



**ALL Ph.D. PROGRAMMES FOR NATIVE, FOREIGNERS, NRI AND OCI
(ENGINEERING, PHYSICS, CHEMISTRY, MATHS, ENGLISH, MANAGEMENT & LAW)
ADMISSION POLICY & SELECTION PROCEDURE-JULY 2020
FOR ACADEMIC YEAR 2020-21
FOR DOCTOR OF PHILOSOPHY (Ph.D.)**

1. INTRODUCTION

1.1 The NorthCap University (NCU), Gurugram, Haryana has been established by the Haryana State Legislature under the Haryana Private Universities Act (Third amendment), 2009.

1.2 The NorthCap University, Gurugram, Haryana is a self-financed multi-disciplinary University recognized by UGC under Section 2(f) of the UGC Act, 1956. For all details of the University and courses run, refer to NCU website at www.ncuindia.edu. The NorthCap University has been included by UGC in their select list of approved Universities. This list of recognized Universities can be obtained from the UGC website www.ugc.ac.in.

The University has a comprehensive and transparent policy regarding Fee Structure, refund, cancellation & withdrawal policy. The Refund & Cancellation policy is in line with UGC/MHRD/AICTE policy on the matter as per UGC Notification dated 02 November 2018.

1.3 This policy shall be called the “**ADMISSION POLICY & SELECTION PROCEDURE-2020**” (APSP-2020) for admission to DOCTOR OF PHILOSOPHY PROGRAMME (Ph.D.) awarded by The NorthCap University, Gurugram.

1.4 This policy has been prepared in accordance with the First Ordinances of The NorthCap University duly approved by Government of Haryana and ensures that admissions are made strictly in accordance with merit and in line with UGC guidelines in a fair and transparent manner in the interest of all concerned.

1.5 While every effort has been made to ensure that the information contained in this document is accurate at the time of publication, all matters that it covers may be subject to change without notice. The University does not intend, by the publication of this document, to create any contractual or other legal relation with the students, their advisors or any other persons. The NorthCap University, reserves the exclusive right to change or withdraw, without notice, any statement in this document.

2. ELIGIBILITY FOR ADMISSION

[A] SCHOOL OF ENGINEERING AND TECHNOLOGY (SOET)

(ENGINEERING, PHYSICS, CHEMISTRY, MATHEMATICS, ENGLISH)

- a. **M Tech (Engineering) degree** with minimum 60 % marks in aggregate or equivalent (with NCU, NPET) or B. Tech. degree from a Premier university or institution (IIT/NIT) and the institution within 100 NIRF ranking for the year of consideration with CGPA 8.5 or equivalent (with NCU, NPET) and GATE/UGC/CSIR score for government financial assistant (NCU, NPET exempted).
- b. **Science/Humanities, M.Sc. (Physics, Chemistry, Mathematics)/MA (English, Mathematics) degree** with minimum 60% in aggregate or Equivalent, with NET/GATE/JRF/SLET qualified for financial assistance by the government (NCU, NPET exempted) or 67.5% with (NCU, NPET).

[B] SCHOOL OF MANAGEMENT (SOM)

A candidate seeking admission to the Ph.D. Programme under School of Management (SOM) of NCU must have obtained Post-graduation in any branch of Engineering, Management, Economics, Commerce, Operations Research or other relevant disciplines subject to approval of School of Management with min. 60% marks in aggregate or equivalent.

[C] SCHOOL OF LAW (SOL)

A candidate seeking admission to the Ph.D. Programme under School of Law (SOL) of NCU must have obtained: Master's Degree in Law from a recognized University with not less than 55% marks or its equivalent

OR

Master's Degree in any discipline from a recognized University with not less than 55% marks or its equivalent; provided that candidates with qualifications in social sciences, humanities and sciences may be admitted to the Programme if the research they wish to pursue interfaces with the discipline of law with a special focus on Public Policy or Law

OR

Judge of any State High Court in India with three years' experience or Judge of Supreme Court of India

- c. **A Foreign National, NRI applicant, OCI Applicants** will apply under the foreign candidate category.
 - d. **Foreign National, NRI applicants, OCI Applicants** with a Masters' degree from a foreign university must apply with an equivalence certificate of AIU along with the Online Application Form along with other documents required.
 - e. Since the mode of instruction is English the Foreign National, NRI applicants, OCI Applicants need to produce **English Proficiency Test Certificate**.
 - f. Selected candidates can be considered for **financial assistance of merit as per norms of NCU**.
- 2.1. The minimum eligibility criteria indicated above for each Programme is only an enabling clause. The concerned Doctoral Research Committee (DRC) may fix higher criteria at the time of short-listing keeping in view the number of candidates, number of seats and minimum academic / professional background expected to cope with the Programme etc.
 - 2.2. Candidates in the final year of their Master's Programme, who expect to complete all their qualifying degree requirements before the date of registration for the first semester of their Ph.D. Programme at NCU can apply for admission. For short-listing purposes, their performance till the preceding semester (or preceding year, if in case their Programme is year based) would be considered, but the admission would be subject to their meeting the minimum eligibility criteria after their final qualifying examination results are announced. In such cases, a letter from HoD of their current institution, certifying candidate's Master's Thesis submission is required at the time of Ph.D. admission.

However, if the student fails in the qualifying examination or fails to produce the degree/provisional certificate/mark sheet within 3 months of the commencement of the 1st semester, his/her admission and registration to the Ph.D. Programme will be automatically cancelled with no refund of the semester fees.

2.3. Part-time candidates are required to submit a ‘**No Objection Certificate**’ on a proper letterhead from the competent authority of the organization in which he/she is presently working clearly stating the following:

- a) The candidate is permitted to pursue Ph.D. on a part-time basis.
- b) His/her official duties permit him/her to devote sufficient time for completion of coursework and carry out doctoral research.

Please [click here](#) for complete Ph.D. rules and regulations.

3. INTAKE FOR JULY 2020 Ph.D. ADMISSION

3.1. The details of department wise intake are as follows: -

[A] SCHOOL OF ENGINEERING AND TECHNOLOGY <i>(ENGINEERING, PHYSICS, CHEMISTRY, MATHS, ENGLISH)</i>		
Name of the Department	Broad Areas	Number of Seats
MECHANICAL ENGINEERING	Thermo-Fluid Engineering, Industrial Engineering, Production Engineering, Mechanical Engineering Design	8
CIVIL AND ENVIRONMENTAL ENGINEERING	Structural Engineering, Earthquake Engineering, Water resources, Environmental Engineering	5
ELECTRICAL, ELECTRONICS AND COMMUNICATION ENGINEERING	Wireless Communication, Signal, Speech and Image Processing, VLSI and Semiconductor devices, Power System, Renewable Energy, Control System, Biomedical Electronics	13
CSE & IT	Cyber Security , cryptography, Malware Analysis, Machine Learning, Image Processing using Soft Computing, Image analysis, Machine learning, Data Mining, machine learning, Smart Video Surveillance (IOT & Image/video Processing) and Medical informatics, wireless sensor networks, AI and Big Data	12
APPLIED SCIENCES	PHYSICS: Condensed matter physics (glasses), Optical image processing, Thin Films; Amorphous Semiconductors, Thin film solar cells, Polymer, Nanocomposites, Nanomaterials, Solar cells, Lasers and Non-linear optics Nanomaterials and piezoelectric devices, Digital Holography, Supercapacitors, Organic Semiconductor device Chemistry: Nano-chemistry, Organic Chemistry, Environmental Chemistry, Biochemistry, Biophysical Chemistry, Biosensors, Electrochemistry, Lateral flow assay Maths: Image Processing, Queueing Theory, Data Analytics, Graph Theory and Discrete Maths, Coding Theory, Approximation Theory, Operations Research Applied Mathematics, Differential Equations, Control theory, Computational Fluid Dynamics	25
CENTRE FOR LANGUAGES LEARNING (CLL)	American Literature, British Literature, Indian Writing in English, English Language Teaching	3
[B] SCHOOL OF MANAGEMENT (SOM)		
SCHOOL OF MANAGEMENT	Finance, Economic, Marketing, HRM	10
[C] SCHOOL OF LAW (SOL)		

SCHOOL OF LAW	Human Rights, International Law, Environmental Law, Constitutional Law, Personal Laws, Criminal Laws, Intellectual Property Law	0
	TOTAL	76

The intakes shown above are subject to change by the University.

3.2 Admission will be based solely on the merit criteria as per procedure indicated at Para 4 below.

4. PROCEDURE FOR ADMISSION

4.1 The candidate desiring to seek admission to Ph.D. Programme at NCU shall apply for the same on the prescribed Application Form 1 by a due date announced by NCU.

4.2 The applications will be scrutinized by the concerned Dean Office (Ph.D. Cell).

4.3 Candidates who do not have valid score in national tests like GATE, UGC-NET and SLET will have to appear in Entrance Test named 'NCU Ph. D. Entrance Test' (NPET) and will have the following weightage of various components for admission:

- NPET marks – 50%,
- Qualifying degree marks – 30%, and
- Interview –20%

4.4 Candidates who have valid score in the above National tests shall be exempted from NPET. The following weightage shall be assigned to various components for the admission:

- National level test score – 50%,
- Qualifying degree marks - 30%, and
- Interview –20%

4.5 The entrance test NPET will be of two hours duration and will be an Objective type test. Entrance Test 'NPET' will be held from 10:00 AM to 12 noon on the date specified by the University. For broad syllabus refer clause 21.

4.6 The NPET will be conducted centrally by Controller of Examination (COE) at NCU Campus. Room No. for NPET will be informed through University website / e-mail.

4.7 After the NPET written test, interview will be conducted (by respective Departments/Schools) on the same day at NCU 1:00 PM onwards. Rooms for interviews will be announced at the appropriate time.

4.8 Selection of the Research Fellows shall be done from amongst scholars who have qualified for admission, by the Fellowships Selection Committee. For details, please [click here](#) to download the SoP for Recruitment of University Fellows.

4.9 The candidates whose selection is approved by the Dean (Research) and Chairman BDR / Vice Chancellor will be admitted to the Ph. D. Programme after payment of prescribed fees.

4.10 In case of candidates from partnering institutions/industries, applications may be considered by the VC/BDR throughout the year, subject to the scrutiny for eligibility upon request by partnering institute.

4.11 The last date of fees submission is taken as last date of admission in Ph.D. Programme.

5. HOW TO APPLY

5.1 A candidate can apply online or offline. For applying offline the candidate can download the application form from the website of NCU or can obtain it from the University campus up to the last date for submission of forms specified in the Admission Notice.

For applying online, the candidate should [click on](#) Ph.D. under admission link on NCU website and fill the online form and upload relevant documents, along with application fee, paid online.

For offline, Please [click here](#) to download the application form.

6. APPLICATION FEE

6.1 An application fee of Rs. 1000/- is required to be submitted along with completely filled application form. The application form should also have self-attested photocopy of supporting relevant documents.

6.2 For offline application, the fee should be paid in cash at NCU campus or through DD in favour of 'THE NORTHCAP UNIVERSITY, GURUGRAM' payable at Gurugram/Delhi. For online application, e-transaction provision is given while submitting the admission form.

7. PROGRAMME FEE

7.1 Annual fee is **Rs. 80,000/-**; Semester-wise fee to be paid in two equal semester wise installments of **Rs. 40,000/-** each at the beginning of each semester (for new admissions, last date of fee submission is mentioned in clause no. 20). The annual fee is the same for full-time and part-time candidates.

7.2 Caution Money: A sum of Rs. 5,000/- will be charged from each student seeking admission to the University in the Academic Year 2020-21. The amount is interest free and will be refunded to the students at the time of withdrawal or at end of their Programme, whichever is later, after deduction of dues, if any.

7.3 FEE FOR FOREIGN NATIONALS, NRI AND OCI:

1. Registration Fee	Rs 10,000/-
2. Security Deposit	Rs 10,000/-
3. Academic Fee	Rs. 75,000/- per semester for full time and part time

8. FELLOWSHIPS & CONTINGENCY

8.1 **University Fellowships to selected full time Ph.D. Scholars:**

This position is only meant for full time Ph.D. scholars, who wish to carry out doctoral research at NCU. Concurrent applications for admissions to the Ph.D. Programme as well as award of University Fellowship can be made. Award of Fellowship and offer for admission will be simultaneously announced by NCU. The University Fellowship will be limited in number and made available to candidates on merit and shall be final and binding. The research scholar shall be awarded fellowship only if she/he is not receiving fellowship from any other source.

The Research Fellows are expected to do research with Faculty members, help the faculty members in their teaching as teaching assistant and support in any other academic tasks assigned from time to time. In short they are expected to be a part of the academic/research community of The NorthCap University, Gurugram.

Essential qualifications:

In addition to offer of Ph.D. admission, the candidate for award of Merit based University Fellowship should have M.Tech./M.Phil. /MBA/M. Com/LLM degree or its equivalent in the relevant discipline with minimum 60% marks or equivalent grade point average in **both** post-graduate and under-graduate degree levels. For Scholars under M.Sc. degree, minimum requirement is either NET qualified with 8.5 CGPA and above, or NET qualified with being a gold medalist.

8.2 Essential responsibilities:

The selected Research Fellows shall be given teaching assignments as stipulated by University/ UGC/ AICTE guidelines upto 8 hours in a week.

The scholar is expected to demonstrate the visible outcome in terms of research publications in peer reviewed Journals. Atleast one publication per year in peer reviewed referred unpaid reputed journal is expected from the scholar after completion of his/her course work, within the stipulated period of one year.

Attendance: All full time candidates who are awarded University Fellowship have to regularly attend the university as per the Ph.D. rules and regulations / SOP for recruitment of university fellow. It is expected that the full time scholar shall not take any job during the period of pursuing Ph.D.

Fellowship: Rs.25, 000/- per month consolidated as per university rules.

Tenure: The tenure of appointment of Fellow will be normally for three years (excluding the approved break in studies / leave period). An extension of the tenure of the Fellow for one year at a time can be given at the discretion of the NCU, if the progress of the Fellow is found good after the three year tenure. A second extension of one year making the total tenure to be maximum 5 years can be given if the progress of the fellow is found good. In no case, total tenure can be more than five years. For further details refer to SOP for Recruitment of University Fellows, please [click here](#)

8.3 All full time candidates who are awarded University Fellowship have to regularly attend the University as per the Ph.D. rules and regulations. Please [click here](#) for standard operating procedure for recruitment of University Fellows.

8.4 Contingency Expenditure for Full Time Ph.D. Scholars:

The items for which contingency expenditure can be incurred are chemicals, glassware, consumables, testing charges, spare parts, pen drive, CD's, stationary, postage, survey expenditure (with prior approval of the Director of the School/Dean of the School/VC), repairs, National conference participation expenditure /International conference outside India venue registration expenditure (keeping maximum expenditure amount limit to Rs. 25000/-) and any other item that is consumable in nature specifically recommended by the concerned Supervisor and the concerned HOD.

Contingency amount: Maximum of Rs. 25,000/- per year, subject to the availability of the funds.

9. DOCUMENTS REQUIRED AT THE TIME OF APPLICATION AND ADMISSION

9.1 For details regarding documents required at the time of Admission, please see the table given below:

S. NO.	DOCUMENTS	ORIGINAL	SELF ATTESTED PHOTOCOPY	ORIGINAL DOCUMENTS TO BE RETRUNED ON THE SPOT AFTER VERIFICATION
1.	Class X Mark Sheet (As proof of date of birth)	Yes	Yes	Yes
2.	Relevant Mark Sheets and Degree Certificate of all UG and PG degree courses need to be provided	Yes	Yes	Yes
3.	National Level Test Score Card such as GATE/NET/SLET (if any)	Yes	Yes	Yes
4	NOC from the employer (only for part-time candidates)	Yes	Yes	NO
5	Certificate of Medical Fitness from a registered medical practitioner	Yes	Yes	NO

6	Migration certificate (Only required for applicants in School of Law)	Yes	Yes	NO
7	Aadhar Card	Yes	Yes	Yes
8	Form 1, 2 & 3	Yes	Yes	NO
9	University Fellowship Form	Yes	Yes	NO

9.2 All original academic and personal certificates and testimonials like mark-sheets and other such documents (other than migration certificate, medical certificate & NOC from employer as mentioned in S. No. 4,5 & 6 in table above) shall be returned by the University after their due verification and receipt of fees. In case a student withdraws his/her admission, the related original certificates shall also be returned subject to the clearance as per Ph.D. rules and regulations of the University.

9.3 The self-attested testimonials of students shall be held valid and authentic for all purposes and administrative requirements and should there be a need for physical verification at any time during the course of programme of study, such verification shall be undertaken in the presence of the student and certificates and testimonials thus verified shall be returned immediately to the student.

10. COURSE WORK REQUIREMENT

SCHOOL OF ENGINEERING & TECHNOLOGY	Minimum Credits	Duration	Possible extension (by opting for more courses)
B.Tech./M.Sc./M.A.	26	12 months	6 months
M.Tech.	11	12 months	6 months
School of Management & LAW	11	12 months	6 months
Min CGPA on completion of course work=7.5			
Min SGPA in any semester = 7.0			

Notes:

- 1) A student is expected to attend all lectures, tutorials, practical classes for the prescribed courses. A minimum attendance of 70% per course calculated till the last teaching day of the semester is mandatory. A student not satisfying the minimum attendance requirement in a particular course will be detained and not allowed to sit for the semester end Major examination in that course.
- 2) Additional course work may be prescribed by Supervisor/Scholar Research Committee (SRC) in case additional domain knowledge is required.
- 3) The continuation of Ph.D. Programme is subject to successful completion of coursework with minimum CGPA required and within prescribed time limits as per table in clause 10.
- 4) A Continuous evaluation of Ph.D. progress shall be carried out by SRC. The Ph.D. Programme of a research scholar can only continue based on recommendation of his/her SRC and may be discontinued if the progress of a scholar is found unsatisfactory.

11. DURATION OF Ph.D. PROGRAMME

SCHOOL OF ENGINEERING & TECHNOLOGY		Minimum duration of the programme	Maximum duration of the programme
M. Tech/M. Phil./M.Sc./ M.A(English) Entry	FT	3 Years	6 Years
	PT	4 Years	6 Years
B. Tech. Entry	FT	4 Years	6 Years
	PT	5 Years	6 Years

SCHOOL OF MANAGEMENT & SCHOOL OF LAW		Minimum duration of the programme	Maximum duration of the programme
	FT	3 Years	6 Years
	PT	4 Years	6 Years

Notes:

- 1) Minimum and Maximum duration includes Course work.
- 2) Relaxation of upto 2years maximum duration can be provided for women under special circumstances and differently-abled candidates.

For more information please [click here](#) for complete Ph.D. rules and regulations.

12. GRIEVANCE REDRESSAL

Grievance / complaints, if any, against any action/decision of the Admission Committee can be made in writing to the Vice-Chancellor of the University, within 3 days of the decision.

In case there is any ambiguity whatsoever, with respect to this policy, the Vice-Chancellor's written interpretation / clarification / decision shall be final and binding on all concerned.

13. WITHDRAWAL POLICY

- 13.1 All requests for withdrawal of admission must be made in writing to the respective HoD/Dean of the department/School by the applicant through supervisor, giving reasons for the same and must be accompanied with the original fee receipt. Requests made verbally or by fax/email without the original fee receipt shall not be entertained.
- 13.2 The written application of withdrawal shall be processed to the respective Chairpersons of the DRC of the concerned School/Department after receiving it duly forwarded by the Supervisor(s) through the concerned HoD. The student should also provide a *No Dues Certificate* along with such an application.
[Click here](#) to see the No dues form.
- 13.3 In case a student withdraws his/her admission from Ph.D. Programme after the last date of Admission in Ph.D. Programme, fees will be refunded as per clause 1.2. In case a student fails to produce Degree/Provisional Certificate/mark sheets within the stipulated time as per clause 2.2, the fee deposited by him/her shall not be refunded in any form. The candidate should therefore keep this in mind before taking admission and before depositing the fees.
- 13.4 No Migration is permitted regarding Research Scholar registration or affiliation as per Ph.D. Rules and Regulations.

14. ZERO TOLERANCE POLICY TO RAGGING

- 14.1 Ragging is strictly prohibited in NCU and NCU follows a ZERO Tolerance policy towards Ragging. Ragging, its abetment, eve-teasing and / or any kind of mental or physical harassment, either directly or indirectly, of any student(s) by whatsoever name called which may hurt the sensibilities or self-esteem of a student(s), inside or outside the University and/or its hostel(s) / mess, cafeteria is strictly prohibited by law and as held by the Hon'ble Supreme Court of India in its order dated 08/05/2009 in the case titled " University of Kerala Vs. Council, Principal's College Kerala & others" bearing CA No. 887/2009. An Anti- Ragging declaration as per **Form – 3** has to be filled and submitted along with other documents at the time of admission.

Disorderly conduct whether by words spoken or written or by an act, which has the effect of teasing, treating or handling with rudeness any other student(s), indulging in rowdy or in-disciplined activities which causes or is likely to cause annoyance, hardship or psychological harm or to raise fear or apprehension thereof in a fresher or junior student(s) or asking the student(s) to do any act or perform something, which such student(s) will not do in the ordinary course and which has the effect of causing or generating a sense of shame or embarrassment so as to adversely affect the physique or psyche of a fresher or a junior student shall constitute an act of ragging.

- 14.2 Association, active or passive, with any unlawful organization including holding and/or participating in demonstrations, inciting violence, displaying notices or circulating handbills in the University and/or its hostel (s)/mess is strictly prohibited.
- 14.3 Smoking, consumption of alcohol, drugs or any other intoxicant by whatsoever name called within the University premises and/or its hostel (s)/mess is strictly prohibited by law.
- 14.4 Besides police/legal action, a student found indulging in any of the above activities shall be expelled from the University. In case of expulsion from the University, under such circumstances, the entire fee paid by him/her shall be forfeited.
- 14.5 Use of cellular/satellite telephones and/or pagers within the University premises (other than the area defined by the University) is strictly prohibited.

15. **FACULTY**

The NorthCap University has one of the best and largest pools of faculty amongst Private universities in North India. Most of the faculty members hold Ph.D. degrees from renowned Indian and foreign universities and have very distinguished track record and are drawn from prestigious institutions like IITs, NITs, industry and research labs. The faculty members have a mix of rich academic and industry experience. There is strong emphasis on good quality teaching as well as research in current areas of technology and faculty members keep themselves abreast with latest developments and are engaged in active research resulting in a large number of research publications in leading international and national journals. Some of the faculty members have published books in their specialized fields and are members of editorial boards / reviewers of reputed journals. Kindly visit the University website (www.ncuindia.edu) for profile and list of faculty members of Departments/School. List of Potential Supervisors are given below:

S. No.	Dept./ School	Supervisors	Broad Area
1.	APS	Dr. Ambika Devi	Experimental Condensed Matter physics, Chalcogenide glasses, Super-capacitors
2.	APS	Dr. Hukum Singh	Optical Image Processing , Condensed matter physics (glasses), Photonics, Digital Holography
3.	APS	Dr. BhartiArora	Biophysical Chemistry, Organic Chemistry
4.	APS	Dr. Aditya Sharma	Nanotechnology, Biosensors, Lateral flow assay, Electrochemistry, Affinity sensors for environmental Pollution
5.	APS	Dr. Tejpal Singh Chundawat	Organic Chemistry, Nanochemistry, Green Chemistry, Asymmetric Synthesis, Natural Product Synthesis
6.	APS	Dr. Sunita Sharma	Nanomaterials, Solar cells, Lasers and Non-linear optics
7.	APS	Dr. SeemaThakran	Coding Theory :Reed Muller Codes, Hamming Codes
8.	APS	Dr. AnshuMalhotra	Graph Theory and Discrete Maths
9.	APS	Dr. RajniRohila	Numerical Methods, Numerical Solutions of PDE
10.	APS	Dr. Sanjay Yadav	Numerical Methods and Numerical Solution of PDE, Data Analytics
11.	APS	Dr. TarulGarg	Approximation theory, Operations Research
12.	APS	Dr. Neha Gupta	Computational Fluid Dynamics and Numerical analysis
13.	APS	Dr. Alka	Partial differential equations and functional different equations, Control Theory
14.	APS	Dr. Arjun Singh	Semiconductor devices: Pervoskite/Polymer Solar cells, Organic light

			emitting diode, Thin film transistors, Transparent conduction oxides
15.	Civil	Prof. H.B. Raghavendra	Geotechnical Engineering, Soil Strata Interaction, Environmental Engineering
16.	Civil	Dr. Ram Karan Singh	Water Resource Engineering / Environmental Engineering
17.	Civil	Dr. Archanaa Dongre	Structural Engineering/ Earthquake Engineering
18.	Civil	Dr. Vaishali Sahu	Environmental Engineering
19.	CSE	Dr. Yogita Gigras	Soft Computing, Cyber Security
20.	CSE	Dr. Shilpa Mahajan	Wireless Sensor Networks , Cyber Security
21.	CSE	Dr. Prachi Ahlawat	Cyber Security, Intrusion Detection & Prevention, Networking
22.	CSE	Dr. Kavita Khanna	Computer Graphics; Video Processing and Soft Computing
23.	CSE	Dr. Meghna Sharma	AI, Big Data and Machine learning
24.	CSE	Dr. Prabha Sharma	Optimization, Design and Analysis of Algorithm
25.	CSE	Dr. Rita Chhikara	Machine Learning
26.	CSE	Dr. Nitin Malik	Machine Learning
27.	CSE	Dr. Mehak	Information Security
28.	CSE	Dr. Anuradha	Data Mining, Machine Learning, Medical Informatics
29.	CSE	Dr. Sumanlata Gautam	Signal Processing, Machine Learning
30.	CSE	Dr. Shaveta Arora	Image Processing
31.	CSE	Dr. Rekha Vig	Image Processing
32.	EECE	Dr. Prof. Swaran Ahuja	Wireless Communication
33.	EECE	Dr. Nitin Malik	Machine Learning applications in Power System
34.	EECE	Dr. Rekha Vig	Signal Processing, Biomedical Signal Engineering
35.	EECE	Dr. Sharda Vashisth	Signal and Image Processing, Biomedical Electronics, Wireless Communication, Navigation Systems
36.	EECE	Dr. Anjali Garg	Power Generation & control of solar energy and wind energy, AI
37.	EECE	Dr. Mona Agarwal	Wireless Communication
38.	EECE	Dr. Shaveta Arora	Signal Processing using soft computing Techniques
39.	EECE	Dr. Hemani Kaushal	Optical Communication
40.	EECE	Dr. Vandana Khanna	VLSI, Solar PV systems, Soft Computing
41.	EECE	Dr. Pooja Sabherwal	Signal Processing, Machine Learning, Biomedical Engineering
42.	EECE	Dr. Pankaj Rakheja	Signal Processing
43.	ME	Dr. Pramod Bhatia	Thermo-Fluid Engineering
44.	ME	Dr. Rohit Singh Lather	Thermo-Fluid Engineering, Mechanical Engineering Design
45.	ME	Dr. Akansha Mathur	Thermo-Fluid Engineering, Heat Transfer, Combustion
46.	ME	Dr. Satnam Singh	Production and Engineering
47.	English	Dr. Divyabha	Indian English Literature
48.	English	Dr. Payal Khurana	American Literature
49.	English	Dr. Shrutimita Mehta	Indian English Literature
50.	SOM	Dr. Prof. Prem Vrat	Industrial Engineering
51.	SOM	Dr. Shilpa Sindhu	Marketing
52.	SOM	Dr. Hemant K Trivedi	Marketing
53.	SOM	Dr. Poonam Arora	HRM
54.	SOM	Dr. Jahanvi Arora	HRM
55.	SOM	Dr. Deergha Sharma	Finance
56.	SOM	Dr. Preeti Chawla	Finance
57.	SOM	Dr. Esha Jain	Finance
58.	SOM	Dr. Swaranjeet Arora	Finance
59.	SOM	Dr. Priyanka Banerjee	Economics
60.	SOL	Dr. Pushpesh Pant	International Law
61.	SOL	Dr. Archana Sarma	Criminal Laws
62.	SOL	Dr. Tapobrata Pakrashi	International Law, IPR Laws, Interface between Technology and IPR, Enforcement of IPR

16. STUDENTS DISCIPLINE

- (a) The University expects that every student in the University shall at all times display good behaviour, show diligence in studies, maintain decorum and dignity, take due interest in co-curricular activities, observe a code of conduct both within and outside the campus in a manner befitting to the student of a university of national stature and observe rules of discipline of the University and thus ensure free and congenial environment for all its students to pursue their studies without any distraction.
- (b) Each student shall show due respect and courtesy to the teachers, administrators and other employees in and outside the University and good behavior to fellow students including residents in surrounding areas or around hostels. Students shall pay particular attention to safeguard the dignity and honor of fellow girl students and the lady faculty and shall not do anything directly, indirectly or through social media or aid any one in doing so, which could cause mental or physical harassment, insult, defamation or outrage the modesty of women inside or outside the campus.
- (c) Association, active or passive, with any unlawful organization, including holding and participating in demonstrations, inciting agitation and violence, display notices or circulating unwanted emails or messages on social media, media or handbills in the University/and/or its hostels(s) are strictly prohibited.
- (d) Smoking, consumption of alcohol, drugs or any other intoxicant by whatsoever name called with the University premises and/or its hostel(s) is strictly prohibited by law.
- (e) Use of cellular/satellite telephones (other than the area defined by the University) is strictly prohibited.
- (f) There is a complete prohibition of ragging in NCU and NCU follows a ZERO tolerance policy towards ragging. The University strictly enforces provisions of the Haryana Prohibition of Ragging in Educational Institutions Act 2012 and UGC Regulations on Anti Ragging pursuant to Hon'ble Supreme Court of India order dated 08/05/2009 in the case titled "University of Kerala Vs. Council, Principal's College Kerala.
- (g) No student shall practice ragging in any form within or outside the premises of the University, hostels or PGs. In a proven case of ragging whether FIR has been lodged or not, invariably the student shall face suspension for at least a period of two semesters and may also be imposed with any one or combinations of punishment mentioned in the Haryana Prohibition of Ragging in Educational Institutions Act 2012 and reproduced in the Students Diary.
- (h) Besides, police/legal action, a student found indulging in any ragging or undesirable activity is liable to be expelled from the University or face such other punishments by the Disciplinary Committee, as provided for in the Ordinance 8 of the First Ordinance. In case of expulsion from the University, under such circumstances, the student's tuition or any other fee paid by him/her will be forfeited.
- (i) An Anti-Ragging declaration as mentioned in relevant Form is attached to this prospectus and is to be filled, signed and submitted along with the other documents at the time of admission.

17. LIMITED LIABILITY

All admissions made by the Selection Committee are provisional and subject to confirmation by the Vice-Chancellor of the University. If the admission of any candidate is not confirmed by the Vice-Chancellor, for any reason whatsoever, the liability of the University will be limited only to the refund of full fees paid by the candidate and that there shall be no further consequent liability on the University and / or any of its employee.

18. JURISDICTION

Disputes, if any, arising out of this Admission Policy & Selection Procedure shall be the subject matter of exclusively of courts in Gurugram only.

19. HELPLINE/WHOM TO CONTACT

For general queries related to **Ph.D. admission**, contact the following:

For department specific queries of School of Engineering and Technology (SOET), contact the following departmental Ph.D. coordinators:

S. No.	Department		Name of Ph.D. Coordinator	Email Address	Mobile Phone number
1	Mechanical Engineering		Dr. Akanksha Mathur	akankshamathur@ncuindia.edu	9990987173
2	Civil and Environmental Engineering		Dr. Vaishali Sahu	vaishalisahu@ncuindia.edu	9650129730
3	Electrical, Electronics and Communication Engineering		Dr. Anjali Garg	nitinmalik@ncuindia.edu	9871370985
4	Computer Science and Information Technology		Dr. Priyanka Vashisht	priyankavashisht@ncuindia.edu	7011922866
5	Applied Sciences and Centre for Languages Learning	Applied Sciences	Dr. Sanjay Yadav Dr. Ambika	sanjayyadav@ncuindia.edu ambika@ncuindia.edu	9818767542 9560916060
		English	Dr. Divyabha	divyabha@ncuindia.edu	9811738101

b) *For queries related to Ph.D. admission School of Management contact the following:*

Dr. Deergha Sharma
Member DRC, School of Management
 Email: deerghasharma@ncuindia.edu
Phone: +91124 2365811/12/13, Mobile: 91-9650416161
University Website: www.ncuindia.edu

c) *For queries related to Ph.D. admission School of Law contact the following:*

Dr. Tapobrata Pakrashi
Member DRC, School of Law
 Email: tapobratapakrashi@ncuindia.edu
Phone: +91124 2365811/12/13, Mobile: 9953458706
University Website: www.ncuindia.edu

d) *For overall queries related to Ph.D. admissions contact the following:*

Dr. Ram Karan Singh
Dean RDIL and Ph.D. Studies
Chairman, International Relation Office
 Email: ramkaransingh@ncuindia.edu
Phone: +91124 2365811/12/13, Mobile: (0) 7683014374, 8448495100
University Website: www.ncuindia.edu

20. **IMPORTANT DATES**

(For admissions in Ph.D. during 1st Semester 2020-21, July 2020 admissions)

S. No.	<u>Details</u>	<u>Date</u>
1.	Advertisement for Ph.D. admission (on Website or Newspaper) and Application forms available online	18 th March 2020 (Wednesday)
2.	Last date for submission of fully filled application forms	26 th June 2020 (Friday)
3.	Entrance Test (NPET) and Interview	4 th July 2020 (Saturday)
4.	Online display of admission list	7 th July 2020 (Tuesday)
5.	Last date for fees deposition and document verification* by candidates.	13 th July 2020 (Monday)
6.	Registration dates** (Registration will be done on-line)	18 th July 2020 – 24 th July 2020
7.	Commencement of classes	27 th July 2020 (Monday)

* Document Verification:

- Refer clause 9 for documents to be verified.
- Refer clause 19 for verification of documents from respective Ph. D. coordinators (Department/School wise).

** Registration shall be done by quoting fee receipt no. issued by Accounts Department after due deposition of fees.

21. **NCU Ph.D. Entrance Test (NPET), 4th July 2020**

1. The test paper for each Department/School will be of objective type, to be attempted in 2 hours with answers to be given by the candidates in the space provided in the paper itself. There will be no negative marking. The questions may be multiple choices and/or fill in the blanks type and/or True/False types with reasons. The paper consists of Analytical reasoning, Research Methodology and Department/School specific technical topics, the syllabus for which is given below point 2. Student will be assessed in the interview for his/her knowledge in the research area of interest / broad area as indicated by the applicant in the application form. (Refer clause 3).

2. **The topics for written test will be as follows: -**

Topics common for all Schools:

- Analytical Reasoning:** Syllogism, Statement and Arguments, Statement and Assumptions, Statement and Course of Action, Statement and Conclusions, Deriving Conclusion, Assertion and Reason, Punch Lines, Situation Reaction Tests, Cause and Effect, Analytical Reasoning
- Research Methodology:** Foundations of Research, Scientific Research, Motivation, Research Objectives, Research Designs, Research Processes, Design of Experiments, Understanding Feasibility of Objectives and Processes, Qualitative and Quantitative Research Methods, Data Collection Processes, Biases in Data Collection

Technical Topics:

[A] SCHOOL OF ENGINEERING AND TECHNOLOGY <i>(ENGINEERING, PHYSICS, CHEMISTRY, MATHS, ENGLISH)</i>	
Name of the Department	NPET Topics
MECHANICAL ENGINEERING	Basics of Mechanical Engineering, Thermal-Fluid Engineering Productivity Management, Supply Chain management /Materials Planning and Control Operations Research, Production and Manufacturing engineering Ordinary and Partial Differential equations, Strength of Materials Dynamics, Machine Design, Mechanical Vibrations, Robotics

CIVIL AND ENVIRONMENTAL ENGINEERING	<p>Environmental Engineering – Water and waste water quality check and treatment processes.</p> <p>Water Resource - Hydrology, runoff and storm calculation, unit hydrograph, Strength of Materials- Simple stresses and strains, Shearing forces and Bending Moments.</p> <p>Structural Analysis- Slope deflection and Moments distribution method</p> <p>Design of Reinforced Concrete structures- Working stress, limit state and ultimate load design concepts.</p> <p>Soil Mechanics and foundation - soil properties, effective stresses in soil, shallow and deep foundation</p> <p>Construction planning and management - CPM, PERT.</p>
ELECTRICAL, ELECTRONICS AND COMMUNICATION ENGINEERING (EECE)	<p>Power Generation, Power Transmission, Power Distribution, Power electronics, Electrical Machines, Controllers Solar and wind energy</p> <p>Signal and systems, Digital Signal Processing, Image Processing, Speech processing, Biomedical Signals</p> <p>Digital Electronics, Analog Electronics, Integrated Circuit Technology, Electron Devices and Circuits, VLSI Design & Technology, OOPs C++</p>
APPLIED SCIENCES	<p>Physics: Mathematical Physics, Classical Mechanics, Electromagnetic Theory, Quantum Mechanics, Thermodynamics and Statistical Physics, Atomic and Molecular Physics, Solid State Physics and Electronics, Nuclear and Particle Physics.</p> <p>Chemistry: Inorganic Chemistry: Main Group Elements, Transition Elements, Lanthanides and Actinides, Organometallics, Radioactivity, Bioinorganic Chemistry, Solids states.</p> <p>Organic Chemistry: Stereochemistry, Reaction Mechanism, Organic Synthesis, Pericyclic chemistry and Photochemistry, Heterocyclic compounds, Biomolecules, Spectroscopy, Instrumental Methods of Analysis.</p> <p>Physical Chemistry: Equilibrium, Kinetics, Structure, Surface and Interfaces.</p> <p>Maths: Calculus, Linear Algebra, Real Analysis, Complex Analysis, Ordinary Differential equations, Algebra, Functional Analysis, Numerical Analysis, Partial Differential Equations, Topology, Linear Programming</p>
CSE & IT	<p>Computer architecture, Operating system, Data structures, C,C++-, programming, DBMS, Computer networks, Discrete Structures, Software Engineering, Computer networks, ADA, Fuzzy Logic</p>
CENTRE FOR LANGUAGES LEARNING (CLL)	<p>American Literature in 19 th century, Modern American Literature, British Literature, Indian English Writing, Translations, World Literature</p>
[B] SCHOOL OF MANAGEMENT	
SCHOOL OF MANAGEMENT	<p>Stock Market, Banking and Financial Institutions, Mutual funds, Security, Analysis and Portfolio Management, Financial Services Derivatives, Banking and Insurance, Accounting, Consumer Behaviour, Services Marketing, Advertising, Customer Relationship Management, Retail Management, Recent trends in Marketing, Digital marketing, Micro and Macro Economics, Organisational Behaviour, Performance Management, HR Analytics, Workforce diversity, Ethical perspectives in organisations</p>
[C] SCHOOL OF LAW	
SCHOOL OF LAW	<p>Constitutional Law of India, Sociological Jurisprudence, Public International Law, Family Law, Law of Contract, Laws of Torts, Law of Crimes.</p>

Application Fee Rs. 1000/-
(One Thousand Only)
(Non Refundable)



(Formerly ITM University, Gurugram)

Established by the Haryana State Legislature under the Haryana Private Universities (Third Amendment) Act No. 25 of 2009, as amended vide Haryana Act No. 1 of 2016. Recognized by UGC u/s 2(f) of UGC Act, 1956 with a right to confer degrees and included by UGC in their select list of approved Universities, available at www.ugc.ac.in (NCU University, Gurugram has no other Centers/Campus in India or Abroad)

**ALL Ph.D. PROGRAMMES
(ENGINEERING, PHYSICS, CHEMISTRY, MATHS, ENGLISH, MANAGEMENT & LAW)**

ADMISSION POLICY & SELECTION PROCEDURE-JULY 2020

FOR ACADEMIC YEAR 2020-21

FOR DOCTOR OF PHILOSOPHY (Ph.D.)

Write NA wherever not applicable. All fields are mandatory.

(All columns need to be filled in Capital letters with black ball point pen only)

- Name of the Applicant (in English)
- Name of the Applicant (in Hindi)
- Father's Name (in English) (in Hindi).....
- Mother's Name (in English) (in Hindi).....

PASTE FIRMLY YOUR
RECENT COLOR
PHOTOGRAPH OF GOOD
QUALITY
(SIZE 3.5 x 4.5 CMS)

4. CORRESPONDENCE ADDRESS

Address

Town/City

State Pin Code.....

Student Mobile No(s)

Alternative Mobile No.

Parent Mobile No.....

Student Email ID.....

Landline no. with STD Code.....

5. PERMANENT ADDRESS

(Fill only if different from Correspondence Address)

Address

Town/City

State Pin Code.....

- Student's Aadhaar Card No.
- Date of Birth..... Age as on 30/06/2020.....
- Gender: Male Female Transgender

9. APPLICATION FOR FULL TIME / PART TIME PROGRAMME

Full Time Programme with fellowship Full Time Programme Part Time Programme

Note: Part Time candidates have to submit no objection certificate from the current employer.
All candidates are required to pay application fee of Rs. 1000/- either through cash receipt or DD drawn in favor of The NorthCap University, Gurugram payable at Gurugram.

10. NATIONAL/STATE LEVEL TEST: (NET/NET-JRF/GATE/SLET) OR ANY OTHER TEST

Type of Test Qualified	Roll No.	Score (out of how much)	Rank	Qualifying Year

Are you in receipt of any Fellowship (JRF/SRF): _____?

11. ACADEMIC QUALIFICATIONS:

Examination	Subject	University/ Board	Year	Percentage Marks /CGPA	Division
Secondary, High School or equivalent					
Sr. Secondary, Intermediate, or equivalent					
Under Graduate Degree in BSc. / B. Com/Arts/Engg/Mgt./Law (Choose One)					
Post Graduate in M.Tech/MBA/ M. Com/LLM/ M.Sc./MPhil/M.A (Choose One)					
Complete Name and Address of Last Attended University/College/Institute:					

Department and area in which the candidate proposes to work (refer clause 3):

- (a) Broad Area/Subject: _____
 (b) Department/Centre: _____

12. Preferred Choice of Supervisors, if any (Refer list at clause 15). However final decision to allot a Supervisor shall rest with the Department/University

- (a) _____
 (b) _____

13. Domicile Details (Tick one only)

- (a) Haryana General (b) SC (c) OBC

14. Total Annual Family Income from all sources (in Rs. Lakhs only):

15. How did you get information about NCU, Gurugram?

- Newspaper NCU Website Current student of NCU Counselor
 Internet Friends/relatives Alumni Other

16. Have you ever been convicted for any Criminal Offence Yes No

17. Is there any case pending against you before a Court/Police/ School/ University: Yes No
 (If yes for point 16 and/or point 17, provide full details on a separate sheet of paper)

 SIGNATURE OF THE APPLICANT WITH DATE

DECLARATION BY THE CANDIDATE

I, hereby declare that all the particulars stated in this Application Form are true to the best of my knowledge and belief. I also affirm that I have read in detail the Admission Policy & Selection Procedure July 2020 of The NorthCap University, Gurugram including its fee structure and withdrawal policy before submitting this application and agree to unconditionally abide by the same. I understand that the decision of the University is final with regard to my admission and fellowship. I promise to abide by the rules and regulations of the University as existing and as would be amended from time to time. If it is proved that I was admitted on false particular and / or documents provided by me or my antecedents prove that my continuance in this University is not desirable, the University shall have the right to expel me from the University, besides being liable for legal action against me, at my cost.

Place: _____

Date: _____

Signature of the Applicant _____

LIST OF ENCLOSURES (Self Attested) TO BE SUBMITTED WITH THE APPLICATION

- 1) FORM 1: APPLICATION FORM
- 2) FORM 2: DECLARATION CUM UNDERTAKING
- 3) FORM 3: ANTIRAGGING FORM
- 4) UNIVERSITY FELLOWSHIP FORM (IF ELIGIBLE AND IF APPLIED)
- 5) RELEVANT DOCUMENTS AS MENTIONED IN PARA 9.1 OF THE ADMISSION POLICY.

Application forms and other required documents if submitted offline should be posted or submitted in person to:

For School of Engineering and Technology	For School of Management	For School of Law
Dr. Ram Karan Singh, Dean (Ph.D. Studies) School of Engineering and Technology, The NorthCap University, HUDA Sector 23-A, Gurugram, Haryana - 122017	Dr. Deergha Sharma Member DRC, School of Management The NorthCap University, HUDA Sector 23-A, Gurugram, Haryana - 122017	Dr. Tapobrata Pakrashi Member DRC, School of Law The NorthCap University, HUDA Sector 23-A, Gurugram, Haryana - 122017

NCU
THE NORTHCAP UNIVERSITY®
NAAC ACCREDITED
(Formerly ITM University, Gurugram)

DECLARATION CUM UNDERTAKING

I have read and understood that The NorthCap University (NCU) has been established by the Haryana State Legislature under The Haryana Private Universities (Third amendment) Act, 2009 and NCU is a Private Self-Financed University recognized by UGC and approved under Section 22(f) of the UGC Act, 1956. NCU has been included by UGC in their select list of approved Universities. This list of recognized Universities can be obtained from the UGC website www.ugc.ac.in

I have clearly understood that the functions of Admission, Course Design, Curriculum Structures, Teaching Methodologies, Examinations/ Evaluation System (Internal and External) and all other issues related thereto including but not limited to the credit/ grading system, submission of synopsis, award of thesis etc. Shall be performed entirely by the University in accordance with the guidelines prescribed in the Statute/ Ordinances/rules and regulations as approved by NCU from time to time.

I hereby agree and undertake that if admitted, I shall abide by all the rules and regulations of NCU from time to time including but not limited to attendance, course work, Internal / External Examination, evaluations, publishing research work, submission of synopsis, thesis and plagiarism policy and ethics as prescribed in NCU Ph.D. rules and regulations, matters of discipline, timely payment of fee etc. I also agree that simply paying fees and spending time do not let me become eligible to complete Ph.D. and that I need to do quality research and publish quality publications, following the rules and regulations and should meet the eligibility conditions for the submission of thesis.

I understand that compliance to NCU rules/regulations as applicable is mandatory and non-compliance may lead to cancellation of my Ph.D. registration.

I understand that my admission to NCU if at all is provisional and subject to confirmation by Chancellor.

I hereby affirm that the information furnished in the Application Form is true and no material information has been concealed. If any information is found to be false, incorrect or misleading, NCU shall have the authority to cancel my candidature/admission without any further enquiry or notice. Under the circumstances, all fee paid for whatsoever purpose shall stand fully forfeited.

I understand and agree that Ragging and/or Smoking within the premises of the University and/or its hostels are illegal and strictly prohibited. I understand that the University has a ZERO Tolerance policy for indulging in any such act and that, if I am found engaging in any such act(s) or any other unlawful act(s) directly or indirectly, besides Police/Legal Action against me, I shall be expelled from the University. In such an event my fee shall also be forfeited.

I also affirm that I have read in detail the Admission Policy & Selection Procedure July 2020 of NCU including its fee structure and the withdrawal policy before submitting this application and agree to unconditionally abide by the same.

I further undertake that the broad areas which I have opted as indicated by me in the Application Form shall be irrevocable.

I also confirm that I have read the Ph.D. Rules and Regulations of NCU.

I have clearly understood the withdrawal policy of the University and the financial impact of a mid-course withdrawal on an unaided self-financed University like NCU. Therefore, in the event of withdrawal/cancellation of my admission from PhD programme, the fees already deposited by me will not be returned to me in any form.

That the contents of this undertaking have been read over and explained to me in vernacular and I am executing the same after understanding the contents thereof.

SIGNATURE OF APPLICANT

DATE

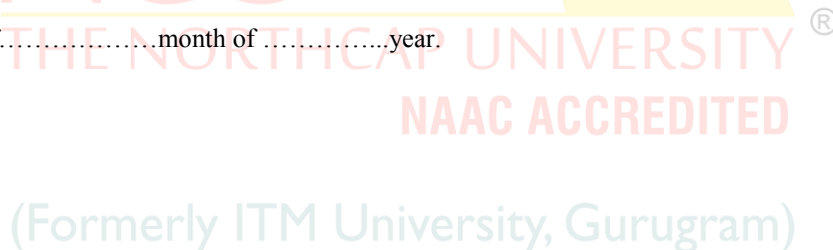
PLACE

ANTI RAGGING

SELF DECLARATION BY THE STUDENT

- 1) I, (full name of student with admission/registration/enrolment number) S/o, D/o Mr./Mrs./Ms....., having been admitted to “THE NORTHCAP UNIVERSITY” have carefully read “THE HARYANA PROHIBITION OF RAGGING IN EDUCATIONAL INSTITUTION ORDINANCE, 2012” and fully understood the provisions contained in the said Ordinance.
- 2) I have, in particular, perused clause 2(f) of the Ordinance and am aware as to what constitutes ragging.
- 3) I have also, in particular, perused clause 8 of the Ordinance and I am fully aware of the penal and administrative action that is liable to be taken against me in case I am found guilty of or abetting ragging, actively or passively, or being part of a conspiracy to promote ragging.
- 4) I hereby solemnly aver and undertake that:
 - a) I will not indulge in any behavior or act that may be constituted as ragging under the ordinance.
 - b) I will not participate in or abet or propagate through any act of commission or omission that may be constituted as ragging under the ordinance.
- 5) I hereby affirm that, if found guilty of ragging, I am liable for punishment according to the Ordinance, without prejudice to any other criminal action that may be taken against me under any penal law or any law for the time being in force.
- 6) I hereby declare that I have not been expelled or debarred from admission in any institution in the country on account of being found guilty or, abetting or being part of a conspiracy to promote, ragging; and further affirm that, in case the declaration is found to be untrue, I am aware that my admission is liable to be cancelled.

Declared this..... day of.....month ofyear.



.....
Signature of Student