

The Annual Quality Assurance Report (AQAR)
of the
Internal Quality Assurance Cell (IQAC)
for year 2016-17

Submitted by



The NorthCap University

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The Annual Quality Assurance Report (AQAR) of the IQAC

All NAAC accredited institutions will submit an annual self-reviewed progress report to NAAC, through its IQAC. The report is to detail the tangible results achieved in key areas, specifically identified by the institutional IQAC at the beginning of the academic year. The AQAR will detail the results of the perspective plan worked out by the IQAC. (Note: The AQAR period would be the Academic Year. For example, July 1, 2012 to June 30, 2013)

Part – A

I. Details of the Institution*

1.1 Name of the Institution

The NorthCap University

1.2 Address Line 1

HUDA

Address Line 2

Sector – 23A

City/Town

Gurugram

State

Haryana

Pin Code

122017

Institution e-mail address

ncu@ncuindia.edu

Contact Nos.

+91 124 2365811-13

Name of the Head of the Institution:

Brig. S.K. Sharma (Retd.)

Tel. No. with STD Code:

0124 4195276

* Facts and figures provided by Registrar NCU

Mobile:

9811591003

Name of the IQAC Co-ordinator:

Prof. Ravindra Ojha

Mobile:

9818000292

IQAC e-mail address:

ravindraojha@ncuindia.edu

1.3 NAAC Track ID (For ex. MHC0GN 18879)

NA

1.4 NAAC Executive Committee No. & Date:

(For Example EC/32/A&A/143 dated 3-5-2004.
This EC no. is available in the right corner- bottom
of your institution's Accreditation Certificate)

EC (SC)/15/A&A/85.1 dated 25-05-2016

1.5 Website address:

www.ncuindia.edu

Web-link of the AQAR:

http://www.ncuindia.edu/images/pdf/IQAC_Booklet.pdf

For ex. <http://www.ladykeanecollege.edu.in/AQAR2012-13.doc>

1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 st Cycle	B	2.72	2016	5 years
2	2 nd Cycle				
3	3 rd Cycle				
4	4 th Cycle				

1.7 Date of Establishment of IQAC : 08/08/2011

1.8 AQAR for the year (for example 2010-11)

2016-17

1.9 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC (for example AQAR 2010-11 submitted to NAAC on 12-10-2011)

* University was accredited by NAAAC in May 2016, and this is the first AQAR post NAAC accreditation.

- i. AQAR NA (DD/MM/YYYY)
- ii. AQAR (DD/MM/YYYY)
- iii. AQAR (DD/MM/YYYY)
- iv. AQAR (DD/MM/YYYY)

1.10 Institutional Status

University State ☐ Central ☐ Deemed ☐ Private ☒

Affiliated College Yes ☐ No ☒

Constituent College Yes ☐ No ☒

Autonomous college of UGC Yes ☐ No ☒

Regulatory Agency approved Institution Yes ☒ (BCI) No ☐

(eg. AICTE, BCI, MCI, PCI, NCI)

Type of Institution Co-education ☒ Men ☐ Women ☐

Urban ☒ Rural ☐ Tribal ☐

Financial Status Grant-in-aid ☐ UGC 2(f) ☒ UGC 12B ☐

Grant-in-aid + Self Financing ☐ Totally Self-financing ☒

1.11 Type of Faculty/ Programme

Arts ☐ Science ☒ Commerce ☒ Law ☒ PEI (Phys Edu) ☐

TEI (Edu) ☐ Engineering ☒ Health Science ☐ Management ☒

Others (Specify)

1.12 Name of the Affiliating University (*for the Colleges*)

The NorthCap University

1.13 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc NA

Autonomy by State/Central Govt. / University

University with Potential for Excellence

UGC-CPE

DST Star Scheme

UGC-CE

UGC-Special Assistance Programme

DST-FIST

UGC-Innovative PG programmes

Any other (*Specify*)

UGC-COP Programmes

2. IQAC Composition and Activities*

2.1 No. of Teachers	<input type="text" value="9"/>				
2.2 No. of Administrative/Technical staff	<input type="text" value="2"/>				
2.3 No. of students	<input type="text" value="2"/>				
2.4 No. of Management representatives	<input type="text" value="2"/>				
2.5 No. of Alumni	<input type="text" value="1"/>				
2.6 No. of any other stakeholder and community representatives	<input type="text" value="1 (Pro-Chancellor)"/>				
2.7 No. of Employers/ Industrialists	<input type="text" value="1"/>				
2.8 No. of other External Experts	<input type="text" value="1"/>				
2.9 Total No. of members	<input type="text" value="19"/>				
2.10 No. of IQAC meetings held	<input type="text" value="6"/>				
2.11 No. of meetings with various stakeholders:	No.	<input type="text" value="5"/>	Faculty	<input type="text" value="8"/>	
	Non-Teaching Staff	<input type="text" value="2"/>	Students	<input type="text" value="1"/>	
	Alumni	<input type="text" value="1"/>	Others	<input type="text"/>	
2.12 Has IQAC received any funding from UGC during the year?	Yes	<input type="text"/>	No	<input checked="" type="text" value="v"/>	
If yes, mention the amount	<input type="text"/>				
2.13 Seminars and Conferences (only quality related)					
(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC					
Total Nos.	<input type="text" value="2"/>	International	<input type="text"/>	National	<input type="text"/>
		State	<input type="text"/>	Institution Level	<input checked="" type="text" value="v"/>
(ii) Themes	<ul style="list-style-type: none"> • Creating Value through Quality • Six Sigma and Lean Basics 				

2.14 Significant Activities and contributions made by IQAC

- A major revamp of the entire program curriculum in consultation with the Industry and Academia experts.
- Improvement in students' employability through CoCubes training and tests across SOET students.
- Upgradation of the Quality of the final year students' industry internship.
- Student examination reforms.
- Quality of project orientation through 'TECHNOVATION'

2.15 Plan of Action by IQAC/ Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year *

Plan of Action	Achievements
<ul style="list-style-type: none"> • Curriculum improvement • 4 year Strategic plan formulation • Students' employability improvement plan • Quality of students industry internship • Reform in student examination 	<ul style="list-style-type: none"> • Comprehensive industry relevant revamp done • Laid down the detailed plan • Introduced CoCubes Test • Live problem oriented project and 100% faculty visit to industry • Minor test pattern, similar to Major and duration of Minor test reduced

* Attach the Academic Calendar of the year as annexure (attached as **Annexure 1**).

2.15 Whether the AQAR was placed in statutory body Yes ☒ No ☐

Management ☒ Syndicate ☐ Any other body ☒ **(Governing Body)**

Provide the details of the action taken

Part – B

Criterion – I

I. Curricular Aspects*

1.1 Details about Academic Programmes

Level of the Program	Number of existing Programmes	No. of programmes added during the year	No. of self-financing programmes	No. of value added/ Career Oriented programmes
PhD	School of Engineering & Technology 1.PhD in CSE 2.PhD in ECE 3.PhD in Civil Engineering 4.PhD in ME 5.PhD in Applied Science 6.PhD in Centre for Language Learning 7.PhD in School of Management 8.PhD in School of Law	NIL	NIL	NIL
PG	1. M.Tech. in CSE 2.M.Tech. in ECE 3. M.Tech. in VLSI Engineering 3. M.Tech. in Civil Engineering 4. M.Tech. in ME 5.Master of Sc. in Mathematics 7. LLM 8.MBA	NIL	NIL	1. M.Tech. in CSE 2. M.Tech. in ECE 3. M.Tech. in VLSI Engineering 3. M.Tech. in Civil Engineering 4. M.Tech. in ME 5.Master of Sc. in Mathematics 7. LLM 8. MBA
UG	1. B. Tech. in Computer Science & Engineering 2. B. Tech. in Electronics & Communication Engineering 3. B. Tech. in Electronics & Electrical Engineering 4. B. Tech. in Civil Engineering 5. B. Tech. in Mechanical Engineering 6. BSc. in Mathematics (H) 7. BSc. in Economics (H) 8. BBA 9. BBA-LLB	1. Bachelor of Science in Physics (H) 2. Bachelor of Fine Arts in Animation & Visual Effects – 4 years.	NIL	1. B. Tech. in Computer Science & Engineering 2. B. Tech. in Electronics & Communication Engineering 3. B. Tech. in Electronics & Electrical Engineering 4. B. Tech. in Civil Engineering 5. B. Tech. in Mechanical Engineering 6. BSc. in Mathematics (H) 7. BSc. in Economics (H) 8. BBA 9. BBA-LLB

* Facts and figures provided by Dean Academics

PG Diploma	NIL	NIL	NIL	NIL
Advanced Diploma	NIL	NIL	NIL	NIL
Diploma	NIL	NIL	NIL	NIL
Certificate	NIL	NIL	NIL	NIL
Others	NIL	NIL	NIL	NIL
Total	24	01		16

Interdisciplinary				
Innovative				

- 1.2 (i) Flexibility of the Curriculum: CBCS/Core/Elective option / Open options
(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	24
Trimester	NIL
Annual	NIL

1.3 Feedback from stakeholders* Alumni ☐ Y Parents ☐ Y Employers ☐ Y Students ☐ Y
(On all aspects)

Mode of feedback : Online ☐ Y Manual ☐ Y Co-operating schools (for PEI) ☐

Please provide an analysis of the feedback in the Annexure 2 (attached as **Annexure 2).*

1.4 Whether there is any revision/ update of regulation or syllabi, if yes, mention their salient aspects.

1. Department of Electrical, Electronics & Communication Engineering

- a) Rationalisation of credits.
- b) Updation of the course content by removing irrelevant/duplicate/obsolete topic from the syllabi
- c) Reduction in number of courses in a semester from 6 to 5 courses and Average Contact hours per week reduced from 27.37 hrs. to 23.75 hrs.
- d) Practical and project oriented syllabi by including more lab based courses and project work in all courses.
- e) Introduction of new track 'Internet of Things' for electives. This track includes courses like 'Cloud Computing, Big Data, IoT based Application development' offered by IBM faculty. Now the 3 tracks for elective courses are-Electronics, Communication and Internet of things
- f) Introduction of new electives courses
- g) Teaching only 2-3 subjects on a day against current 4-5 subjects. Timetable has been designed accordingly. Lab of a course to be followed by its theory class.
- h) Other points like Incorporating service learning (GP) in all semester, Introduction of Math Lab, Introduction of Self study topics in each course and to be included in evaluation.

2. Department of Mechanical Engineering

- a) Rationalizing the course content by removing irrelevant/duplicate/obsolete topics from the syllabi of B.Tech and M.Tech courses.
- b) Making syllabi of B.Tech and M.Tech subjects updated, industry and application oriented, for enhancing their employability
- c) Assessing the practical/ tutorial content and suggest if new experiments/activities need to be added in the syllabi.
- d) Reducing overall credits and modification of LTP structure of courses for effective utilization of classroom contact hours
- e) Making more time available for students by reducing the contact hours

3. Department of Computer Science & Engineering

- a) Develop competent professionals with analytical skills and independent thinking, through excellent undergraduate and graduate education for productive career in industry, academia and administration

- b) To enhance theoretical, experimental and applied of faculty and students in Computer Science through nationally and internationally recognized research.
- c) Continuously improve physical, academic information and computing infrastructure.
- d) Support society by focusing on entrepreneurship and socially relevant projects.
- e) Create a nurturing environment for lifelong learning skill.

4. School of Management-MBA

- a) Revision of L-T- P structure of courses from 2-0- 2 to 2-1- 0 to facilitate more application based and experiential learning in the classroom.
- b) Revision of L-T- P structure of courses from 2-0- 2 to 2-1- 0 to facilitate more application based and experiential learning in the classroom.
- c) Revision of average per day contact hours of the programme to ≤ 5 to ensure that students get enough time for project work, research and library work, self-study and development and participation in extracurricular activities.
- d) Introduction of Business Analytics as a specialization field.
- e) Incorporation of courses on communication and leadership

5. School of Law

- a) Rationalization of credits.
- b) All the core courses are kept uniformly with 5 credits each with LTP 4-1-0
- c) Introduction of tutorial component in LTP with SOP designed.
- d) Introduction of 3 compulsory Internships of 3 credits each in Sem-V, VII and IX.
- e) Most of the Courses are swapped in order to impart preliminary knowledge in initial semesters and application based knowledge in last semesters.
- f) Introduction of new elective courses.

1.5 Any new Department/Centre introduced during the year. If yes, give details.

2. Teaching, Learning and Evaluation*

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
121	96	18	6	1

2.2 No. of permanent faculty with Ph.D.

62

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

Asst. Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
16				2				18	

2.4 No. of Guest and Visiting faculty and Temporary faculty

25	45	
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2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	15	36	1
Presented papers	31	5	0
Resource Persons			

2.6 Innovative processes adopted by the institution in Teaching and Learning:

Industry Oriented <ul style="list-style-type: none"> • Guest Lectures • Workshop • Industrial Visit • Video Lectures For Faculty <ul style="list-style-type: none"> • Externship • Industry visit during student internship

2.7 Total No. of actual teaching days during this academic year

150

- 2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

EXAMINATION REFORMS IMPLEMENTED

The following Examination reforms have been implemented during Academic session 2016-2017.

1. Pattern for Minor Test question paper setting (except languages) recast on the model adopted for Major Test question paper and divided into three parts viz. A, B & C ; where part 'A' consists of Short answer type questions, 'B' consists of long answer or derivation type questions and C consists of a Case study/ numerical/design related or differentiator question.
2. Examination system reviewed and instead of two Minor tests per semester, only one Minor Test of 90 min duration mid-way during the semester introduced to allow adequate syllabus coverage before subjecting students for examination after start of semester. The Minor test is in addition to on-line tests, quizzes and tutorials held at regular intervals during the semester.
3. Examination answer sheet does not have the name or signatures of the student to ensure secrecy during evaluation.
4. Third Party Employability assessment test introduced for all students so as to prepare them to get placed either during the pre-final semester or immediately after graduating.
5. Major Test question papers set by the Examiner vetted by a Committee comprising of HOD and senior Faculty of the School/Department and at least two or more External members who are senior Academicians/ Subject Experts.
6. Major Test question papers subjected to Post-Examination audit by Senior Academicians /Subject Experts other than those who vetted the papers prior to the examination. Observations and suggestions received are incorporated in the next Major Test.

- 2.9 No. of faculty members involved in curriculum restructuring/ revision/ syllabus development as member of Board of Study/ Faculty/ Curriculum Development workshop

148		
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- 2.10 Average percentage of attendance of students

77.3 %

2.11 Course/Programme wise distribution of pass percentage:

	Title of the Programme		Division				
			Distinction %	I %	II %	III %	Pass %
UG Courses	Btech CSE	137	14	73	9	-	96
	Btech CV	51	12	67	16	-	94
	Btech ECE	133	16	68	10	-	93
	Btech EEE	50	14	66	12	-	92
	Btech IT	50	14	74	8	-	96
	Btech ME	108	10	68	12	-	90
	BSc(Maths)	24	21	42	17	-	79
	BBA	80	14	40	1	-	55
	BCOM(Hons)	40	8	60	8	-	75
	BSc(Eco-Hons)	24	13	63	8	-	83
	BBA LLB (Hons)	74	8	72	18	-	97
PG Courses	PhD						
	Mtech (All)	60	12	80	2	-	93
	MSc (Maths)	14	14	71	7	-	93
	MBA	37	11	68	8	-	86
	LLM	9	11	78	11	-	100

2.12 How does IQAC Contribute/ Monitor/ Evaluate the Teaching & Learning processes:

The IQAC cell's meeting takes place in every two months period and is chaired by Vice Chancellor and directed by Director SOET having 19 team members from all the departments and students representatives as well. The typical agenda points of IQAC meeting are:

ITEM NO. 1: Confirmation of the minutes of the previous meeting of IQAC.

ITEM NO. 2: Progress made in building the Quality of industry engagement - All HoDs.

ITEM NO. 3: Status of the research publications in NCU and the related new initiatives taken for its quality improvement – Dy Dean RDIL.

ITEM NO. 4: Quality improvement related initiatives taken/ implemented in the 2017-18 academic curriculum – Dean Academics.

ITEM NO. 5: Status of AQAR report 2016-17 – Dir. SOET

ITEM NO. 6: Any other point with the permission of the Chair.

At the end of academic session the consolidated report is sent to NAAC as AQAR report.

2.13 Initiatives undertaken towards faculty development

Faculty/ Staff Development Programmes	Number of faculty benefitted
Refresher courses	148 (IIT Courses, online course on Coursera etc.)
UGC – Faculty Improvement Programme
HRD programmes	150
Orientation programmes	21+15=36
Faculty exchange programme	
Staff training conducted by the university	121+50=171
Staff training conducted by other institutions	
Summer / Winter schools, Workshops, etc.	126
Talks shows of medical counselor	148

2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	41		4	3
Technical Staff	62		1	2

3. Research, Consultancy and Extension*

3.1 Initiatives of the IQAC in Sensitizing/ Promoting Research Climate in the institution

1. Focus on Quality Publications as per recommended by NIRF (Web of Science, Scopus)
2. Strong emphasis on unpaid Publications and discouraging paid ones.
3. Procurement of “Scanning electron Microscope for Central Research facility.
4. Financial Assistance to faculty member for attending conferences.

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	1	9	-	18
Outlay in Rs. Lakhs	9.3	109.86	-	716.20
Total in Rs. Lakhs	119.16			

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	-	-	-	-
Outlay in Rs. Lakhs	-	-	-	-

3.4 Details on research publications

	International	National	Others
Peer Review Journals	195	15	-
Non-Peer Review Journals	-	-	-
e-Journals	-	-	-
Conference proceedings	26	8	-

3.5 Details on Impact factor of publications:

Range SCI 0.47-8.05 Average 0.71 h-index (SCOPUS) 4 Nos. in SCOPUS 67

* Facts and figures provided by Dy. Dean RDIL

3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned in Lakhs	Received Till June17 in Lakhs
Major Projects	3	DRDO (CARS)	9.99	9.3
	3	DST (WOSA)	30.03	21.5
	3	DST (WOSA)	20.51	8.87
Major Projects	3	DST (WOSA)	25.41	13.17
	3	DST (CSRI)	18.27	7.4
	3	DST (WOSA)	24.30	11.44
	3	DST (SERB) Young Scientist	42.02	22
	3	DST (WOSA)	18.90	7.35
	3	DST (WOSA)	18.15	6.05
Total			207.58	107.08
Minor Projects	-	-	-	-
Interdisciplinary Projects	3	DST (CSRI)	19.31	12.08
Industry sponsored	-	-	-	-
Projects sponsored by the University/ College	-	-	-	-
Students research projects (other than compulsory by the University)	1	The Northcap University	0.43	0.43
	1		0.60	0.60
	1		2.0	2.0
Total			3.03	3.03
Any other(Specify)	-	-	-	-
Total			229.92	122.19

3.7 No. of books published i) With ISBN No. Chapters in Edited Books

ii) Without ISBN No.

3.8 No. of University Departments receiving funds from : **Nil**

UGC-SAP CAS DST-FIST
DPE DBT Scheme/funds

3.9 For colleges: **Nil** Autonomy CPE DBT Star Scheme
INSPIRE CE Any Other (specify)

3.10 Revenue generated through consultancy

3.11 No. of conferences organized by the Institution

Level	International	National	State	University	College
Number	0	3	0	11	0
Sponsoring agencies	-	<ul style="list-style-type: none"> * Metrology Society, Delhi * Wika Instruments India Private Ltd, Pune, Maharastra * Micronix Associates, Aurangabad * Mitutoyo Southasia Pvt. Ltd, New Delhi * National Board For Testing And Calibration Lab, Gurgaon, Haryana * Advanced Technological Laboratories, Delhi * National Council For Cement And Building Material, Ballabhgarh, Haryana * Isothermal Technology Private Limited, Delhi * National Physical Laboratory, Delhi * Canan Testing Services, Delhi 	-	NCU, ASQ	-

3.12 No. of faculty served as experts, chairpersons or resource persons 18

3.13 No. of collaborations 6 International 12 National - Any other

3.14 No. of linkages created during this year 18

3.15 Total budget for research for current year in lakhs:

From funding agency 119.16 From Management of University/College 36.47

Total 155.63 Lakh

Total budget for research for current year in lakhs				
A.	VC Innovation Fund			
S. No.	Students Names	Faculty Mentor	Title	Amount Received (In Lakhs)
1	Harshit Juneja (13CSU050), Kriti Aggarwal (13CSU066)	Dr. Shilpa Mahajan	Wifi powered indoor navigation system with multilingual support (Nav Me Bot)	0.20
2	Tushar Chadha (13MEU111), Ketan Singhal (13EEU019)	Ms. Anjali Garg, Dr. Feras Al-Hakkak	Power generation through moving vehicles on road	1.35
3	Suyash Abhay Ghirnikar (13MEU107), Tanmay Dhanote (13MEU109)	Dr. Feras Al-Hakkak, Mr. Anuj K. Jain	Design and fabrication of a hybrid rocket engine	2.0
Total (In Rs. Lakhs)				3.55
B.	From Management of University (Central Research Facility)			32.92
	Total A+B (In Rs. Lakhs)			36.47

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	Nil
	Granted	Nil
International	Applied	Nil
	Granted	Nil
Commercialised	Applied	Nil
	Granted	Nil

3.17 No. of research awards/ recognitions received by faculty and research fellows

Of the institute in the year

Total	International	National	State	University	Dist	College
19	9	7	0	3	0	0

3.18 No. of faculty from the Institution
who are Ph. D. Guides
and students registered under them

66

136

3.19 No. of Ph.D. awarded by faculty from the Institution

8

Sr. No.	Name of the Scholar	Roll No.	Title of PhD Thesis	Date of Registration	Date of Award	Department/ School
1	Alpana Agarwal	12MSD001	Bio Inspired Models for Management of Organizational Systems	23/5/2012	30/5/2016	SOM
2	Shiv Manjari Gopaliya	10MED001	Kinematics and Dynamics of Multi- Degree of Freedom Robotics Systems using Analytical and Artificial Intelligent Techniques with Experimental Validation	16/8/2010	8/7/2016	ME
3	Shashi Gupta	12MSD006	“An Empirical Analysis of Volatility, Price Discovery and Hedging Effectiveness in Indian Commodity Futures Market”	18/6/2012	10/12/2016	SOM
4	N. Kumar Swamy	10ASD001	'Investigation of Structural, Magnetic and Transport Properties of Doped Manganites and Multiferroic material'	16/8/2010	23/12/2016	APS
5	Ravindra Ojha	13MSD008	'Modelling and Analysis for Manufacturing Growth in Indian	20/7/2013	2/3/2017	SOM

			Economy'			
6	Irameet Kaur	12MSD009	“A Paradigm Shift In Education Management – Application Of Emotional Intelligence And Social Media Based Human Resource Practices”	5/1/2013	21/3/2017	SOM
7	Sheila Mahapatra	10ECD002	“Intelligent Control Techniques for TCSC Implementation In Power Transmission System.”	5/1/2011	11/2/2017	EECE
8	Vaishali Sahu	10CVD002	“Study on Stabilized Fly Ash Lime Sludge Composite As Pavement Base Course Layer”	16/8/2010	2/5/2017	Civil

3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF SRF Project Fellows Any other

No. of Research scholars receiving the University Fellowships (Rs 25,000 Per Month)

1	Divya Jain	14CSD002	CSE & IT
2	Priyanka Maan	15CSD008	CSE-IT
3	Ankita Gupta	17CSD005	CSE/IT
4	Rishika	17CSD010	CSE/IT
5	Poonam Yadav	17CSD011	CSE/IT
6	Shradha Singh Parihar	14ECD002	EECE
7	Ram Sharma	15ECD005	EECE
8	Anshul Vats	15ECD010	EECE
9	Jyoti Dabass	16ECD007	EECE
10	Pallavi Asthana	16ECD008	EECE
11	Darpan Dahiya	15MED002	ME
12	Chetna Tyagi	13ASD001	APS

3.21 No. of students Participated in NSS events:

University level	<input type="text" value="45"/>	State level	<input type="text" value="-"/>
National level	<input type="text" value="-"/>	International level	<input type="text" value="-"/>

3.22 No. of students participated in NCC events: **Nil**

University level	<input type="text" value="-"/>	State level	<input type="text" value="-"/>
National level	<input type="text" value="-"/>	International level	<input type="text" value="-"/>

3.23 No. of Awards won in NSS: **Nil**

University level	<input type="text" value="-"/>	State level	<input type="text" value="-"/>
National level	<input type="text" value="-"/>	International level	<input type="text" value="-"/>

3.24 No. of Awards won in NCC: **Nil**

University level	<input type="text" value="-"/>	State level	<input type="text" value="-"/>
National level	<input type="text" value="-"/>	International level	<input type="text" value="-"/>

3.25 No. of Extension activities organized

University forum	<input type="text" value="-"/>	College forum	<input type="text" value="-"/>	
NCC	<input type="text" value="-"/>	NSS	<input type="text" value="2"/>	Any other <input type="text" value="Yukti-4 activities"/>

NSS Activities

1. **School Outreach:** The NSS society- NCU took an initiative to inculcate positive attitude among underprivileged students of different NGO's and government school. On 10th April '17 four teams under NSS were formed to make young students aware of the increasing competition and stresses they might face physically and mentally.
2. NSS Self Financing Unit of NCU organised an annual seven day camp at Abhaypur village under Sohna Subdivision from 25-31 Jan 2017. The theme of this year's camp was "Youth for Eco Development"

Day	Date	Activity
1	25-01-2017	Cleanliness Drive
2	26-01-2017	Street Play and Self Defense Training
3	27-01-2017	Yoga and Meditation, Team Building Activities
4	28-01-2017	Inauguration and Village tour
5	29-01-2017	Plantation
6	30-01-2017	Digital India
7	31-01-2017	Skill India and Team Work

Yukti Activities

1. **Organ Donation Drive:** Yukti social service cell organised an organ donation camp, from 20th to 24th March 2017, wherein people could pledge to donate their organs after death. The main aim of this camp was to spread awareness about the benefits of organ donation in case of brain death and thus motivate students/faculty to pledge to donate their organs after death.
 2. **Cleanliness Drive:** In this event, we aim to clean the road near sector 23-A market as well as the road outside ITMU. These areas have been identified by Yukti Volunteers due to the litter spilt in these areas. We aim to clean the whole road and also, aim to spread awareness amongst college students to promote a healthy environment. The event is scheduled on 6th October 2016.
 3. **Campaign against animal abuse in association with Peta and Khadi :** This event was organised during momentum 2016.
 4. In continuation with its previous activities i.e. cleanliness drive and the performance during Momentum, Yukti team visited old age home 'Tau Devi Lal' Situated in Sector 4, Gurugram, under Suvidha and Khushi Cell , on 19 Nov 2016.
- 3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility.
1. The National Science Day is celebrated on 28 February to pay tribute to the Nobel Laureate Sir Chandrasekhar Venkata Raman, the National Science Day on 28 February 2017.
 2. The University organized a panel discussion on 'Gender Equality and Women Empowerment' in collaboration with Brahma Kumaris and Gurugram Police on 11 March, 2017 at NCU campus.

The event was organized in continuation to the joint campaign titled 'Sashakt Neev' on Gender Equality, Women respect and Empowerment led by Brahma Kumaris and Gurugram Police.

3. NCU in association with NGO, Goonj, organized 'Abhaar Mela' on 21 March 2017. It comprised of a book fair of used books and the sale of Green by Goonj Products (a brand built around reusing and up cycling even the last shreds of materials received).
4. A Workshop on 'Thinking beyond yourself with empathy and compassion' was conducted by Ms Sonia Puar on 25 February 2017 for faculty, admin and technical staff of the University.
5. In Line with NCU's commitment towards 'Disease free Fraternity' a free of cost Diagnostic Camp, was organised in a tie up with Vijaya Diagnostic Centre on 5 February 2017.
6. On 3 February 2017 the NorthCap University (NCU) Chapter of SPIC MACAY organized a theatre performance by 'Naya Theatre' founded by renowned playwright, poet and actor Late Habib Tanvir.
7. The Legal Awareness poster making competition was organised at NCU related to women and children and human rights violations.
8. A pollution Check Centre was inaugurated by Secretary Regional Transport Authority (RTA), Gurugram on 16 January 2017 at NCU, near the Basketball Court.
9. Nivaran III- Preventive Health Check Camp, was organised at the University o 18 January 2017. Around 50 People made good use of the specialised diagnostics camp.
10. The NorthCap University in collaboration with Brahamkumaris, Palam Vihar and RITES organized a talk on 'Work-Life Balance' by Sister Shivani in the NCU Auditorium on 29 April 2017.
11. The Department of Civil & Environmental Engineering (CEE) organized the World Environment day on 5 June 2017.
12. To celebrate Blood Donation Day on 14 June 2017. The NorthCap University and Columbia Asia Hospital, Gurugram.
13. The University organized an on-campus 'Dental Health Investigatin and Consultation Camp' in association with Columbia Asia Hospital on 10 August 2016.
14. The NorthCap Univeristy in collaboration with Goonj, an NGO organized a Clothes Collection Camp covering entire Gurgaon on 6 Nov 2016, Under Goonj's campaign 'Odha Do zindagi'.
15. Blood Donation Camp in the University Campus on 22 September 2016.
16. SPIC MACAY activites on 28 September 2016.
17. 'Divine Light' on 5 October 2016 for an Art and Culture Programme at The NorthCap Univeristy.
18. Hand Care Foundation, in association with Enactus Chapter at The NorthCap Univeristy, has installed a plastic bottle recycling machine in the University campus near the Cafeteria. The used PET bottle can be recycled through this machine and can be converted into T-Shirts, bag packs, caps etc.
19. A talk on 'depression' by Dr Shweta Sharma, Psychologist, Columbia Asia Hospital was delivered on 7 April 2017 on the occasion of world Health Day.

20. The Department of CEE organized the Inter school Design & Tech Competition for different schools in the NCR on 20 April 2017 and the Department also inaugurated the Indian Road Safety Campaign (IRSC) in association with IIT Delhi.
21. The School of Law in association with full Gospel Trust of India Conducted a Legal Aid Camp in New Delhi on 28 January 2017. Adv. Sulacha, and Adv. Babitha (Advocates, High Court of Delhi) Chaired the legal aid clinics.
22. 'Road Safety Week' from 11-17 January 2017 as part of the National Road Safety Week. The event was organized in association with the Secretary, Regional Transport Authority (RTA), Gurugram, presided over by the Chief Guest, Shri Balbir Singh, HPS, DCP Traffic, Gurugram and Shri Dharmender, HCS, Secretary RTA, Gurugram.
23. Students activities, to provide free legal aid to society,
24. Reporting the inmates of the Bhondsi jail
25. Help Police to file correctly in understanding the law FIR.
26. Enactus: Manufacturing pencil out of used paper.

4. Infrastructure and Learning Resources*

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	10 Acres	NIL	Own and Loan	
Class rooms	66+18 (T)	NIL		84
Laboratories	68	NIL		68
Seminar Halls	02+01	NIL		03
No. of important equipments purchased (\geq 1-0 lakh) during the current year.		5		5
Value of the equipment purchased during the year (Rs. in Lakhs)	-	1154540		1154540
Others (IT) Plz refer 4.4, 4.5 & 4.6				

4.2 Computerization of administration and library

- Library is automated through software named LIBSYS 4.
- 28 computers are available for general access, along with 2 printers in the library.
- 60 MBPS internet bandwidth is available which provides good internet access.
- Learning Management System (LMS) provided through 'Moodle' as an institutional repository and as a content management system for e- learning.
- Remote access to Library e-resources available 24*7.

4.3 Library services:

	Existing		Newly added		Total	
	No.	Value (₹)	No.	Value (₹)	No.	Value (₹)
Text Books	59083	88,37739.00	2,235	12,68,984.00	61318	10106723.00
Reference Books	4200	14,78,292.00	190	74250.00	4219	15,52,542.00
e-Books	1,36,000	8,05,309.00	--	--	1,36,000	8,05,309.00
Journals	170	9,08,000.00	04	17525.00	174	9,25,525.00
e-Journals	20,245	38,53,055.00	--	--	20,245	38,53,055.00
Digital Database	06	38,53,055.00	--	--	06	38,53,055.00
CD & Video	1430	Free with Books	41	Free with Books	1471	Free with Books
Others (specify)	--	--	--	--	--	--

* Facts and figures provided by Registrar NCU

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing	936	27	60 mbps	--	--	--	--	--
Added	7	0	0	--	--	--	--	--
Total	943	27	60 mbps	--	--	--	--	--

4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)

7 laptops have been added

4.6 Amount spent on maintenance in lakhs :

i) ICT	3293777
ii) Campus Infrastructure and facilities	602015
iii) Equipments	1086898
iv) Others	246314
Total :	5229004

5. Student Support and Progression*

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

IQAC has played a major role for bringing awareness among University students about Student Support Services. There is a very active IQAC student chapter for bringing quality awareness among the students. Regular seminars and invited talks are conducted by inviting senior professionals from the industry. Students are extended support for:

- Counselling for pursuing higher studies
- Summer Inter ship with the industry
- Job placements with core / dream companies
- The University has a student mentoring and support system. Academic Counselling at the Deputy Dean (Academics) level, Career counselling by the Director (School of Professional Attachment) and counselling on administrative & Discipline/ Complaints through the Registrar, welfare measures through the Deputy Dean (Students)
- Preparation for competitive exams like: UGC-CSIR-NET, SLET, IAS, GATE/ CAT/ GRE/ TOFEL/ GMAT/ Central/ State services, etc.
- University publish its prospectus/ handbooks annually for the students' information
- Providing financial aid to students in the form of scholarships
- University provides assistance for obtaining educational loans from banks
- Equal opportunities are offered for differently abled students.
- Entrepreneurship cell encourages students for self-employment by various activities organized by them. The entrepreneurship incubation cell has been set up.
- Welfare schemes are available like book bank and medical care support system.
- Students are encouraged to become a part of professional societies.
- Suitable support is available for the students for academic/ tech./ sports/ cultural events.
- University has a student grievance re-dressal cell which is based on the UGC guidelines
- University has student representatives from each class as part of Student class committees, which interact with University authorities on various issues of student concerns

5.2 Efforts made by the institution for tracking the progression

Institute makes all out efforts for tracking progression like:

- Data is maintained for all students who have gone for higher studies and a regular contact is maintained through the alumni cell
- A placement portal maintains complete data for placement of the students and the summer internships.

* Facts and figures provided by SPA

- The Entrepreneurs are offered technical as well as financial support through the Incubation centre
- Regular interactions are planned with student class committees to receive feedback on various issues related with academics, infrastructure, faculty, discipline, library, canteen and any other important issues.

5.3 (a) Total Number of students	UG	PG	Ph. D.	Others
	3109	218	134	-

(b) No. of students outside the state 1953

(c) No. of international students NIL

	No	%		No	%
Men	2419	70%	Women	1042	30%

Last Year						This Year					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
1006	3	0	0	0	1009	809	0	0	0	0	809

Demand ratio

Dropout %

5.4 Details of student support mechanism for coaching for competitive examinations (If any)

Academic support is provided for qualifying GATE exams in the form of special classes and mock tests on the pattern of GATE

No. of students beneficiaries 300

5.5 No. of students qualified in these examinations

NET	-	SET/SLET	-	GATE	3	CAT	-
IAS/IPS etc	-	State PSC	-	UPSC	4	Others	6

5.6 Details of student counselling and career guidance

SPA provides special sessions for career guidance to the students. Industry experts are invited with technical as well as HR background to guide the students about their readiness to migrate from Campus-to-Corporate. Help is also extended by the alumni and faculty

No. of students benefitted

500

5.7 Details of campus placement

<i>On campus</i>			<i>Off Campus</i>
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
105	305	274	-

5.8 Details of gender sensitization programmes

- Gender Equality and women empowerment – 86 participants
- Women day celebration – 70 participants
- National workshop on equality, justice and gender sensitisation – 128 participants

5.9 Students Activities

5.9.1 No. of students participated in Sports, Games and other events

State/ University level

10

National level

2

International level

-

No. of students participated in cultural events

State/ University level

20

National level

2

International level

-

5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports : State/ University level

2

National level

-

International level

-

Cultural: State/ University level

5

National level

-

International level

-

5.10 Scholarships and Financial Support

	No. of Stds.	Amount
Financial support from institution	266	14084006
Financial support from government	-	-
Financial support from other sources	-	-
Number of students who received International/ National recognitions	-	-

5.11 Student organised / initiatives

Fairs	: State/ University level	<input type="text" value="2"/>	National level	<input type="text" value="1"/>	International level	<input type="text" value="-"/>
Exhibition:	State/ University level	<input type="text" value="-"/>	National level	<input type="text" value="-"/>	International level	<input type="text" value="-"/>

5.12 No. of social initiatives undertaken by the students

5.13 Major grievances of students (if any) redressed: _____

6. Governance, Leadership and Management*

6.1 State the Vision and Mission of the institution

Vision:

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

Mission:

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

6.2 Does the Institution has a management Information System

Computerization of administration and library:

- Library is automated through software named LIBSYS 4.
- 28 computers are available for general access, along with 2 printers in the library.
- 60 MBPS internet bandwidth is available which provides good internet access.
- Learning Management System (LMS) provided through 'Moodle' as an institutional repository and as a content management system for e- learning.
- Remote access to Library e-resources available 24*7.

ERP: Enterprise Resource Planning System (ERP) has been implemented in The NorthCap University, Gurgaon since November, 2013 with the collaboration of DigiUniv Nyasa, Noida.

* *Facts and figures provided by VC office*

The system includes following modules:

1. Admission and Fee Module

- a. Form Collection and Verification
- b. Fee Management System

* *Facts and figures provided by VC office* ds

- d. Class Management
- e. Related Reports

2. Academic Module:

- a. Semester Registration
- b. Time Table Generation
- c. Faculty Feedback
- d. Related Reports

3. Attendance Module:

- a. Bio-metric Attendance System
- b. Linking with ERP
- c. Related Reports

4. Examination Module:

- a. Admit Card Generation
- b. Grading and Results
- c. Related Reports

5. Administrative Module

- a. HRMS
- b. Student Placement

6.3 Quality improvement strategies adopted by the institution for each of the following:

6.3.1 Curriculum Development

Process for Curriculum Review & Implementation

1. Core courses and electives **content has been thoroughly reviewed** and old courses phased out / new ones as per contemporary trends brought in particularly electives. New courses/ topics like engineering design/problem solving etc. have been added as suggested by industry experts. This opportunity has been used to align the curriculum with the objectives of the strategic plans of the dept as well.
2. In engineering programs **not more than 5 core/elective courses per semester**. Provision for including one additional PDP/VA type of course beyond this per semester to take care of new industry requirements has been made. For School of Management & School of Law programs, although number of courses per semester may be more than 5, but overall daily and weekly contact hour limit is being maintained.

3. One foreign language course, courses on “**Environmental Studies**” and “**Human Values & Ethics**” as well as English Language **are compulsory**.
4. Core courses shall normally be 4 credits (3-0-2) & Electives of 3 credits (2-0-2) with ‘**Practical**’ **component being expanded in scope to be called as “Practice”**.

The practice shall include **three components namely (i) problem solving/project work/ case studies (ii) experimental work and (iii) a lab project**. The number of turns(hours) for (i) & (ii) would depend upon the type of course and shall be decided by faculty as required on course to course basis. The (iii) component i.e. lab project work is supplementary to lab work and shall be given as self-study work to students individually or in small groups at the start of the semester & evaluated at the end.

The broad plan for these components has been indicated in the individual **course templates which are tailored as required by the faculty taking that course**.

This shall ensure due attention to all components of teaching viz. lecture, tutorial and lab work/project work and intensive utilization of the allocated time. This will also encourage more & more project orientation in the learning process by students.

The courses shall be treated as an **integrated unit and assigned to the same faculty** so that the lecture and practice truly complement each other, enriching the quality of teaching-learning.

5. Curriculum has **flexibility with the target of approximately 60 % core and 40% electives** including program electives and open electives. This is an indicative bench mark and any program to program variations have been approved by their respective BOSs.
6. Class size shall be **restricted to 45-50 students**, as far as possible to ensure effective problem solving /case study sessions in 90 minute classes. The class shall be divided in two practical groups of maximum 25 students each to ensure proper lab / practice conduct.
7. **Project Work & Industry Internships** have been introduced in all programs in view of the importance of hands on & real world exposure for students. These activities carry appropriate number of credits, which vary from program to program. Project work during internships is being emphasized, which can be carried as major projects. This shall bring in certain amount of live project experience for students.
8. **General Proficiency (GP) Credits:** The students are expected to have ample time for self-study/self-development. Students shall daily have non-contact time of average 3 hrs. at campus. This time shall be utilized by students for the purposes of self-study and holistic development by participation in extra / co-curricular activities / participation in contests / service to society / special skills development/winning of national or international recognition/awards etc. **This student**

development effort shall be evaluated through GP evaluation every semester and shall carry one credit/ semester.

For example, with GP credits, the expected range for Credits for **B Tech programs is 160 plus instead of 155-160.**

9. **VA Courses for enhancing employability:** VA (Value Added) courses are wholly practice oriented with 0-0-2 (1 credit). The topics for these courses is to be chosen every year based on industry inputs. The VA courses of PDP type are being coordinated by CLL and offered in 6th Semester. In other semesters, technical VA courses unique to each dept maybe run and shall be coordinated by the depts. Further, there are two predominantly practice oriented English courses offered in 1st and 2nd Sem of B.Tech & certain other UG programs. The recommended credit structure for these courses is 1-0-2 (2 credits).
10. **Making students Industry Ready:** Most of the well known companies hiring fresh engineering or management students put them through some basic tests before short listing them for interviews/ further assessments. These tests include English Usage, analytical and quantitative ability, logical reasoning, English writing, coding and certain core domain tests. NCU has retained **Co-Cubes, an agency specializing in these tests**, to evaluate our students and suggest remedial measures. The score in “Preassess” tests conducted by this agency for final year students opens additional employment opportunities for our students in companies associated with Co Cubes or similar agencies.

In view of high importance of these skills for employability, the process is being built into our curriculum, particularly with regard to domain & coding tests. For other tests, **practice material is being given to students via LMS/Weblinks** for self-study. Internal testing for the other topics is proposed to be formally done **as part of GP evaluation at the end of each semester.**
11. **MOOCs and Online Courses :** In view of the good quality teaching material being available from UGC, as well as reputed sites like MIT , .edx , Courseera etc. some courses in each program ,particularly elective courses are being recommended to be run in blended learning mode with local facilitation and evaluation to ensure quality. Further, regular teaching is being supplemented by QEEE program of IIT, Chennai, Spoken Tutorial Program of IIT Mumbai & Virtual Lab programs of IIT Delhi.
12. **FDP and Externship Programs:** Good course delivery is the key to success of this exercise and it is important that faculty keeps itself upto date/ reskilled on some of the new technologies proposed in the curriculum. For that purpose, technology oriented FDPs are proposed at Dept. level in summer where domain experts from outside shall be invited, while University level FDPs are run

during the Winters. Further, the faculty is also being encouraged to do 3-4 days externships with industry to keep them abreast of latest trends and also work with industry on joint projects.

13. **Time Tabling:** With the proposed teaching plan of **five courses per week & the lecture duration of 90 minutes, it is feasible to work on time table with 2-3 subjects per day** and lecture followed by lab concept. Daily contact hours shall be approximately five. Departments shall be working towards this objective from the forthcoming semester.

This shall give the student appx.3.0 hrs. daily as free time which can be used for self-study and co-curricular & extracurricular activities and service to society activities etc. Depts are expected to prepare their own plans for GP activities for proper utilization of the 3 hour non classroom time by students.

14. **Approvals of Revised Curricula**

All Depts / Schools have gone through the process of revision of the curriculum of their programs. Extensive discussions have been held at faculty level amongst core groups, dept. level and inter departmental levels. Feedback from academic & industry experts has also been taken.

In view of the focus on new technologies, current industry trends, the BOS of various depts have been reconstituted with experts from renowned universities and industries. Based on the BOS recommendations, the Review of Curriculum was done from July 2017 onwards.

6.3.2 Teaching and Learning

Improvements in Teaching Learning Process

The Salient Action Points

1. **Reduce the contact hours of students to appx.5 Hrs./day from current 6+ hours/ day**, to allow the students more time for self-study , to inculcate the habit of independent learning as well as participate in more extra & co curricular activities for holistic development.
2. **Teach only 2-3 subjects on a day** against current 4-5 subjects, to reduce variety & allow the students to better concentrate on these subjects. This is particularly applicable to B.Tech & M.Tech programs where significant lab work & project work is proposed.
3. **Increase the lecture duration to 90 minutes from current 60 minutes in selected subjects** to enable faculty teaching the subject to deliver the content more effectively. The faculty is also expected to make use of multiple teaching aids like videos, demo models, problem solving sessions etc. to make the lectures more wholesome and interesting and provide better learning experience to students. The depts may select suitable subjects as well as experienced faculty for these courses

before start of the semester. Faculty may also innovate & evolve methods for improving delivery to sustain interest of students for the extended period of 90 minutes.

4. **Reduction in credits from current 170-175 to 150-160 range for B Tech programs.** This range compares well with various IITs & IIITs where such programs have 150-155 credits. This is a major restructuring which shall facilitate fulfillment of action points above and some subsequent points.

For MBA and other courses the credit structure has also been reworked, to bring it in line with current trend at top Universities like IIMs, FMS etc. A separate exercise has been done for BBA-LLB etc. to bring down credits, keeping in view the BCI guidelines.

5. **Build in the Importance of sharpening of Communication & Soft Skills in curriculum** to enhance the employability of students. This is one of the key inputs from industry. The syllabus of English as well as other soft skill courses has been revamped and aligned with needs of the industry. The learning has been made highly practice oriented for better outcomes. A foreign language course (with choice of German, French or Spanish) has been made compulsory to open international opportunities for our students
6. **50% - 50% weightage of marks allocation to Exams (Major & Minor) and other elements of continuous evaluation (Practice).** With equal weightages, the pass marks for Theory & Practical (Practice) should be equal (e.g. with 40% as pass marks both Theory & Practical's should have equal pass marks of 20% each of the total). This shall bring in more seriousness in students towards practical work/hands on practice.
7. **Incorporate maximum live projects in curriculum to give more importance to practical/hands on experience** in which students are usually deficient. This will also encourage self-study effort by students & develop their problem solving skills. Accordingly labwork in all courses shall have lab projects for students in addition to experiments. These projects shall be done singly or in small groups by students, allocated in the start of semester and evaluated at the end.
8. **Reducing two Minors to one Minor Tests** to cut down the load of examination & to reduce number of evaluations. Students feel overburdened with too many evaluations. The time and weightages of the Minor test shall be appx 50% of the Major test, this being a mid sem test.
9. **Reduce class contact hours from 30 to max 26hrs/week** in each semester to reduce burden on students and give more time for self-study and other activities for holistic development.
10. **Lectures & Practical be preferably taught by the same faculty.** This is the essence of 'Practice' period & shall integrate lecture & practical, tutorial work. Senior faculty (Professors & above) may take labs also & consider associating young faculty/ research fellows for labs/workshop support to

train them. This shall give benefit of their rich experience to junior faculty as well as students & avoid disconnect between lectures and practical work.

11. **Incorporate service learning in all our syllabus** and engage with non- profit organizations for this method of learning to bring in holistic development of students. The aspect of social responsibility has been highlighted by all industry experts.
12. **All textbook resources updated.** Outdated textbooks / teaching weeded out and latest state of art books introduced to align with current industry and technology trends. This has been supplemented with high quality online resources. Some of the open source material shall be integrated with the course and problem solving/project work resources available online shall also be made use of.
13. **Maths Lab Introduced:** For an alternate teaching strategy for Maths, a Maths Lab has been introduced for the Maths course to make the classes more interesting. Visualization of various mathematical concepts shall be done through various softwares for better appreciation of the concepts normally found difficult to understand.
14. **Courses on problem solving, critical reading and creative writing introduced** and curriculum up graded for strengthening soft skills and improving analytical and logical reasoning for enhancing employability.
15. **Introduction of self-study topics:** Every course has some self-study topics and reference study material has been indicated in the course template. These topics will not be covered in the class. Evaluation process shall cater for self-study components of syllabus also with 10-15 % weightage in Minor & Major Tests. Question paper formats shall be suitably reworked.

6.3.3 Examination and Evaluation

EXAMINATION REFORMS IMPLEMENTED

The following Examination reforms have been implemented during Academic session 2016-2017.

1. Pattern for Minor Test question paper setting (except languages) recast on the model adopted for Major Test question paper and divided into three parts viz. A, B & C ; where part 'A' consists of Short answer type questions, 'B' consists of long answer or derivation type questions and C consists of a Case study/ numerical/design related or differentiator question.
2. Examination system reviewed and instead of two Minor tests per semester, only one Minor Test of 90 min duration mid-way during the semester introduced to allow adequate syllabus coverage before subjecting students for examination after start of semester. The Minor test is in addition to on-line tests, quizzes and tutorials held at regular intervals during the semester.

3. Third Party Employability assessment test introduced for all students so as to prepare them to get placed either during the pre-final semester or immediately after graduating.
4. Major Test question papers set by the Examiner vetted by a Committee comprising of HOD and senior Faculty of the School/Department and at least two or more External members who are senior Academicians/ Subject Experts.
5. Major Test question papers subjected to Post-Examination audit by Senior Academicians /Subject Experts other than those who vetted the papers prior to the examination. Observations and suggestions received are incorporated in the next Major Test.

6.3.4 Research and Development

- Financial Assistance to faculty members for Conferences.
- Focus on Quality Publications as recommended by NIRF (Web of Science, Scopus).
- Strong emphasis on unpaid publications and discouraging paid ones.
- Procurement of 'Scanning Electron Microscope' for Central Research Facility.

6.3.5 Library, ICT and physical infrastructure/ instrumentation

LIBRARY :

LIRC has procured below mentioned number of titles and copies for the year 2016-17 (till July 2017)

No. of Titles added from June 16 to July 17 : 219 titles

No. of Copies added from June 16 to July 17: 2,235 copies

Total Cost : Rs. 12,68,984.00

E Resources Renewal : LIRC has renewed following E resources for the year 2016-2017:

ASME : Rs 2,27,498.00

ASCE : Rs 2,73,352.00

Proquest E Centarl : Rs 8,05,309.00

Sage Journals: Rs 77500.00/-

Lexis Nexis: Rs 2,30,000.00/-

Manupatra: Rs 2,39,396.00/-

Total Amount spent on Renewal of E Resources for the year 2016-17: **Rs 18, 53, 055.00/-**

Printed Journals/ Magazines:**New Purchased : 04 (Rs 17,525.00/-)****Renewed Old ones: 56 (Rs 2,07,200.00/-)****ICT:**

The University frequently upgrades its IT facilities and has latest computing facilities.

- Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing	936	27	60 mbps					
Added	7	0	0					
Total	943	27	60 mbps					

- Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)

7 laptops have been added

- Amount spent on maintenance in lakhs :

i) ICT

3293777

ii) Campus Infrastructure and facilities

602015

iii) Equipments

1086898

iv) Others

246314

Total :

5229004

6.3.6 Human Resource Management**1. Winter/Summer FDP Program.**

- 06 days summer FDP holds every year in first or second week of June/July month.
- 06 days winter FDP holds every year in first or second week of Dec month.

2. Orientation Program.

An orientation program held every year in month of Aug for all newly joined faculty member to make them familiar with key areas like ERP Process, RDIL Process, Online Test, HR policies.

3. Employee Engagement Activities.

- a. FUNCU – A Cultural Event organized on Saturday by NCU Faculty & Staff.
- b. Women's day celebration
- c. Talk show on gender equality and women empowerment
- d. Best teacher award/Teachers day celebration

4. Medical / Counselling Centre.

A dedicated psychologist is available for counselling of all staff member whenever is required by individual to rejuvenate them. Time to time the counselling centre organizes awareness camps like:-

- a. Positive psychology & wellbeing
- b. Dental health camp.
- c. Nivaran-III
- d. Thinking beyond yourself with empathy & compassion
- e. Mammography & talk by Gynaes
- f. Talk on depression (world health day)
- g. Disease free fraternity

6.3.7 Faculty and Staff recruitment

1. Career Advancement Progression Scheme for recruitment of External candidates are available.
2. Promotion Scheme for internal candidates.

6.3.8 Industry Interaction/ Collaboration

School of Law:

- Association with District Legal Services Authority, Gurgaon (Social Projects and students as Para legal Volunteers)
- National Green Tribunal, New Delhi
- Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India
- Partners of Reputed Law firms interacting with students
- Senior Supreme Court Advocates members of various committees
- MoU with Navjyoti India Foundation
- Students interning with Public Prosecution Office, New Delhi

DEPARTMENT OF CIVIL & ENVIRONMENTAL ENGINEERING

Industry Interaction

INDUSTRIAL VISITS CONDUCTED

For the academic year 2016-17 (June 2016-July 2017)

S. No.	Sem.	Date	Place of Visit	Accompanied by
1	2nd year	15.02.2017	NDMC's 200 KLD sewage treatment plant based on an innovative Soil Biotechnology technique	Mr. Lokesh Choudhary and Mr. Shubham Bansal.
2	3rd year	22.03.2017	Geological Site Investigation of Aravalli hills in Haryana	All faculty
3	1st year	2.03.2017	GURGAON 1 Site, under Alpha Construction Pvt Ltd, Sector 84 Gurugram	Ms Purnima Bajpai & Ms Megha Kalr
4	1 st Year	2.09.2016	HIGHWAY WIDENING OF NH9	Mr Lokesh Choudhary
5	2nd year	24.10.2016	ULTRA TECH RMC PLANT, GURGAON	Mr Akx Malik and Ms Megha Kalra

GUEST LECTURES

For the academic year 2016-17(June 2016-July 2017)

S. No.	Sem.	Date	Topic of the lecture	Delivered by
1	ALL	11.01.2017	Condition of India in terms of the climate change, pollution levels, rainfall fluctuations	Dr Sd Attri Deputy Director General, India Meterological Department
2	2nd and 3rd year	10.1.2017	Real Estate and application of Solar Energy	Dr. K N Rai, Former Chief Executive (CW&E) and Advisor (Special Projects)DRDO, Min of Defence
3	2nd and 3rd year	19.01.2017	Interpersonal Skills and Body language	Mr. Chirag Singla (2009-2013),owner QuickDoctorIN Pvt. Ltd
4	3rd year	11.02.2017	"Construction Contracts & Safety"	Mr Saurabh Jolly, Vice President, Seafardays Pvt Ltd
5	3rd year	18.02.2017	Arbitration / conciliation	Mr. Gursharanjit Singh Rosha, currently, President, ASCE – India Section (Northern Region)
6	2nd and 3rd year	28.02.2017	Competitive exams	Vipul Bajaj on who have secured AIR - 77 in IES (Year 2016
7	2nd and 3rd year	22.03.2017	Ductile Detailing of structures	Mr. Varun Bajaj, Structural design engineer , WS Atkins India Pvt Ltd
8	4th year	20.04.2017	Career oriented discussion	Mr. Anand Poonia, Assistant Commissioner, Indian Revenue Services, Customs and Central Excise, Faridabad.
9	2 ND year	5.05.2017	CE Professional in a real estate	Nikita Gupta(2009-13), IREO Pvt. Ltd.
10	Vth	16.08.2016	Expert Talk on Water Supply problems and concerns in Haryana	Mr. Ram Niwas Malik, Engineer In-Chief (Retd.) from Haryana State Industrial Development Corporation Limited (HSIDC)

11	IIIrd	20.08.2016	Values & practices of a good Engineer.	Mr. D K Goel
12	ALL	9.09.2016	Infrastructure Growth in India & Future of Civil Engineering Profession”	Prof. Gajanan M. Sabnis
13	ALL	28.09.2016	“Cyclone, Drought and Floods & their relation with Monsoon Circulation	Dr R K Jenamani
14	All	17.06.2016	Quality Control of Roads	Mr OP Sharma

WORKSHOPS & SEMINARS -2016-17

S. No.	Topic of Workshops / Seminars	Attended by
1.	1 day Workshop on STAAD PRO	47 Students from final year
2.	5 days Workshop of total station	All 3 rd year students-47 in no
3.	1 day Workshop on E Tabs software	51 students from 3 rd year
4.	1 day Workshop on Revit Architecture	61 students from 2 nd year
5.	Auto Cadd (40 hours workshop)	40 students
6.	Revit Architecture one day workshop	40 3 rd year students
7.	Staad Pro one day work shop	25 students from all batches
8.	E tabs	40 students
9.	National level design competition and AUTO CADD	40 3 rd year students
10.	Revit	25 students from all batches
11.	QEEE	3 rd year students
12.	SSRCID-National Conference	All batches
13.	Auto cadd	60 3 rd year students
14.	STAAD Pro	30 2 nd year students
15.	Revit	60 3 rd year students
16.	Matllab and Primavera	All batches

MoUs/Collaborations

- The Dept of C & EE signed a MOU with the CADD Centre Dwarka as their software training partners to train students in various softwares like Staad Pro , Nevis Works, etabs and Revit, etc in February 2017.
- The C & EE signed an MOU with IIT Delhi and started Indian Road Safety Campaign, a voluntary organization running under the umbrella of Transport Research and Injury Prevention Program, IIT Delhi, refers to improve the road safety rules and also make the stakeholders – who are the reason for road accident deaths, aware about safety rules. This will help organize guest lectures, student internships, workshops and awareness programmes.

Department of Mechanical Engineering

July 2016

Industrial Interaction

- Dr Feras Al-Hakkak visited Honda Cars India factory at Greater Noida on 21 July 2016 to supervise the industrial training of University's Mechanical Engineering students.

August 2016

Industrial Interaction

- Mr Gagan Baradia had an interaction with Mr Suneel Abrol, General Manager (Projects) ALP Polymer Park (P) Ltd., Gurugram on 10 June 2016 to discuss the opportunities for collaboration with The NorthCap University. This may bring some sponsored projects for the faculty members of the department and good internship and placement opportunities for students.

Workshop Organized

- The Department organized a two-day Auto-Mob Workshop on 22-23 April 2016 in the University premises for its students. The experts from Go4tech, New Delhi shared brief knowledge about 'Current trends in Automobile and Internal-Combustion Engines'. The key attraction of the workshop was hands-on practice on two-wheeler and four-wheeler engines by disassembling-assembling the engines. The workshop helped the students understand the concept in a better way which will ultimately help them during their placements. The workshop was coordinated by Mr Deepak Monga, Mr Gagan Baradia and Dr Ankur Gupta.

September 2016

Visit of German Delegation

- A German delegation visited the University on 15 September 2016 to discuss the concept of 'Learning Factories'. The concept provides an opportunity to students to simulate a real life environment of typical manufacturing organization with almost all the variables giving experiential learning to them. The concept is developed by IWF TU Braunschweig, FESTO and BITS, Pilani. The visit was organized by Department of Mechanical Engineering following which Mr Ashwini Sharma of the Department visited BITS Pilani to learn about the concept.

MoU Exchange

- The Department of Mechanical Engineering has signed an MoU with Beijing Wavespectrum Science and Technology Co, China on 21 September 2016. Under the MoU, Beijing Wavespectrum will setup an interdisciplinary Mechanics Laboratory with investment of over USD 60,000. The lab will have 16 research instruments relating to vibration, design and data acquisition (testing equipment, sensors with software), along with hardware updates and maintenance. The lab will be a part of our Central facility and will help in boosting BTech and MTech programmes. The equipment can be used for teaching purpose and for consultancy. The coordinator for this lab is Dr Rohit Singh Lather.

Industrial Interaction

- Mr Ashwini Sharma organized a visit for the students of 1st year Mechanical Engineering to fabrication facility of trucks for transporting Maruti cars on 18 September 2016. During the visit, students saw different aspects of truck body welding.
- Mr Abhishek Pratap Singh and Dr Shiv Manjree Gopaliya visited JS Enterprises, Manesar along with BTech final year students on 16 September 2016 to discuss the planning and execution of ongoing live project 'Design and Fabrication of Progressive Die.

October 2016

Guest Lecture

- The Department organized a special lecture on 5 October 2016 under the aegis of Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE). Mr Kapil Singhal from BP RefCool, Gurugram who has more than 15 years of experience in HVAC&R industry delivered the talk on past, present and future refrigerants. A total of 22 student participants attended the session. The event was coordinated by the Society coordinator, Dr Amit Arora.

Industrial Interactions

- The Department conducted an industrial visit to Yakult DNNONE Pvt. Ltd. Rai Sonipat, Haryana on 1 October 2016 for the students of BTech 1st, 2nd & 3rd year. 45 students benefited by understanding the plant layout of a FMCG industry, automation facility, packaging etc. The visit is expected to assist in taking up student projects from industry. Mr Deepak Monga and Mr Gagan Baradia coordinated the visit.
- Dr Shiv Manjaree Gopaliya and Mr Manoj Kumar Gopaliya visited AG Industries, Gurugram on 5 October 2016. Various possibilities of having summer internships, live projects and industrial visits were discussed with Mr Ashok Gupta, GM Corp. HR, AG Industries.
- Prof. R Ojha and Ms Shikha Kashyap visited IFB Binola plant on 15 October 2016, to review progress of students' performance, engaged with the industry for their major projects. Two ME students, Omkar Kaushik and Saket Jha have pursued their summer internships with IFB and continue the work for their major project. During the visit, inventory related issues were identified to be critical in the industry and same were finalized as problem area for the project. The visit was guided by Mr Ruchir Mathur, Plant Head and mentor for NCU students at IFB.
- Mr Ashwini Sharma was invited as keynote speaker at MSME cluster of Jalandhar industries on 21 October 2016 where he delivered a talk on 'Design for MSMEs'.

November 2016

- **MoU with Beijing Wave Spectrum Science & Technology Co. Ltd., China**
- The NorthCap University inaugurated its new Mechanics Lab, set up in collaboration with Beijing Wave Spectrum Science & Technology Co. Ltd. China, on 26 November 2016. This lab is a unique model of international collaboration with a private Indian university. The Lab was inaugurated by Mr Lyons Zhu, Managing Director, Beijing Wave Spectrum Science and Technology Co. Ltd. China, and Prof. Prem Vrat, Pro-Chancellor. The Mechanics lab has been setup with an approximate cost of USD \$60,000 (INR 40 lakhs) by Beijing Wave Spectrum under a five year MoU. Beijing Wave Spectrum is a Chinese company, dedicated to the research and development of vibration measurement technology, measurement and control and sensor technology. The new set up is a multidisciplinary lab with test equipment and instruments for mechanical, civil and electronics engineering disciplines. The lab has 16 research instruments relating to vibration, design and data acquisition (testing equipment, sensors with software), along with hardware updates and maintenance. This lab will be a part of Central Research Facility and will help in boosting BTech, MTech and PhD programmes at the University. Dr Rohit Singh Lather, Associate Professor, Mechanical Engineering, facilitated the collaboration and will also co-manage the lab and its activities along with Beijing Wave Spectrum engineers. The lab will support graduate and post graduate programmes at NCU, provide training to students and research activities. The lab will be used by the Beijing Wave Spectrum and the University as a platform to continuously improve and develop research instruments and testing systems. Mr Lyons Zhu, Managing Director, Beijing Wave Spectrum will also be a visiting international faculty at the University.

Industrial Interactions

- Mr Yogesh Kalia, Director, CTO, Medhaavi Center for Automotive Research, Hoshiarpur, visited I.C Engines Lab, Dept of Mechanical Engineering, NCU on 10 November 2016. Dr Rohit Singh Lather and Mr Yogesh Kali a mentored BTech final year Mechanical and Electronics students, for their BTech final year project titled, 'Development of Low Cost Fuel Injection System', being jointly carried out by Department of Mechanical Engineering and Electrical Electronics and Communication Engineering, NCU.

December 2016

- Mr Sudam Maitra, Deputy MD (IFB) covered the topic, 'VAVE The Game Changer'. He shared valuable information regarding the requisites expected in any engineering entrant in auto industry. Dr Amit Tyagi, Scientist 'E' DRDO, led a session on 'Industrial Fire Safety'. He discussed types of fire and best suitable fire extinguishing agents that are to be opted.
- Dr SP Nigam, Emeritus Visiting Faculty, NCU led a session on 'Time Management'. He shared how time management skill set helped him throughout his life to perform his best with varied profiles, which he has been handling for the past 50 years. He concluded with the quote "manage your minutes and hours will be managed automatically".
- Mr Avijit Das delivered a talk on the topic 'Entrepreneurship and startups – some experiential facts'. The FDP was organized on 14 December 2016 and coordinated by Ms Shikha Kashyap, Dept of Mechanical Engg.
- In the interactive session on 'Leading in the knowledge worker era', Mr Krishnan was of the view that in today's time we should inspire and not just motivate. The FDP was organized on 14 December 2016 and coordinated by Ms Shikha Kashyap, Dept of Mechanical Engg.

Jan 2017

MoU

- A MoU was signed between NCU & Delta Electronics India Pvt Ltd on 3rd Jan'17. It covered development and execution of education and research projects, promote development of Syllabi and other activities that supports R&D.

Workshop

- Society of Automotive Engineers NCU conducted a workshop on 'Shape your imagination-training' for students from 12 Dec 2016 to 12 January 2017. The workshop included inputs regarding Design, Manufacturing, 3D Printing and Robotics. The event was organized by the society coordinator Dr Ashwini Sharma.

Industrial/ Institute interaction

- Dr K Mathiyazhagan visited and worked on a joint research at the Center for Engineering Operations Management, Department of Technology and Innovation, University of Southern Denmark, Odense under Prof. Kannan Govindan (Head and Professor) from 15 December 2016 to 13 January 2017. The research focused on 'Development of Sustainable indicators for Indian Industries'. The outcome of the research has been communicated to the SCI journal for possible publication.
- Dr Pramod Bhatia was invited for a guest lecture by MVN University, Palwal on 18 January 2017. The topic of the lecture was 'Introduction to Computational Fluid Dynamics and its Applications' and it was attended by 60 students of BTech, Mechanical Engineering. At the end of the session, Dr Pramod Bhatia conducted a quiz for evaluating their understanding. The lecture was appreciated by the students as well as faculty members of MVN University. Thereafter, Dr Bhatia discussed the road ahead for strengthening interuniversity ties between The NorthCap University and MVN University.

Feb 2017

MoU of NCU & Mitsubishi Electric Private Ltd, Gurugram

- Prof. Ravindra Ojha, Prof. Swaran Ahuja, Dr Anjali Garg, Dr Shiv Manjaree Gopaliya and Ms Shaveta Arora visited the office of Mitsubishi Electric Private Limited, Gurugram on 31 January 2017.
- The NCU team met Mr Manoj Gupta, Head & Incharge – MEL with his Japanese team members and Ms Ripanjeet Kaur, MoU Coordinator, MEL. A detailed discussion was held on the future directions of the MoU signed between NCU and MEL. Following areas of collaboration were discussed :
 - Workshops/trainings for students and faculty members.
 - Proper integration of Mitsubishi PLC kits into the laboratory experiments for various Courses at NCU.
 - Participation of NCU in various workshops/seminars conducted by MEL as a part of academic institutions and industries linkages.
 - Participation of our students in various events of MEL.

- NCU participated in the two day training programme on 'iQ-R PLC Hardware' for our faculty members on 1 and 2 Feb 2017.

MSME collaborates with NCU

- Government of India recognizes The NorthCap University as a leading professional educational institute in the area of design / innovation / engineering. Micro Small & Medium Enterprises (MSME) is collaborating with NCU under the Design Clinic Scheme (DCS) that aims to enable 'design' as a tool for improving manufacturing competitiveness of respective MSMEs in the manufacturing sector, in Dec the details of which are available at <http://www.designclinicsmsme.org/>.
- Under the Design Clinic Scheme faculty and students of NCU will collaborate with the MSME sector in Haryana through the following activities:
- Design Awareness Seminar for MSME clusters.
- Design Awareness programme consisting of need assessment survey and design clinic workshop for identified manufacturing cluster.
- Student Design Projects taken up by graduating students as their final project along with MSME.
- Professional Design project taken up by professional industrial design expert along with MSME.
- Dr Ashwini Sharma, Dept of Mechanical Engineering is the faculty coordinator for MSME collaboration.

Industrial/ Institute interaction

- Mr Gagan Baradia participated in a panel discussion on the theme 'Tech-innovation' in the 'Entrepreneur Summit 2017' from 27-29 Jan 17 organized at IIT-Bhubneswar, Odisha. Mr Baradia discussed about the importance of innovation in the journey of an entrepreneur while interacting with the young entrepreneurial minds of IIT-Bhubaneswar during the Q/A session.
- Dr Shiv Manjaree Gopaliya and Ms Charu Rana along with 15 ME, ECE students went for an industrial visit to Delta Electronics Private Limited, Gurugram on 7 February 2017 to explore the width of work done by the company.
- Quanser, a Canada based company in association with Edutech India Private Limited have developed a Control Engineering based laboratory at IIT Delhi. Mr Manoj Kumar Gopaliya and Dr

Shiv Manjaree Gopaliya visited the laboratory on 13 February 2017. Eductech India Private Ltd provided details of the Quanser based research products available in the lab such as 2-DOF helicopter, 3 DOF gyroscope, Rotary Servo base unit with accessories of inverted pendulum and flexible link which are highly research oriented equipments available in the area of mechatronics and controls engineering. This visit also helped in finding future research directions for MTech and PhD programmes.

- Prof. Ravindra Ojha, Director, SOET and Ms Shikha Kashyap, Assistant Professor visited Sellowrap on 27 February 2017. The company supplies to leading OEMs different products like pressure sensitive adhesive coated door film, products that are based on foam, plastics for interiors of the vehicle. The visit was accompanied by Plant Head Mr Ramesh Chand and QA head Mr Vijay Shanker of Sellowrap. Two ME final year students, Kunal Upadhyay and Dishant Aghi were selected in Maruti Centre for Excellence (MACE) for internship and based on their performance their approval to work with MACE was extended and converted to final year BTech project. These students have been allotted with live problems in Sellowrap where they are working to improve Overall Equipment Efficiency (OEE) of critical machine named Pressure Sensitive Adhesive Coating Machine. Our students are delivering good work with suggestions and recommendations worth implementing for improving the productivity of the company.

Guest Lectures

- Mr S Maitra, MD, IFB delivered a lecture on the important topic 'KAIZEN' to final year Mechanical Engg students on 28 January 2017. He shared his rich professional experience and challenges in the automotive sector with the students who interacted with him enthusiastically. Mr Maitra will continue to interact with students on Quality Assurance and Reliability Engineering in other relevant sessions in the forthcoming months.
- The Department organized a Health Talk by Ms Jyoti, Senior Executive, Department of Science, Yakult Denon Pvt Ltd Sonapat on 21 February 2017. Ms Jyoti discussed about the importance of intestinal Micro-flora in health and disease, the role of Probiotics and daily routine activities to maintain good health. Mr Gagan Baradia and Mr Deepak Monga coordinated the event.

March 2017

Guest Lecture

- The Dept of Mechanical Engineering and the Dept of EECE organized an expert lecture on today's highly demanding topic of 'Industry Automation and Programmable Logic Controller' by industry expert Ms Ripanjeet Kaur, Senior Engineer, Mitsubishi Electric India Private Ltd, Gurugram on 17 March 2017. The expert lecture was attended by ECE and ME students of 4th, 6th and 8th Semesters.

The detailed lecture covered the following areas:

- Industry automation
- Latest trends in automation industry
- Programmable Logic Controller (PLC)
- PLC programming and hardware-software interfacing
- Controller designing
- Ms Ripanjeet also highlighted the type of work and research that was being done at Mitsubishi Electric and its various plants located worldwide. The talk was followed by an interactive session wherein students actively participated in clarifying their doubts. The talk was coordinated by Dr Shiv Manjaree Gopaliya, Dept of Mechanical Engg, Dr Anjali Garg and Ms Shaveta Arora, Dept of EECE.
- An Expert lecture was delivered by Dr Ankur Gupta, IIT Bhubaneswar on 'Nano-inspired Research Applications and Challenges' on 25 February 2017. Dr Ankur Gupta discussed about the distinct properties of Nano-structured materials, different Nano-fabrication strategies, application of Nano-structured materials viz. gas sensing, waste water treatment, microfluidics, antimicrobial and bio sensing etc. He also spoke about research and challenges based on Micro/Nano-systems. Mr Gagan Baradia and Mr Deepak Monga coordinated the event.
- The Department organized a lecture on 'Project Management: Visualizing theory in Practice' by Mr Himanshu Sharma, Project Management Division, Andritz Hydro. Mr Himanshu discussed the concept of Project Management from its basics to its implementation. He elaborated the talk with case studies which was followed by a query session. Possibilities of internship opportunities at Andritz Hydro were also discussed and he has agreed to provide some selected internships to students. Overall it was a very interactive session and students of Mechanical Engineering

gained a lot from his experience. The session was coordinated by Mr Anmol Bhatia and Mr Kishore Guru.

Workshop

- The Department organized a three day skill development workshop on 'Applications of ANSYS CFD' conducted by ANSYS Software Pvt Ltd under Corporate Social Responsibility (CSR) programme for 4th Semester students. 59 students attended the workshop which was held from 15-17 March 2017. It was coordinated by Mr Abhishek Pratap Singh and Ms Shikha Kashayap.
- **Industrial Interaction**
- An industrial visit to Surabhi Engineers Ltd, Faridabad was organized on 15 March 2017 for 1st & 2nd Year students. Surabhi Engineers is a leading supplier of engineering components, sheet metal press components, pipe accessories suppliers to companies like Caparo, Maruti, Escorts Ltd, Honda SIEL power products, Yamaha, JBM etc. The students visited the manufacturing division of the company in which various machining processes like turning, boring, knurling, thread cutting etc. were shown and explained. They also visited the welding section of the company which is equipped with the latest Robot welding machines for spot welding, projection welding etc. Later the students visited the quality control department of the company where they learnt about the inspection processes followed by the company. Discussion was also held for Surabhi Engineers Ltd to provide industrial training to NCU students. The visit was coordinated by Mr Anmol Bhatia and Mr Kishore Guru.
- An industrial visit to Surya Roshni Ltd, Bahadurgarh, Haryana was organized on 22 March 2017 for BTech 1st Year students. They got an opportunity to see the manufacturing processes of Steel Pipes of various diameters, their testing and quality control processes, galvanization processes etc. Mr Gagan Baradia and Mr Deepak Monga coordinated the visit.
- An industrial visit to Blue Peter Pvt Ltd, Badli Industrial Area Delhi, was organised on 22 March 2017 for students of BTech. Blue Peter group is an ISO/TS 16949:2002 certified 1st Tier sheet metal OEM supplier to automobile giants nationally & internationally like M/s Maruti – Suzuki, M/s Honda (India & UK), etc and 2nd Tier supplier to M/s GM, etc. Students observed sheet

metal operations especially progressive dies. The industrial visit was coordinated by Mr Anuj K Jain and Mr Satnam Singh.

- The Dept conducted an industrial visit to Motif Capacitors Pvt Ltd, Delhi on 22 March 2017 for students of BTech 2nd & 3rd Year. Students got an opportunity to witness a world class manufacturing facility with various capacitors and high level of industrial automation. Motif Capacitors is one of the prominent manufacturers of industrial capacitors in India. Students interacted with the top management of the company and got hands-on experience of manufacturing of capacitors. Director of Motif group, Mr Rohit Rai explained the future of Mechatronics and Industrial Automation in MSME's. The visit was coordinated by Mr Anuj K Jain and Mr Satnam Singh.

Mr Johan Gustafson, Nira Control AB, Sweden visits ME Department

- Mr Johan Gustafson, CEO, Partner, Nira Control AB, Sweden and Mr Yogesh Kalia, CEO, Medhaavi Center for Automotive Research, Punjab visited the Department of Mechanical Engineering on 20 March 2017. Discussions were held regarding upgradation of labs and future cooperation with Prof. Prem Vrat, Prof. Ravindra Ojha and Dr Rohit Singh Lather. They visited IC Engines Lab and Automobile Lab and appreciated the engine test setups, equipments and upgradations in both the labs. The visit was coordinated by Dr Rohit Singh Lather.
- Nira Control AB, Sweden, develops and delivers state-of-the-art advanced electronic control systems for the automotive industry. Projects and products include advanced electronic control units for diesel engines, natural gas engines, electric motors and vehicle data networks with customers ranging from start-ups to global industrial companies.

April 2017

- **Industrial Interaction**
- Mr Anmol Bhatia interacted with Mr Prateek Sirohi, Sr Engineer, Sona Steerings Limited, Gurugram on 22 April 2017 regarding internship opportunity for the students. Through his contact Mr Sirohi has agreed to arrange for internship opportunity to two students at RICO Automotives, Gurugram.

May 2017

Faculty Development Programme

- An FDP was conducted by Prof. R Singh, Professor, Dept. of Mechanical & Aero. Engineering, Ohio State University, Columbus, USA and Honorary Distinguished Professor, NCU on the topic 'Effective teaching learning process and faculty mentoring on research' on 9 May 2017. The FDP was attended by 18 faculty members and research scholars. The FDP included exhaustive discussions on topics like origins and formulation of research problems, team oriented research, resources / funding for research activities, scholarly publications and research credentials, elements of publications, independent vs collaborative work, publication ethics. The discussion was open ended where faculty members were encouraged to present their problems they face pre, during and post-doctoral research work.
- He further discussed about innovation paradigms with mechanism to generate highly skilled workforce for tomorrow. He shared upcoming R&D topics for vehicle trends and needs along with role of academic research from students, faculty, industry /government perspective. Prof. R Singh's visit was coordinated by Dr Pramod Bhatia, Ms Shikha Kashyap and Mr Satnam Singh.

Industrial Interaction

- An Industrial visit was organised for ISHRAE student members to AC Humidin Air Systems Pvt Ltd on 4 April 2017. Students got real life exposure to all products of the company as they visited the entire workshop area. They saw the manufacturing processes and equipments such as ventilation units, welding units, riveting units, axle balancing units etc. Students clarified their technical doubts and possibility for internship, projects and placements on completion of course were explored.
- HUMIDIN is a leading Ventilation equipment manufacturing company having a foothold in HVAC industry and projects all across India and abroad. HUMIDIN deals in Energy Recovery Wheels, Energy Recovery Ventilators, Treated Fresh Air Units and Cross Flow Heat Exchangers. The visit was coordinated by Mr Jag Parvesh Dahiya.
- Mr Gagan Baradia met Mr Suneel Abrol, GM-Projects, ALP Polymer Park Pvt Ltd, Neemrana, RJ to discuss industry-academia joint projects and the scope of internship for ME students and thereafter two students were selected for 3rd Year summer internship. (MED2017V010)

June 2017

- **Faculty Development Programme**

- To bridge the gap between the industry and academia and to enhance the learning process at the Department, a Faculty Development Programme was organized from 5-10 June 2017.
- Prof.R Singh, Academy Professor, Dept. of Mechanical & Aero Engineering, The Ohio State University, Columbus, USA and Honorary Faculty Emeritus, NCU conducted a session on research, funding and publications on 5 June 2017. He discussed topics like origin and formulation of research problems, funding for research activities, scholarly publications, research credentials, publication ethics and individual vs collaborative work. Prof. Singh discussed about innovation paradigms with mechanism to generate a highly skilled workforce for the future. He also shared upcoming R&D topics for vehicle trends and needs.
- Prof. Prem Vrat, Pro-Chancellor spoke about the importance of 'Materials Management' and stated that almost 80% cost of the final product lies in the material and its management and even a 10% savings in material cost and management can result in twice the salary of the manpower. As an outcome of the session, a proposal was made to include 'materials management' as a part of the curriculum.
- Dr Feras-Al-Hakkak, spoke on the topic 'Applications of bamboo in engineering'. An interesting lecture was delivered on the contemporary topic 'The future of power train/ trend for electrification' by Mr Vinod Hans, Managing Director, Federal Mougai. Dr Rohit Lather, discussed the topic 'Positive Thinking' and the mind set required to be successful in life through examples of successful people.
- A session on the topic 'Fundamentals on noise' was delivered by Prof. SP Nigam, Emeritus Professor, NCU. He explained the implications of the increasing environmental noise pollution and the useful applications of noise in the study of heart beats, dental extraction and gave an overview of how noise can be used for positive effects as well as the important frequency ranges for hearing and acoustics.
- An industrial visit was organized to Polyplastics Engineering India Pvt Ltd, Bawal, Haryana on 9 June 2017. Live application and implementation of tools for Lean system like 5S, KAIZEN were shown which enhanced practical understanding of the term 'Lean system'. Avenues for doing a live project on a problem faced in the industry, industrial visits, guest lectures were also explored.

- Mr Manoj Paweria, Senior Manager, Taikisha India Ltd, Gurugram delivered a lecture on the topic 'Application of CAD/CAM & CAE in industries'. He spoke about eliminating costly prototyping by evaluating the various robot movements and paint parameters in the digital environment, thus leading to an optimum result. The FDPs were co-ordinated by Dr. Pramod Bhatia, Mr Sanchit Mewar, Mr Praveen Singh

Department of CSE & IT

Industry Interaction/Collaboration

1. TRUPAY (Protinus Infotech Private Limited, Gurgaon)
2. DOCTOR VISTA, Gurgaon
3. Ingeniocity, Noida
4. Universal Technical System (India) Pvt. Ltd., Gurgaon
5. Stratbeans Consultancy Pvt. Ltd., Gurgaon
6. Ansyst, Gurgaon
7. Atlanta Healthcare, Gurgaon
8. Open Hardware Days, Hyderabad
9. Digitas, New Delhi
10. Edunext Technologies, Ghaziabad
11. Mendo infotech, Gurgaon
12. 360 degree cloud, Faridabad
13. TrendzLink, Gurgaon
14. Ritesource Pharma solutions, Gurgaon
15. HCL info Systems, Delhi
16. Skoolfi, Gurgaon
17. Incuspaze, Gurgaon
18. Rankwatch, Gurgaon

Department of Applied Sciences

2016

1. Dr Sunanda Vashisth and Dr Sunita Sharma coordinated a visit to National Physical Laboratory (NPL), Delhi on 27 September 2016 for 30 students of BTech CSE and Mech Engg. 1st Sem and PhD Scholars. National Physical Laboratory celebrated CSIR Foundation Day in which scientists explained the basics and advance works in various research areas being carried out at NPL. The students gained the knowledge in the field of optics through an optical microscope, using of femto second laser and how laser is used for sputtering etc. Students also visited the solar cell lab and had a feel of designing hybrid solar cells. Dr Sharma discussed about her research work on Strontium Ferrite material with Dr RP Pant, Chief Scientist & Head, EPR & Magnetic Fluids and he agreed to collaborate with the University. It was a great platform for the young minds to interact with the scientists and gain exposure to the recent research work in the field of Physics.

2017

1. Visit to IIT Delhi: An educational trip for BTech CSE 1st year students to the annual event Open 1. House-2017 at IIT-Delhi was organized by Dr Kamlesh Sharma on 22nd April 2017. A group of 15 students visited the exhibition and research facilities available in IIT Delhi. Key highlights were earthquake simulators, bipolar charge plasma transistor, robotic research, smart cane, next generation wireless communication, advanced polymeric material and processing, particulate air pollution and effects on heart, design of unmanned underwater vehicles, etc. The aim for imparting this visit is to make students capable of designing and implementing projects for future innovations. The event was taken up under the initiative of Dr Kamlesh Sharma, Assistant Professor, Chemistry Section of Department of Applied Science. (APS2017V002)
2. Visit to Open House-2017 at IIT Delhi: An educational trip for BTech ME 3rd year students to the Open House-2017 at Indian Institute of Technology-Delhi was organized by Dr Rashmi Tyagi, Associate Professor, Department of Applied Science on 22nd April 2017 for the project work of the course Environmental Studies. Main attractions of the event were showcasing of latest developments in technology and engineering to provide excellent platform to learn new things and interaction with students from various institutes, painting and drawing competition on cyber security awareness and energy quiz competition to test general knowledge and to create awareness in the field of energy and environment. There were also amazing sessions on industry interaction, talks to get a general idea of engineering on “After class 12, is engineering my

option?” and “I am doing engineering, now what” by Professor Subrat Kar from Electrical Engineering Department of IIT-Delhi. (APS2017V003)

School of Management

- The School of Management organized a **guest lecture** on 'Total Quality Management' by Prof. Ranjit Sinha on 25 February 2016. Prof. Sinha has more than 40 years of rich experience with British Steels, UK and other multi-national companies as Quality Controller, Production Planning and Control Supply Chain Management, Manufacturing Director, Operations Director Sales & Marketing Director, Managing Director. During the first session, Prof. Sinha shared his experiences with Nissan and other corporate houses. He discussed the concept of quality maintenance, quality as an important tool in business. The session was attended by students of MBA and BTech Final Year. Prof. Sinha conducted a second session on 'Business Plan' for students of MBA, BBA and BCom (H). He discussed on how to prepare a business plan and how to present the same. It was an informative session to motivate the students to opt for entrepreneurship. Prof. Sinha also responded to various queries raised by the students related to quality and business plan proposals.
- School of Management organized an **alumni interaction** with Mr Kanva Sharma, Process Associate, Royal Bank of Scotland on 16 April 2016. Mr Sharma interacted with students of MBA 2nd and 4th sem and discussed the recruitment process at RBS, competencies required, internships opportunities etc.
- A **guest lecture** on ‘Competency Mapping’ by Dr Seema Sanghi, Managing Director, Styrax Consulting Pvt. Ltd was organized at School of Management for MBA students on 30 September 2016. Dr Sanghi shared her work on competency framework developed for PSUs, UPSC and many other private organizations.
- With a view to providing industry exposure to students, an **industrial visit** to Air Cargo, Exports & Imports was organised for students of BSc, BCom, MBA on 26th Oct 2016. The students went to the Exports & Imports section (Air Cargo) with the objective of having first hand insights into import and export documentation requirements, procedures, cargo management/ handling and related issues. The students also got an opportunity to visit the export and import warehouses.
- School of Management in collaboration with PHD Chamber of Commerce and Industry and MSME organised a **seminar** on 'Role of Intellectual Property Rights in Promoting Innovation and Commercialization of Technology' on 10 Nov 2016. The seminar highlighted the significant role played by intellectual property rights in helping a business gain and retain its innovation-based advantage. The seminar focused equally on the importance of converting an innovation into a

commercially viable product. The speakers and the delegates from PHDCCI made the seminar enriching, taking students through an array of live cases and examples from the industry.

- A **guest lecture** on 'Human Capital Management and the Role of Technology' was organized on 11 Nov 2016. The lecture was delivered by Mr Neeraj Narang, Director – HCM Product Strategy for students of MBA, BBA and BCom. Mr Narang shed light on how human capital management has achieved prominence in today's corporate world. He elaborated on the journey of HCM and leveraging technology for the same. The students discussed work-life balance initiatives, performance measurement and retention strategies at Oracle.
- School of Management organised a **Seminar** on 'Rethinking and Redefining Human Capital in Today's Fast Changing Business Horizon: Dialogues & Perspectives' on 25 February 2017. The speakers were industry stalwarts i.e. Mr Jagjit Singh, Chief People Officer, PwC and Mr P Dwarkanath, Head, Group Human Capital, Max India.

The speakers shared their experiences related to challenges faced by employees in today's competitive environment and the changing nature of jobs/employment. Factors like agility, adaptability and adding value to business were highlighted. Students from SOM and SOET attended the seminar.

- On 25th March, 2017 Mr Achalesh Sharma, HR Professional, Formerly VP HR Snapdeal and Mr Sandip Khetan, Partner and Head Accounting Advisory Services, SR Batliboi and Associates (EY India member firm) were part of the Board of Studies, for Curriculum Review of Undergraduate Programs.
- SOM organized an **Industry Guest Session** by Mr Achalesh Sharma, Founder & CEO, Prime Consulting on 19 January 2017. The interactive session focused on how to approach interviews, the emerging sectors & skills required and how to start a corporate journey.
- SOM organised an **industrial visit** to the Mother Dairy Plant, Patparganj, Delhi, on 22 March 2017 for the students of BBA-III, BCom-III and MBA-I. The presentation and the plant visit made the students aware of the entire production process i.e. starting from collection of milk from farmers, clarification, homogenization, pasteurization, fortification till dispatch. The students learnt about the transportation guidelines and the unique distribution network of bulk vending milk booths, retail outlets and mobile units. The various quality control measures adopted were also shared. Students learnt about the totally automated and internationally designed process of milk production through a small documentary film shown to them. Students were really excited about the newly installed solar panels at the plant which are efficient and a good source of conventional energy.

- An **industrial visit** to Carrier Aircon, Gurugram was organized for the students of the course CILE, comprising mostly of Mechanical Engineering students, on 24 March 2017. Students were briefed about the history of the world's largest provider of air-conditioning, heating and commercial refrigeration systems. They were apprised about the various awards won by Carrier for its quality work, certifications achieved and the different products manufactured. The values of the company were strongly put across and it was shared that primarily because of this they have been able to hold a record of 1200 million hours of working without any time loss due to any accident. The students were taken on a round of the plant where they saw different assembly lines, QC tools, 5S and hi-tech machines used for production of air conditioners and heat exchangers.
- A **guest lecture** on 'Employee Performance in the Era of Competition: Industry Perspective' was delivered by Mr Rajesh Tara, VP-HR (Usha International Ltd) for the students of BBA, B Com and MBA on 25 April 2017. Mr Tara discussed the role of a Manager in understanding the needs of the 'people' in an organization. He stressed upon the consistency of performance for succeeding in any field and said that every organization must ensure the most effective and efficient utilization of these resources. Performance management should be a combination of the evaluation component as well as potential identification. He also shared that it is not only 'what' employees have accomplished i.e. performance goals, but also 'how' the work was performed i.e. competencies.
- E Cell of the university had invited Mr Zorawer Singh, Core Team Member, Jugnoo, to share his insights on the "Journey of Jugnoo" on 28th February, 2017 (seminar hall). It was a stimulating session where Mr Zorawer shared with the students, insights into the Jugnoo journey – inception, challenges, growth and diversification. He shared the business model of Jugnoo and discussed various steps a person should follow when setting up a business. He stressed on "following your heart and passion is the key to success. Determination and grit go a long way in helping an entrepreneur." Having done that, he shared how they diversified to Jugnoo Delivery by utilizing the same auto rickshaw drivers. The inspirational **lecture session** was an invigorating and inspiring one and it served well in charging up the inquisitive students. Subsequent to this one hour session, there was a mentoring session for the potential NCUpreneurs.
- Pre Placement Preparation is crucial to help the MBA students gear up to face the professional world. Keeping this in mind, School of Management organized the Pre Placement Interviews on 22nd April, 2017. The **Alumni** of SOM - Pushap Karan of Batch (Macquarie, Investment Bank) of Batch 2012-14, Rishika Singhal of Batch MBA 2012-14 (Moody's Analytics- Investment Banking Division), Noopur Gupta of Batch MBA 2012-14 (Quotemykaam.com (Home services

provider), Trisahla Bhan of Batch 2013-15 (Proviti), Abhinav Malik of Batch 2013-15 (Protiviti) and Puneet Khanduja of Batch 2013-15 (Mercer Consulting) – made it to their alma mater for this event. The interactive session started with the alumni sharing their journey from campus to the corporate world and then the MBA students asking a lot of questions. Following this, the PPIs commenced with three panels. Each panel dedicatedly spent an average of 20-25 minutes on each student giving detailed feedback on their strengths, areas of improvement, CV correction etc. The event started at 11 a.m. and continued till 5 p.m.

Department of EECE

Guest Lectures : 7

S.No.	Name of Guest Speaker	Designation, Affiliation	Topic of Guest Lecture	Month	Dates	Organized by
1	Ms. Gayatri Magie	Business Development Executive	Internet of Things	August	03/08/2016	Dr. Rekha Vig
2	Mr. Jeevan Talgaonkar	General Manager & Head Practice Business Operations, Ericsson India Pvt. Ltd. (a Swedish MNC)	Smart Cities	October	27.10.2016	Dr. Anjali Garg, Ms. Kusum Dangi, Dr. Sharda Vashisth
3	Mr. Aman Chandna	Service Delivery Manager, TCS	Future Trends in IT Infrastructure Services	November	10.11.2016	Shaveta Arora, Kusum Dangi
4	Mr. Mohit Grover	Head of Radio Access GSS-India, Nokia ,Noida	Internet of Things	February	8.2.2017	Ms. Naresh Kumari ,Ms. Charu Rana
5	Dr. S.P. Saini	Retired Senior Scientist, CEERI Pilani	IoT talk and Demo	February	23.2.2017	Rekha Vig, Kusum Dangi
6	Mr L N Vishvanathan	Vice President Production (Exicom ltd)	SMD Techniques	February	27.2.2017	Sharda Vashishth, Kusum Dangi
7	Karanpreet Singh	Owner of Startup company- Leaf Bird Electronics, Delhi	Electronics Design & Mfg	March	24.3.2017	Anjali Garg

Industrial Visits: 5

S.No.	Dates	Company visited	Class	Arranged By
1	27/10/2016	Signal and speech processing laboratory and Underwater and air acoustic laboratory at CARE-IIT	EEE Sem VIII	Dr. Rekha Vig, Dr. Sharda Vashisth
2	20/2/2017	Milestone Switchgear Pvt. Ltd, Gurgaon	EE 6th Semester	Dr. Anjali Garg, Dr. Nitin Malik
3	22/3/2017	Exicom Telesystems Pvt. Ltd.	ECE 4th semester	Dr. Sharda Vashisth, Dr. Rekha Vig
4	22-4-2017	Beumer India Ltd.	EE 6th Semester+ME 2nd Semester	Ms. Shaveta Arora, Ms. Vandana Khanna
5	6/4/2017	Logic-Fruits Technologies	BTech (ECE), MTech (ECE & VLSI Design), & PhD Scholars	Dr. Neeraj Shukla

Externship done by 8 faculty members (2016- 2017)

S.No.	Faculty	Organization	Duration	Externship Outcome
1	Dr. Sharda Vashisth	Exicom Telesystems Pvt. Ltd.	21- 24 Dec 2016	<ul style="list-style-type: none"> • Industrial visit • Internship • Guest Lecture • M.Tech students placed • On campus placement opportunity initiative in process
2	Ms. Shaveta Arora	Beumer Group	2-4 Jan 2017	<ul style="list-style-type: none"> • Industrial visit organized on April 22, 2017. • One Internship offer • Possibility of placement
3	Ms. Charu Rana	FIS Global	7-9 March 2017	<ul style="list-style-type: none"> • Internship • Possibility of placement • Guidance for major project
4	Dr. Anjali Garg	The Energy and Resource Institute (TERI)	27-28 March 2017	<ul style="list-style-type: none"> • Research guidance and testing facility • Possibility Guest lecture

5.	Ms. Kusum Grewal Dangi	Reliance Jio	3- 5 May, 2017	<ul style="list-style-type: none"> • 3 students got internship • Possibility of Industrial Visit/ Guest Lecture • Feedback for curriculum
6	Dr. Mona Agarwal	Nipa International Pvt. Ltd., Gurugram	26 – 27 May, 2017	<ul style="list-style-type: none"> • Planning Industrial visit in this semester • Offer of Internship for next year
7	Dr. Rekha Vig	ST Microelectronics	2 – 3 June, 2017	<ul style="list-style-type: none"> • Planning Workshop in October • Planning Guest lecture in October
8	Ms. Amanpreet Kaur	ZTE Corporation, Mohali	2 – 3 June, 2017	<ul style="list-style-type: none"> • One Project associated • Internships offered for next year

6.3.9 Admission of Students

COURSES /YEAR OF ADMISSION - 2016-17	STUDENT STRENGTH
B.Tech	617
BSc Maths	26
M.Tech	27
MSc Maths	28
SCHOOL OF ENGINEERING & TECHNOLOGY TOTAL	698
BBA	134
B.Com(H)	27
MBA	37
SCHOOL OF MANAGEMENT TOTAL	198
BBA-LLB	86
LLM	5
SCHOOL OF LAW TOTAL	91
GRAND TOTAL	987

6.4 Welfare schemes for

Teaching	Gratuity, Mediclaim, PF.
Non teaching	
Students	Scholarships and fee concessions, GATE Teaching Assistantship for M.Tech, Research Fellowship Award, Subsidized bus facility, Society fees reimbursement for eligible students.

6.5 Total corpus fund generated: 4.4 Crores only

6.6 Whether annual financial audit has been done Yes ☒ No ☐

6.7 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Internal Audit conducted with External Experts			
Administrative	An administrative audit/survey was conducted by Accreditation Services for International Colleges (ASIC), UK during 13 to 15 September 2016, headed by Prof. Dr. John Wilson, Head of Accreditation, ASIC. As a result, The NorthCap University got the reaccreditation in the category of 'Premier' Universities, with 'Commendable' Grades, for 2016-2020.			

6.8 Does the University/ Autonomous College declares results within 30 days?

For UG Programmes Yes ☒ No ☐

For PG Programmes Yes ☒ No ☐

6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?

EXAMINATION REFORMS IMPLEMENTED

The following Examination reforms have been implemented during Academic session 2016-2017.

1. Pattern for Minor Test question paper setting (except languages) recast on the model adopted for Major Test question paper and divided into three parts viz. A, B & C ; where part 'A' consists of Short answer type questions, 'B' consists of long answer or derivation type questions and C consists of a Case study/ numerical/design related or differentiator question.
2. Examination system reviewed and instead of two Minor tests per semester, only one Minor Test of 90 min duration mid-way during the semester introduced to allow adequate syllabus coverage before subjecting students for examination after start of semester. The Minor test is in addition to on-line tests, quizzes and tutorials held at regular intervals during the semester.
3. Third Party Employability assessment test introduced for all students so as to prepare them to get placed either during the pre-final semester or immediately after graduating.

4. Major Test question papers set by the Examiner vetted by a Committee comprising of HOD and senior Faculty of the School/Department and at least two or more External members who are senior Academicians/ Subject Experts.
5. Major Test question papers subjected to Post-Examination audit by Senior Academicians /Subject Experts other than those who vetted the papers prior to the examination. Observations and suggestions received are incorporated in the next Major Test.

6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

Not Applicable, being a Unitary University.

6.11 Activities and support from the Alumni Association

NCU has a strong Alumni base of 6000+ members spread all over the globe. A complete data base is maintained for all the members and their current contact details. There is a NCU Alumni Association (NCUAA) with nominated office bearers. NCUAA has the following objectives:

- To promote and foster mutually beneficial bond of relationship and networking between the Alumni and the present students of NCU and between the Alumni themselves.
- To encourage the Alumni to take an active and abiding interest in the work and progress of the NCU providing:
 - Leads for placement of the students.
 - Opportunities for the summer internship of our students.
 - Technical support with the help of invited talks to our students
 - Feedback for upgrading our academic curriculum to meet the industry requirements.
- To maintain an up-to-date and comprehensive database of NCU alumni
- To identify and promote alumni success and achievements to advance the credibility and reputation of the University.
- To maintain, deepen and strengthen an enduring lifelong relationship between alumni and their alma mater through opportunities that promote interaction and engagement with NCU.
- To inspire alumni to contribute to the development of the University and the promotion of its good name and reputation, locally and internationally.
- To keep alumni informed and connected to NCU through a comprehensive communication like NCU News Letter and social media that inspires commitment to and confidence in the University.

Department of Civil & Environment Engineering

ALUMNI INTERACTION

S. No.	Name	Batch	Month
1	Mr. Mayank Gupta	2009-2013	July 2016
2	Mr. Dilpreet Singh	2009-2013	July 2016
3	Ms. Nidhi Verma	2012-2016	December 2016
4	Mr. Chirag Singla	2009-2013	January 2017
5	Mr. Ankit Pachouri	2007-2011	March 2017
6	Ms. Mahima Bhatnagar	2007-2011	March 2017
7	Mr. Bharat Gaur	2010-2014	March 2017

School of Law:

- Bridge for placements and internships
- Inviting law firm partners for guest lectures
- Organising legal aid camps and other activities
- Judges in national level competitions

Department of EECE

1. 8 Alumni interaction on various subjects
2. Alumni are actively involved in pre placements interview sessions and project guidance.
3. Alumni are actively involved in Curriculum review.

Alumni interaction on various subjects

Sr. No.	Alumni Name	Topic
1	Alumni Deepika Ahlawat	Role of OOPs in Signal Processing and VLSI Design
2	Alumni Ashima Gandhi	Opting VLSI Design as a Career Option
3	Alumni Komal	• Careers as a Layout Designer in VSI Design Industry
4	Alumni Komal	• Power Optimization in Layouts – The Latest Trends
5	Alumni Agrata Kumar	Career Prospects after Engineering
6	Abhinav Bhardwaj, Arpit Gupta	Conduction of PPI and Motivational Talk
7	Sidhant Sharda	Conduction of PPI and Motivational Talk
8	Mr. Karanpreet Singh	Electronics Design and Manufacturing - Finding your way

Department of Mechanical Engineering

Alumni Interactions

- The Alumni Cell of the Department organized an interactive session with Mr Prabhat Tiwari, MDesign from IIT Guwahati (alumnus of 2013 batch) for the 1st year Mechanical Engineering students on 20 August 2016. Mr Tiwari conducted a session on 'Design of Mechanical Systems and Products with the focus on Aesthetics using Solid works and Photoshop' and emphasized on the importance of aesthetics in product design
- Mr Tejasvi Mohan, Mr Rachit Yadav, both from Apollo Tyres, Gurgaon and Mr Amit from Mercedes (NCU alumni of Automobile Engineering 2013 batch) interacted with 25 members of SAE Supra team on 3 September 2016 regarding vehicle making for the participating in Supra Event and the future scopes of Mechanical Engineers in Automotive sector. The session proved to be fruitful for the students who are participating in the event as they were able to clear their doubts regarding the manufacturing and assembly aspect of the same. The session was organized by the Alumni Cell of Mechanical Engineering Department.
- The Department organized an interactive session on the topic 'Power Plant Engineering and Design' by Ms Stuti Kaushal (Class of 2012), Sr Executive Engineer, Larsen and Toubro-S & L Division on 31 January 2017. She discussed various thermodynamic cycles used in Power Plants along with the Design aspects of Power plants. She correlated theoretical concepts with the practical scenario in the industry and also shared her work experiences with the students. Ms Kaushal has offered to help in arranging internships for students in L&T. The interaction was coordinated by Mr Anmol Bhatia.
- The Department organized an Alumni Interaction on the topic 'Use of Simulink in Automotive Industries' by Mr Ashish Kumar (Class of 2015) for 2nd Year students on 31 March 2017. Mr Ashish Kumar is a Calibration Engineer, R & D Division at Napino Auto and Electronics Ltd, Gurugram. Mr Ashish shared his knowledge of Simulink with the students. Through practical examples he discussed how a vehicle is tested in the virtual environment and the applicability of Simulink in the industry. It was followed by an interactive session wherein students got an opportunity to clarify their doubts. Mr Ashish has offered to mentor a group of students in project work. The session was coordinated by Mr Anmol Bhatia.

School of Management

- School of Management organized an event 'Meet the Dean' for BBA, BCom (H), BSc Eco (H) and MBA students on 10 August 2016 : SOM alumni Mr Puneet Khanduja, Asst Manager Sales & Marketing Stratbeans Consulting and Mr Yatin Malik, Pre Sales, Customer Support Sales, Gartner shared their learnings at NCU and its implementation in corporate life. Mr Pranav Jain, BTech CSE student with an internship opportunity at Google, shared his experiences and extended his guidance to SOM students.

Department of CSE&IT

- The Department organized an expert talk and interactive session on 'Project Management and IT Infrastructure' by Mr Nitish Arora (CSE Alumni, 2004-2008). Mr Arora is working as Unit Manager, IT infra project program, Metlife Global Operations. The session was coordinated by Alumni Cell of the Department.

- **Incubation Centre established at The NorthCap University: April 2017**

The NorthCap University inaugurated 'The Master Jagannath Centre for Excellence & Incubation' (MJCEI) the new start-up incubation platform at the University on 26 April 2017. The Centre was inaugurated by Pro-Chancellor, Prof Prem Vrat and on behalf of MJCEI, by Mrs Snehlata Jhamb and Mr Mayur Jain. The event was graced by the presence of the Pro Vice-Chancellor, Brig SK Sharma (Retd), Prof. Ravindra Ojha, Director, School of Engineering & Technology, Mr BK Gupta, Director, School of Professional Attachment and Registrar, Col Bikram Mohanty (Retd).

The Incubation Centre is an initiative of some of NCU alumni, Mr Kashish Jhamb, Founder Managing Director of City Innovates Pvt Ltd, Gurugram and Mr Mayur Jain. The faculty coordinator of MJCEI is Ms Supriya Raheja, Dept of CSE&IT.

- An expert talk was organized by the Department on the topic 'Designing of Web applications using MVC Design Pattern' by our Alumni Mr Chirag Aggarwal for BTech CSE 4th and 6th Semester students on 10 April 2017. He discussed about the industrial need of MVC design pattern in PHP based web development. He discussed different components and the linkage of those components coordinated with the help of real life web examples. The lecture was coordinated by Dr Supriya Raheja and Dr Shilpa Mahajan.

- An interactive session was organized by the Department for 2nd Year BTech students by our Alumni Mr Aman Singh Dhaka (Class of 2004) working as SME DBA in IBM India on 19 April 2017. The topic of the talk was 'Database Management Tools and their Industry Relevance'. He discussed about various database streams that can be opted for as a career option in the future. He suggested focusing more on database fundamentals. He also gave ideas on various dbms tools that are used in industries nowadays.
- Alumni cell of the Dept of CSE organized an interactive session for CSE 3rd Year students on 13 April 2017. Alumni Mr Manmohan Maheshwari and Mr Manan Jain (Class of 2015), currently pursuing MS in Pennsylvania State University, USA interacted and mentored the students. The objective of this session was to guide students to prepare for GRE exams.

6.12 Activities and support from the Parent – Teacher Association

- The University has a transparent mechanism of interacting with Parents. Parents can meet any of our Faculty members, Heads of the Departments, Dean(s), Director(s) and even the Vice Chancellor at any given time for any of their concerns.
- Weak students are identified by faculty and monitored for progress regularly. Parents are informed in case progress is not satisfactory.
- Visits by parents and parents' interaction with HODs help getting the feedback for improvement.
- Interaction with parents for Anti-Ragging.
- Attendance deficiency is informed to students and parents as well.

6.13 Development programmes for support staff

1. Fire Fighting Training
2. First aid training

6.14 Initiatives taken by the institution to make the campus eco-friendly

Initiatives taken:

- NCU is an environmental friendly institution. A 150 KW rooftop solar PV system with a net metering facility has been installed to provide alternate source of power to the University in line with the State and National objectives of using solar energy.

- In order to ensure zero wastage of water, we have installed an effective rain water harvesting system as well as sewage and waste water treatment plants.
- NCU is committed to the green movement and campus-wide initiatives at reducing, reusing and recycling are helping it achieve a green code of living. A Recycling Machine at the University converts used PET bottles into T-shirts, bag packs, caps etc.
- To check the emission levels of vehicles parked at the University, a Pollution Checking Centre has recently been set up inside the campus.
- The University is surrounded by lush green gardens and this is the 16th consecutive year when the University has been declared the winner of the HUDA garden competition in Gurugram.

7. Innovations and Best Practices*

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

- A holistic strategic plan (School wise)- A well-defined 4-year strategic plan was evolved by the three schools- SOET, SOM & SOL. It consisted of 8 sets of Strategic Initiatives and Measures. Each Strategic Initiative had short term enablers with definite responsibility. The measures had SMART goals. This has been a good beginning for the long term improvement planning for The NorthCap University.
- Employability improvement initiative (CoCubes tests) – The University has signed a MoU with CoCubes Technologies Pvt. Ltd. A comprehensive test is conducted for the students in SOET during their four years. This ranges from Written English Test to Quantitative to Domain Knowledge test. Based on the performance of the tests the students are called for final round of interviews in different industries. This is expected to improve the student placement quality and quantity.
- Technical upgradation of laboratories/ workshops- in order to improve the research orientation the CRF has been upgraded by a new SEM. The IC Engine lab has been upgraded by the instillation of CRDI engine. The new testing lab NCUTU has been created to provide testing related consultancy to external agencies.
- Productive industry based MoUs- 5 productive MoUs with industry giants have been signed- M/S Delta India Ltd., M/S Mitsubishi Electric Ltd., Beijing Waves Spectrum, Chinna, CADD Centre Dwarka and IIT Delhi. MEL and BWS have invested machineries of the tune of 40 lacs INR in the NCU laboratories.

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

- Formation of the new IQAC team as per NAAC guidelines post accreditation has been completed
- Based on the NAAC feedback report the following actions were planned.
 - Quality enhancement action plan – 7 key areas with leaders identified for development of action plan (refer MoM 13/08/17 meeting).
 - Action plan for improvement in 3 criteria with responsible leaders- curriculum aspect, research consultancy & extension and innovation & best practices (refer MoM 13/08/17 meeting).

* Facts and figures provided by Director SOET

7.3 Give two Best Practices of the institution (*please see the format in the NAAC Self-study Manuals*)

- The Mentor-Mentee scheme for the faculty members by renowned external mentors and the students by the internal experienced faculty.
- The comprehensive faculty assessment and development process – Appraisal/ FDP/ external exposure etc.

Provide the details in annexure (attached as **Annexure 3(i), and ii).*

7.4 Contribution to environmental awareness/ protection

- The comprehensive Green Waste Management System- STP, Green Grass Waste Management, Canteen Waste Management, E-Waste Management and greenery in the campus.
- Eco-friendly campus- rain water treatment, sewage treatment, wind driven exhaust system, Solar panel for electricity generation (150 KW), E-waste mgmt. by NGO etc.
- Awareness creation – Mandatory course on Environmental studies, Events like Cerebration, National Science day, contribution by Enactus, PhD in E-waste etc.

7.5 Whether environmental audit was conducted?

Yes

☒

No

☐

(Audit conducted by M/S Power Grid Gurgaon India team)

7.6 Any other relevant information the institution wishes to add. (for example SWOT Analysis)

STRENGTHS

- The only Private University in Haryana & Delhi / NCR to be included in the **Top 100 Universities in NIRF ranking** recently announced by MHRD, Govt. of India.
- A Private State University duly **approved by the State of Haryana** under an Act of the Legislature and approved by the **UGC** and **BCI**.
- A boutique university with just under 3500 students, running programmes at all levels of UG, PG & PhD in Engineering, Management, Law & Sciences.

- Enjoys an **excellent location** with good infrastructure in the **industrial hub of Gurgaon**, close to Delhi International Airport.
- A valuable brand name, well known particularly in NCR & North India for **quality of teaching and infrastructure**, and providing a **safe environment to women students**, with no incident of ragging since its inception.
- A **non-bureaucratic, transparent functioning with high speed decision making**, helping in dynamically improving all aspects of academics and administration.
- A **stringent faculty selection process** with good compensation and enabling HR policies, which have attracted talented faculty.
- High academic rigour and discipline, with **zero deviations** allowed in academics and other important activities of the University.
- **Flexibility to review and amend the curriculum** on a year on year basis, through a well-established process of industry academia interface, vetting through Board of Studies and the Academic Council. The curriculum incorporates Programme and Course Objectives for an **Outcome based education**.
- A **Choice Based Credit System** with continuous evaluation, relative grading, duly moderated after evaluation through a credible examination system.
- An average **student teacher ratio of 1:15**.
- Efforts to develop the students holistically, through **value added courses**, self-development programmes and co-curricular activities.
- An equal opportunity institution of higher education, encouraging meritorious as well as need based students, through award of **scholarships to about 220 students** annually with an outlay of over **Rs.1.6 Crore**.
- A system driven university **with ERP modules** for all major functions of the University and a desire to continuously improve the systems through quality processes, **IQAC** and a robust **feedback system**.
- An **attractive and informative university website**, regularly updated, providing transparency and access to information to all stake holders on all matters of the university.
- A **good placement record**, achieved through a full-fledged School under a Director **School of Professional Attachment**, ensuring internships and placements in leading companies successfully.

- A transparent and well documented **admission** procedure, with selections **based on merit** of marks obtained in relevant national level examinations (e.g. JEE, CAT/MAT/CMAT and CLAT for Engineering, Management and Law respectively etc.)
- A **Learning Management System**, based on latest version of Moodle, as an interactive learning tool **available 24x7** to the students.
- Effective utilization of financial resources by projecting the University purely on quality of merit and not by spending on advertisements.

WEAKNESSES

- Limited size of campus of 10 acres, being situated in an urbanized environment, poses limitations of physical growth.
- Lack of a residential campus, limiting 24x7 onsite opportunities for additional academic & co curricular activities.
- Lack of diversity of students from across the country and abroad.
- Slow progress of student and faculty in international exchange programmes, further adding to lack of diversity.
- Lack of Continued Education Programmes for industry.
- Lack of research funds; being a private State University, it does not elicit adequate research funding, despite a number of viable research proposals regularly submitted to concerned agencies.
- Less number of programme options, as compared to Central Universities.
- Need to have more practical content in the teaching-learning process.
- Difficulty in hiring of Associate Professors due to non-availability against existing vacancies despite extensive efforts (a nationwide weakness).

OPPORTUNITIES

- Exploit the locational advantage of the University to have more interactive dialogues with the industry, undertake research work for their specific requirements and run CEP/Executive Programmes, relevant to them.
- Encourage Project based learning to make it a USP of the University. Projects relevant to society need to be given special priority.
- Growing numbers of alumni need to be networked for useful feedback, industry interaction and placements.

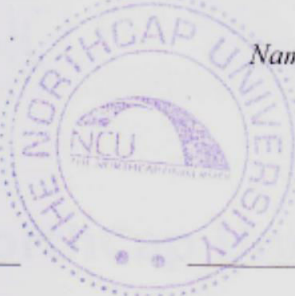

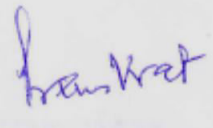
- Enhance Globalization by increasing the number of foreign students, faculty and collaborations.

CHALLENGES

- Ever increasing competition of Private Universities in the region. From two universities five years ago including THE NORTHCAP UNIVERSITY, the State Private Universities in Haryana have grown to 18. Consequently, an ever increasing need to appear in print/ electronic media arises, diverting substantial resources.
- Restrictive controls of regulatory bodies such as State Higher Education department, UGC and BCI pose a challenge, as they reduce autonomy and academic freedom impacting innovative practices.
- Being a University high on transparency, a lot of time and effort is taken up in responding to excessive queries, RTI applications etc.
- Cyber threat to website and to our social media presence of the University, being open platforms.
- To attract the best & brightest of the professionals to teaching and research profession to opt as their career option.

8. Plans of institution for next year (2017-18)

1. Implement innovative Teaching-Learning processes.
(Online courses, Credit reduction, LTP by one teacher, IT enabled classes, 90 minutes classes etc.)
2. Implement market driven curriculum.
(Improved core: electives ratio, practical content in courses, relevant electives, preponed Major project, create a Thought lab etc.)
3. Enriching the student experience at NCU by addressing the student centric issues. (hygiene factors, active professional bodies, productive collaborations etc.)
4. Build and nurture the research culture.
(PhD faculty, SRC quality, publication quality, funded projects, external consultancy etc.)
5. Enhance the level of NCU- Industry engagement.
(Live industrial projects, internship quality, externship for faculty, productive MoUs etc.)
6. Improved quality of Student-placement.
(Improved CTC, dream companies, more core companies, better placement in Mechanical Engg., Civil Engg. etc.)
7. Improve the quantity and quality of admissions.
(Numbers as per seats, better selectivity ratio etc.)
8. Conduct a large scale National HR Conclave and an International Conference on Leadership with the theme “Situational Leadership”. (Planned in Jan & May 2018)
9. Start-Up Tower to be inaugurated for entrepreneurs to incubate their ideas.
(Planned to be launched in Feb 2018)
10. Conduct various Workshops/ conferences/ Moot Courts/ competitions - Cyber Security, Right to privacy, Energy Law, NCU National Moot Court and Access to Justice: 3rd National client Consultation Competition.

<i>Name Prof. Ravindra Ojha</i>		<i>Name Prof. Prem Vrat</i>
		
_____ <i>Signature of the Coordinator, IQAC</i>		_____ <i>Signature of the Chairperson, IQAC</i>

Annexure I

DETAILED ACADEMIC CALENDAR FOR SESSION 2016-17 THE NORTHCAP UNIVERSITY **ALL SCHOOLS (ODD SEMESTER, JULY-DEC 2016)**

Sr. No	DETAILS	FROM	TO
1.	Orientation and Registration	22 nd July 2016 (Friday)	23 rd July 2016 (Saturday)
2.	Commencement of classes	25 th July 2016 (Monday)	
3.	Last date to accept the request for change in elective courses as per availability	29 th July 2016 (Friday)	
4.	Teaching Period	25 th July 2016 (Monday)	2 nd September 2016 (Friday)
5.	Minor Test 1	3 rd September 2016 (Saturday)	7 th September 2016 (Wednesday)
6.	Teaching Period	8 th September 2016 (Thursday)	14 th October 2016 (Friday)
7.	Class Committee meetings	12 th September 2016 (Monday)	16 th September 2016 (Friday)
8.	Mid-term project evaluation	17 th September 2016 (Saturday)	
9.	Submission of attendance by Course Coordinators to COR upto 22 nd September 2016	23 rd September 2016 (Friday) by 03:00 PM	
10.	Submission of checked answer scripts of minor test-I to COE & uploading of marks on ERP	23 rd September 2016 (Friday)	
11.	Issue of Mid-Term Warning to students for Shortage of attendance	27 th September 2016 (Tuesday)	
12.	Minor Test 2	15 th October 2016 (Saturday)	19 th October 2016 (Wednesday)
13.	Teaching Period	20 th October 2016 (Thursday)	24 th November 2016 (Thursday)
14.	Start of submission of online feedback by students	20 th October 2016 (Thursday)	
15.	Momentum & Cerebration	3 rd November 2016 (Thursday)	5 th November 2016 (Saturday)
16.	Meeting of Time-table in-charges with Deputy Dean-Academics (UG)	7 th November 2016 (Monday)	
17.	Last date for returning marked answer scripts of Min Test 2 to COE & uploading marks on ERP	11 th November 2016 (Friday)	
18.	Submission of minor test-I & II marks at Dean Office (in soft copy)	11 th November 2016 (Friday)	
19.	Last day of Teaching	24 th November 2016 (Thursday)	
20.	Last day of submission of online feedback by students	19 th November 2016 (Saturday)	
21.	Submission of final attendance by Course Coordinators to COR	24 th November 2016 (Thursday) by 5:30 PM	
22.	Display of pre-major evaluation on ERP	25 th November 2016 (Friday) by 12:00 NOON	
23.	List of detained students to be displayed on board/website	25 th November 2016 (Friday) by 4:00 PM	
24.	Preparatory leave (for students)	25 th November 2016 (Friday)	27 th November 2016 (Sunday)
25.	Major Tests	28 th November 2016 (Monday)	7 th December 2016 (Wednesday)
26.	Evaluation Activities	28 th November 2016 (Monday)	23 rd December 2016 (Friday)
27.	Winter Internship (Only for Law)	12 th December 2016 (Monday)	6 th January 2017 (Friday)
28.	Display of Results	23 th December 2016 (Friday)	
29.	Registration of courses (Even semester)	2 nd January 2017 (Monday)	3 rd January 2017 (Tuesday)
30.	Commencement of classes	4 th January 2017 (Wednesday)	

SUMMARY OF ACADEMIC CALENDAR	TOTAL NO. OF DAYS
Total Teaching/ Learning Days	107
Minor Test I & II	08
Momentum (Cultural Festival)	03
Preparatory leave	03
Major Test	09
LIST OF HOLIDAYS (Already approved by GB)	
6 th July 2016 (Wednesday)	Idu'l Fitr
15 th August 2016 (Monday)	Independence Day
18 th August 2016 (Thursday)	Rakshabandhan
25 th to 28 th August 2016 (Thursday to Sunday)	Sri Krishna Janamashtmi
2 nd October 2016(Sunday)	Mahatma Gandhi Jayanti
11 th October 2016 (Tuesday)	Vijay Dashami
29 th October to 1 st November 2016 (Saturday to Tuesday)	Diwali Vacations
14 th November 2016 (Monday)	Guru Nanak Jayanti
25 th December 2016 to 1 st January 2017 (Sunday to Sunday)	Winter vacation
Note: 1. 2 nd September 2016 (Friday) will work as "Saturday" 2. 13 th October 2016 (Thursday) will work as "Saturday". 3. 16 th November 2016 (Wednesday) will work as "Monday"	

DETAILED ACADEMIC CALENDAR FOR SESSION 2016-17 THE NORTHCAP UNIVERSITY
ALL SCHOOLS (EVEN SEMESTER, JAN-JUNE 2017)


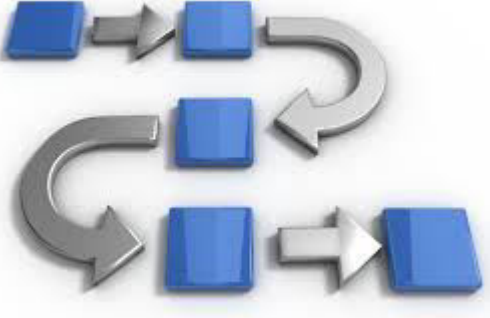


S. No.	DETAILS	FROM	TO
1.	Registration	26 th December, 2016 (Monday)	3 rd January, 2017 (Tuesday)
2.	Commencement of classes	4 th January, 2017 (Wednesday)	
3.	Teaching Period	4 th January, 2017 (Wednesday)	3 rd March, 2017(Friday)
4.	Mid-term project evaluation of projects for B. Tech.	16 th February, 2017(Thursday)	
5.	Class Committee meetings	8 th February, 2017 (Wednesday)	13 th February, 2017 (Monday)
6.	Submission of attendance upto 28 th February, 2017(Tuesday) at COR for mid-term attendance warning	1 st March, 2017(Wednesday) by 04:00 PM	
7.	Issue of written warning to students having short of attendance by COR	3 rd March, 2017 (Friday)	
8.	Minor Test	6 th March, 2017(Monday)	9 th March, 2017(Thursday)
9.	Open Elective/Programme Elective offered by Departments for July 2017 semester	10 th March, 2017(Friday)	
10.	Teaching Period	10 th March, 2017(Friday)	3 rd May, 2017(Wednesday)
11.	Open Elective/ Programme Elective opted by students	20 th March, 2017 (Monday)	25 th March, 2017 (Saturday)
12.	Pre-placement assessment test/Industrial visit	22 nd March, 2017 (Wednesday)	
13.	Submission of checked answer scripts of minor test to COE & uploading of marks on ERP	1 st April, 2017 (Saturday)	
14.	Display of allocated Open Elective/ Programme Elective	1 st April, 2017 (Saturday)	
15.	Start of submission of online feedback by students	7 th April, 2017 (Friday)	
16.	Last day for any modification in Open Elective/ Programme Elective by students	12 th April, 2017 (Wednesday)	
17.	Project Display by B. Tech. final year students	14 th April, 2017 (Friday)	
18.	Meeting of Time-table in-charges with Deputy Dean-Academics (UG)	19 th April 2017(Wednesday)	
19.	Final List of Open Elective/ Programme Electives	20 th April 2017(Thursday)	
20.	Last day of submission of online feedback by students	29 th April, 2017 (Saturday)	
21.	Last day of teaching	3 rd May, 2017(Wednesday)	
22.	Submission of final attendance at COR	4 th May, 2017(Thursday) by 2:00 PM	
23.	Display of pre-major evaluation on ERP	5 th May, 2017(Friday)	
24.	Preparatory leave (for students)	4 th May, 2017(Thursday)	5 th May 2017 (Friday)
25.	List of detained students to be displayed on notice board/website by COR	5 th May 2017 (Friday) by 2:00 PM	
26.	Major Tests	6 th May 2017 (Saturday)	16 th May, 2017 (Tuesday)
27.	Examination Activities	16 th May, 2017 (Tuesday)	9 th June, 2017 (Friday)
28.	Practical Training	17 th May, 2017 (Wednesday)	22 nd July, 2017 (Saturday)

29.	Display of Grades on Examination notice-board/website	9 th June, 2017 (Friday)	
30.	Re- Major Activities	3 rd July, 2017 (Monday)	15 th July, 2017 (Saturday)
31.	Registration for next semester	15 th July, 2017 (Saturday)	22 nd July, 2017 (Saturday)
32.	Commencement of classes	24 th July, 2017 (Monday)	

SUMMARY OF ACADEMIC CALENDAR		TOTAL NO. OF DAYS
Total Teaching-Learning Days		75
Registration days		02
Remedial classes		01
Minor Test		04
Mid-term project evaluation of projects		01
Project Display by final year students		01
Pre-placement assessment test/Industrial visit		01
Preparatory leave		02
Major Test		09
LIST OF HOLIDAYS (Tentative)		
Events	Date	No. of Days
Republic Day	26th January 2017(Thursday)	01
Holi Vacation	13 th -14 th March 2017(Monday to Tuesday)	02
Ram Navami	5 th April 2017 (Wednesday)	01
Good Friday	14 th April 2017 (Friday)	01
Idu'l Fitr	26 th June 2017 (Monday)	01
Total		06

AN ANALYSIS OF THE FEEDBACK FROM STAKEHOLDERS

Table of Contents

	Objective of the Analysis
	Methodology
	Data Analysis
	Conclusion

Objective of the Analysis

The main aim of this analysis is to study the Exit feedback of the students towards The NorthCap University.

The study will highlight the following objective:

1. To analyze the satisfaction level of the students primarily measured on the basis of four major factors:
 - Classrooms Facilities
 - Teaching/Lab Facilities
 - Academic areas/Student Development
 - Support areas
2. To analyze how NCU has helped in overall grooming of the students.
3. To take suggestions and recommendations from students of NCU about any problem they faced during the process so that the teaching and other services can be improved further.
4. To create a database of the students of the contact details of the passed out students in order to stay in touch with them and to gather information relating to their future carrier ambition (placement, higher studies etc).

Methodology

- Feedback of the all stakeholders was taken via a questionnaire.
- The questionnaire mainly asked to rate NCU on the various factors categorized under four major categories:
 - Classroom Facilities
 - Teaching/Lab Facilities
 - Other Academic areas
 - Support areas
- Respondents were asked to rate the various factors on a scale of 1 to 5 where 1 means poor and 5 means excellent.
- The data gathered was taken analyzed using tools of Excel to draw various figures and conclusions which would be useful to improve further the facilities in NCU.

Feedback Statistics

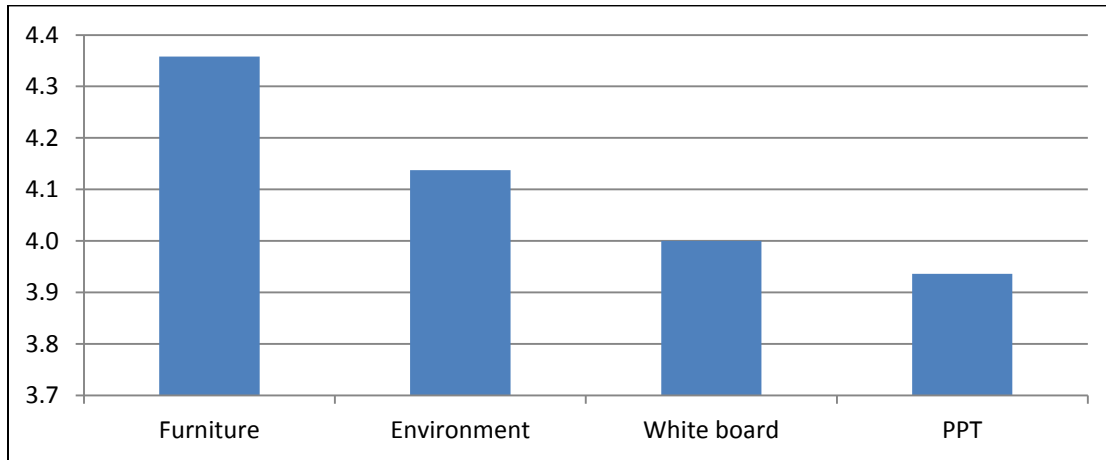
<i>Total number of EECE(B.Tech(ECE&EEE) and M.Tech) Students, ALUMNI, Parents Participated</i>	209
<i>Estimated time to fill each feedback form</i>	10 Min.

Data Analysis

For ECE Students

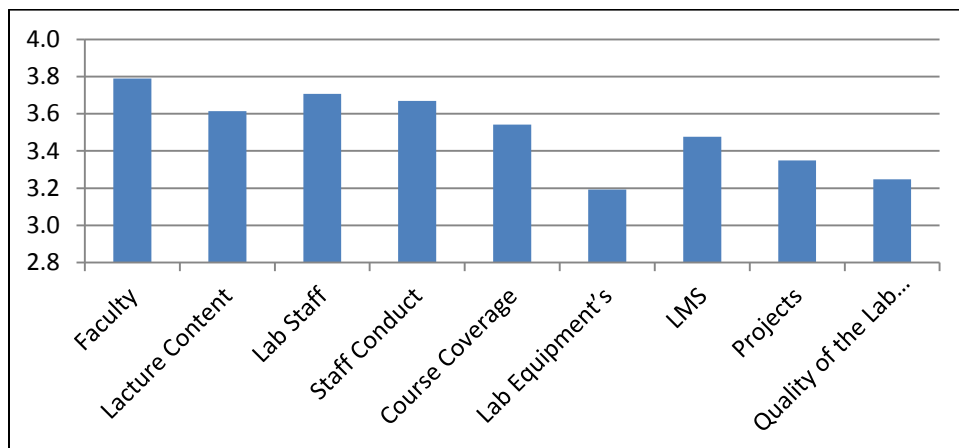
Category1: Class Room Facilities

- **Class Room Furniture**
- **Class Room Environment**
- **White Board Visibility**
- **Projector Operation and Usage**
- **Any other**



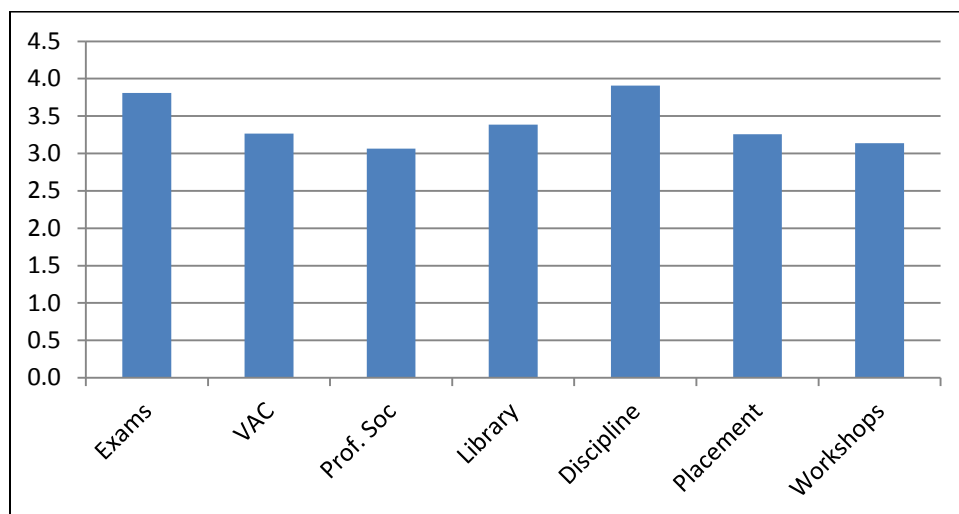
Category II: Teaching/ Lab Facilities

- Faculty quality
- Lecture Content
- Lab Staff Quality
- Staff Conduct
- Syllabus Coverage
- Lab Equipment
- Effectiveness of LMS
- Projects
- Any other



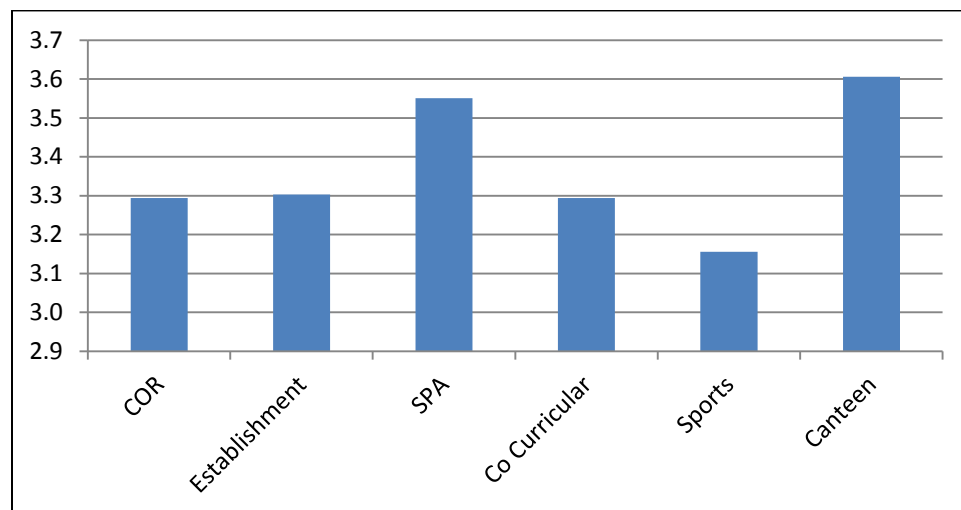
Category III: Other Academic Areas/Student Development

- Conduction of internal exams
- Effectiveness of value added courses(VAC)
- Role of professional societies
- Library: Quality and copies of books
- Discipline in the Dept.
- Campus placement
- Any other



Category IV: Support Areas

- COR/Admin/Accounts Departments
- Establishment support/Conduct
- SPA(School of professional attachment
- Co-Curricular Activities
- Sports
- Canteen & refreshment area
- Any other



Steps Taken for Improvements

- The schemes were revised to reduce the credits and to make the track based programs .
- The students were given more choices in program electives .
- Industry oriented courses were designed to match with requirements of placement.
- Lab workbooks were redesigned with more emphasize on Quiz and by providing more student's work area.
- Use of more innovative methods for teaching, such as videos on projects and animation slides.
- Lecture content quality improvements.
- Project work improved due to project demonstration to the students.
- Industry Visits and interactions are improved.
- More emphasis is put on Industry training of the students.
- The students are encouraged to work on real time projects.
- Quality and effectiveness of LMS improved due to addition of animation, tutorials, and short answer type question, quizzes.
- Periodic checking of lab equipment improved quality of lab equipment.
- Effectiveness of VA courses improved because of selection of current trends and latest technology areas.
- Discipline in department improved because of anti-ragging committee, class counseling sessions and mentoring reports.

Major Steps taken based on exit feedback

- The students have been given more choices in program electives.
- Tutorial and lab content has been improved.
- Most of the subjects have been converted to 2-0-2 (3 credits) structure so that in addition to theory and lab the students can take up small projects related to the subject to gain more practical knowledge.
- The role of professional societies in department has been improved, students are encouraged to become members and more events are organized.
- To make practical classes interesting and knowledge gaining, most of the experiments are replaced by component based experiments in all EECE department labs.
- The faculty is coming up with new and innovative ideas to improve the quality of the projects.
- Placement coordinator of the department putting good efforts to increase the placement and internships of ECE&EEE students.
- Every faculty is asked to maintain the contacts with Alumni and good number of activities like webinars, project mentoring etc. are being done by alumni.

Annexure 3(i)

Minutes of the Mentors Meeting with Members of Governing Body, Chief Mentor and Vice Chancellor

Mentors Annual Meeting was held on Friday, 3rd February 2017 at 11:00 AM with Members of Governing Body, Chief Mentor and Vice Chancellor and was attended by the following:

1. Prof. Prem Vrat (Pro Chancellor, Prof. of Eminence and Chief Mentor)- Chairman
2. Prof. Karmeshu, (Mentor)
3. Prof. I.K. Varma, (Mentor)
4. Prof. B.K. Das, (Mentor)
5. Prof. P.K. Swamee, (Mentor)
6. Dr. Y.P. Anand, (Mentor)
7. Prof. V. P. Sandlas, (Mentor)
8. Dr. C.R. Prasad (Mentor)
9. Dr. KM Mital (Mentor)
10. Prof. Pushpesh Pant (Mentor)
11. Mr. Avdhesh Mishra (Founder Member, Governing Body)
12. Mr. Shiv Saran Mehra (Founder Member, Governing Body)
13. Brig. S.K. Sharma (Retd.) , Officiating Vice Chancellor
14. Prof. Ravindra Ojha, Director, SOET
15. Col. Bikram Mohanty (Retd.) , Registrar
16. Prof. A.K. Yadav, Faculty-Mentoring Scheme Coordinator

Minutes:

- 1) The meeting started with a welcome address by the Chief Mentor, Prof. Prem Vrat. He welcomed the newly joined Mentor, Prof. Pushpesh Pant (Emeritus Professor, School of Law, (NCU). He also congratulated Dr. C.R. Prasad who has been conferred upon the Petrotech-2016 Lifetime Achievement (Category – Midstream) Award. The Chief Mentor also informed the members about another feather in the cap of Prof. K.L. Chopra who has been conferred with an honorary

DSc by Jadhavpur University in Dec 2016. He then welcomed Prof. Yadav as the new Convener & Coordinator of this Mentoring Scheme. In the end, Brig. S K Sharma informed the members that Prof. Prem Vrat himself has been conferred with the MC Memorial Award 2016 at the Annual Convention of the Central Council of Operational Research Society of India in December 2016.

- 2) **Item No. 1: Briefing by the Coordinator:** Prof. A.K. Yadav delivered a presentation highlighting the details of this scheme, Major Accomplishments resulting from the interactions of mentees with their respective mentors, and expanded scope of mentoring included in the revised guidelines recently implemented.
- 3) **Item No. 2:** Brig. S. K. Sharma (Retd.), Officiating Vice Chancellor in his opening remarks welcomed all members to this meeting and shared his views about the Mentoring Scheme which has proven extremely successful with outcomes as well as the need is constant due to the turnover of faculty and the need to enhance research. He also suggested to fix up a particular date for holding this Annual Mentors Meeting (say, 3rd Friday of January, each Year), so that all Mentors as well as other members of this meeting can block this date in their calendar well in advance and maximum participation can be ensured. Prof. A.K. Yadav was requested to initiate this exercise so as to make it a part of the Academic Calendar. Brig. Sharma also added that to increase the scope of Mentors' monthly visit to the departments, HODs could request various advisory roles for the dept. during the Mentors' visit on their regular / monthly visits. He added that some new mentors from Industry are expected to fill the gap areas once we receive their consent. This will also reduce the number of mentees per mentor, which are currently at about ten mentees per mentor.
- 4) **Remarks by Members of Governing Body:** Mr. Avdhesh Mishra in his initial remarks stated that the Mentor-Mentee meetings are to be given due importance that they deserve. Secondly, availability of Mentees should be ensured in all interactions by the Dept. Coordinators, keeping in mind the excellent pool of intellectuals, their expertise and rich experience, which makes an impact on any Mentee for his/her professional as well as personal growth due to which, ultimately the students are benefitted. He also requested Mentors to set specific targets for their respective Mentees in their meetings and a regular follow up would prove very beneficial and keep them on a progress track. Mentee-Group Coordinators should ensure availability of mentees well before scheduling the meeting/visit of their mentor so as to utilize the visit effectively.
- 5) **Item No. 3: Mentors Individual Remarks:**
 - (i) **Remarks by Prof. I. K. Varma:** Prof. Varma was happy to share that the Mentees assigned to her are working well and putting lots of efforts to accomplish their work. She pointed out that some uncertainty in running the courses of Chemistry is a matter of concern, which is to be addressed by the University authorities and Management. Brig. Sharma assured that the matter would be looked into before July 2017 session. Mr. Mishra emphasized the need of knowledge of Chemistry in Engineering but advised for

consideration as to how to deliver it in the most effective manner, adding that Material Science is of special importance to technology.

- (ii) **Remarks by Prof. V.P. Sandlas:** Prof. Sandlas shared with the members that all his Mentees have now registered for Ph.D after his continued persuasion. Regarding the vetting of Question Papers, he suggested that in theory exams, System-Engineering related questions are missing. He also suggested inviting some Industry Experts who can deliver some lectures on System Engineering for our Faculty members. He added that those pursuing PhD should be encouraged to teach M. Tech students in specific areas of their PhDs by respective HoDs. He suggested introducing incentives for NCU faculty to register for PhD at NCU.
- (iii) **Remarks by Dr. C.R. Prasad:** Dr. Prasad informed the members about the areas that he is advising his Mentees to work upon such as taking up issues of National importance like Make in India, Paris Climate Change Convention, Smart Cities and what all be done by faculty to be counted as meaningful contribution.
- (iv) **Remarks by Dr. K. M. Mital:** Dr. Mital shared some collections of newspaper articles, wherein the importance of Mentoring is highlighted and the wide scope of this is given utmost importance. Even he cited some examples from the clippings, of top internationally renowned personalities who have acknowledged their Mentor's role in their success. He too suggested to have a target orientation and to focus on areas of real significance. He supported the idea of fixing a date for Annual Mentors Meeting and including it in the Academic Calendar.
- (v) **Remarks by Prof. P.K. Swamee:** Prof. Swamee shared some of his recent contributions like modification of syllabus, suggesting removal of some obsolete topics in the curriculum, improvements of Lab equipments etc. He pointed out that Water Tanks at the Labs of both Civil & Mechanical Engineering should be a concrete one instead of plastic tanks. HOD CE is requested to seek views on concerned Lab from Dr. Swamee and get the same completed and inform the mentor of the same. He observed that some of the Mentees assigned to him from Mechanical Engineering Department were not adequately involving themselves in the mentoring process. HOD Mechanical Engineering must ensure the involvement. Lastly, he suggested that even e-mail communication/interaction from mentees would be sufficient to share their progress and give updates to their mentors.
- (vi) **Remarks by Prof. B.K. Das:** Prof. Das was happy to inform the members about the achievements of his Mentees i.e. 6 Papers published and 2 Faculty Members got Best Paper Award. He suggested that some handholding guidance to the faculty members from HODs or senior faculty members is desirable. So far as PhD scholars are concerned, Brig. Sharma suggested that Mentors could be Co-Supervisors to them, to guide them properly in their research works. Deputy Dean PhD programme and HODs may consider this.

- (vii) **Remarks by Prof. Karmeshu:** Prof. Karmeshu while appreciating the Scheme, also brought to the notice of all that his area of Stochastic Modelling and Simulation has significant importance in every sphere of Engineering and this could be given enough scope & opportunity to flourish amongst each Department of Engineering. In particular, MTech in all Engineering fields should be taught this course. He also suggested looking into the possibility of incorporating this Course in NCU Syllabus and/or keeping a series of lectures in this area for faculty as well as students on a weekly basis so as to understand the importance of this in engineering. Prof. Karmeshu was disappointed to notice the switching of Mentees to other groups without discussion with the existing mentor. He suggested that if a Mentee wants to continue with the existing Mentor (keeping in mind his/her areas of interest / research), he/she could be allowed to be with that Mentor. Officiating Vice Chancellor requested Prof. Yadav to look into this assignment with utmost care. Adding to Prof. Karmeshu's remarks on importance of his areas, Mr. Shiv Saran Mehra (Member, Governing Body) suggested ensuring the followings: (a) Frequent Lectures to students on Maths, (b) Improve quality of Maths Teaching, (c) Teachers should also be trained to make Maths-teaching exciting. Prof. Prem Vrat, Chief Mentor added that Multidisciplinary Mentees is a great idea, which could be looked into. That is, a mentees should be able to interact freely with multiple mentors without imposing any artificial boundary. He added that a report from the Mentor about each mentee should be included in the Annual Performance Appraisal of the faculty, just as in the past. The Chief Mentor and the Pro VC reiterated that the Mentors can very well be co-supervisors of PhD scholars of NCU.
- (viii) **Remarks by Prof. Pushpesh Pant:** Prof. Pant was satisfied with his Mentees performance, but was disappointed on their attrition rate (reason could be of any type). He suggested the management to find out ways for sustaining the young faculty members at the Department.
- (ix) **Remarks by Dr. Y.P Anand:** Dr. Anand opined that since he has a very few number of Mentees in Civil Department (with frequent changes, with departure of some faculty), he could be given some more mentees who are interested to do research in the areas of Transportation Management, Waste Management, Recycling etc, which are issues of National Importance and could be of interest to other departments as well.

Adding to his suggestion, Officiating Vice Chancellor advised Prof. Yadav to circulate the information of expertise/research areas of each of the mentors amongst all Faculty and Research Scholars once again, so that they can request for being mentored by a specific mentor based on mutual interest and can also meet the Mentors according to their specific advice on the date of their visit to the Departments. He also suggested holding Mentee-Group Coordinators' Meeting to synchronize these aspects. Our University event calendar invariably contains the date/time/place of visit of mentors and any faculty desirous of meeting him/her can simply be present there.

- 6) **Item No. 4:** As there were no other matters, the meeting ended with a vote of thanks and also with a request to all Mentors to visit the NIRF website for giving their Perception to The NorthCap University (for its 2017 Ranking purpose, as notified by UGC through Newspapers). A mail regarding the details has already been sent by the registrar to all the Mentors among others.

Summing up:

- a) The scheme has proved its worth which benefits the mentees, the depts., and the university as a whole. It should be continued and progressed with all seriousness by the Mentees and the HODs.
- b) It was unanimously agreed to have a fix-date for the Mentors Meetings in future as 3rd Friday of Jan each year and should be included in the Academic Calendar.
- c) Mentor group coordinators should try to plan visits of their Mentors on a working Saturday so that maximum interaction with the mentees is ensured and Mentor's visit is fully utilized for other departmental matters as well as stated in the expanded scope of Mentoring.
- d) A meeting of Mentor-Group coordinators along with HODs is suggested in the near future to update them on the important follow up points for more effective implementation of the scheme.
- e) A Mentor's feedback for each mentee should be filled before the Appraisal exercise and ensured by HR.
- f) Each mentor's expertise area should be shared with all so that cross-discipline interaction could be facilitated. Mentors were requested to initiate some interdisciplinary research proposals as many mentors have mentees from more than one department / background.
- g) Each mentee should take these interactions seriously and should try to maximize benefits from the scheme. Mentors should set targets for each mentee and their progress can be followed-up in each interaction.

Closing Remarks:

The Pro-chancellor thanked all the members for their active participation and requested the University Coordinator for the Faculty-Mentoring Scheme to follow up on all points expeditiously.

Prof. A.K. Yadav

Convener

Annexure 3(ii)

Annual Faculty Appraisal Process

AIM: In order to motivate employee and acknowledge their performance in a year, a systematic faculty appraisal process is followed at THE NORTHCAP UNIVERSITY based on which annual increments and allowance are granted. The Annual Faculty Appraisal Form is designed in a manner to make the process holistic, comprehensive, and participative in nature. The overall weightage of teaching /research and outreach activities have been provided to ensure a broad coverage of all vital aspects of faculty development. The assessment factors have been spelt out making it easier for an appraiser to provide objective rating/score against each parameter. All stakeholders like faculty, students, administration are involved in the process thereby ensuring a 360 degree feedback. Grading benchmarks and ratings have also been improved further to make it more achievable and thereby acting as a motivational tool.

HODs will also get a platform to provide their scores and descriptive assessment covering both personal and professional growth of each faculty highlighting their strengths and areas of improvement. Each HOD shall sensitize respective faculty in their department about the expectations of the University from a faculty member in terms of multiple attributes of performance relevant to an institute of higher learning. The forms will be made available to each faculty well in advance to keep updating their information as per the format. The individual appraisal meetings should be treated as an opportunity to share meaningful suggestions, ideas and feedback with the Central Appraisal Committee.

Any faculty who wishes to discuss the engagement plans and focus on improvements strategy is welcome to discuss with Pro-Chancellor, Prof. Prem Vrat, who as Chief Mentor would be meeting all faculty in small groups to provide guidance/assistance for improving faculty performance.

Depending upon the performance, the faculty is assessed as follows:

Outstanding	:	85% and above
Excellent	:	Score between 80% to 84%
Very Good	:	Score between 70% to 79%
Good	:	Score between 60 % to 69%
Satisfactory	:	Score between 50% to 59 %
Marginal	:	49% and below

‘Excellent’, ‘Very Good’ and ‘Good’ performance is suitably rewarded with Variable Performance Allowance and star performers are awarded on Teacher’s Day.

Summary of Faculty Development Programmes (FDP)

S.No.	Dept.	WINTER FDP (08 th to 14 th December 2017)		SUMMER FDP (05 th to 10 th June 2017)	
		Topic	No. of lectures	Topic	No. of lectures
1.	APS	Bridging The Gap Between Industry And Academia	14	Innovation In Teaching And Learning	4
2.	CLL	Emerging Trends And Challenges In Teaching	15	Innovation In Teaching And Learning	4
3.	CEE	Skill Enhancement	18	Industry Institute Interaction	13
4.	CSE	Advance Concepts & Design Methodologies In Designing IOT Systems	16	Latest Industry Trends And Needs	3
5.	EECE	New Technology Areas Introduced In Course Curriculum	12	Synergism For Growth	3
6.	ME	Bridging The Gap Between Industry And Academia	10	Bridging The Gap Between Industry And Academia	6
7.	SOM	Holistic Development Of Faculty Members	7	Research Methodology Using Spss And Amos	9
8.	SOL	Legal Research And Teaching Methodologies In Contemporary Era	10	Technology in Legal Science	5

SOP for Financial Assistance to faculty members for attending National / International Conferences/ Seminars/ Symposia etc.

General

This Standard Operating Procedure (SOP) is issued for providing financial support to the regular faculties of SOET (School of Engineering & Technology), The NorthCap University, Gurgaon for attending National / International conferences/ Seminars / Symposia within India and abroad and workshops/short term training programs within India. The scheme is effective from the academic year 2016-17.

Eligible candidates are required to submit the applications in the prescribed format available from the office of RDIL/ from the website (www.ncuindia.edu) the format of which is attached as **attached**. The application should be directly submitted to Director, SOET office for consideration and the outcome of the review process shall be communicated to the concerned faculty member within 10 days from the date of submission of the application form.

1. Eligibility criteria for seeking financial assistance

- (a) For events organized within India, the faculty member should have completed a minimum of one year of regular service post probation and he/she should have secured at least 'Satisfactory' rating in the last annual appraisal. Teachers on contract, on probation or visiting faculty members are not eligible for availing the financial assistance for travel from the university.
- (b) For events organized within India, the hosting institute should preferably be any of the IITs or NITs, Central Universities, government owned Central Research Laboratories or any other institution including private institutions preferably with a ranking appearing in the current National Institutional Ranking Framework (NIRF).
- (c) The event should preferably be supported by any National / International body or Society of which the concerned faculty is an active member.
- (d) For seeking financial assistance for international travel, the faculty member should hold a PhD degree and also should have completed 5 years of regular service in the university and should have a minimum three 'Good' appraisal ratings.
- (e) International conferences/ seminars / symposia should preferably be supported by reputed international societies and / or the hosting institute should preferably have a place within top 500 in World University Rankings or Times Higher Education (THE) or QS world University Ranking.

2. Mode and schedule of application

- (a) As per the year's budget, a specified financial amount will be made available to the School of Engineering & Technology (SOET) at the beginning of the academic year (July), which shall further be divided equally in both of the semesters, to ensure an even spread across the academic year.

- (b) Application (with a cover letter) in a prescribed format should, directly, be submitted to Director, SOET office after receiving prior approval from HoD. Incomplete application form and / or application forms shall not be considered for the financial support.

3. Process of selection

- (a) The financial assistance shall be provided to the faculty member in the following order of preference, i.e.,
- Faculty member delivering keynote address
 - Faculty member contributing a paper through oral presentation
 - Faculty member invited to chair a session
 - Faculty member invited for expert talk / lecture
- (b) After initial scrutiny, application form received from the faculty member will be placed before a committee constituted as under:
1. Director, SOET – Chairman
 2. Head of the concerned Department - Member
 3. Dean, Academic – Member
 4. Dy. Dean, RDIL – Member Secretary
- (c) The committee members should not be the author/ co-author of the paper under consideration.
- (d) Once approved, the decision should be communicated to the CFAO and the concerned faculty member keeping HoD, Vice-chancellor and Hon'ble Governing Body informed.
- (e) Financial assistance to participate in the workshop/ short term course (one week duration) would be limited to within India.
- (f) No financial assistance will be provided to attend short term training programme / workshops held abroad.

4. Quantum of financial assistance and its periodicity

- (a) For academic year (AY) 2016-17, Hon'ble Governing Body has allocated a fund of Rs. 7, 00, 000/- (Rupees Seven lakh). For an equitable and fair balance, the further distribution of the amount among the various departments of SOET are as under:

1	Computer Science & Engineering	Rs. 1.95 lakh
2	Electronics & Communication Engineering	Rs. 1.30 lakh
3	APS	Rs. 1.45 lakh
4	Mechanical Engineering	Rs. 1.40 lakh
5	Civil Engineering	Rs. 0.60 lakh
7	CLL	Rs. 0.30 Lakh
	Total	Rs. 7.00 lakh

However, the amounts shown above are only indicative and shall be finalized as per (regular) faculty strength of the department in the beginning of the commencing academic year.

Note: The allocation of fund to individual department has been approved based on the number of faculty members / department. Next year onwards, it will be linked with the number of admissions /department.

- (b) The above allocation may be changed by the competent authority depending on the number of applications received in a given semester and the availability of the fund.
- (c) A faculty can avail this facility once in an academic year for an event organized within India and once abroad in a block of five academic years (2016-20 and so on).
- (d) Faculty member willing to attend the conference/symposia/workshop/seminar on their own expenses or sponsored by external agencies need to submit their application forms in the same prescribed format for obtaining the approval of attending the event and sanctioning of SCL etc. Such faculty members, however, will be eligible to avail financial assistance from the university to attend another conference/ symposia/seminar etc. on their own merit.
- (e) Faculty members attending conference/symposia/seminar within India are eligible to avail registration fee and travel expenses limited to a maximum amount of Rs. 10,000/- (Rupees Ten thousand only).
- (f) Faculty members attending conference/symposia/seminar abroad are eligible to avail support for registration fee and travel expenses limited to a maximum of Rs. 50,000/- (Rupees Fifty Thousand only).
- (g) Faculty members wishing to attend short term course / workshop shall only avail travel expenses. No other allowance or reimbursement of other expenses will be entertained. Duration of short term course / workshop should be of 7 days maximum and faculty member should apply in prescribed format to avail a maximum of 4 days SCL for attending the event.
- (h) In case two faculty members qualify to apply for the same conference, preference will be given to the senior faculty member. Similarly, if there are two authors for the same paper and both have applied for availing the financial assistance from the university, preference will be given to the first author of the paper.

5. Submission of claim & Reimbursement

In order to ensure early release of reimbursement of grant, the applicant should submit the following documents within 7 days after the conference/event is over:

- (a) A Statement of account giving full details of expenditure incurred on various items viz., travel, airport tax, registration fee, visa fee and DA as enclosed in **attached**.

- (b) A utilization certificate in the prescribed format (**attached**) from the CAFO (NCU) for the total expenditure incurred on the visit.
- (c) In case of foreign travel, conversion rate of the currency (country visited) into Indian currency be stated.
- (d) Original cash memo / receipt should be enclosed with the claim. No photocopy will be allowed to be submitted.
- (e) On return, along with the reimbursement claim, the faculty must submit a written report on the proceedings as how he/she gained from the event.
- (f) The amount due to the candidate shall be disbursed in one installment within 15 days of submission of relevant documents duly approved by the concerned authorities.
- (g) In case financial assistance is received from the organizers or any other agency, an equivalent amount paid by the university will be refunded by the faculty

6. Applicability and authority for modification

The SOP can be modified / amended at any time by the approving authority, i.e., Governing Body of the University. The SOP comes into effect from 15th September 2016, the last date of admission. The guidelines broadly laid down here is equally applicable for SOM and SOL. For AY 2016-17, the funds granted to SOM and SOL is tentatively Rs. 1.5 lakhs each. Dean SOM and SOL may follow this SOP in principle; make suitable adjustment to meet their specific requirements.

**APPLICATION FORM FOR FINANCIAL ASSISTANCE TO ATTEND CONFERENCE/
SEMINAR ETC**

A. Details about the applicant

1	Name of the applicant	
2	Designation	
3	Department	
4	Date of joining the University	
5	Faculty Code	
6	No of years served after lifting of probation	
7	Indicate the field of paper (to be presented) & its title, including authors	
8	Publication profile of the candidate in specified field (<i>attach separate sheet</i>)	
9	Whether a member of national / international professional body supporting the conference [<i>Attach the membership certificate, if member</i>]	

B. CONFERENCE DETAILS

1	Name / title of the conference	
2	Name of the organizers with complete address	
3	Name of the country/city/town where the conference will be held	
4	Whether the conference /event is supported by anybody. If so, specify and provide details of conference/ event	
5	Duration of the conference [date / month / year (from – to)]	
6	Role of the applicant in the conference / symposia	

	<ul style="list-style-type: none"> ➤ Presenting / chairing the session (if yes, attach documentary evidence) ➤ Delivering a plenary lecture / invited talk (if yes, attach documentary evidence) ➤ Presenting a paper (attach acceptance letter along with abstract) 	
9	Indicate the amount of expenditure expected in attending the conference. Give brief break up.	
10	When was the last financial assistance received by the applicant for attending the conference / workshop/symposia under this policy?	

Declaration from applicant

I,, working as in the department ofcertify that the details given above are correct and true to my knowledge. If the information supplied is found to be incorrect at a later date, I shall reimburse the entire amount to NCU. The amount received will be used for the purpose for which it is requested. In case financial assistance is received from the organizers / other agency later, I shall pay back an equivalent amount taken from NCU. I shall abide by the decision of the Committee of NCU.

Place:

Date:

Signature of the applicant

Proforma for claiming re-imbursement of the expenditure incurred under the travel grant scheme to attend conference/seminar/symposia in India or abroad and workshops/short term courses in India

1. **Name of the applicant:**

2. **Name & place of the conference:**

5th International conference on Forensic Geotechnical Engineering

Place: IISc, Bangalore

3. **Duration of the conference:**

4. **Details of actual expenditure incurred on travel** (attach TA Bill):

Travel =

5. **Registration Fee Paid (Yes / No) [receipt enclosed] =**

6. **Brief report of participation** (enclosed Yes / No):

7. **Certificate of Attendance** (Yes / No) (enclosed):

8. **Enclose copy of approval letter:**

Certified that

1. The details given above are correct and if the information is found to be incorrect on a later date, entire amount paid by the university will be refunded.
2. The expenditure has been utilized for the purposes for which it has been approved in accordance with the terms and conditions laid down.
3. In case financial assistance is received from the organizers or any other agency, an equivalent amount paid by the university will be refunded.

Signature of applicant

Name:

Certificate from Director SOET

1. Certified that details given above have been verified and are correct.
2. The applicant qualified for receiving financial assistance from the university as per the laid rules and guidelines.

Signature: _____

UTILIZATION CERTIFICATE

Certified that the expenditure of Rs. On the
visit of from
..... to present his /
her paper at the
..... has
been incurred in accordance with term and conditions laid down by the University in its letter No.
..... dated..... and all conditions of the
grant have been fulfilled.

Hence, the above amountmay be released.

CFAO, NCU
(Name & Seal)

DSOET, NCU

VC:

GB: