VICE–CHANCELLOR’S REPORT

Presented at the
Fifth Academic Advisory Board Meeting
held on
(Saturday, February 20, 2016)

Brig. S K Sharma (Retd)
Pro Vice-Chancellor, Officiating Vice-Chancellor
THE NORTHCAP UNIVERSITY, Gurgaon
Meassage

I am extremely happy to note that ITM University*, Gurgaon 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, Gurgaon all the best in its endeavours to achieve academic goals and excellence.

(Prof. Kaptan Singh Solanki)

*Now THE NORTHCAP UNIVERSITY
Quality Benchmarks

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, ordinance No. 2 of 2015 dated 22nd July 2015, Legislative Department, Haryana Government

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

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

Accredited Undergraduate Engineering Programmes

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)

ISO 9001:2008 Certified
On the views expressed by the distinguished members during the Fourth Academic Advisory Board Meeting, the following actions have been taken:

1. **Placement Activities at the University**
   This continues to be an area of focus and the University has taken a number of steps in this direction. Summary of the activities towards placements are as under:

   - The School of Professional Attachment has been steadily enhancing its activities and includes active support for internships and advice on higher studies. Summer internships in the industry have been made compulsory for all students. The students need to carry out a project under the supervision of the industry guides and nominated faculty members. A mid-term review is carried out by the faculty by visiting the company and interacting with project guides. This has helped the University in many ways through better industry attachment, better quality of student projects and improved placements with increasing number of companies. Student project reports have been appreciated by the visiting company officials. Overall in 2015, 490 students underwent internships and 87 students have gone for higher studies in India and abroad.

   - As advised by Academic Advisory Board members in the last meeting, SPA worked on enhancing the base of core companies and companies such as Daikin Airconditioning India, Chicago Bridge & Iron, Mahindra & Mahindra, Sobha Builders, Ilaasaka Steel etc. were added during the year:

   - To encourage entrepreneurship, the Centre for Creativity, Innovation and Entrepreneurship was set up in 2015 and to initiate its charter, the students in Dean’s List were given a Certificate course. The Centre is now offering Entrepreneurship as an elective course, which has received a good response from students across the University.

   - Preparatory aptitude tests for appearing in various public service exams were conducted.

   - TCS, the IT major visited the University in the month of October 2015 and 172 students were placed on Day One.

   - As advised during the last meeting, to boost placements of Civil Engineering students, core companies have been approached for placements. As a result, some infrastructure companies have visited the Campus which has improved the position since last year. Some of the companies are Ireo, Rodic, Chicago Bridge & Iron, Cerestek etc.

   - Direct interaction of faculty members with the industry for review of syllabus from industry perspective is in progress.

   - Students have been advised and encouraged to apply for Technical Commission in the armed forces.

   - Collaboration with IBM is underway to introduce new programmes in MBA, Business Analytics and BTech CSE in Information Security and BTech in Internet of Things as these courses are topical and can enhance placements.

2. **Flexibility in Curriculum**
   - The learning process has been supported by reducing the programme credits of all
Engineering courses from the previous 180–190 credit points to 170–175 credit points for completion of an Engineering programme. The idea is to create a more modernized, flexible and streamlined curriculum for the students at the University.

- Accordingly, the University initiated a process in July 2015 to redesign the programme schemes and rationalise the total credits and offer more flexibility to students by increasing the number of electives.
- The ratio of Core courses and Elective courses is now about 60:40, with a further subdivision of 20:20 for Departmental and Open Electives.
- A new course, MTech CSE with specialization in Cyber Security commenced in July 2015 and covers a major area of demand of future professionals in this important field.

3. **Establishment of Chair Professors at the University**

   The establishment of Chair Professors at the University has not yet fructified despite our best efforts as no formal sponsorship from the industry has been forthcoming. However, continuous efforts are on from our side for commencing the establishment of Chair Professors.
4. **Sponsored Research / Consultancy**

The University intends to accord the highest priority to research and it is committed to building a strong research base. With a view to promote research projects and consultancy as well as industry academia linkages, the Research Development and Industry Liaison (RDIL) cell is functioning in the University under the guidance of Professor Anitava Sen Gupta. Some of the initiatives taken during the last one year are:

- **The Central Research Facility** has strengthened its research-relevant infrastructure of basic science and technology at the University and faculty members are utilizing this facility to pursue their research work. Several UG, PG, and PhD level projects funded by NCU and external funding agencies are being carried out at the facility.

- **A National Workshop** on ‘MEMS Design, Technology & Application’ was organized by RDIL cell from 1-3 March 2015 under the joint collaborative research & development project between IIT Delhi and THE NORTHCAP UNIVERSITY, sponsored by the Department of Electronics and Information Technology (DeitY), Govt. of India.

- NCU Faculty won the National Design Contest ‘Aakruti 2015’: A team comprising of Mr. Ashwini Sharma, and Mr. Gagan Baradia, Assistant Professors of the Dept. of Mechanical Engineering bagged the First prize in Professor’s Category in ‘Aakruti 2015’ with the theme of ‘Smart City and Smart Villages of India’, held at Pune on 1 October 2015.

- **Research Projects**
  - Three sponsored research projects have been completed at a cost of Rs. 52.65 lakhs.
  - Five research projects are ongoing for which Rs. 105 lakhs have been sanctioned.
  - Four projects have been technically approved for Rs. 115 lakhs.
  
  (Details under ‘Research at the University’ elsewhere in the Report)

- **A contingency grant** of Rs. 25,000 each to 14 full-time Doctoral research students is being funded through University’s own resources to facilitate research being carried out by the scholars.

- **133 doctoral students** are currently registered with the University to carry out their Doctoral research work. The first two PhD scholars of the University have been awarded the degree of Doctor of Philosophy in December 2015. Two more candidates have submitted their theses while three scholars have submitted their synopsis during the year.

- **Modernization of Laboratories**: During the reporting year, Physics laboratories were modernized and new apparatus for experiments were introduced, related to current course curriculum. The infrastructure of other laboratories was also modernized to create a suitable work environment.
Members of the 
Academic Advisory Board

Mr. NK Dewan  
Chancellor - THE NORTHCAP UNIVERSITY

Prof. Prem Vrat, PhD, FNA, FNASc  
Pro Chancellor, Prof. of Eminence & Chief Mentor - THE NORTHCAP UNIVERSITY

Brig. SK Sharma (Retd)  
Pro Vice-Chancellor & Officiating Vice-Chancellor - THE NORTHCAP UNIVERSITY

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  
Executive Chairman, Brookings India & Former Chairman, Shell Companies in India

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

Prof. K L Chopra  
Padma Shri, FormerDirector, IIT Kharagpur, SS Bhatnagar Awardee

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

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

Prof. RC Budhani  
Professor, IIT Kanpur, Former Director National Physical Laboratory, New Delhi

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

Prof. SK Kak  
Founder Vice-Chancellor, Mahamaya Technical University, Noida

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

Mr. Satish Kaura  
Padma Shri, Chairman, Samtel Color Ltd

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

Mr. Ajai Chowdhry  
Padma Bhushan, Honorary Adjunct Professor, THE NORTHCAP UNIVERSITY, Founder – HCL, New Delhi

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

Prof. Karmeshu  
Prof & Dean, School of Computer & Systems Sciences, JNU, New Delhi, SS Bhatnagar Awardee
Dr Krishna Kumar  
Executive Advisor, Maruti Automotive Centre for Excellence

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

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

Prof. SG Deshmukh  
Director, ABV IIITM, Gwalior

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

Prof. PB Sharma  
PhD (Birmingham) FIE, FAeroS, FWAPS, Vice Chancellor, Amity University Gurgson,

Prof. Pradeep Kumar  
Former Vice Chancellor, Delhi Technological University, New Delhi

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

Prof. Kehar Singh  
Distinguished Research Prof, THE NORTHCAP UNIVERSITY, Ex-Dean & Emeritus Fellow, IIT Delhi, SS Bhatnagar Awardee

Prof. MS Sodha  
Padma Shri, Honorary Distinguished Research Professor, THE NORTHCAP UNIVERSITY, Former Vice-Chancellor, Barkatullah, Bhopal, Indore and Lucknow Universities, SS Bhatnagar Awardee

Mr Mangu Singh  
Managing Director, DMRC, New Delhi

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

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

Mr Bunty Peerbhoy  
Director, Maa Group Holdings

Mr Avdhesh Mishra  
Founder & Member - Governing Body, THE NORTHCAP UNIVERSITY

Mr Shiv Saran Mehra  
Founder & Member - Governing Body, THE NORTHCAP UNIVERSITY

Mr V Daulet Singh  
Founder & Member - Governing Body, THE NORTHCAP UNIVERSITY

Prof. Ravindra Ojha  
Director, School of Engineering & Technology, THE NORTHCAP UNIVERSITY

Col Bikram Mohanty (Retd)  
Registrar - THE NORTHCAP UNIVERSITY
It gives me immense pleasure in welcoming our Hon’ble Pro-Chancellor, Prof. Prem Vrat; Founder Members of the Governing Body, Shri Vijender Daulet Singh, Shri Avdhesh Mishra, Shri Shiv Saran Mehra, distinguished members of the Academic Advisory Board and my colleagues to the Fifth Academic Advisory Board Meet and the first, since the name change of the University. The name change took place on 31 August 2015, approved by Haryana Government Ordinance No. 2 of 2015, followed by UGC, Govt. of India Notification dated 26 August 2015, changing our name from ITM University, Gurgaon, to THE NORTHCAP UNIVERSITY or NCU for short.

The new name, we believe captures the essence of our vision, 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. NCU’s new logo is based on a ‘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. Let me assure you that in its new avatar; NCU continues to empower its students for a lifetime of personal and professional fulfillment.

Distinguished members, we at THE NORTHCAP UNIVERSITY are greatly inspired by your involvement and contribution to the development of the University which aims to be known for learning innovations, academic excellence and socially relevant research outcomes. Multiple approaches have been initiated to achieve high standards of teaching and research. The School of Engineering and Technology (SOET) in the current academic year started the postgraduate programme in Cyber Security, an area of importance. Additional new relevant programmes are planned to be started, that would add to the strength and course offerings of SOET.

Conventional teaching and learning practices are being complemented by new teaching methodologies and ICTs that enrich and engage students in the learning processes. An academic initiative has been taken by enrolling 3rd and 5th semester students of ECE and EE programmes in Spoken Tutorials of IIT Bombay. Online tests will be conducted by IIT Bombay and certificates awarded by them.

With technology growing at an exponential rate, we strive to blend research with academics as their combination alone is an indicator of academic quality. We aspire to inculcate a research culture and attitude in faculty members. To involve more students in research activities a new technical fest ‘Technovation’ the project day was organized in 2015, besides the ongoing ‘Cerebration’ our technical festival. To encourage and recognize research the VC’s Innovation Fund, Best Research Paper Awards, Best BTech Project Awards continue as before and have been awarded to students and faculty, after careful analysis and scrutiny.

The two year NBA accreditation for BTech programmes continued through the year. The University has applied for renewal of NBA accreditation for BTech programmes and applied for MBA accreditation. NCU has also applied for NAAC accreditation and all efforts for its successful completion have been initiated. NCU has also participated in the recent initiative of MHRD for National Rankings through NIRF. The University has taken up an exhaustive exercise to redesign the respective programme schemes and have rationalized the total credits for each programme and also to offer more flexibility to students by increasing the number of elective courses, including programme electives,
open electives and foundation electives. All Departments are reviewing their course lectures and practical content of all programmes and a fully revamped curriculum is expected to be in place by Academic Year 2016 onwards.

The University ensures global best practices such as inter-disciplinary teaching-learning and research, collaborative, peer-to-peer, experiential, and flipped classroom learning. In order to monitor effective student progression, the University continues with its system to get students’ feedback about teaching at the University. The online, fully anonymous feedback given by students is analyzed through our ERP system and necessary corrective measures taken by concerned faculty.

Besides academics, the University provides good physical infrastructure and necessary support for students to pursue sports, hobbies and extracurricular activities, so as to develop well-rounded personalities. It aims at preparing its students to make the most of the opportunities that have opened up in India’s economy today and the sweeping changes taking place globally.

NCU is an environmental friendly institution. Campus-wide initiatives are committed to the green movement such as energy conservation; use of solar energy with the installation of a 150 KW rooftop solar PV system with a net metering facility; a comprehensive rain water harvesting system; sewage and waste water treatment plants. The University has adopted the odd-even system of vehicles reducing the number of cars coming to the campus. These are small steps taken by NCU to increase its green footprint. For the 14th consecutive year the University has been declared the winner of the HUDA garden competition in Gurgaon. The University understands its responsibility towards society and conducts programmes to sensitize and mobilize community participation.

THE NORTHCAP UNIVERSITY is open to students, faculty and staff of all backgrounds and all states, who demonstrate their merit. There are over 3300 students, 222 faculty members, 72 technical and 42 admin staff currently. The University’s rich intellectual wealth comprises of some of the top academicians and industry leaders of India and abroad. We invest in hiring superior quality faculty and retaining them by enabling HR practices.

Dear Members, we now look ahead to ensure the pursuit of academic excellence in order to accomplish our vision and to create a fine band of researchers and scholars bestowed with social commitment. This day means much to us and we look forward to a meaningful exchange of information, knowledge, experiences, your views, directions, guidance and mentoring from each one of you to help make the University become more contemporary and relevant at all levels.
Our Achievements in 2015

THE NORTHCAP UNIVERSITY (formerly ITM University, Gurgaon) 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:

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

• THE NORTHCAP UNIVERSITY was recognised as No. One, of the Top 10 Most Promising Educational Institutes in Delhi / NCR 2015, by Higher Education Review, 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 (formerly ITM University, Gurgaon) 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.
Our Schools

A frontrunner amongst educational institutions in Northern India, THE NORTHCAP UNIVERSITY has carved a niche for itself for being a multi-disciplinary university with an unrelenting will to excel. It strives to ensure that the courses are designed such that they not only help the students to understand the core courses, but also their applications in other streams. The three schools of the University viz., School of Engineering and Technology, School of Management, School of Law, supported by School of Professional Attachment and Centre for Languages Learning, offer UGC and BCI approved courses at UG, PG and PhD levels.

School of Engineering and Technology

The School of Engineering and Technology with its five academic departments namely Applied Sciences, Civil and Environmental Engineering, Computer Science & Engineering and Information Technology, Electrical, Electronics and Communication Engineering, and Mechanical Engineering is committed to enhancing the quality of the teaching learning processes and to promote innovation driven research. To this end, NCU has created a vibrant academic ambience for innovation and research in all branches of science and technology, at all levels.

B.Tech Programmes

The popularity of the B.Tech programmes is reflected in the high student selectivity ratio for admission and is based on the outcome of the student placement record for the current year which has been very encouraging. The School has worked to improve the framework of the students' continuous evaluation, provide higher degree of academic flexibility and focus on internships and major projects. Each student after second and third year, has compulsorily gone through the rigours of summer internships. The B. Tech curricula has been revisited to rationalise the programmes and the revamping of course curricula including their practical orientation has been completed.

Higher Education

The Dept. of CSE&IT has initiated a relevant specialisation in Cyber Security in its M.Tech programme. Our faculty conducted a series of workshops on Cyber Security covering topics such as Cryptography, Insecure Electronic Transaction, Social Engineering and Digital Forensics. There has been an encouraging trend in admissions to the PhD programme with an increase of about 36% i.e. from a total number of 74 scholars to 101 scholars currently in SOET.
<table>
<thead>
<tr>
<th>S.No.</th>
<th>NAME OF COURSE</th>
<th>STUDENT INTAKE-2015</th>
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<tbody>
<tr>
<td></td>
<td><strong>Under Graduate (UG)</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Computer Science &amp; Engineering</td>
<td>265</td>
</tr>
<tr>
<td>2.</td>
<td>Mechanical Engineering</td>
<td>95</td>
</tr>
<tr>
<td>3.</td>
<td>Electronics &amp; Communication Engineering</td>
<td>65</td>
</tr>
<tr>
<td>5.</td>
<td>Civil Engineering</td>
<td>30</td>
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<tr>
<td>6.</td>
<td>Applied Sciences (BSc Hons, Maths)</td>
<td>22</td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>477</strong></td>
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<tr>
<td></td>
<td><strong>Post Graduate (PG)</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Computer Science &amp; Engineering</td>
<td>25</td>
</tr>
<tr>
<td>2.</td>
<td>Electronics &amp; Communication Engineering</td>
<td>10</td>
</tr>
<tr>
<td>3.</td>
<td>VLSI Design</td>
<td>10</td>
</tr>
<tr>
<td>4.</td>
<td>Mechanical Engineering</td>
<td>5</td>
</tr>
<tr>
<td>5.</td>
<td>Civil Engineering</td>
<td>5</td>
</tr>
<tr>
<td>6.</td>
<td>Applied Sciences (MSc, Maths)</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>70</strong></td>
</tr>
<tr>
<td></td>
<td><strong>PhD</strong></td>
<td></td>
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<tr>
<td>1.</td>
<td>PhD Scholars in various disciplines in Engineering</td>
<td>27</td>
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</tbody>
</table>
School of Management

The School of Management (SOM) maintained the enhanced admission criteria to attract better talent which resulted in significantly higher and better quality of intake this year. Further, the School brought on board some nationally and internationally renowned academicians to teach as Adjunct and Visiting faculty. The third major step was to redefine and reinvent course structures to be relevant to the needs of the industry.

The School is successfully running its three-year full-time UG programmes of BBA, BCom (H) and BSc Economics (H) and the two year full time MBA programme. Despite the competitive pressure in MBA admissions across India, the selectivity ratio of the students was 1:3. Admissions to MBA were successfully conducted including the University’s Management Entrance Test (NCUMET) which was introduced this year. The PhD (Management) programme is also progressing well. The total number of research scholars pursuing PhD in SOM is currently 20.

The ‘Centre of Creativity, Innovation and Entrepreneurship’ organized training sessions for the students of BCom, BSc (Eco) and MBA to familiarize them with various sources of financial information about industry, economy, and corporate firms and to access information from them. The Centre also conducted a five day workshop in September 2015 on ‘Creative Leadership and Innovation’ for Dean’s List of Students.

Research was a prime focus area for the School of Management during the year. Faculty members published and presented several research papers in national and international journals and conferences. A research paper authored jointly by Prof. Ravindra Ojha, Prof. Prem Vrat and Prof. AK Vij was selected by the Emerald Group Publishing Ltd. (UK) for the ‘2015 Outstanding Paper Award’. The paper was published in the Journal of Advances in Management Research, Vol. 11, No. 3, pp. 312-332. The School also focused on the development of students’ research capabilities and faculty members helped students to publish research papers in various national and international journals. One research scholar submitted her thesis and two research scholars submitted their synopsis. Another research scholar published three books on environment and sustainable development and was sponsored by the International Union for Conservation of Nature (IUCN) and the Research Institute of Environmental Law (RIEL), Wuhan University (China), and attended a workshop on ‘Protected Areas Law’ in November 2015 in China.

The student intake details are as under:

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>NAME OF COURSE</th>
<th>STUDENT INTAKE- 2015</th>
</tr>
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<tbody>
<tr>
<td></td>
<td><strong>Under Graduate (UG)</strong></td>
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</tr>
<tr>
<td>1.</td>
<td>Bachelor of Business Administration (BBA)</td>
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</tr>
<tr>
<td>2.</td>
<td>Bachelor of Commerce</td>
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<tr>
<td>3.</td>
<td>BSc Economics (Hons)</td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
<td>199</td>
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<tr>
<td></td>
<td><strong>Post Graduate (PG)</strong></td>
<td></td>
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<tr>
<td>1.</td>
<td>Master of Business Administration (MBA)</td>
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<tr>
<td></td>
<td><strong>PhD</strong></td>
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<tr>
<td>01.</td>
<td>PhD Management</td>
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</table>
THE NORTHCAP UNIVERSITY’s School of Law (SOL) continued to achieve excellence in legal education through professionally relevant academic programmes, experienced and qualified faculty, interactive pedagogy and clinical training. SOL offers three programmes: the five-year integrated BBA-LLB (Hons) at the undergraduate level, a one-year LLM with specialization in Human Rights and Corporate Law at the postgraduate level, and a full-time PhD programme at the doctoral level. 2015 has been a special year for SOL as its first batch of BBA-LLB (H) students graduated and most got placed with various law firms.

In the reporting year SOL constituted a Recruitment Co-ordination Committee – a student-run body responsible for internships and placements of law students with excellent outcomes. As a result, students had the privilege of interning 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.

Moot Court exercises are an integral part of the Law School teaching and thereby it prepares students to compete at various levels. To foster research, the first issue of the NCU Law Review (ISSN: 2321 9904) a biannual, blind peer-reviewed journal was published in 2015. The Law Review serves as a forum for the promotion and circulation of views on contemporary legal issues and for encouraging research and publications.

The Centre for Intellectual Property Rights Advocacy, Research and Training (CIPRART) of the School of Law continues to facilitate the preparation and filing of patent applications by the faculty and students of the University and to promote awareness on intellectual property rights. SOL’s Legal Aid Clinic is providing free legal advice to the local community. The clinic organized a literacy seminar in August 2015 and students of the Government School, Carterpuri, Gurgaon were educated on relevant subjects like ‘Right to Education’ and ‘Domestic Violence’.

<table>
<thead>
<tr>
<th>NAME OF COURSE</th>
<th>STUDENT INTAKE-2015</th>
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<tbody>
<tr>
<td>BBA-LLB (Hons)</td>
<td>87</td>
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<tr>
<td>LLM</td>
<td>15</td>
</tr>
<tr>
<td>PhD</td>
<td>01</td>
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</tbody>
</table>
The School of Professional Attachment (SPA) ensures regular professional attachment of academics with industry for professional enrichment and better job opportunities for its students. The main objective of professional attachment is to equip students with the right kind of skills and attitude so that they can become more effective, efficient and productive in their employer’s organization.

During the year, efforts of SPA have resulted in good placements of students who passed out in June 2015 in companies like Tata Consultancy Services (172 students received placement offers on day-one), 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 etc. A positive feedback of the previously placed students by the employers, resulted in these companies continuing to return for campus placements with more inclusions this year. Besides the placements, a number of our students have gone in for higher studies in India, including IITs, and abroad to Universities in USA and Canada amongst others.

**Placements – Class of 2015**

<table>
<thead>
<tr>
<th>S. NO.</th>
<th>B Tech</th>
<th>CS</th>
<th>ECE</th>
<th>EEE</th>
<th>IT</th>
<th>ME</th>
<th>CV</th>
<th>M Tech</th>
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<td>1</td>
<td>STUDENTS STRENGTH</td>
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<td>84</td>
<td>130</td>
<td>44</td>
<td>122</td>
<td>47</td>
</tr>
<tr>
<td>2</td>
<td>NOT ELIGIBLE DUE TO INDUSTRY CRITERIA</td>
<td>202</td>
<td>52</td>
<td>54</td>
<td>15</td>
<td>23</td>
<td>41</td>
<td>17</td>
<td>66</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>NOT APPLYING DUE TO FAMILY BUSINESS/ HIGHER STUDIES</td>
<td>87</td>
<td>7</td>
<td>22</td>
<td>11</td>
<td>5</td>
<td>20</td>
<td>22</td>
<td>40</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>OFFERED FOR PLACEMENT</td>
<td>348</td>
<td>110</td>
<td>93</td>
<td>15</td>
<td>56</td>
<td>69</td>
<td>5</td>
<td>16</td>
<td>38</td>
</tr>
<tr>
<td>5</td>
<td>NUMBER OF PLACEMENTS</td>
<td>331</td>
<td>122</td>
<td>96</td>
<td>11</td>
<td>48</td>
<td>50</td>
<td>4</td>
<td>10</td>
<td>37</td>
</tr>
<tr>
<td>6</td>
<td>PERCENTAGE PLACEMENTS</td>
<td>95%</td>
<td>111%</td>
<td>103%</td>
<td>73%</td>
<td>86%</td>
<td>72%</td>
<td>80%</td>
<td>63%</td>
<td>97%</td>
</tr>
</tbody>
</table>

95, 111, 103, 73, 86, 72, 80, 63, 97, 100
Our Recruiters
ince its inception in January 2014, the Centre for Languages Learning (CLL) has been offering courses on Effective Communication as well as foreign languages to students across all schools of THE NORTHCAP UNIVERSITY. One foreign language course has been made compulsory with a choice between French and German.

A series of Faculty Development Programmes on Communication Skills were conducted for faculty members from the three Schools of the University in January 2015 followed by further FDPs in September and October 2015. The objective was to facilitate interpersonal skills by enhancing speaking and listening skills of faculty members. The CLL faculty runs various student clubs like Samwad, Success Mantra, Lingua Franca, Mainstream and Abhivyakt which conducted several enriching activities and competitions.

CLL conducted diagnostic tests in English for 1st Year BTech students in August 2015. Those who were weak in speaking and writing skills were identified and remedial classes were taken to improve their skills. CLL in collaboration with the School of Professional Attachment (SPA) guided students for interviews, group discussions, writing CVs and resumés and developing their soft skills to enhance their placement prospects.

The CLL Language Lab has been used extensively by students to familiarize themselves with content from different sources and media such as text, images, audio, and video. The idea has been to offer students an alternative way of teaching to promote the practice of the skills taught in class by using technology as a tool.

In February 2015, a student seminar on MA/PhD study options with Scholarships in France was organized by CLL. The seminar was conducted by ‘n+i Engineering France’.
# Student’s Strength/Intake

<table>
<thead>
<tr>
<th>S. No.</th>
<th>School</th>
<th>Admitted in 2015</th>
<th>Students strength other than fresh intake</th>
<th>Total Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>School of Engineering &amp; Technology</td>
<td>546</td>
<td>1750</td>
<td>2296</td>
</tr>
<tr>
<td>2</td>
<td>School of Management</td>
<td>245</td>
<td>279</td>
<td>524</td>
</tr>
<tr>
<td>3</td>
<td>School of Law</td>
<td>102</td>
<td>312</td>
<td>414</td>
</tr>
<tr>
<td>4</td>
<td>PhD</td>
<td>28</td>
<td>107</td>
<td>135</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>921</strong></td>
<td><strong>2448</strong></td>
<td><strong>3369</strong></td>
</tr>
</tbody>
</table>

Ratio of applicant to intake seats indicates a high demand trend at THE NORTHCAP UNIVERSITY.

Top marks in JEE Main & 10+2 establish high merit levels at the intake stage for BTech.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>BRANCH</th>
<th>JEE MAIN (Out of total 360)</th>
<th>10+2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MECH</td>
<td>167</td>
<td>97.00%</td>
</tr>
<tr>
<td>2</td>
<td>CSE</td>
<td>132</td>
<td>94/75%</td>
</tr>
<tr>
<td>3</td>
<td>ECE</td>
<td>149</td>
<td>92.00%</td>
</tr>
<tr>
<td>4</td>
<td>CV</td>
<td>150</td>
<td>88.25%</td>
</tr>
</tbody>
</table>

**(Figures for BTech Programmes)**

**Branch Choice trends-BTech**

**Area-wise profile of admitted students**
The University results for Academic year ending June 2015 have been good with a pass percentage of over 98%. 897 students were awarded degrees in their respective disciplines, including 629 from BTech, 147 from MTech, 7 from MSc Maths, 31 from BBA, 12 from BCom (Hons), 47 from MBA, 17 from BBA-LLB and 12 from LLM and two PhD Scholars. The results are shown below:

<table>
<thead>
<tr>
<th>DISCIPLINE</th>
<th>TOTAL STRENGTH</th>
<th>TOTAL PASSED</th>
<th>FIRST WITH DISTINCTION</th>
<th>I CLASS</th>
<th>SECOND CLASS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UG COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BTech</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Sc. &amp; Engineering</td>
<td>169</td>
<td>167</td>
<td>18</td>
<td>137</td>
<td>12</td>
</tr>
<tr>
<td>BTech Civil Engineering</td>
<td>44</td>
<td>36</td>
<td>2</td>
<td>30</td>
<td>4</td>
</tr>
<tr>
<td>BTech Electronics &amp; Communication Engineering</td>
<td>169</td>
<td>165</td>
<td>20</td>
<td>133</td>
<td>12</td>
</tr>
<tr>
<td>BTech Electrical &amp; Electronics Engineering</td>
<td>41</td>
<td>38</td>
<td>3</td>
<td>29</td>
<td>6</td>
</tr>
<tr>
<td>BTech Information &amp; Technology</td>
<td>84</td>
<td>81</td>
<td>5</td>
<td>71</td>
<td>5</td>
</tr>
<tr>
<td>BTech Mechanical Engineering</td>
<td>130</td>
<td>125</td>
<td>15</td>
<td>99</td>
<td>11</td>
</tr>
<tr>
<td>BTech (Batch 2010 &amp; Autonomous Batch)</td>
<td>21</td>
<td>17</td>
<td>2</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>BBA</td>
<td>34</td>
<td>31</td>
<td>5</td>
<td>23</td>
<td>3</td>
</tr>
<tr>
<td>BCom (H)</td>
<td>13</td>
<td>12</td>
<td>3</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>BBA-LLB17</td>
<td>17</td>
<td>3</td>
<td>13</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Pass Percentage UG (95.43%)</strong></td>
<td>722</td>
<td>689</td>
<td>74</td>
<td>545</td>
<td>70</td>
</tr>
<tr>
<td><strong>PG COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTech (All Branches)</td>
<td>143</td>
<td>140</td>
<td>22</td>
<td>109</td>
<td>9</td>
</tr>
<tr>
<td>MSc Maths</td>
<td>7</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>MBA</td>
<td>47</td>
<td>47</td>
<td>8</td>
<td>35</td>
<td>4</td>
</tr>
<tr>
<td>LLM</td>
<td>12</td>
<td>12</td>
<td>3</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td><strong>Percentage (98.6%) PG</strong></td>
<td>209</td>
<td>206</td>
<td>35</td>
<td>158</td>
<td>13</td>
</tr>
</tbody>
</table>
## MEDALS AWARDED

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>School</th>
<th>Programmes</th>
<th>Gold Medal</th>
<th>Silver Medal</th>
<th>Bronze Medal</th>
<th>Certificate of Merit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SOET</td>
<td>BTech</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>2</td>
<td>SOET</td>
<td>M Sc (Maths)</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>SOET</td>
<td>M Tech</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>SOL</td>
<td>BBA- LLB(H)</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>SOL</td>
<td>LLM (1 Yr)</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>SOL</td>
<td>LLM (2 Yrs)</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>SOM</td>
<td>BCom (H)</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>SOM</td>
<td>BBA</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>SOM</td>
<td>MBA</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>18</td>
<td>9</td>
<td>8</td>
<td>2</td>
<td>37</td>
</tr>
</tbody>
</table>

---

### Research at the University

The University accords highest priority to research. The Central Research Facility at NCU provides the necessary facilities and instruments for research in the areas of Physics, Chemistry, Engineering and interdisciplinary sciences. It has strengthened research-relevant infrastructure of basic science and technology at the University and faculty members are utilising this facility to pursue their research work. The common research facilities consist of instruments used for the characterization and synthesis of materials. Major equipments in the laboratory are UV-VIS-NIR Spectrophotometer, I-V Picometer, L-C-R meter and Holography equipment, Vacuum Coating Unit, High Temperature Furnace. Scanning electron microscope (SEM) is planned to be established by mid-2016.

To promote sponsored research, project consultancy, industry academic linkages and research publications at the University, the Research Development and Industry Liaison (RDIL) cell is functioning in the University since 2011.

Some of the projects undertaken during the year under reporting are:-

### Projects Completed

<table>
<thead>
<tr>
<th>S.No</th>
<th>Faculty (PI)</th>
<th>Project Title</th>
<th>Funding agency</th>
<th>Sanction in Rs. Lakhs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Dr. Sunanda Vashisth (APS)</td>
<td>To prepare a State-of-Art Status Report on Phase Retrieval Techniques in Optics and Their</td>
<td>DRDO (CARS)</td>
<td>8.15</td>
</tr>
<tr>
<td>2.</td>
<td>Mrs. Anjali Garg (ECE)</td>
<td>Intelligent Electronic load controller for Induction Generators</td>
<td>DST (WOSA)</td>
<td>25.05</td>
</tr>
<tr>
<td>3.</td>
<td>Ms. Niharika Garg (CSE)</td>
<td>Logistics @ 360o Tracking using RFID and Pocket PC Wireless Scanners</td>
<td>DST (WOSA)</td>
<td>19.45</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>52.65</strong></td>
</tr>
</tbody>
</table>
## Ongoing Projects - 2015

<table>
<thead>
<tr>
<th>S.No</th>
<th>PI &amp; Department</th>
<th>Project Title</th>
<th>Scheme</th>
<th>Duration (yrs)</th>
<th>Year of Sanction</th>
<th>Sanction in Rs. Lakhs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dr. Dipa Vaya &amp; Dr. Tejpal Singh Chundawat (APS)</td>
<td>Development of Polyurethane coating for blast mitigation.</td>
<td>DRDO (CARS)</td>
<td>1.5</td>
<td>2014</td>
<td>9.99</td>
</tr>
<tr>
<td>2</td>
<td>Dr. Deepika Chaudhary (PI) Mentor: Dr. Hukum Singh (APS)</td>
<td>Study of optical and electrical properties of nanostructured glasses for application in optical recording media</td>
<td>DST (WOSA)</td>
<td>3</td>
<td>2015</td>
<td>30.03</td>
</tr>
<tr>
<td>3</td>
<td>Dr. Phool Singh (APS) &amp; Ms. Jyotsna Singh (CSE)</td>
<td>A computational model for STN (sub thalamic nucleus) in Parkinson Disease to investigate the discharge patterns</td>
<td>DST (CSRI)</td>
<td>3</td>
<td>2015</td>
<td>19.30</td>
</tr>
<tr>
<td>4</td>
<td>Ms. Rita Chhikara (CSE)</td>
<td>Neural network based steganalysis</td>
<td>DST (WOSA)</td>
<td>3</td>
<td>2015</td>
<td>20.51</td>
</tr>
<tr>
<td>5</td>
<td>Ms. Vaishali Sahu (CE)</td>
<td>Experimental and Numerical Study of Single Pile Capacity Adjacent to Existing Buried Pile System</td>
<td>DST (WOSA)</td>
<td>3</td>
<td>2015</td>
<td>25.41</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>105.24</strong></td>
</tr>
</tbody>
</table>

## Technically Approved Sponsored Research Projects in 2015

<table>
<thead>
<tr>
<th>S.No.</th>
<th>PI &amp; Department</th>
<th>Project Title</th>
<th>Scheme</th>
<th>Duration (yrs)</th>
<th>Year of Technical Approval</th>
<th>Approx Budget in Rs. Lakhs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dr. Aditya Sharma (APS)</td>
<td>Lateral Flow Assay Strip Sensor Development for Non-Invasive Point of Care Diagnosis of Urinary Tract</td>
<td>DST (SERB) Young Scientist</td>
<td>3</td>
<td>2015</td>
<td>37.68</td>
</tr>
<tr>
<td>2</td>
<td>Ms. Geetika (CSE)</td>
<td>Phylogenetic Model for cancer classification</td>
<td>DST (WOSA)</td>
<td>3</td>
<td>2015</td>
<td>26.40</td>
</tr>
<tr>
<td>3</td>
<td>Ms. Chetna Tyagi (APS)</td>
<td>Study of Polymer nanocomposites for solar cell applications</td>
<td>DST (WOSA)</td>
<td>3</td>
<td>2015</td>
<td>20.90</td>
</tr>
<tr>
<td>4</td>
<td>Dr. Akansha Singh (PI), Dr. Latika Singh, Ms. Sumanlata Gautam</td>
<td>Emotion recognition system for autistic children</td>
<td>DST (CSRI)</td>
<td>3</td>
<td>2015</td>
<td>30.27</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>115.25</strong></td>
</tr>
</tbody>
</table>
In summary, during the reporting year three sponsored research projects have been completed, five research projects are ongoing in the University for which Rs. 105.24 lakhs have been sanctioned. Additionally, three more projects have been technically approved. In addition, 27 research projects have been submitted to various funding agencies and are awaiting outcomes.

The following patents have been filed during the year till date:

- Ms Anjali Garg (Dept of EECE) and students Sharad Bansal and Nishant Bhardwaj (Dept of EE) filed a patent for ‘Security Box’ on 15 January 2016.

- Ms Jyotsna Singh (Dept of CSE &IT) and student Ankit Bhardwaj filed a patent for ‘A real time traffic detection system’ on 29 October 2015.

- Ms Charu Rana and students Nitish Aggarwal, Nishant Bharadwaj and Nishant Ahlawat (Dept of EECE) filed a patent for ‘Suraksha-a novel security device for women in emergency situations’ on 11 September 2015.

- Mr Vipin Thakran along with Mr Ashwini Sharma (Dept of Mechanical Engg) and THE NORTHCap UNIVERSITY filed a patent for ‘Coconut Opener machine’ on 12 June 2015.

- Ms Jyotsna Singh, Ms Supriya Raheja (Dept of CSE &IT); Ms Sharda Vashisth (Dept of EECE) and Dhruv Basnotra, a student, filed a patent for ‘Mobile to Mobile Battery Charger’ on 5 June 2015.

- Ms Suman Bhatia (Dept of CSE &IT) and students Dhruv Basnotra, Diksha filed a patent for ‘Regulating room temperature for patient’ on 5 June 2015.

- Ms Jyotsna Singh (Dept of CSE &IT) and Aman Malik, a student, have filed a patent for ‘A Smart Refrigerator that communicates with the user and outside environment’ on 5 May 2015.
Other Research Issues

THE NORTHCAP UNIVERSITY registered for the purpose of availing Customs Central Excise duty exemption with the Department of Scientific and Industrial Research (DSIR) was approved by the Government this year and to be continued till August 2018.

NCU’s Best Research Paper Award recommended by the University’s Publication Award Recommendation Committee (PARC) was bagged by Assistant Professors Dr Hukum Singh, Dr Sunanda Vashisth (Dept of Applied Sciences) for ‘Fully phase image encryption using double random-structured phase masks in gyrator domain’, Applied Optics, 53 (28), 6472-6481; and Dr K Mathiyazhagan (Dept of Mechanical Engg) for ‘Analysis of enablers for implementation of sustainable supply chain management-A textile case’, Journal of Cleaner Production, 83, 391-403.

Modernization of Laboratories: During the reporting year, Physics laboratories were modernized and new apparatus for experiments were introduced, related to current course curriculum. The infrastructure of other laboratories was also modernized to create a work friendly environment at a total cost of Rs 70.28 lakhs in 2014-15 and Rs 77.30 lakhs in 2015-16.

Publications: Our faculty members have been actively participating in national and international conferences and seminars in India during the year. A total of 190 papers have been published in refereed journals. Year 2015 has been a productive year for books in which four books and six book chapters have been published by the faculty.
Student Projects

Project orientation plays a vital role in enhancing the leadership and innovative skills of students. SOET for the first time organized ‘Technovation’ the annual project day on 17 April 2015. A total of 23 ideas were converted to projects and has resulted in improving the quality of projects. After a rigorous scrutiny for innovation, authenticity, quality and standards, the Evaluation Committee selected three final year BTech projects for the Best BTech Project Award on 4 June 2015. The following Best BTech projects were awarded during the year:

**Suraksha** - a woman’s safety device: A cost effective woman’s safety device uses the latest technology on GPS, GSM, Piezoelectric sensors (force sensors) and voice recognition by Nitish Aggarwal, Nishant Ahlawat and Nishant Bhardwaj (Dept of EECE).

**Dexto: Eka** - the humanoid robot: A tele-operated anthropomorphic robot with three modes of operation: dependent, semi-sovereign and sovereign defining the different levels of control over the robot made by Sumit Gupta, Himanshu Vaswani, and Yash Gupta (Dept of EECE).

**Development of mix design and study the strength and durability of self-compacting concrete:** Work was carried out on effective replacement of cement with waste materials like rice husk, fly ash and micro silica to increase structural quality and durability of concrete. It was prepared by Shwetang Kundu, Sumit Ahlawat and Utsav Jain (Dept Civil Engineering).

**Anti-Plagiarism** NCU continues use of proprietary software, Turnitin, to vet all theses, publications and documents to guard against plagiarism. Guidelines for checking plagiarism were reissued during the reporting year and meticulously followed, with no case of plagiarism reported.

**MoUs** NCU has strengthened academic and industrial collaboration through MoUs signed with various universities/institutes/industry. 18 MoUs are currently active.
Academic Initiatives

THE NORTHCAP UNIVERSITY, in the year gone by has maintained its position as a quality conscious institution by continuously evolving and challenging conventions to remain current and competitive. A number of initiatives were conceived and launched; courses were reviewed and new programmes introduced. The competencies of our high-quality faculty were further enhanced by mentoring, faculty development programmes, special lecture series by eminent scholars from different domains. Individual career progression and support for research was specifically addressed. We also reinforced our industry-academia cooperation and national and international collaborations. The following are some of the major initiatives taken by the University during the reporting period:

Centre for Creativity, Innovation and Entrepreneurship
The Centre for Creativity, Innovation and Entrepreneurship was set up in 2015 to promote inter-disciplinary idea generation, innovation and strengthening industry tie-ups. The Centre houses workstations with I-Lab facilities having software for innovation statistical software tools like SPSS, industry database like PROWESS and advanced modelling tools like STELLA. The Centre provides an excellent forum for industry oriented Executive Development Programmes. Dean’s list of students went through one cycle of a five day programme and found it very useful. The School of Management is running this as an Open Elective Course from 2016.

Student Counselling by Faculty Mentors
To make the freshers comfortable in the new environment of the University a Student Counselling by Faculty Mentors Scheme was introduced. It aims at making the process of settling down at the University easy and promotes a nurturing environment in an informal yet intense relationship in the Guru Shishya parampara. It also offers useful feedback to improve the environment of the University.

Value-added Courses
To sharpen the competitive skills, enhance their employability and make the students industry-ready comprehensive value-added programmes, over and above the basic curriculum are running successfully. Special VA courses on Android, iOS, Window Phone, Python, PHP, Mathlab, SciLab, C++, Java, CAD, Total Station Surveying and others were run. In addition, professional agencies were employed to conduct Personality Development classes, including individual grooming.

Online tests
As part of examination reforms, two online tests per course per semester were introduced in the previous year continued successfully during the year, with improved systems. This has proved to be an important step towards ERP processes and provided a simplified evaluation system adding to academic efficiency. It has helped to further build an online culture amongst faculty and students and removed barriers in going online for our other quality processes.

Emphasis on interactive teaching-learning and self-learning
Process of prior assignments and/or self-study, in which students were asked to come self-prepared on certain topics before class or tutorials, and questions asked, or quizzes given to
kindle their enthusiasm in the subject, has been inculcated in students and teachers. The use of NPTEL (the National Programme on Technology Enhanced Learning) as a resource for supplementary reading material was encouraged. Performance tracking of weak students was implemented by the Departments. It helped to improve the teaching-learning systems and processes at NCU.

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) were framed and used for UG and PG programmes in line with NBA processes. A Faculty Course Booklet designed to capture all aspects of a course, its content, delivery and effectiveness has been introduced since last two semesters.

Special Lecture Series
Special lecture series by eminent scholars from different domains for the faculty members continued to enrich the learning environment. Expert talks were delivered by invited experts from outside as well as our senior faculty members on various topics during the year.

Faculty Mentoring Scheme
To encourage utilizing the collective wisdom of Honorary Distinguished Research Professors, Honorary Adjunct Professors, industry leaders and others, the scheme of Faculty Mentors invigorates academic rigour and research orientation in the University continues to run successfully. Biannual meetings are held to review the outcome-based progress of their respective mentees and to plan the way forward to improve and make the scheme more effective.

Online courses
In order to get aligned with future patterns of learning, the University took an initiative to offer online courses in the areas of Computer Sciences & 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 the students are transferred to their respective courses at the University as per the Departmental guidelines. A large number of faculty underwent online courses of leading universities.

Relative Grading and Moderation
The University continues with the relative grading system across disciplines, rationalized to achieve a 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.

Spoken Tutorials of IIT Bombay subscribed
An academic initiative has been taken by enrolling 3rd and 5th semester students of the Departments of ECE and EE in Spoken Tutorials of IIT Bombay in Core Java and Linux. Online tests will be conducted by IIT Bombay and certificates will be awarded by them. Other Departments propose to adopt this initiative of the Dept. of EECE.
CCNA Module
Dept of CSE & IT completed the CCNA Module 1 Certification course. 26 students successfully completed the course.

Learning Management System (LMS)
Learning Management System was reviewed for its content and delivery during the year to make it more user friendly to students by making it an interactive e-learning tool. Towards this end, all departments uploaded dynamic, interesting content like animations, videos etc. and constantly update the material. The usage has shown an increase in the number of ‘hits’, not only during the examination period but also sustained through the semester.

Competency building Courses for UG Engineering programmes

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Competency Building Courses</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Effective Communication – 1</td>
<td>1st Sem</td>
</tr>
<tr>
<td>2</td>
<td>Personality Skill Development</td>
<td>1st Sem</td>
</tr>
<tr>
<td>3</td>
<td>Effective Communication – 2</td>
<td>2nd Sem</td>
</tr>
<tr>
<td>4</td>
<td>Value Added Course in Android, IOS, Window Phone, Python, PHP, Matlab, SciLab, C++, JAVA, CAD or any other programme relevant VA course</td>
<td>4th and 5th Sem</td>
</tr>
<tr>
<td>5</td>
<td>‘Campus to Corporate’</td>
<td>6th Sem</td>
</tr>
<tr>
<td>6</td>
<td>‘Work-Life Readiness’</td>
<td>7th Sem</td>
</tr>
</tbody>
</table>
Collaborations

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 a few premier institutions, 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.

**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 CIarb, 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 Annual Report earlier.

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.

National Board of Accreditation (NBA): The University was granted a two-year accreditation for BTech programmes in Electronics & Communication Engineering, Information Technology, Computer Science & Engineering, Mechanical Engineering and Civil Engineering, up to end 2015 and has since applied for accreditation of its BTech and MBA programmes.

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.
**Power Grid Corporation of India Ltd:** An MoU for academic collaboration with Power Grid Corporation of India, Gurgaon, 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. As regards Power Grid, we will organize executive education programmes, conduct and document case studies, organizational and development training programmes.

**ECON Systems:** A company in the field of Embedded Systems, ECON systems has entered into an MoU with the University, where our students will be trained and employed in ECON Systems and the University will provide all support for their training.
THE NORTHCAP UNIVERSITY during the year continuously improved its physical, academic and information infrastructure in pursuit of academic excellence.

Physical Infrastructure
The campus, spread over 10 acres, with a covered area of 22,000 square metres, currently has an academic infrastructure of 60 classrooms, 18 tutorial rooms, 68 labs, 25 workshops, faculty cabins, a seminar hall, conference rooms, 450 seat state-of-the-art Auditorium and double basement car park. Departments, faculties, laboratories and facilities have been further strengthened during the reporting year. 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. An excellent air-conditioned cafeteria with a total capacity of about 200 including space for faculty, indoor games and a gymnasium was completed during the year and has become one of the most prominent hubs of students’ activities. In addition, company brands such as Amul and Nestle continue their popular outlets on campus. The entire campus is wi-fi-enabled, fully air-conditioned, with a 24-hour power back-up. The University provides hostel facilities to about 150 students. The rooms are well-furnished, and the hostels also have a 24-hour power back-up system, treated water, wi-fi, intercom, indoor sports facilities, a central kitchen, entertainment and recreational facilities, and a bus to convey the students to and from the University. The large amphitheatre on the campus is used extensively for various university functions and club activities. Syndicate Bank’s ATM facility was established during the year next to the University’s gate.
As already briefly mentioned above, NCU is committed to the green movement. Campus-wide initiatives at reducing, reusing and recycling are helping it achieve a green code of living.

Library and Information Resource Centre
The Library and Information Resource Centre (LIRC) at THE NORTHCAP UNIVERSITY, was at the forefront of our steady growth in academic infrastructure development and consistently received principal attention from the University’s management. Currently,
LIRC has a collection of over 88,747 volumes in areas of Engineering, Law, Sciences, Management, Social Science and General subjects. LIRC subscribes to over 200 print journals from reputable publishers, institutions, societies, like Indian Academy of Science Journals, IIMB Management Review, Decision, Vision, Harvard Business Review, BCI Journal, etc. LIRC has fully computerized its services with the Libsys Software. The following are some of the salient features of development during the year:

- LIRC joined INFLIBNET Shodganga theses repository (An initiative of UGC). It provides full text access to theses published in Indian universities.
- To augment access to outside resources, LIRC has taken membership of the American Center Library, New Delhi.
- The library organized a Book fair on 6th June 2015 in which 15 well known publishers participated.
- LIRC subscribed to ACM Digital Library with an aim to provide quality resources to students, research scholars and faculty members.
- The library’s reading room timings have been extended up to 10.00 pm. The library is now open from 8.00 am to 10.00 pm on all teaching days.
- LIRC’s photocopier machines have been replaced with new digital machines which provide faster and accurate services.

<table>
<thead>
<tr>
<th>Discipline</th>
<th>No. of Books</th>
<th>National</th>
<th>International</th>
<th>International Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>4341</td>
<td>30</td>
<td>12</td>
<td>ABI/INFORM: 308, SAGE: 16</td>
</tr>
<tr>
<td>Law</td>
<td>3581</td>
<td>26</td>
<td>02</td>
<td>LEXIS NEXIS: 100, MANUPATRA: 07</td>
</tr>
</tbody>
</table>

(In addition, 1,20,000 e-books and Journals through e-brary are available)
ict Facility
The University is connected with fibre optics on a network which is wide, robust and secure. It has moved to the 'dynamic host configuration protocol', where the user can connect to the network through any electronic communication gadget through the wireless password. Facilities available are as under:

<table>
<thead>
<tr>
<th>Resource</th>
<th>Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers (UG Courses)</td>
<td>744</td>
</tr>
<tr>
<td>Computers (PG Courses)</td>
<td>215</td>
</tr>
<tr>
<td>System Software</td>
<td>04</td>
</tr>
<tr>
<td>Application Software</td>
<td>51</td>
</tr>
<tr>
<td>Printers</td>
<td>112</td>
</tr>
<tr>
<td>Lan &amp; Internet</td>
<td>Available on systems</td>
</tr>
<tr>
<td>Mail Server &amp; Client</td>
<td>Using Google Apps from Google</td>
</tr>
<tr>
<td>Internet Bandwidth</td>
<td>60 MBPS</td>
</tr>
</tbody>
</table>

NCU network has a backbone of optical fiber cable. Use of Unified Threat Management & Centralized Anti-Virus Server, Windows update server, Virtual Private Network services, Learning Mgmt System, Virtual Labs, Video Conferencing is provided. Access to the network from home – 24X7. Campus & Hostels are fully wi-fi.

ERP Modules made functional in 2015
Committed to the automation of various academic, financial and administrative processes, the University has completed the following key Academic and Administrative modules of Enterprise Resource Planning (ERP), implemented on cloud computing:

- Successfully Completed Online Admission process for July 2015.
- Registration of Courses by Students
- Generation of Time Table
- Management of Attendance by Faculty
- Generation of Admit Cards for Examination
- Attendance Reports including Mid-Term and Final Reports (less than 70%).
- Student-Faculty Feedback Form
- Declaration of Results
- Generation of Detailed Grade Sheets

Virtual Labs
NCU is a nodal centre for Virtual Labs, where the University utilizes the facilities available at the IIT labs through remote triggering. Virtual Labs is 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.

Cisco Networking Academy
The Cisco Networking Academy, at the University continues to meet the growing demand for ICT professionals and also to improve the career prospects of IT students. Cisco certification is sought after by IT professionals and greatly improves the prospects of students who want to build a career in the industry.
THE NORTHCAP UNIVERSITY held its fourth Annual Convocation on 21 December 2015. Shri Balmiki Prasad Singh, IAS (Retd), Ex-Governor Sikkim, Former Union Home Secretary and Executive Director World Bank was the Chief Guest at the occasion. A total of 897 students were awarded degrees in their respective disciplines. The first two PhD scholars and the first BBA-LLB (H) graduating batch from the University were also awarded degrees during the Convocation. Gold, silver and bronze medals were awarded to 37 candidates who topped the list in their respective streams.

The Annual Scholarship Distribution Ceremony was held at NCU on 16 December 2015. The University awarded scholarships on Merit and Means basis to about 222 students, amounting to over Rs 1.6 crores. This major initiative by a private university was lauded by Prof. Ranbir Singh, President, Association of Indian Universities (AIU) and Vice-Chancellor, National Law School, Delhi, who was the Chief Guest at the occasion.
CSI’s ‘Discover Thinking’ project
A two-member students team comprising Dhruv Basnotra and Diksha Goyal (BTech CSE final year) stood First in North India, out of 10 State teams participating in the Northern India final round of Computer Society of India (CSI) ‘Discover Thinking’ project contest 2015 conducted by CSI.

Hackathon 2015
Pranav Jain, 3rd Year BTech (CSE), was a part of the team Codezilla which was declared Winners in the Hackathon 2015 competition organized by Google & Code for India. The Live US - India Hackathon 2015 was a 15 hour continuous competition organized on 27 September 2015 in honour of India’s Prime Minister, Mr Narendra Modi’s visit to Silicon Valley which took place in parallel at Tech Mahindra Campus in India and Google Headquarters in US over a video-conference.

Times App Search Contest
In the Times of India National App Search Contest 2015, Pranav Jain (BTech CSE 2nd Year) was declared the National Gold Winner for his unique app ‘Passkey’. It provides users a new way of managing passwords who can access applications with different passwords with ease and work flawlessly across any platform.

Law Debate
Robin Sharma and Swamini Chhibbar, BBA-LLB (Hons) 2nd Year students were adjudged the ‘Best Team’ in the Law Debate held at Amity Law School, Noida.

ECE student participates in International SPIE Meet at USA
Manica Kathuria (ECE 4th semester) was sponsored to participate in the SPIE meeting at San Diego, CA, USA under the SPIE NCU student chapter. She received a grant of $2500 and a full waiver of the student registration fee.

Alacrity at QUADTORC 2015
Team ‘Alacrity’ consisting of 24 students from Department of Mechanical Engineering participated in the technical event ‘QUADTORC 2015’ organized by ISNEE at Faridabad. It secured 5th position out of 32 participating teams from across the country.

Multi-disciplinary team ‘Electrotech’
Multi-disciplinary team ‘ELECTROTECH’ comprising Chaitanya Jhanji (ME), Kubhushan Gogia (ME), Sahil Saini (EEE) and Karan Malhotra (EEE) participated in a national level automation competition organized by M/s Mitsubishi Electric Ltd. ELECTROTECH has been shortlisted amongst top 24 teams (out of 100 participating teams) who will now compete for The Mitsubishi Electric Cup Finals to be held at Pune in end February 2016.

Debate
- BBA-LLB (H) team comprising Danish Kaur Mavi (1st year), Mandeep Kalra (4th year) and Swamini Chhibber (2nd year) participated in the ‘Pitch Parliamentary Debate Competition’ organized by GD Goenka University, NCU’s School of Law bagged the first position, cash prize of Rs 5000, free access to LexisNexis database and a set of Law books worth Rs 6000.
- Robin Sharma, BBA-LLB (H) 4th Semester, participated in ‘SPLASH 2015’ the cultural fest at Lady Hardinge Medical College, New Delhi. He received the ‘Best Speaker’ award in ‘DESPUTATIO – DEBATE’.

- Our Law team was awarded the Champions trophy in the G D Goenka University Debate Competition.

**Best Campus Ambassador**

Vishnu Tandi, student of 4th year BBA-LLB(H) received the Best Campus Ambassador award from India National Bar Association for excellent work in the legal industry.

**Design Competition**

Lokesh Lochav (CE 4th semester) won two rounds of the National Design Competition at the regional level. He is ranked amongst Top 10 participants and represented the University in the finals at Bangalore. The organizers of the competition, CAAD Centre, Dwarka, visited the University to felicitate Lokesh.

**Quiz Competition**

Puranjay Bhatt and Shubham Yadav, BBA-LLB (H) 3rd Year participated in the annual quiz competition ‘Quaestus, 2015’ held at Atma Ram Sanatan Dharma College, University of Delhi. Competing among 18 teams from across Delhi NCR, they stood at 2nd position in the finals, and received a cash prize of Rs. 2,500. The competition witnessed participation from various educational institutions such as IIT Delhi, Jamia Millia Islamia, Kamla Nehru College, Shaheed Sukhdev College of Business Studies, SriVenkateshwara College.

**GRIDTECH 2015**

- Humanoid robot ‘Dexto:Eka’ developed by Himanshu Vaswani, Yash Gupta and Sumit Gupta (ECE final year) secured 2nd Runners-up position in Student’s Innovation Pavilion held at GRIDTECH 2015 (5th International Exhibition & Conference) at ITPO, Pragati Maidan, New Delhi. The Project was awarded a cash prize of Rs. 25,000.

- In addition to project ‘Dexto:Eka’ two more innovative projects were selected for the exhibition: ‘GPS based Collision Avoiding System’ prepared by Akshay Kapoor, Arjun Pannu and Anshul Lakra (EECE); ‘Intelligent Parking System with Damage Notification’ prepared by Shubham Ahuja and Sawan Chauhan (EECE).

**Theatre Society ‘Abhimanch’**

Street and Stage Play teams of NCU’s Theatre Society ‘Abhimanch’ participated at NIT Kurukshetra’s Annual Fest. Street Play team stood First and the Stage Play team stood Third.

**Enactus NCU shows pottery skills**

Enactus NCU participated in the Enactus National Competition and received a grant of Rs 20,000 for their ‘Project Kumhaar’ under Walmart Women’s Economic Empowerment project partnership.

**Canon Photo Marathon**

Abhishek Shanker (BTech-IT Final Year) has been awarded a Grand Prize of a US$ 5000 for a trip to Japan at the Canon Photo Marathon, India, 2015 for attending a Photo Clinic in Japan.

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Enactus NCU shows pottery skills
Model United Nations
- Hitansh Thakur (CE 4th semester) was selected by MUN Circuit for the post of Rapporteur in the Executive Board (Judges panel) of Indore MUN 2015.
- Mr Nitesh Jain BBA-LLB (H) won Special Mention award at the Zenith Model United Nations held at Miranda House, Delhi University and at Model United Nations (SYMUNC) organized by Symbiosis Centre for Management Studies, Noida.

Moot Court Competitions
Our teams bagged:
- The Runners-Up trophy at 5th ILNU All India Moot Court Competition 2015, organised by the Institute of Law, Nirma University.
- 8th position at the ALSA International Moot Court Competition at Jakarta, Indonesia. This was the first event where our Law students participated in a foreign country.
- The Runners-up trophy at the G H Raisoni State Trial Advocacy Moot 2015 at Nagpur. Rohan Seth also bagged the ‘Best Advocate Prize’.

A short film by NCU students
A short film titled ‘The Last Truth’ directed by Kushagra Gupta (CSE 6th Sem) with Abhishek Shanker and Tanya Pahuja (IT 6th semester) as the lead cast was premiered at the University.

Youth Parliament ‘Disha’
The University organized the first edition of NCU Youth Parliament ‘Disha’. Students from different colleges across Delhi NCR participated in the event.

SPIE student chapter
Mohit Yadav, President SPIE student chapter, NCU and Shubham Sehgal, Student Member attended the 19th International Symposium on VLSI Design and Test - VDAT 2015 at Nirma University, Ahmedabad. They attended the tutorial on Cadence VLSI Design tools. Both the students received a grant for their participation in the symposium by SPIE Student Chapter.

Students visit Russia
Hemant Bindal, Parth Dudeja and Karan Kapoor (CSE) went for Management internship to Moscow, Russia, through AIESEC, an International and student-run organization to work under Russia’s National Project, Project Sunshine. They worked in a team comprising of members from different parts of the globe.

Photography Training Workshop
Student photography society, Lumiere organizes interactive training workshops that are free of cost, and are open to all. A seminar was organized by Lumiere to guide the students about photography techniques. Kaushal Chug, final year student of Dept of ECE and also a professional photographer, explained the composition of a camera and its settings while shooting in different conditions.

Jagriti Yatra
Pulkit Garg, student of BTech Final year (ECE), was selected for ‘Jagriti Yatra: Building India through Enterprise 2014’. Jagriti Yatra was a 15 day long odyssey that took budding
entrepreneurs and other distinguished achievers across India, introducing them to like-minded peers, and helping them explore wider horizons.

**Google Online Marketing Lab**

University’s Google Student Ambassador, Palash Chhabra was invited to attend an Online Marketing Lab by Google. The event comprised of a three-day live training programme which helped the participants increase their online marketing knowledge. It also provided the resources and skill-set to understand Google’s tools and functionalities and become Google Adwords Certified Individual. Palash was also trained to introduce the Online Marketing Course in the University with the help of AdClass Programme.

**Beyond the Classroom**

Life at the University has been more than an academic experience and students were provided ample opportunities in and outside the classrooms for their all-round development.

The students celebrated the annual cultural fest of the University ‘Momentum’ and the tech fest ‘Cerebration’ with the theme ‘Where Mass Meets Velocity’. Students from over 20 colleges and institutions of Delhi-NCR participated in over 100 events, celebrity performances, professional workshops and technical events.

The University celebrated Club Fiesta when student clubs of the University organized cultural programmes, game shows, extracurricular activities and competitions. It was an opportunity for students to showcase their talents and extracurricular skills.

**Social Cause –Yukti**

- Yukti, the social service club of NCU, visited the old age home in Gurgaon and provided amenities to the mentally and physically challenged residents. Student volunteers spent time with them and were empathetic listeners to them.

- Taking forward the ‘Swachh Bharat’ campaign, Yukti initiated a cleanliness drive in the neighbourhood of the University. They also sensitized the residents and others in the area about cleanliness and sanitation.

- Yukti under its ‘Vastradaan’ scheme ran a campaign to collect and distribute winter clothing for the underprivileged. Yukti also invited children from the orphanage and encouraged them to participate in cultural programmes at the University.
**Sports Achievements**

During the reporting year students participated in various sports tournaments at state and national levels and have brought laurels to the University. NCU Table Tennis team won the Silver Medal in the Table Tennis tournament during the Inter Collegiate Sports Festival ‘Udgosh 2015’ organized by IIT Kanpur. Competing in a league of 30 teams participating from different colleges and universities from all across the nation, NCU defeated the 3 times defending champions IIT Kanpur in the semi-finals to compete with NIT Trichy in the Finals.

**Ice Hockey Nationals**

Avi Sharma, student of BBA 3rd year participated in the 3rd IHAI National Ice Hockey Championship, under Junior Boys U-20 category. His team finished as Runners Up in the Finals bagging the coveted Silver Medal.

A Lawn Tennis tournament was organized by ‘SPACE’, the Civil Engineering Society at NCU. The tournament saw participation from various departments including Civil, Mechanical and ECE. Indoor and Outdoor Inter-Departmental Sports Tournaments for the session 2015-16 were held in the University in which teams from all the three Schools participated with great zeal and showcased their sports skills.

**Mini Marathon**

To further its commitment to Raahgiri, health consciousness amongst youth, the University organized its first ever Mini Marathon. Students and staff of NCU and other colleges of Delhi-NCR participated in the marathon.

**Conclusion**

The University is well on course to its designated goal of ranking amongst the foremost universities of the country. We have the vision, enriched value system, will and commitment, eminent leadership, the ever improving intellectual capital and infrastructure to support our mission with Swami Vivekananda’s words to inspire us: “Arise, Awake and Stop Not till the Goal is Reached”.
Agenda Points

Agenda Point 1:

Reporting of update on name change of the University

The University was rechristened as THE NORTHCAP UNIVERSITY with effect from 31 August 2015. Since its establishment ITM University (now NCU) had earned an enviable reputation of academic excellence at the Under Graduate and Post Graduate level. Consequent to the pole position enjoyed by the University our accomplishments and achievements was being appropriated by other institutions with the same name with a view to improve their visibility. Similarly the shortcomings of other similar named institutions by default effected our institution. Considering all of the above aspects including the University’s multi-disciplinary offerings in Engineering, Management and Law, it was decided that the University should go for rechristening.

Registrar shall update the members on the action taken by the University for name change.

Agenda Point 2:

Review of Curriculum

As brought out in the ‘Action Taken Report’ the University had taken up an exercise in June last year to re-design the programme schemes and rationalise the total credits for each programme as also offer more flexibility to students by increasing the number of programme electives open electives and foundation electives. This resulted in rationalization of credit programmes in all Departments and the current range of credits for a UG programme is between 170-175 credit points. The idea is to create a more, modernized flexible and streamlined curriculum for the students at the University.

The Vice Chancellor shall brief the members about the University’s curriculum review and the changes that are planned to be implemented from the Academic Year 2016-17, to enable our students to become qualified Engineers, Managers and Lawyers. Further suggestions of the Members are solicited for improvement in academic curriculum.

Agenda Point 3:

Progress on Research Projects

Research Development and Industry Liaison (RDIL) cell, the nodal agency in the University which monitors and advises the faculty on various research activities, reports that three sponsored projects which have been completed and five research projects are ongoing. Research and teaching mesh together seamlessly, at NCU. With the vast experience of research of Prof. A Sen Gupta at the National Physical Laboratory, who is now guiding the RDIL, the process of research at the University is likely to enhance.

Prof. A Sen Gupta will present an overview of the Research and Development activities and the collaborative programmes with other organizations. Members’ advice is sought in taking our research and development efforts further.
Agenda Point 4:

Introduction of New Courses

The University has enhanced its close collaborations with the industry with the objective of bridging the gap between the classroom and the real world. New courses are being planned as under to be introduced from the next academic year. Discussion for collaboration of some of these programmes with IBM is currently on. The programmes proposed to be introduced are:-

- BTech CSE with specialization in Information Security.
- BTech ECE with specialization in Internet of Things.
- MBA in Business Analytics.
- MTech CSE with specialization in Cyber Security.
- MTech CSE with specialization in Data Sciences.

HoD CSE and concerned faculty from School of Management will brief on the proposed courses. Members’ views are sought on the new courses under consideration.

Agenda Point 5:

Academic updates and MoUs signed in 2015.

The University, besides obtaining recognition from accreditation agencies and statutory bodies, is now collaborating through its Departments to share knowledge and resources with industry by signing joint memoranda of understanding. This is a part of the strategy to accelerate and sustain the effort that will help Departments to remain competitive and relevant to the industry. We have applied for extension of NBA accreditation of our BTech programmes and also include MBA programme for NBA accreditation, sought NAAC accreditation and have also participated in the first National Institution for Ranking (NIRF), recently initiated by the MHRD. Some of the MoUs signed during the year are:

- **MoU with Mistubishi**: MoU signed by Dept of Mechanical Engineering with Mr Mahoto Kitai, MD MEL, with the objective of spreading awareness about automation amongst engineering students and provide training to them in Mistubishi equipment. They will also support the University in student project/training.

- **MoU with Protinus Infotech Private Limited Gurgaon and Ingenioicity, Noida**, provides technical and process based solutions to various industries. Under this MoU, students of CSE will be taken as Summer interns and joint projects would be undertaken between the University students and the Company to help bridge the gap between the academic and industry.

- **MoU for Primavera & Autocad**: MoU has been signed by Dept of Civil & Environmental Engineering with Primavera & Autocad Training Centre. NCU CAD is Asia’s largest training institution that trains students on CAD/CAM/CAE/RAFX/Project Management & Interior Design. It is already helping students to learn to use these tools.

- **MoU with InnovatioNext**: MoU has been initiated by School of Management and signed by the University with InnovatioNext which is an innovation consulting firm, helping corporates in developing innovative capacity and creative leaders. It aims to enhance quality and creative talent of NCU students by various programmes by conducting EDP/MDP Programmes.
• **MoU with Shodhganga:** MoU has been signed by the University with Information & Library Network Centre (INFLIBNET Centre) to provide access ETD (Electronic Theses & Dissertations) to create meta data, and upload theses and dissertations in the ETD repositories designed for the purpose. Two of our completed theses are being uploaded on this platform.

• **MoU with Ansyst Consulting:** MoU has been signed by Dept of CSE to establish collaborative relations with Ansyst Consulting for exploring career opportunities specifically for the CSE and IT students by associating our students with live projects/product development.

• **MoU with Miracle Eye Group (MEPL), Numeric Technologies and Ingenioicty** for joint projects and product development by NCU’s team of faculties, students and company engineers have been signed with Dept of CSE.

• **MoU with VDoIT Technologies:** MoU has been signed for the faculty members of the NCU for Technical seminars/continuing education programs and support in the technical aspects of software development on a sustained basis.

• The University has exchanged draft MoU with **Institute of Telecom Technology & Management (ITTM), MTNL, New Delhi** for the students of BTech (ECE) for internships, training and industrial visits.

• **MoU with AgBe Technologies,** MoU has been signed for exploring career opportunities for students and for joint project and product development.

• In addition, the University has exchanged a draft MoU with Michigan Technological University, USA for tie up with Dept of CSE.

*Director SOET shall update the Members on the various academic initiatives and MoUs that the University has signed in the last one year. Members are requested to suggest ways and means to further enhance industry interaction and academic excellence.*
### Agenda Point 6:

**Effort towards conservation of environment**

THE NORTHCAP UNIVERSITY is an environmental friendly institution. Campus wide initiatives are committed to the green environment such as energy conservation through installation of a 150 kw roof top solar PV system with net metering facility to support the national cause of reducing our carbon print. A number of measures have been undertaken by the University recently. The idea is to inculcate an understanding amongst the faculty, staff and students to take ownership of our environment and help in reducing carbon emissions on the Campus.

Some of the initiatives taken by the University to make the campus eco-friendly are as under:

<table>
<thead>
<tr>
<th>S NO.</th>
<th>ECO FRIENDLY ASPECT</th>
<th>ACTION TAKEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Energy Conservation</td>
<td>Based on a detailed green audit report by PowerGrid Corporation in December 2014 – January 2015, the following actions have been taken: The new construction is equipped with LED lighting. The old workshops and buildings have been renovated with false ceilings to reduce heat load. Renovation of existing classrooms are being planned to have the LED lighting system.</td>
</tr>
<tr>
<td>2.</td>
<td>Use of renewable energy</td>
<td>Based on a green audit, installation and commissioning of 150 KW rooftop solar PV System is completed at our parking area in October 2015.</td>
</tr>
<tr>
<td>3.</td>
<td>Water harvesting</td>
<td>5 rain water harvesting structures have been constructed within the University premises. The pipes go to 300 feet below ground and are of 8 inches diameter so as to reach the aquifers and ensure ‘Zero discharge’ of rain water beyond the campus.</td>
</tr>
<tr>
<td>4.</td>
<td>Efforts for Carbon neutrality</td>
<td>The University has ensured a green foot print of 6 acres of green area out of the 10 acres of campus.</td>
</tr>
<tr>
<td>5.</td>
<td>Plantations</td>
<td>A very vibrant and green garden is maintained in the University, with ample trees/ shrubbery. It has been the consecutive 14th year winner of Haryana Urban Development Authority (HUDA) competition in Gurgaon.</td>
</tr>
<tr>
<td>6.</td>
<td>Hazardous waste management</td>
<td>The University garbage is handed over responsibly to the Municipal Corporation of Gurgaon (MCG) for the proper disposal of the same. No hazardous waste is produced in the Campus. A 100 KLD sewage treatment plant is being installed in the campus to ensure zero discharge to municipal sewer line with plans to sustain our water irrigation requirements of horticulture from treated water.</td>
</tr>
<tr>
<td>7.</td>
<td>E – waste management</td>
<td>E – waste is segregated and reused where relevant or else the e-waste is recycled to external vendors. A tie up with Hindustan Times has ensured our paper recycling for their newsprint requirements upto 2014 till the scheme lasted.</td>
</tr>
<tr>
<td>8.</td>
<td>Odd-even scheme for vehicles</td>
<td>The challenge of reducing carbon footprint is a collective responsibility, therefore, as citizens of the country and role models for others the University has taken a decision to permit entry of vehicles (cars and two-wheelers) inside the campus, based on their odd and even registration numbers and the scheme is ongoing.</td>
</tr>
</tbody>
</table>

*Prof. Pushpesh Pant, Professor & Dean NCU Law School, himself a keen environmentalist shall brief the Members on our environmental friendly initiatives. Members are requested to advise further action in this regard.*

### Agenda Point 7:

Any other point with the permission of the Chair.
Dean’s List of Students 2015

To promote excellence in academics and to recognize outperformers, students scoring a CGPA of 9.5 and above are included in a selected Dean’s List. This achievement is reflected in their degrees. They form a think tank for the University’s academic reforms, and enjoy special privileges and pride of place in the University. They are specially invited to conduct distinguished visitors to the University. This policy has worked significantly to encourage students to strive towards making the grade to be on the Dean’s list.

Even Semester 2015

Under Graduate

School of Engineering & Technology
Lakshya Nanda
Devansh Bhatia
Garima Bhayana
Lakshay Chaudhary
Nandini Gupta
Neha Khan
Shreya Chadha
Sushant Ghai
Nitin
Pankaj Dagar
Shubham Sehgal
Radhika Agrawal
Jitender Verma
Sumit Jain
Tanyam
Akshay Kumar
Divya Sharma
Divya Bajaj
Kunal Arora
Sukrit Sharma
Abhishek Jain
Aishwarya Basotia
Hemant Hasija
Ishant Bhardwaj
Simar Preet Kaur

Mehek Chandna
Dinesh Dangi
Sparsh Bhayare
Suyash Abhay Ghimikar
Balram Sharma
Ruchi Khatri
Sanya Gambhir
Bhrigu Joshi
Kumar Abhishek
Shivam Garg
Rajvi Kaushik
Rashi Aggarwal
Gaurav Chauhan
Geetika Guleria
Rounak
Shubham Ahuja
Vidhi Sachdeva
Dinesh Tanwar
Esha Prashar
Akash Sheoran
Preeti Dagar

School of Law
Gabriella Ruhl
Anubha Yadav
Himangshu Rathee
Arohi Kashyap
Mohit Vats
Tashi Vaish

Post Graduate

School of Engineering & Technology
Dilpreet Singh
Kriti Chaudhary
Ankita Gupta
Priyanka Rastogi
Tanuja P Bhandari
Gaurav
Priyanka Jain
Shivani Garg

School of Management
Supriya Rajpal
Sumedha Bansal
Odd Semester 2015

Under Graduate

School of Engineering & Technology
Aadish Goel
Chhavi Jain
Madhav Goyal
Madhur Bahl
Ruchi Arora
Rupal Kapoor
Sakshi Garg
Shaurya Jauhari
Shubhashree Dash
Sarthak Agarwal
Kartik Sikka
Sidharth Sharma
Baljinder Singh
Mayank Juneja
Nikhil Juneja
Shubham Gagal
Lakshya Nanda
Devansh Bhatia
Garima Bhayana
Lakshay Chaudhary
Nandini Gupta
Neha Khan
Shreyas Chadha
Manish Yadav
Nitin
Pankaj Dagar
Shubham Sehgal
Radhika Agrawal
Jitender Verma
Sumit Jain
Tanya
Akshay Kumar

Divya Sharma
Divya Bajaj
Kunal Arora
Sukrit Sharma
Abhishek Jain
Aishwarya Basotia
Hemanth Hasija
Ishant Bhardwaj
Neha Gossain
Simar Preet Kaur
Mehek Chandna
Dinesh Dangi
Sparsh Bhayare
Suyash Abhay Ghinikar
Balram Sharma
Sanya Gambhir
Bhargu Joshi
Kumar Abhishek
Rajiv Kaushik
Rashi Aggarwal
Gaurav Chauhan
Laveena Garg
Preeti Dagar

School of Law
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Mukul Sharma
Arohi Kashyap
Mohit Vats
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Priya Bhargava
Vimal Dahiya
Supriya Rajpal