboration with IIT Bombay have also been introduced.

Achievements and Activities of the Department

Various MoUs have been signed for exploring career opportunities by associating our students with live

project/product development in industries. Through this collaboration, the CSE&IT department would fulfill the commitment to bridge the gap between academic and the industry. The students have obtained the first and third rank in Happening Haryana Startup Weekend. The department conducts the pre-placement interviews and mock tests to facilitate the students with internships and job opportunities. Value Added Courses, Summer Schools & Refresher Courses are carried out as Pre Placement Activity. Various workshops and guest lectures are also conducted to make the students and faculty aware of the latest industry trends. Students have won various competitions for best B.Tech projects.

Professional Societies and Clubs

The department offers a student to enhance his soft skills and technical skills by providing an opportunity to be a part of SOCCER GROUP, Google Student's Club, Computer Society of India, ISTE, SPL, Microsoft Technical Club, Reframers Club, FOSS Group. The e-Gov Cell will provide you a platform for e-Gov projects which benefit society.

Constantly Evolving Curriculum

The department offers streamed electives in Network Security and Cryptography, Big Data, Digital Image Analysis, Data Mining and Warehousing, Computational Modeling, High Performance Computing, Machine Learning, Combinatorics, Cloud Computing, Computational Neuroscience, Digital Forensics. The department is working hard in thrust areas of CYBERSECURITY and DATA MINING. Our curriculum even includes Colloquium, Presentation and Training in which the weightage is given to Summer Trainings, General Proficiency and GATE Exam.

Industry Engagement

At NCU, we have more interaction with the corporate world than any other institution –one of the reasons why we are consistently ranked at the top. The percentage of placed students in 2015 was 107.1 and 100% strength from CSE and IT 4th and 6th Semester had gone for summer training from companies namely Adobe, HCL, MTNL, DRDO, NIC, IIT Delhi and one of the students was also rewarded by HP for being the best intern. The faculty also visited these companies during the internship of our students so as to strengthen up the relationship with the firms and could get the feedback that helps us to improve our curriculum. This practice also helped us to make an association with various firms and we have signed 8 MoU's this year with industries and they even conduct Pre-Placement Interviews for our students.

International Collaborations

The department has collaborated with Michigan Technological University (MTU), USA for the 3+1+1 program wherein a B.Tech student can complete his fourth year from MTU. He can also complete his post-

graduation in one year from there. Teacher training and Academic Research Program is also a part of the collaboration. The department also holds the collaboration with ITB, Ireland.

USPs of CSE & IT

- **Research Culture:** Strong research groups in data sciences and cyber security with Govt. funded projects and research papers in international/ national journals.
- **Experienced and well qualified faculty:** Brings out the best in students by keeping them in touch with the latest state of art technologies and provide supportive environment for students to study.
- **Effective Industry Alliance and International Tie-ups:** MoUs with industry for placement, guest lectures, curriculum revision, intern-ships, live projects with record of 100% placements. Collaboration with universities from US and Ireland for student and faculty exchange.
- **State-of-art infrastructure:** Excellent concept delivery through ICT and up to date computing equipment's to support research and teaching activities including High Performance Computing Lab, CISCO Networking Academy, Cloud Lab, RFID lab etc.



- **In Collaboration with IBM on latest industry trends:** Can choose Programme Electives jointly run by NCU and IBM on latest industry trends like Data Analytics, Big Data and Cyber Security.



- **Michigan Technological University:** An MoU with the University of Michigan Technological University Houghton, Michigan, USA was signed in March 2016, to implement the 3+1+1 programme in Computer Science.



- **An MOU between the University of Regina (U of R), Canada and The NorthCap University (NCU), Gurugram is in a advanced stage of finalization.** NCU students of MTech CSE are eligible to apply for a Master of Engineering degree in Software Systems Engineering. Selected students will proceed to Canada after 2 semesters and get a Canadian degree in Master of Engineering.





Dr Amit Srivastava

PhD, ME, Indian Institute of Science, Bengaluru
Associate Professor & Officiating Head, Department Civil and Environmental Engineering

The BTech programme offered by the Department of Civil & Environmental Engineering is accredited by the National Board of Accreditation (NBA) and will soon also be accredited by NABL leading to enhancement of consultancy and research projects at the University. Well qualified, dedicated faculty and committed technical staff will assist you in the teaching learning processes at the Department. Our state-of-the-art laboratory facilities are readily available for hands-on practical work and research. We maintain outstanding industry interaction through guest lectures, industry visits, workshops, internships and later placements at respected companies like CB&I, Ireo Infrastructure, India Bulls, L&T, Punj Lloyd Engineering etc.

Civil Engineering is one of the oldest branches of Engineering, which deals with the analysis, design, construction and maintenance of the physical and built environment and as a civil engineer you will contribute in improving the quality of lives in society. After graduating a career in civil engineering is highly rewarding.



About Civil Engineering

Civil engineering traditionally consists of several sub-disciplines, including Structural Engineering (analysis and design of structures); Geotechnical Engineering (analysis and design of foundations and soil-related problems); Water Resources Engineering; Environmental Engineering (water treatment, wastewater treatment, pollution hazards etc.); Transportation Engineering (analysis and design of roads, railways, airports and harbours); Surveying (mapping and setting out works); Construction Engineering (construction materials, construction and maintenance of various structures); and new thrust areas such as green technology, sustainability, natural calamities and other future challenges such as climate change.

resources; and a consciousness of environmental issues. She/he should be skilled in the use of computers for analysis, design and construction; new technologies like remote sensing, intelligent buildings, intelligent transport systems and green buildings; managerial skills for managing resources and structures; communication skills, and the need for environmental consciousness in the design for environmental sustainability, have all become part of Civil Engineering.



How does NCU fulfill the requirements?

The Civil Engineering curriculum and scheme of studies at NCU covers the study of Basic Sciences, Programme Core, Programme Electives, Open Electives, a



Requirements of a Civil Engineer

A civil engineer should possess skills for analysis, design, construction and maintenance of various structures; computing, managerial and communication skills for optimal management of





compulsory foreign language, foundation course, communication and technical skills. The curriculum and scheme of studies is kept relevant by drawing on the expertise of the industry and leading academicians from India and abroad.

The laboratories in the Department provide you the opportunity to conduct basic experiments as well as advanced research. The Department is credited with having highly qualified and experienced faculty with extensive teaching and research experience. Moreover, the Department also offers post graduate degree programmes and PhD programme in Civil engineering and these give our undergraduate students an exposure to higher level courses and research.

How we equip our students for the 'Real World'?

Your career prospects will be sharpened through real-world practical training, project work, industrial visits and exposure to the latest software. In addition, to

keep you abreast with the latest developments in the industry, we have industry experts deliver guest lectures regularly. Communication skills are improved through periodical technical colloquiums in which you will make presentations of your skills and research achievement. For acquiring managerial skills you will prepare reports of case studies. Regular field visits right from the first-year to the final-year enable us to help bridge the gap between the classroom and real-world problems.

Departmental Magazine

The Department's magazine 'Space Newsletter' will give you the opportunity to showcase your creative writing skills. It provides a platform to share news, views about latest developments in the field of civil and environmental engineering and to embrace the latest technology and current trends. In the non-technical section you can share your articles, short stories, puzzles, quizzes etc.



Professional Societies

The main objective of professional societies is to develop skills in technical and non-technical fields, beyond the classroom and to encourage professional networking and exposure to the professional world. The Department of Civil & Environmental Engineering has active student chapters of the Institution of Engineers (India) and the American Society of Civil Engineers (India). In 2009 the Department established the Society in Pursuit of Advances in Civil Engineering (SPACE) in the University. 1st and 2nd Year students are members of SPACE.



Laboratory Facilities

The Department of Civil and Environmental Engineering has a variety of laboratories for Structural Analysis, Soil Mechanics and Geotechnology, Concrete and Highway Engineering, Fluid Mechanics, Surveying, Environmental Engineering, Engineering Geology, and Computer Simulation and Modelling.

Some of the major equipments with which experiments can be conducted on fundamental and field projects include the Triaxial Shear testing equipment with data acquisition system in the Soil Mechanics and Geotechnology laboratory, Total Station in the Surveying laboratory, Tilting Flume in the Fluid Mechanics laboratory, Spectrophotometer and High-Volume Samplers in the Environmental Engineering laboratory, Computerized Universal Testing Machine in the Strength of Material laboratory.



Placement Opportunities

A career as a civil engineer offers several lucrative job avenues in both public and private sectors. Some popular options include Steel Authority of India, National Hydroelectric Power Corporation, Bharat Heavy Electricals Ltd., consulting firms, railways, defence forces, municipal corporations, State and Central government organizations like PWD, CPWD, DDA and DMRC. Multinational and private sector companies involved in infrastructure projects like airports, ports, highways, metros, railways, and so on, including contracting and consulting firms, regularly recruit our civil engineers. Initially, the nature of the job may be construction supervision, design, marketing or production.



Experienced civil engineers can manage large-scale projects. Other areas in which our civil engineers work include teaching and research, for which you will need to acquire additional degrees at the Master's and PhD levels. Civil Engineering offers unparalleled opportunities to work overseas. By becoming professionally qualified you will be able to enter the international workplace and work abroad on mega projects. Today the world is undergoing vast changes and the coming decades will be some of the most creative, demanding and rewarding times for civil engineers.

USPs of Civil & Environmental Engineering

- **Intellectual Capital:** Well qualified, and dedicated faculty and committed technical staff.
- **State of the art laboratory facilities:** For academia and research.
- **Accreditation:** The BTech Programme is accredited by the National Board of Accreditation and is geared up for NABL accreditation to further facilitate consultancy and research.
- **Good placements:** With core companies e.g. CB&I, Ireo Infrastructure, India Bulls, L & T, Punj Lloyd Engineering etc.
- **Outstanding industry university interaction:** Through lectures, industrial visits, internships and workshops.



Dr Rashmi Tyagi
PhD, MSc, BHU, Varanasi
Associate Professor &
Officiating Head,
Dept. of Applied Sciences

We are proud to have a rich pool of talent with highly qualified, experienced and research-driven faculty many of them from IITs. The department has good research labs and facilities, developed with the support of government funding agencies, thus creating infrastructure for interdisciplinary research.

We provide a strong foundation in the areas of Mathematics, Physics and Chemistry to engineering and other disciplines, and ignite the spark for interdisciplinary research and development.

The department offers programmes at undergraduate, postgraduate and doctoral levels in major fields of science. We keep a small class size for better one-to-one interaction. Our BSc and MSc programmes have internship and project based curriculum, at par with other reputed institutions. We offer special guidance for NET, GATE, JAM, NBHM and other competitive exams.



About the Department

At the Department of Applied Sciences we offer you courses in Basic Sciences that aim at building a strong foundation and developing the necessary skill-set to succeed in the professional world. The Department offers academic programmes leading to BSc (Hons) in Mathematics, MSc in Mathematics and PhD degree in selected areas of Mathematics, Physics and Chemistry. The Department lays a strong foundation by offering core and elective courses in Mathematics, Physics, Chemistry and Environment Studies to BTech, MTech, MBA, BBA and Pre-PhD courses.

The Department optimizes and customizes the curricula and syllabi to ensure that you get the relevant inputs essential to the current needs of the industry. One of the major strengths of the Department is the inter-disciplinary research carried out by the faculty and research scholars.



Faculty

In its quest for continuous improvement, formal training and development of all faculty members is an ongoing process. The Department regularly organizes workshops on communication skills and Matlab under the Faculty Development Programme. Other than the classroom teaching, faculty members of the Department share their knowledge and experience by conducting seminars which are open to both students and faculty. Our highly qualified and competent faculty is continuously engaged in publishing research papers, books, guiding scholars and students in their specialized areas.



Research

The Department is credited with having secured recognition from Government institutions like the Department of Science and Technology (DST), Council for Scientific and Industrial Research (CSIR), and Defence Research and Development Organisation (DRDO), who have funded various research projects at the University.

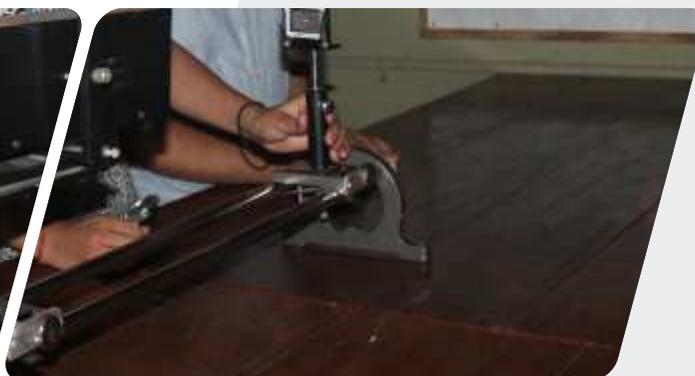
- Sponsored Research Projects

- To prepare a state-of-the-art Status Report on Phase Retrieval Techniques in Optics and Their Relative Performance, funded by DRDO (CARS) has recently been completed.
- Development of Polyurethane coating for blast mitigation funded by DRDO (CARS) is ongoing.
- Study of optical and electrical properties of nanostructured glasses for application in optical recording media funded by DST (WOSA) is ongoing.
- Lateral Flow Assay Strip Sensor Development for Non-Invasive Point of Care Diagnosis of Urinary Tract Infection is technically approved for funding.
- Study of Polymer nanocomposites for solar cell applications is technically approved for funding.



Departmental Magazine

The 'Wall Journal' is the magazine published by the Department. You can contribute technical and non-technical news, views, articles, puzzles etc. The aim of the technical section is to develop your interest and



skills of writing articles on technical subjects and will prove to be a quality dissemination channel for your work.

Professional Societies

The Department of Applied Sciences has an effective student chapter of the Enactus Society. It is an international organization that connects students, academics and business leaders through entrepreneurial-based projects that empower people to transform opportunities into real, sustainable progress for themselves and their community. The Society for Innovations and Development (SID) enhances the academic and industrial experiences of research students at the University. The Society encourages, develops, enables, and promotes the entrepreneurial and innovative talents and ambitions

of all students of the University. You can be an active member of the Mathematic Society and improve your maths skills and actively participate in the SPIE student chapter as well.

USPs of Applied Sciences

- **Highly experienced, research driven PhD faculty** (Mostly from IITs and NET Qualified)
- **Small Class size:** For better one-to-one interaction
- **Internship and Project based curriculum**
- **Higher studies options:** Upto PhD at par with other reputed institutes
- **Special guidance:** For NET, GATE, JAM, NBHM and other competitive exams





Dr Ruchi Nayyar
PhD, Singhania University,
Rajasthan
MCA, IGNOU, Delhi
MBA, SCDL, Pune
HOD, School of Management

The School of Management (SOM) at The NorthCap University is one of the top B Schools in Delhi-NCR. The attraction of studying for a degree at SOM, whether it is MBA, BBA, BCom (H) or BSc Eco (H), lies in combining theory and practice. It is this aspect that has given so much market value to our graduates. We are favoured with several factors that assist us in this effort such as our location in the hub of leading corporates, national and international. We handle learning situations and deliver results to the satisfaction of our corporate patrons, built upon extensive experience and deep insights of our highly qualified and skilled faculty. We work in an interdisciplinary environment and utilize the technical expertise of our School of Engineering and Technology. This helps us to engage in meaningful dialogue with numerous business enterprises and take up case studies which enable students to take on the role of decision makers. Active engagement during class room activities enhance students' problem solving and analytical skills and establish a framework for analysis. Learning is a never-ending process and you will experience a phase of learning that will help shape your life beyond your expectations. Come and join us in this exciting voyage of self-discovery and startling business revelations.

For a life-changing learning experience and untold career options join NCU's School of Management (SOM). Our Management programmes focus on developing well-rounded global leaders ready to thrive and succeed in today's business environment. Learn from our highly respected faculty who are also experienced consultants to financial institutions, Government agencies, national and multinational companies etc. NCU is the best choice to get the right education to become a corporate doyen.

The School of Management has been ranked No. 3 amongst Private B-Schools in Haryana and No. 20 amongst Top B-Schools of Eminence in the CSR-GHRDC Survey 2015 published in the Competition Success Review's November 2015 issue. SOM has been ranked as 'A-5' by the Indian Management, a journal of All India Management Association (AIMA), Business Standard publication in June 2015. More importantly SOM achieved a score of 90% for its 'Intellectual Capital'.

Global Perspective

Build an international mindset through multifaceted learning experiences at NCU as it is the right place for access to distinguished leaders from across the world. They visit the University as faculty and mentors, deliver special guest lectures and interact with students. The School of Management has MoUs and alliances with world class institutions to provide a global perspective to our management students. Having started off as the gateway to the London School of Economics and Political Science, we have since moved forward and forged alliances in the areas of student and faculty exchange, professional attachment and higher education with leading universities like University of Chester (UK) and Institute of Technology Blanchardstown (Ireland). This enhances the overall learning and research experience of NCU students.

Industry Collaboration

Our vibrant campus is in the industrial hub of Gurugram

surrounded by global business and finance, having close association with living lessons in start-ups and entrepreneurship. We help you build a global network as this is the market eager for your skills and outlook. Industry visits, guest lectures by industry experts, summer internship, live projects and a major research project in the final semester will expose you to real-life situations and help you apply theoretical concepts to contemporary business problems.

The School of Management follows a systems based approach to management education and imparts holistic learning with emphasis on industry needs of realistic hands-on management education aimed at operational efficiency, process focus, quality deliverables and use of IT for business effectiveness.

Curriculum

Choice of Electives is not only from the School of Management, but also from other Schools as Managers in real life need technical, managerial and legal competency sets. We stress on holistic learning, entrepreneurship, values and professional ethics. NCU endeavours to create business leaders of tomorrow – business leaders with a sense of values and ethics, sensitive to the environment and to other human beings.

Centre for Creativity, Innovation and Entrepreneurship

Entrepreneurship Development activities find a special place in the curriculum as we believe that it is the key for nation building. Young minds are mentored to look at problems in society and come up with ideas to solve them and subsequently implement them. We kindle your entrepreneurial spirit as well as hand-hold our potential and budding entrepreneurs. The Centre for Creativity, Innovation and Entrepreneurship promotes interdisciplinary idea generation, innovation and strengthening industry tie-ups. The Centre runs short term certificate courses to make you better employable.





The Centre houses workstations with I-Lab facilities having software for innovation, statistical software tools like SPSS, industry database like Prowess and an advanced modelling tool STELLA.



Research @ SOM

The School focuses on developing your research capabilities and faculty members help you to publish research papers in various national and international journals. Faculty members are involved in research activities and publish and present their research papers in national and international journals and conferences. Recently, a faculty research paper was selected by the Emerald Group Publishing Ltd. (UK) for the '2015 Outstanding Paper Award'.



New Value Added Courses introduced in the School of Management

Foundation course in Business Analytics

Foundation Course in Business Analytics, in association with IBM, empowers students to independently explore, analyze, visualize and share data. In minutes, analysts and line-of-business managers can create and share custom applications, dashboards and visualizations to help solve individual and workgroup challenges. As part of this course participants will get in-depth understanding of Business Analytics using IBM Cognos Insight tool.

Fundamental course in Business Analytics

Descriptive Analytics helps an organization drive better decisions, achieve better results, and gain a deeper understanding of trends, opportunities, weaknesses and threats. Fundamental Course in Business Analytics, in association with IBM, will enable students to explore data, in any combination and over any time period with a broad range of analytics capabilities using IBM Cognos BI. This course will be on business perspective with IBM Cognos BI as a tool to achieve the report outputs.



Holistic Development

For your holistic development SOM gives you the opportunity to actively participate in clubs, professional societies, extracurricular activities and sports and win numerous awards and recognitions. There is never a dull moment as you can choose to be involved in workshops, seminars, economic fest 'Arthshastra', or attend a Capsule Course such as on Social Media Marketing and acquire skills for a successful digital marketing campaign. Value-added programmes for MBA, BBA and BCom students are conducted throughout the year.



Placements

Business school graduates are driving change through leadership positions across all corporates, industries and sectors like banking and finance, information system management, investment banking, private equity, management consulting, data analytics, Human Resources (HR) and entrepreneurship.

USPs of School of Management

- Industry-rich curriculum
- State-of-the-art infrastructure
- Well-trained faculty
- Industry collaborated value added courses in Business Analytics
- Focus on Entrepreneurship
- Curriculum designed by an industry consortium
- Mentoring
- 100% placements



• Courses in Business Analytics in 2nd and 3rd Semester in Association with IBM



Prof. Pushpesh Pant
PhD (JNU)
Professor & Dean,
School of Law

The School of Law offers five years Integrated BBA-LLB (Hons) Degree Programme, one year's LLM programme with specialization in Human Rights, Corporate Law and IPR; and PhD in Law and emphasis is on Clinical Legal Education. Our faculty has wide industry experience and we offer structured internship and placement opportunities to our students in top Law firms, Delhi High Court, Tribunals and Supreme Court of India.

THE NORTHCAP UNIVERSITY's School of Law (SOL) is amongst the premier law schools in North India and the preferred destination for every law aspirant. SOL is a benchmark for other budding law schools. We provide the highest quality professional legal education to equip you to face the challenges posed by the internationalization of the legal profession and to equip you for transnational practice.

The NCU School of Law

You get excellent legal education through interactive teaching-learning processes, clinical opportunities, exposures to the legal profession through internships and externships, industry ready curricula and innumerable opportunities to interact with stalwarts in the legal profession. After graduating from SOL you will be equipped not only with knowledge, skills and values to make you a competent legal professional but also become a complete human being.

Apart from a team of competent and dedicated law teachers, a host of other legal professionals like judges, eminent lawyers, in-house general counsels, activists, bureaucrats and leaders of the bar and the bench regularly visit the School and will groom you for lawyering and to develop your critical legal thinking skills. We integrate the study of Law with Management subjects to assist you will assist you to excel not only as Lawyers but as great Managers also.

The innovative course matrix adopted by the School of Law with Honours and Elective Courses on specialization and super specialization subjects will give you a competitive edge over other law students studying elsewhere. With a small class size of 40-45 students and with a faculty student ratio of 1:15 NCU's School of Law takes pride in these stand-alone credentials and uniqueness amongst other law schools.

Research

To foster research we publish the NCU Law Review, a biannual, blind peer-reviewed journal. It serves as a forum for the promotion and circulation of views on contemporary legal issues and for encouraging quality research and publications. A research scholar has recently published three books on environment and sustainable development. She was sponsored by the International Union for Conservation of Nature





(IUCN) and the Research Institute of Environmental Law (RIEL), Wuhan University (China), to attend a workshop in China.

The Centre for Intellectual Property Rights Advocacy, Research and Training (CIPRART)

At SOL you can facilitate in the preparation and filing of patent applications by the faculty and students of the University and promote awareness on intellectual property rights. You also get the opportunity of helping society through SOL's Legal Aid Clinic which provides free legal advice to the local community.

The Fun Part at SOL

Studying at SOL will give you opportunities for participating in various Moot Court competitions, debates, MUNs and other extracurricular activities, including sports as we not only encourage you to be academically sound, but also maintain an atmosphere conducive for your all-round development. We also organize the National Environmental Law Moot Court Competition every year, which is already being touted as a one of its kind Environmental and Constitutional Law Moot Court Competition in the country.

Internships & Placements

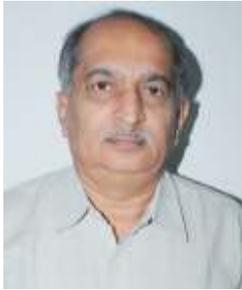
At SOL you can choose to be a part of the Recruitment Co-ordination Committee – a student-run body responsible for internships and placements of law students. Our students intern and work closely with prominent Supreme Court lawyers, Government organisations, public prosecutors, law firms of repute,

eminent lawyers practicing in various High Courts and District Courts and in prominent NGOs specializing in public interest litigations. After graduating from SOL we support you for your placement with reputed law firms.

Lawyers, can also work as legal advisors in companies, public sector undertakings, NGOs, legal process outsourcing (LPO). By clearing exams conducted by Public Service Commissions, a law graduate can become a judge.

USPs of School of Law

- **Multiple Offerings:** School of Law offers five years Integrated BBA LLB (Hons) Degree Programme, One year LLM programme with specialization in Human Rights, Corporate Law and IPR; and Ph.D. in Law.
- **Emphasis on Clinical Legal Education.**
- **Strong Faculty base with live experience.**
- **Good Internships and Placements:** Top Law Firms, Delhi High Court, Tribunals and Supreme Court of India.
- "2nd Rank in Northern Region and 5th Rank in Category of 'Eminence' awarded by Global Human Resource Development Centre (GHRDC), New Delhi"



Mr BK Gupta
BSc (Hons) Eletrical Engg,
Punjab Engineering College,
Chandigarh
Director,
School of Professional
Attachment

The youth of today has got tremendous potential to transform society and the nation. The School of Professional Attachment (SPA) has been established at NCU to enhance this potential and to help you plan your career better. Its objective is to make you industry ready and capable of standing tall to face contemporary challenges of the corporate world and have a smooth transition from Campus-to-Corporate.

SPA is engaged in the task of enhancing student employability, improved industry internship attachment, increased students' ownership, career counselling and gap analysis, obtaining higher and better job placements with a wider industry reach and obtaining industry feedback for improving the academic curriculum. You, as an NCU student will be trained on aspects like facing interviews and group discussions, professional resume writing, cracking aptitude tests, soft skill training and internship projects.

The University is a preferred destination for most of the MNCs for hiring students from various streams of Engineering, Management and Law. More than a hundred companies visit NCU regularly every year for carrying out placement drives and generally end up picking up higher numbers than what they had originally planned based upon the performance of our students. The University boasts of an excellent track record of placements.

The University is proud of its students who have been serving in various capacities as technocrats, business managers, industrialists and entrepreneurs. The most frequently cited accolades regarding our students from the organizations which are regular recruiters from NCU include our students' flexibility, ability to learn quickly, versatility, performance as team players, excellent analytical skills, and most importantly the positive attitude that they bring to their jobs. We are confident that our students will make a mark wherever they go and make their alma mater proud.

We wish you a great learning experience here at The NorthCap University and an equally rewarding career thereafter.



The School of Professional Attachment (SPA) at NCU is responsible for nurturing you from induction to placement, a bridge between the classroom and your first job. SPA ensures regular professional attachment of academics with industry for your professional enrichment and better job opportunities. Regular grooming sessions are held to explain various activities during campus placement drives such as Pre Placement Talks (PPT) by company officials, aptitude tests, Group Discussions (GDs), technical and HR interviews etc. To get the feel of a real-life working environment and to be up-to-date with the latest technologies you will undertake summer internship by working in the industry for a period of ten weeks.

Imparting Soft Skills

Soft skills are the abilities and traits pertaining to personality, attitude and behaviour in addition to core skills i.e. technical knowledge. It helps to raise your EQ (Emotional Intelligence Quotient). There is a strong need to acquire these skills right from the moment you

enter the first year of professional studies, rather than waiting till the final year or just before the job placement selection process begins.

There is an important saying 'Technical Skills will get you the interview, but it's your Soft Skills that get you the job'. At NCU your soft skills are developed through a series of initiatives like lectures, seminars, talks from industry experts and workshops. This process begins right from the time you join NCU and continue till you graduate.

Industry internship attachment

Internship gives the opportunity to develop relevant skills, knowledge and experience. Industry internship provides you the opportunity to get attached with a professional organization, on a full-time basis, for a period of eight to ten weeks to:

- Get exposed to a real-life work environment to acquire first-hand practical experience and sharpen your skills in tune with the requirements of the industry.





- Interact with real life working professionals and gain valuable references to gain an edge for better job placements.
- Apply theoretical knowledge gained through academic studies to the workplace, and blend it with real-life practical situations.
- Serve as an opportunity to showcase your potential for a prospective employment opportunity with the same organization.

Internship thus acts as a stepping stone for entering into the professional world with the required skills. The job market is competitive and by showing your commitment as soon as you can, you will stand out. SPA extends all possible help in getting you placed with an appropriate company for your internship so that you get career-related work experience.



'Aarohan' and 'Lakshay' clubs

The NorthCap University lays strong emphasis on equipping you with requisite skills to successfully migrate from the 'Campus to Corporate'. To achieve this objective, two student led clubs 'Aarohan' and 'Lakshay' help you in grooming and placement related activities, supervised and guided by SPA.

- 'Aarohan' starts from the day you join NCU and continues till you get placed. It includes three main aspects – learning, practical exposure and assessment. 'Aarohan' is a label given to a programme called PPP (pre-placement preparation). It has been designed to help in your

professional grooming with the objective of preparing you climb the ladder of success in your professional life.

'Aarohan' is managed by student executive members drawn from the three schools namely School of Engineering & Technology, School of Management and School of Law. Grooming activities are carried out round the year by conducting seminars, invited talks by industry experts, presentation competitions, mock group discussions and interviews.

- 'Lakshay' targets final placement related activities. It will serve as a launching pad for you make it to the best organization based upon your professional interests and abilities. 'Lakshay' has been designed to cover all placement related activities which generally begin when you will enter the final year until you finally get placed. It includes registration for placement, opting for attending the placement drive of a company and appearing for the placement.



Placement Portal

The complete working of SPA has been automated. A placement portal is used as a tool for all communication with students. It is used for:

- Uploading student resumes
- Posting the company profile and job profile of a visiting employer company
- Accepting student nominations for the company
- Posting schedule of on campus placement drives
- List of successfully selected students
- Issue of 'No Objection Certificate' to students for joining industry internship
- Schedule of invited talks by industry experts.

SPA stands committed to hand-holding you right from the time you join the University till you join your dream company and even thereafter as alumni, for the benefit of providing the wisdom of your experience to your younger college mates in the form of career counselling and getting better job opportunities.

*Technical Skills
will get you
the interview,
but it's your Soft Skills
that gets you the job*





The University has strong links with a variety of employers – from startups to multinational corporations - all operating across a multitude of sectors. There has been a tremendous response from the corporate world with leading companies visiting NCU campus for recruitments with attractive salary packages. Efforts of SPA have resulted in over 90% placements of students who passed out in June 2015, in premier companies like Tata Consultancy Services (172 students received placement offers on day 1), Libsys Corp., Newgen, Nagarro Software Pvt. Ltd, Deloitte Consulting, Ernst & Young, Maruti Suzuki, CB&I, Samsung Engineering, SK Engineering, S K E&C, Think Future Technologies, Mentor Graphics and others. A positive feedback of the previously employed students, from the employers has resulted in these companies continuing to return for campus placements with more inclusions each year. Besides the placements, a number of our students have gone in for higher studies in India, including IITs, and to USA and Canada. Some of the companies that have been carrying out placements include:





Dr Shrutimita Mehta
PhD, CCS University, Meerut
MA (English), University of Delhi
Three years' Advanced Diploma (German), University of Delhi
Assistant Professor & Head, Centre for Languages Learning (CLL)
Deputy Dean (Students)

The Centre offers mandatory courses in French, German and Spanish. Every student enrolled in UG courses across the three Schools acquires a foreign language before graduation. We lay a strong emphasis on enhancing your communication skills by encouraging you to articulate your ideas and demonstrate advanced reading, writing, listening and speaking skills. The Centre offers courses on Personal Skill Development, Human Values and Professional Ethics, Work Life Readiness and Campus to Corporate. By integrating ICT into classroom teaching, the Centre attempts to bridge the gap between academia and the professional world.

Developments in technology, research and higher education require multilingual communicators and having proficiency in foreign languages will certainly give you an edge in terms of placements.

To achieve excellence in any field it is of utmost importance to possess good communication skills. Besides, developments in technology, research and higher education require multilingual communicators having proficiency in foreign languages. If you want to have an edge over others in terms of placements and climbing the ladder of success, look no further as we at NCU's Centre for Languages Learning (CLL) will hone your English language, communication and soft skills. We will also provide you the opportunity to acquire proficiency in foreign languages such as French, German, Spanish etc. so that you are well equipped to meet global challenges with confidence.



Faculty

We have a highly experienced team of qualified and talented faculty ready to provide you quality language education through Core and Elective Courses using innovative teaching techniques and learning resources. As we have students coming from diverse backgrounds possessing different speaking and writing abilities CLL conducts a diagnostic test in English for 1st Year especially for BTech students. Those

who are weak in speaking and writing skills are identified and remedial classes are taken to improve their skills. We lay strong emphasis on enhancing the writing, reading, speaking and listening skills of all our students. We will also help you to prepare for interviews, group discussions, write your CV and resume at the time of placements.



Curriculum

Our courses are designed keeping in mind the changing global patterns in business and communication and catering to the emerging need of not only polishing your interactive skills in English but also affording you an opportunity to acquire proficiency in a foreign languages. The Centre conducts specialized workshops/ training sessions in areas like Soft Skills, Personality Development, Body Language etc. Besides Core Courses in English that the Centre is offering to all Schools of the University, it is also running basic and advanced Certificate Courses in German, French and Spanish. You can opt for any of the three foreign languages. The Centre has a Foreign Languages Club (FLC), and if you are keen to learn languages you

can become a part of it. The curriculum of the courses is developed to enhance your employability skills.



Language Lab

We have a modern well equipped digital language lab that offers rich language learning content. You can use it extensively to familiarize yourself with content from different sources and media such as text, images, audio, and video. The idea is to offer an alternative way of teaching and to promote the practice of skills you learn in class by using technology as a tool.

The Centre runs various clubs like Samwad, Success Mantra, Lingua Franca, Mainstream and Abhivyakt which conduct several enriching activities, competitions, seminars etc. You can be an active participant of these clubs, voice your opinion on contemporary issues and polish your language, communication, interpersonal skills and be ready to face the world of tomorrow.

USPs of the Centre for Languages Learning

- **Emphasis on learning a foreign language:** The Centre offers mandatory courses in French, German and Spanish. Every student enrolled in UG courses across the three Schools acquires one foreign language basic skill before graduation.
- **Acquisition of Soft Skills:** Integrating ICT into classroom teaching, the Centre attempts to bridge the gap between academia and professional world through the instruction of soft skills.
- **Enhancement of Communication skills:** The Centre strives to encourage students to articulate their ideas and demonstrate advanced reading, writing, listening and speaking skills.
- **Emphasis on Personal Skills and Human Values:** The Centre offers courses on Personal Skill Development, Human Values and Professional Ethics, Work Life Readiness and Campus to Corporate.





If you are creative, have new ideas which you want to test, see them materialize and patent them, we will assist you in every way as The NorthCap University accords the highest priority to research and promotes sponsored research, project consultancy and industry academic linkages. It has set up a state of the art Research Development and Industry Liaison (RDIL) cell in the University for this purpose.



Central Research Facility

After the recognition of NCU as a Publicly Funded Research Centre/University by the Department of Scientific and Industrial Research, Government of India, (one of the few self-financed educational institutions or universities to be so recognized), the Central Research Facility (CRF) was established in the University.



Contribution of Distinguished Research Professors

Distinguished research professors of eminence strengthen research activities at the Department level

by conducting workshops, seminars, initiating socially relevant student projects and establish national and international level collaborative programmes. Under their guidance research groups have been formed. These groups are working in advanced research areas, These are interdepartmental and multidisciplinary with faculty members from two or more departments participating to complement each other's skills.



Best BTech Project award

Best BTech project award is given to Final Year BTech students based on FOCUS i.e. Financial viability of the project, its Originality or newness, Customer-end applicability and Usefulness to Society.



Rs 10 Million Vice Chancellor's Innovation Fund

The VC's fund has been instituted to support innovative ideas amongst research scholars, final year BTech projects and to seed research activity for faculty members where external funding is not readily available. Director, School of Engineering and

Technology, monitors the progress and outcomes/proper utilization of allocated funds.

Best Research Paper Awards

NCU encourages and recognizes research publications of research scholars and faculty through the Best Research Paper Award.

Tech Fests

Cerebration, Technovation and NCU's SAE Collegiate Club's technical cum automotive fest, SAKSHAM are technical fests that will give you an opportunity to showcase your technical skills in an environment of competition





with colleges all over North-India. These programmes provide you a platform to demonstrate creativity, innovation and technical knowledge. Technical competitions are regularly held in diverse fields such as robotics, building all-terrain vehicles, hardware assembly, design and programming, website design, and graffiti where you get the chance to showcase your innovative projects.

Publications

Our faculty members actively participate in national and international conferences and seminars throughout the year. They author books, book chapters and their research papers are published in refereed journals. Over 200 research paper have been published in last one year.





Beyond the Classroom



Apart from the core courses in Sciences, Engineering, Management and Law you will be nurtured to be a leader in every realm of life. Personality development, sports and a wide variety of

extracurricular activities make up an important part of student life. The University provides excellent physical infrastructure, necessary support and offers a myriad of opportunities for your holistic development.

Sports and Extracurricular Activities

If you want the thrill of competition or desire physical fitness NCU will provide you a wealth of sporting opportunities, both on and off campus. The University has sports facilities for nearly all indoor and outdoor sports and numerous clubs that provide an array of activities to choose from. The cricket-cum-football ground is arguably one of the finest grounds in Gurugram, with floodlight facilities for night sports. The sports ground is embellished with a new well equipped gymnasium, athletics track, as well as a multipurpose sports arena and amphitheatre. We encourage participation in sports as it inculcates qualities of commitment, dedication, integrity, perseverance, leadership, fair play and help in the development of various skills. Our students have been participating and performing well in different sports tournaments in and outside Delhi/ NCR. Sports have earned the University several awards, with winners' trophies in basketball, football and cricket in inter-university tournaments across India. Our sporting and extra curricular activities are scheduled to fit in with the academic timetable, allowing everyone to participate in the late afternoon and on Saturdays.



Students' Activities

A lot of activities are available for honing talent and for enhancement of your overall personality. They will enrich your life, relieve mental pressures and provide relaxation so that you reach your full potential.

Regular activities occur on and off campus and are open to all students. The campus is enlivened by the number and diversity of its students' organizations. Many students' groups are dedicated to community service and social action. The office of Dy Dean Students' Activities serves as a living-learning centre for students to coordinate a broad range of social, cultural, intellectual, educational and leadership programmes.

You will get varied opportunities to participate in the performing arts - in theatre productions, music ensembles, dance groups, or to become involved in committees that sponsor speakers or organize cultural festivals. The music, photography, art, painting, films and dramatics societies are active throughout the year. Symposia of literary pursuits like debates, group

discussions and quizzes are regularly conducted. A variety of cultural activities, festivals and tech fests, which synthesize technical knowledge with fun, are organized. 'Momentum', the annual cultural festival of the University, and 'Club Fiesta' are occasions for you to display your talent and give artistic expression to your personality.

National Service Scheme

The University has opened a National Service Scheme (Self Financing Unit which enables students to participate in various national and International activities, being conducted over the ministry of youth affairs and sports, Govt. of India.



Special Activities and Trips

If you have interest in journalism there are rich opportunities available for you. VectorTech, the bi-annual publication about the life at the University serves as a platform for presenting opinion on a wide spectrum of issues. In addition, a monthly 'Newsletter' serves as the chief source of campus news.

The Recreational Club organizes adventure cum educational trips regularly. All trips are designed to educate and build your confidence, provide you thrills of adventure and outdoor recreation, explore and learn more, as well as promote the ethical use of environmental resources.

Musical concerts are organized under the aegis of SPIC MACAY, where students get an opportunity to attend performances by renowned exponents of classical Indian music and dance. Renowned artists like Pandit Hari Prasad Chaurasia, Pandit Neeladri Kumar, Pandit Vishwa Mohan Bhatt, Pandit Salil Bhatt, Shri TN Krishnan, Shrimati Savita Devi, Pandit Rajendra Prasanna, Pandit Prateek Chaudhuri, Shrimati Rashmi Aggarwal, Mr Gustavo Tavares and guitarist Anders Clemens, Ms Ragini Chandrashekar, renowned folk artist Ustad Rehmat Khan Langa and many more have performed at the University.

Merit cum Means Fee Concessions/Scholarships

The NorthCap University considers it a social responsibility in putting education within the reach of everyone and grants a number of full/partial scholarships/fee concessions of about Rs. 1.5 crores every year to over 200 students from the Schools of Engineering, Management and Law so as to encourage promising students from economically and socially weaker sections of society as per University rules.



Scholarships are also awarded for encouraging meritocracy.

Social Outreach

If you have genuine concern for those who are not so privileged and want to reach out to those whose lives you can touch and make a difference you can do so through the 'Yukti' club at NCU. It focuses on spreading happiness amongst different sections of society by regularly organizing activities such as:

- Blood donation camps at the University for the benefit of the sick.
- Slum Childrens' Day through competitions (painting, singing, dancing etc.); movie shows; gifts; refreshments etc.
- Invite young students of Government schools to see a University and get inspired to pursue higher education.
- Student volunteers take forward the 'Swachh Bharat' campaign for a clean and healthy India and thereby a more productive India.

- Distribute clothes to the economically weaker sections through the *Vastradaan* initiative.
- Provide necessary amenities, medicines etc. to the old and the disabled inmates of the Old Age Home and be empathetic listeners and make them feel cared.
- Invite children from the orphanages and encourage them to participate in cultural programmes in the University.

These initiatives give our students an insight into the realities of life, instill in them a level of responsibility, trust and confidence about themselves and the community, and help them grow into role models, both as technocrats as well as caring human beings. NCU's mantra is 'Empowered individuals make an empowered Nation'.





We have an active Alumni Association with a vibrant 5000-strong alumni network. Besides an Annual Alumni meet, which is a regular feature; we have frequent interactions with our alumni, so as to inspire students to share lifelong commitment, pride, and passion for the University. We engage alumni as active members of the University community, and strive to develop programmes and services that add value to the alumni experience and to the life and work of the University.

About Gurugram

Gurugram is situated in the National Capital Region (NCR) of Delhi and is just 7 kms away from the Indira Gandhi International Airport, New Delhi. The district is fringed by Delhi and Rajasthan. It derives its name from Guru Dronacharya, who was given the village as gurudakshina by his students, the Pandavas. Hence, it came to be known as Guru-gram, which in course of time became Gurugram and has been in existence since the times of the Mahabharata.

The city has now emerged as one of the largest hubs of industrial activity, with a concentration of global IT, telecom and automobile industries. Multinationals like Maruti Suzuki, Hero Honda, Ericsson, TCS, HCL, Airtel and hundreds of other industries are located here. Being one of the leading multidisciplinary universities in the region, we have forged lasting relationships with many of these industries. The University is easily accessible by rail, road and air.





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