# Ordinances Rules and Regulations for Ph.D.

October, 2023

NATIONAL INSTITUTE OF TECHNOLOGY, UTTARAKHAND

#### **1. INTRODUCTION**

#### **1.1 PREAMBLE**

These rules and regulations govern all the Ph.D. Programme in NITUK. The Institute offers Ph.D. Programme in a wide range of areas in Engineering, Science, Humanities and Social Sciences. The broad objective of the Ph.D. Programme is not only to keep pace with the expanding frontiers of knowledge but also to provide research training relevant to the present social and economic objectives of the country. The Institute also encourages research in interdisciplinary areas through a system of joint supervision and interdepartmental group activities. The presence of a strong research oriented faculty provides excellent opportunities for such Programme. The Institute undertakes sponsored research and development projects from industrial and other organizations in public as well as private sector. Facilities for research work leading to the Ph.D. degree are available in the Departments of Computer Science & Engineering, Electronics Engineering, Electrical Engineering, Mechanical Engineering, Civil Engineering, Physics, Chemistry, Mathematics, Humanities & Social Sciences. The medium of instruction in the Institute is English.

#### **1.2 DEPARTMENTS**

The Institute has following Academic Units, each one acting as a Department. The various Departments and their two-letter codes are given below.

S. N.	Name of Department	
1	Civil Engineering	CE
2	Computer Science and Engineering	CS
3	Electrical Engineering	EE
4	Electronics Engineering	EC
5	Mechanical Engineering	ME
6	Physics	PH
7	Chemistry	CY
8	Mathematics	MA
9	Humanities & Social Sciences	HS

#### **1.3 PROGRAMMES OFFERED**

Institute offers Academic Programmes in Engineering at Undergraduate & Postgraduate levels. Only research based Programmes are included in this ordinance. Course based Programmes are covered by Ordinances for Undergraduate and Postgraduate Programmes.

	Full Time			Par	t Time	
PhD	With Fellowship *	With Assistantship #	Sponsored +	Self- Sponsored	Sponsored +	Self- Sponsored
		Yes	Yes	Yes	Yes	Yes

Each Department offers a Ph.D. Programme. Types of Ph.D. Programme offered are as under.

\* Number of fellowships offered shall be declared in the beginning of every year.

The number of fellowships and amount of fellowship shall be as per directives of MHRD.

- # Assistantships availability shall depend upon ongoing projects. Assistantships shall be declared by the Project's Investigator with approval from NITUK and sponsoring agency.
- + Sponsorships offered by the employer of the candidate.

#### 1.3.1 Conversion of status from part time to full time or from full time to part time

The conversion of status from Part time to Full time or From Full Time to Part Time is permitted. However, in either case minimum period of submission of the thesis shall be governed by Part Time regulation. Other regulations shall be applicable as per the changed status. Change of status shall be permitted on formal application submitted to Dean (Academic Affairs) through supervisor and HoD. Such change shall be permitted only once during the registration period of 6 years.

#### 1.3.2 Provision to offer full time Ph.D. Programme to the project staff of the institute

**1.3.2.1** The Project staff or JRF/SRF who satisfies the eligibility criteria as per institute norms may be considered for admission to the Ph.D. Programme as full time scholar.

**1.3.2.2** There shall be no special treatment/preference/concessions given to Project Staff appointed in various Research Projects in the Institute, and who are aspiring to enroll in the Institute for pursuing Ph.D. They will have to compete with all other applicants against an Open Advertisement.

**1.3.2.3** The other rules and regulations regarding fees, course work, degree requirement etc. shall be same as applicable to full time Ph.D. scholars as mentioned in Ordinances, Rules and Regulations for Ph.D.

**1.3.2.4** The fellowship to such Project staff who has been offered admission in full time Ph.D. Programme, shall continue to draw fellowship from the project throughout the duration of the project.

**1.3.2.5** In case of termination/completion of the project before five years, the scholarship then shall be paid to the scholars as per MHRD norms for the remaining period.

#### 1.4 ADMISSION PROCEDURE (Full Time & Part Time)

#### **1.4.1 Minimum Qualifications for Admission**

A candidate is eligible for admission in Ph.D. programme if he/she satisfies the following conditions:

A Master's degree in the concerned or an allied subject with a minimum 6.5 CGPA or 60% for General/OBC and 6.0 CGPA or 55% for SC/ST/PWD candidate.

or

A minimum of 6.5 CGPA or 60% for General/OBC and 6.0 CGPA or 55% for SC/ST/PWD at Bachelors level with at least 55% marks at Master's level.

#### 1.4.1.1 For full time Ph.D. Programme

Candidates should have qualified GATE / NET.

#### 1.4.1.2 For part time Ph.D. Programme

Candidates should have qualified GATE / NET. However, relaxation from the requirement of GATE/NET will be given only for admission into part time Ph.D. Program, for candidates with minimum two years of service experience in reputed Academic/Industrial Organizations or Govt. funded Research Projects. However, at the time of application against Institute advertisement, the candidate should be in service. NOC in case of serving candidate is mandatory. Essential qualifications, other terms & conditions will be same as per Ordinances of the Institute. All the UGC/AICTE approved institutions may be considered as the reputed Academic Institutes and experience from all those Institutes should be considered while shortlisting the applications for Ph.D. admission. The selection procedure shall be same as for full time Ph.D. Programme. Other guidelines regarding Fees, Registration, Enrollment, Course work, Attendance, Registration seminar, Thesis submission etc. shall be same as per Ph.D. Ordinances of the institute.

#### 1.4.2 Application Procedure and other guidelines of Ph.D. Programme

**1.4.2.1** The prospective PhD admission shall be offered provisionally in both the semesters through advertisements (prominent Newspapers & Institute Website)

**1.4.2.2** The application forms for Ph.D. registration will be available on the Institute website: www.nituk.ac.in. It is to be downloaded and to be properly filled.

**1.4.2.3** The form, duly filled in by the candidate, should be submitted by published last date to the Institute. Incomplete applications and those received late will not be processed. The application form (downloaded from website) must be accompanied with a DD of Rs. 500/- and drawn in favor of Director NITUK, and attested copies of marksheets / degree certificates and other certificates to substantiate the information provided in the application form.

**1.4.2.4** Candidates applying for full time or part time Programme will be required to appear for written test to be conducted in the respective departments. Further, the scholars shortlisted on the basis of performance in the written test shall be interviewed. The schedule of written test and interview shall be available in admission notification. The candidates will be required to appear for written test / interview at their own cost.

**1.4.2.5** Selected candidates shall be intimated about their selection and allotted a supervisor. Candidates will be given provisional admission at the Institute. The PhD candidates are required to register for the PhD course work immediately after joining. Therefore the admission process shall be completed in July/December so that PhD candidates can register along with Academic registration. Candidates, in consultation with the supervisor shall identify the broad area of research within three months of their Registration.

**1.4.2.6** The date of joining of a candidate at the Institute will be considered the date of registration in Ph.D. Programme. However for the payment of fee and for all Academic activities scheduled in a semester, the date shall be  $1^{st}$  January /  $1^{st}$  July which is preceding the date of provisional admission.

**1.4.2.7** The Ph.D. candidates are required to register for Ph.D. Course work immediately after joining the Institute. The student is required to complete the course work within three semesters (including the duration of failure in course work) from the date of joining in Ph.D Program.

**1.4.2.8** The Ph.D students who join in Ph.D Program in the middle of Semester, their duration for completion of course work will be counted from the beginning of next Semester. The fellowship of the candidate will start from his/her initial date of admission.

**1.4.2.9** A Ph.D scholar sponsored by the Institute will be awarded fellowship by the Institute for maximum 5 years from the date of joining the Ph.D Program or until the submission of his or her Ph.D. thesis, whichever is earlier, subject to the satisfactory performance of the student as recommended by RPC from time to time.

**1.4.2.10** A student who is admitted in full-time Ph.D. Program as institute fellow can surrender his/her Institute fellowship and can join in NET-JRF (CSIR/UGC) fellowship on the recommendation of his/her supervisor(s) and approval of Dean (Acad.) through proper channel. However, the date of Ph.D. Registration and validity period of Ph.D. registration will remain same i.e. the initial date of joining in Ph.D. program. The student will be governed by the Ph.D. Ordinances of the institute in all aspects. Once the student joins in NET-JRF, he/she further can't revert in Institute fellowship.

**1.4.2.11** The supervisor will propose a **Research Progress Committee**, (**RPC**) for that Ph.D. candidate. The RPC shall monitor the progress of Ph.D. work of the candidate. Following shall be the composition of RPC.

- i) Convener: Respective Supervisor.
- ii) Two Experts from Department (to be nominated by supervisor)
- iii) One Expert from allied Department (to be nominated by supervisor & approved by Chairman, SPGB)

**1.4.2.12** The Ph.D. candidates have to defend the explicit research proposal before the RPC members within 18 months from the date of their Ph.D. registration. An extension of 6 months may be given to the candidate on recommendation of his/her RPC members, subject to the approval of Asso. Dean (Academic Affairs)/ Dean (Academic Affairs). The research proposal shall be submitted only after completion of the Course work. The candidate shall submit, at least three days in advance, a copy of synopsis duly approved by the supervisor to all RPC members. The synopsis shall include outline of the work with reference to problem identification, objective, scope of work, methodology and results till date.

**1.4.2.13** The Registration of the candidate for the Ph.D. Program will be confirmed on successful completion of the course work (with minimum 7.0 CGPA) followed by recommendation of the RPC members on his/her research proposal which shall be approved finally by Asso. Dean (Academic Affairs)/Dean (Academic Affairs). The

supervisor and HOD will forward the report of Registration seminar to Academic Section. The report shall include RPC recommendation and synopsis. If the performance of candidate is not satisfactory in Registration seminar, then the RPC may not recommend the case for Registration.

**1.4.2.14** Dean (Academic Affairs) will issue a notice indicating list of candidates confirming their Registration in Ph.D. Program.

**1.4.2.15** RPC shall recommend the courses to be undertaken by the candidate as per the norms.

**1.4.2.16** The Registration will be valid for a period of 6 years from the date of Registration and no further extension will be granted under normal circumstances.

**1.4.2.17** After 6 years, if the candidate wishes to continue research, the candidate will be required to register again. The candidate should apply for re-registration before completion of 6 years of registration period. If the re-registration application is received after  $1^{st}$  January /  $1^{st}$  July, the candidate will be required to register again following the procedure for fresh candidates.

**1.4.2.18** Guidelines for the disbursement of Institute Fellowship to Ph.D. research scholar:

1. The fellowship of the candidate will start from his/her initial date of admission.

2. A Ph.D. scholar sponsored by the Institute will be granted fellowship for a maximum of 5 years from the date of joining the Ph.D. programme or until the submission of his or her Ph.D. thesis, whichever is earlier, subject to the satisfactory performance of the student as recommended by RPC from time to time.

3. If the student fails to maintain the CGPA 7.00 or above during course work, his/her scholarship shall be stopped from the next month of the declaration of the results.

4. In case of any indiscipline created by Ph.D./M.Tech./JRF/SRF Student, his/her scholarship will be stopped.

5. Up to the 3<sup>rd</sup> year of Ph.D. program (before completion of 4 Year from date of joining), the student must publish at least one paper in a SCI/SCIE/Scopus indexed journal, failing which the student's scholarship will be stopped in the fourth year.

6. Furthermore, up to the 4<sup>th</sup> year of Ph.D. program (before completion of 5 Year from date of joining), the student must publish at least two papers in a SCI/SCIE/Scopus indexed journal, failing which the student's scholarship will be stopped in the fifth year.

7. The disbursement of the scholarship will be resumed when the student will fulfil the required criteria.

8. The above rules will be applicable for the newly admitted Ph.D. student (Academic Year 2022-23 onwards) who will receive institute scholarship.

9. The above rules (except rule at Pt. 4) are not applicable for the student's availing scholarship in Ph.D. programme from other funding agencies (CSIR, UGC, DST, etc.)

#### 1.5 SUPERVISOR FOR Ph.D.

**1.5.1** A staff member of NITUK possessing Ph.D. will be recognized as a supervisor for the Ph.D. Programmes at NITUK in their subject.

**1.5.2** A supervisor can guide maximum four candidates for PhD Programme at a time in NITUK, out of which maximum two candidates will be offered MHRD scholarship by the Institute. Accordingly, annual intake of Ph.D. students will be decided by SPGB.

**1.5.3** Faculty member of NIT Uttarakhand can act as Ph.D. Thesis Co-Supervisor of student outside NIT Uttarakhand provided the student is studying in Government Institution or any Private Institution (within NIRF 100 ranking).

**1.5.4** Outside researchers can guide Ph.D. thesis as additional supervisors only. Principal supervisor should be essentially from NITUK.

**1.5.5** The co-supervisor of a Ph.D student from inside and outside the institute can be added before confirmation of Ph.D registration. This is applicable for the serving faculty members of the Institute.

**1.5.6** The addition of co-supervisor from the institute and outside the Institute may be allowed on the recommendation of RPC followed by DPGC and SPGB. The recommendation will be implemented upon the approval of the Chairman Senate and the same will be ratified in the upcoming senate.

Sl. No.	Co-Supervisor is	Resolution	
	from:		
A.	Academic Technical	The Co-Supervisor must be from CFTIs,	
	Institute	Government Institute, and Private Institutes within	
		NIRF 100 Ranking.	
В.	Medical Institute	The Co-Supervisor must be at least MD/MS with 4	
		SCI/SCIE publications as first author and has	
		produced/supervised at least one Ph.D. student.	
C.	Industry/R&D Lab	The Co-Supervisor must be at least	
		M.Tech./ME/MS/M.Sc. with at least five year	
		experience and have at least 4 SCI/SCIE	
		publications as first author and total ten publications.	

For outside Co-Supervisor, following guidelines must be followed: -

**1.5.7** If any faculty of the Institute leaves the Institute due to any reason, the main supervisor/ co-supervisor of the Ph.D. students registered under him/her will be decided based on the following conditions:

S. No.	Status of the	Guidelines
	student	
1.	The Student has	1. A new supervisor will be allotted by a duly
	not completed the	constituted committee under the chairmanship
	coursework.	of Dean (Acad). The recommendation of the
		committee will be implemented upon the
		approval of the Chairman, Senate.
2.	The student has	1. Main supervisor will become co-supervisor and
	completed the	co-supervisor (if any) will become main
	coursework but	supervisor automatically. An office order will be
	he/she is not in a	issued in this regard.
	position to submit	2. Main supervisor will become co-supervisor and
	his/her thesis	the main supervisor (in case of no co-supervisor)
	within the next	will be allotted by a duly constituted committee
	six months from	under the chairmanship of Dean (Acad). The
	the date, the main	recommendation of the committee will be
	supervisor leaves	implemented upon the approval of the
	the institute.	Chairman, Senate.
3.	The student is in a	1. Main supervisor will be allowed to continue as
	position to submit	the main supervisor for next six months.
	his/her thesis	2. If the student doesn't submit his/her thesis
	within the next	within the next six months, main supervisor will
	six months from	become co-supervisor and co-supervisor will
	the date, the main	become main supervisor automatically. In case
	supervisor leaves	of no co-supervisor, main supervisor will be
	the institute.	allotted by a duly constituted committee under
		the chairmanship of Dean (Acad). The
		recommendation of the committee will be
		implemented upon the approval of the
		Chairman, Senate.

4.	Otherwise	1. A new supervisor will be allotted by a duly
		constituted committee under the chairmanship of
		Dean (Acad). The recommendation of the
		committee will be implemented upon the
		approval of the Chairman, Senate.

1.5.8 An additional supervisor / external supervisor can have maximum 3 candidates registered under him/her at a time in NITUK.

**1.5.9** In the subjects for which there are no recognized supervisors in NITUK, the external supervisor alone can guide the Ph.D. work at NITUK.

**1.5.10** The practice of change of Supervisor should be discouraged under the normal circumstances. Candidate's current supervisor and co-supervisor(s) shall sign the application for change of supervisor jointly. Such applications if recommended by HoD shall be considered by Asso. Dean (Academic Affairs) as Chairman, SPGB.

**1.5.11** However, any application from the candidate or the Supervisor requesting for a change may be considered and decided by a Committee comprising Dean (R&D), Dean (Academic Affairs) and HoD of the concerned Department. In case, any of the above committee members happens to be the Supervisor, the Director shall nominate a member in lieu of the above Supervisor.

#### **1.6 PLACE OF WORK**

**1.6.1** Normally the place of work will be NITUK.

**1.6.2** The place of work other than NITUK, if approved by RPC, shall be mentioned in the report of Registration or six monthly seminar.

#### **1.7 PAYMENT OF FEES AND DEPOSITS**

- a) Application fee for Ph.D. registration: Rs. 500/-
- b) Other fees:

(I)	Registration	Rs. 5,000/- (one time)
	Tution fee Caution money	Rs. 15,000/- (Annual) Rs. 3,000/- (refundable)
	Library fee	Rs. 2,000/- (one time)
	Development fee	Rs. 10,000/- (annual)
	TOTAL	Rs. 35,000/-

TOTAL

Rs. 35,000/- is to be paid before  $31^{st}$  January /  $31^{st}$  July.

(II) Subsequent years: Annual fees

 Tution fee
 Rs. 15,000/ 

 Development fee
 Rs. 10,000/ 

 TOTAL
 Rs. 25,000/ 

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Rs. 25,000/- is to be paid before six monthly seminars of June / December. (III) Examination fee:

The examination fee of Rs. 5000/- shall be paid by the candidate prior to the submission of the thesis.

#### Note:

1. The delay in payment of annual fees may invite cancellation of registration. Payment of fees is annual. Six-monthly seminar shall not be conducted without payment of fees.

2. All the staff members of NITUK will be exempted from the payment of annual fees. However, they will have to pay a registration fee of Rs. 5000/- and examination fee of Rs. 5000/-.

3. Students who are staying in Quarters are required to pay license fees, water & Electricity Charges, etc. as applicable for occupation of these quarters as per the Estate Office Rules

4. If the thesis is submitted after 31st December /30th June, candidates are required to pay the fees for next Academic session.

#### **1.8 SCHOLAR'S ROLL NUMBER**

**1.8.1** Each Scholar shall be allotted an Identification Number during first registration and which will be a permanent identification number.

**1.8.2** The roll number of a Scholar shall consist of ten alpha-numerals (XXnnYYZmmm), e.g. DT08EEJ001.

'XX'	Indicates Programme	code
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Code	Programme
DS	Doctor of Philosophy in Science
DT	Doctor of Philosophy in Technology
DH	Doctor of Philosophy in Humanities, Social Sciences & Other
	Areas
DB	Doctor of Philosophy in Business Management

'nn' indicates year of admission

YY indicates department code

Z indicates code for area of research.

(2008 is indicated as 08)(EE is for Electrical Engineering)J for areas related to departments I forInterdisciplinary area

mmm indicates Sr. No. in Programme DT13EEJ001 indicates roll number 001 of Ph.D scholar admitted in 2013 in Electrical Engineering Department.

#### 2. ENROLLMENT AND ATTENDANCE

#### **2.1. ENROLLMENT**

Enrollment is a very important procedural part of the academic system. The enrollment procedure ensures that the scholar's name is on the roll list of each course that he/she wants to study. No credit is given if the scholar attends a course for which he/she has not registered. Registration for courses to be taken in a particular semester will be done according to a specified schedule at the beginning of semester commencing from Aug/Jan. Scholar's Supervisor must approve the choice of courses. The Scholar must also take steps to pay his/her dues before delivery of the seminar. Scholars should enroll themselves on a stipulated date. Enrollment after the specified date will be allowed only once in duration of completion of Programme. A scholar must meet his/her supervisor within the first week of the new semester for confirmation of his/her registration. The relevant dates are included in the Academic Calendar that is available before the start of the semester.

Part time Ph.D. scholars shall register within one month of declared date of registration. These scholars note that this is a special favor and under no circumstances, further extension shall be allowed. If a scholar is likely to be outstation during registration, he/she shall seek prior permission from Dean (Academic Affairs). However enrollment dates shall not be extended.

#### 2.2 ENROLLMENT AND SCHOLAR STATUS

Enrollment by a scholar confirms his/her status as scholar at the Institute. Failure to enroll before the last date for late enrollment will imply that the scholar has discontinued studies and his/her name will be struck-off the rolls.

Every registered scholar, except **part-time** doctoral scholars, is considered as a full-time scholar at the institute. They are expected to be present at the Institute and devote full time to academics.

Scholars who have completed all course works are not required to register for the courses any further. They should enroll themselves for next semester after delivering the six-monthly seminars. Registration and enrollment procedures are required till submission of Ph.D. thesis.

#### **2.3 ADVICE ON COURSES**

At the time of Registration, each scholar must consult his/her Supervisor to finalize the Academic Programme.

#### 2.4 REGISTRATION VALIDATION

Before the first day of classes, every scholar is required to be present on campus and validate his/her registration. Scholars who do not do registration validation (enrollment of courses) will not be permitted to add/drop courses.

#### 2.5 MINIMUM SCHOLAR REGISTRATION IN A COURSE

Ph.D. scholars can register / enroll for only 500 or 600 level courses. There is no requirement of minimum number of enrolled students to run a course where these Ph.D. scholars are registered.

#### 2.6 LATE REGISTRATION / ENROLLMENT

Late registration is permitted under the following conditions:

A scholar, who was not in the campus during the period of registration in the previous semester needs to complete the registration process on or before the first day of the semester before Late Enrollment. For reasons beyond his/her control, if a scholar is not able to enroll, late enrollment is permitted until one week after the start of the semester. However, this facility can be availed only once in the duration of program.

#### 2.7 ADDITION, DELETION, AUDIT AND WITHDRAWAL FROM COURSES

(a) <u>Add/Drop:</u> A scholar has the option to add a course(s) that he/she has not registered for, or drop a course(s) for which he/she has already registered for. This facility is restricted to the first week of the semester.

(b) <u>Audit</u>: A scholar may apply for changing a credit course to an audit one within one week of the end of the first sessional examination.

(c) <u>Withdrawal:</u> A scholar who wants to withdraw from a course should apply within one week of the end of first sessional examination. A withdrawal grade (XX) will be awarded in such cases. A course withdrawal will not be permitted if the number of students in that course drops to less than 6 on account of course withdrawal by the students and in such, a case no student will be allowed to withdraw from that course.

#### 2.8 SEMESTER WITHDRAWAL

If a scholar is absent for more than 20 teaching days in a semester on medical grounds, then he/she may apply for withdrawal from that semester, i.e. withdrawal from all courses registered in that semester. Application for semester withdrawal must be made as early as possible and latest one week before the start of the End Semester Examination. Partial withdrawal from courses registered in a semester is not allowed.

Scholars registered under Research Programme can not withdraw the main Project XXD601 (For PhD). Semester withdrawal for these scholars shall exclude subjects XXD601.

#### 2.9 REGISTRATION IN SPECIAL MODULE COURSES

Special module courses, i.e. V-category courses, can be offered at the beginning of the semester in which case the regular registration procedure will be followed. A V-category course may also be offered during the semester. In such a case, scholars will be allowed to add this course before classes for the course begin.

#### 2.10 REGISTRATION FOR ACADEMIC WORK AT OTHER INSTITUTIONS

Scholars planning to do academic work, i.e. take courses or do part of project work, at another institution in India or abroad, need to register prior to proceeding for such work. This includes scholars going out on exchange Programmes arranged through the institute and scholars intending to do project work at other institutions. Prior approval of the Supervisor, RPC, HoD and Dean (Academic Affairs) is required before proceeding on such studies for full time scholars. Prior approval of the Supervisor, RPC is required before proceeding on such studies for studies for part time scholars.

#### 2.11 PRE-REQUISITE REQUIREMENT FOR REGISTRATION

Ph.D. scholars are exempted from prerequisite requirements for all courses.

#### 2.12 FEES PAYMENT

Every registered scholar must pay the stipulated fees (including Hostel Dues) in full before the six monthly seminar. In the event that a scholar does not make these payments, he/she will be de-registered from all courses and his/her name will be struck-off the rolls.

#### 2.13 REGISTRATION RECORD

The scholar should ensure that all the relevant information is entered in the Registration Record. Queries related to registration will be considered only when accompanied by the original Registration Record. This record must be preserved until the semester grade card is received by the scholar.

#### 2.14 CONTINUOUS ABSENCE AND REGISTRATION STATUS

If a full time scholar is absent from the Institute for more than four weeks without notifying the Supervisor or Head of Department or Dean (Academic Affairs), his/her registration will be terminated and name will be removed from the Institute rolls.

#### 2.15 ATTENDANCE RULE

**2.15.1** All scholars must attend every lecture, tutorial and practical class. However, to account for late registration, sickness or other such contingencies, the attendance requirement will be a minimum of 75 % of the classes actually held.

**2.15.2** A scholar with less than 75% attendance in a course during the semester, in lectures, tutorials and practicals taken together (as applicable), will be awarded 'W' attendance in that course irrespective of his/her performance in the tests. The course coordinator will award 'W' grade to the scholar who is deficient in attendance taking into account the consolidated attendance record for the whole semester for the course concerned. For the purpose of attendance calculation, every scheduled practical class will count as one unit irrespective of the number of contact hours.

**2.15.3** Attendance record will be maintained based upon roll calls (or any equivalent operation) in every scheduled lecture, tutorial and practical class. The course coordinator will maintain and consolidate attendance record for the course (lectures, tutorials and practicals together, as applicable).

**2.15.4** To account for circumstances beyond control, scholars shall be permitted in only one semester (only once in the duration of Programme) the attendance below 75%, provided it is at least 65%. Attendance grade of L shall be awarded in such cases.

**2.15.5** The attendance grade shall be awarded as per following table.

Sr. No.	Attendance	Grade	Remark
1	$\geq 65\%$ but < 75%	L	If L grade is not awarded earlier
2	≥ 65% but < 75%	W	If L grade is awarded earlier
3	< 65%	W	-

#### 2.16 LEAVE REGULATIONS FOR FULL TIME Ph.D. CANDIDATE

Ph.D. research scholars will get Casual Leave (CL) of 8 days, Restricted Holiday (RH) of 2 days and Medical Leave of 15 days in a calendar year, excluding Institute's holidays. The Ph.D. research scholars will also be eligible for Special Duty Leave of 10 days in a calendar year to conference/symposium/Sample analysis from other present research papers in institutes/Workshop/STTP/STC, etc. Such leaves should be approved by the Head of Department concerned on the recommendation of the Supervisor and a proper leave account of each scholar shall be maintained by the Department. Further, if Ph.D. research scholars need extra leave for field survey and experimental studies, Research Progress Committee (RPC) of the student will look into the matter and will give their recommendation for number of leaves as requested by the student for approval of the Chairman, Senate. Women research scholars will be eligible for Maternity Leave with assistantship for a period not exceeding 135 days once during the tenure of their award.

#### 2.17 ATTENDANCE REQUIREMENTS FOR ASSISTANTSHIP

A Ph.D. scholar irrespective of the source of research assistantship while pursuing course work, must attend at least 75 % of classes in each course in which he/she is registered. In case his/her attendance falls below 75 % in any course during a month, he/she will not be paid Assistantship for that month. Further, if his/her attendance again falls short of 75 % in any course in any subsequent month in that semester, his/her scholarship and Assistantship will be terminated. A research scholar after having completed the course work must attend to his/her research work on all the working days and mark attendance except when he/she is on duly sanctioned leave.

All scholars who are offered assistantship are required to register for a special course (XXD603) with Satisfactory/Unsatisfactory grade. They are expected to put in 8 hours per week towards the work assigned by the Institute. Continuation of assistantship in a subsequent semester would be conditional to obtaining a satisfactory grade in this course.

#### **3. DEGREE REQUIREMENTS, REGULATIONS AND PROCEDURES**

#### **3.1 COURSE REQUIREMENTS**

The award of Ph.D. degree is in recognition of high achievements, independent research and application of scientific knowledge to the solution of technical and scientific problems. Creative and productive enquiry is the basic concept underlying the research work. In order to overcome any deficiency in the breadth of fundamental training or proper foundation for advanced work, special preliminary or pre-doctoral courses are given by each department/centre. These courses are given either by faculty members or by guest-speakers and specialists in the profession.

Candidates registered for Ph.D. Programme shall be required to Audit two three-credit courses XXL601 (Communication Skills) and XXL602 (Research Methodology) offered by any department (departments shall offer the course every year in rotation) in addition to the minimum course work specified by the RPC.

Candidates having a M.Sc./M.A. or equivalent degree are required to complete a minimum of 12 credits. Relaxation up to 6 credits in the course work can be considered for those with M.Phil. degree. M.Tech. or equivalent degree holders are required to complete a minimum of 6 credits. The departments may require a larger number of credits in general or in specific cases. The additional course requirement will be determined by the RPC on the recommendations of the supervisor after due consideration of the background of the scholar in relation to the proposed topic of research. These courses can be prescribed from existing M.Tech. courses, special pre-Ph.D. courses including laboratory, seminar, foreign language, etc. Normally, no independent study course will be allowed for Ph.D. scholars. However, self-study courses can be permitted if the recommended courses are not offered in the first calendar year.

The Ph.D. student has to maintain minimum 7.00 CGPA in the course work for confirmation of Ph.D. registration. If the CGPA at the end of 1st/2nd Semester is less than 7.00, he/she will be required to register for more courses on the recommendation of his/her RPC in order to make up the required CGPA. If the CGPA of the student at the end of 3rd Semester is below 7.00, his/her doctoral Programme will be automatically terminated. The student cannot repeat the same course if he/she has passed the course. All the earned credits will be considered in CGPA calculation. The course work must be completed within the first three semesters of joining the Ph.D. programme.

#### **3.1.1 ADDITIONAL RULE FOR THE SPECIAL EXAMINATION**

**3.1.1.1** In case a student is absent in MTE on legitimate grounds such as serious medical problem, death of first blood relative etc., Special MTE shall be conducted normally within 10-15 days from the last date of corresponding MTE. Such requests, for Special MTE, by students shall be approved by the respective HoDs on the recommendations of the concerned course coordinator.

**3.1.1.2** In case a student is absent in ETE on legitimate grounds such as serious medical problem, death of first blood relative etc., the student may apply for Special ETE which shall be conducted normally within 10 days from the last date of corresponding ETE. Such requests, for Special ETE, by students shall be approved by the Dean Academic/Associate Dean Academic on the recommendation of the concerned HoD.

#### **3.2 SEMINARS DURING Ph.D. WORK**

**3.2.1** The candidate is required to give a seminar on the progress of his / her project work every 6 months in respective departments after the confirmation of Ph.D Registration till presubmission of the thesis. This will be done during the Ph.D. seminar weeks indicated in the Academic calendar. In case, the pre-registration seminar of a student is being conducted in between the running semester, his/her six-monthly evaluation will be conducted from the next semester. In such case, supervisor will submit the recommendation form on the six monthly progress of the student for that semester as submitted in each semester before confirmation of PhD registration. The details of confirmation of Ph.D Registration of a students is mentioned in para 1.4.2.12 & 1.4.2.13.

**3.2.2** The time-table for the 6 monthly seminars shall be displayed by HoD at least 15 days prior to it. Also, a brief write-up outlining the work previously done, the current status and the future plans should be submitted to the RPC members at least 3 days prior to the date of seminar.

**3.2.3** The report of the RPC after each 6 monthly progress seminar shall be duly forwarded to the Office of Dean (Academic) by the concerned department in an appropriate format. KK grade will be awarded if the progress is 'satisfactory' in that semester. If the progress is 'unsatisfactory', UU grade will be awarded.

**3.2.4** If the report of 2 consecutive review seminars is unsatisfactory, RPC may recommend discontinuation of registration. If 3 consecutive seminar reports are unsatisfactory or if 4

seminar reports are unsatisfactory, the registration shall be automatically cancelled. If seminar is not given, it shall be considered as unsatisfactory.

**3.2.5** Six monthly seminar shall be conducted only if annual fees are paid. No further seminar shall be conducted without payment of fees. Six monthly reports shall be considered as unsatisfactory if the six monthly seminar is not permitted.

**3.2.6** A student is required to work as JRF for minimum of two years from the date of joining in Ph.D program and he/she should complete the course work as per Ordinances to become eligible for application for up-gradation to SRF. An External member & the research progress committee (RPC), under the chairmanship of Dean (Academic Affairs) or Asso. Dean (Academic Affairs) will review the performance of the student for recommendation his/her upgradation from JRF to SRF. An external assessment is compulsory for enhancement of fellowship from JRF to SRF. The External Examiner can be a Professor or an Associate Professor (with five year experience). This should be approved by Chairman (Senate). Only GATE/NET/DST-Inspire candidates are eligible for the same. Annual Satisfactory Assessment is mandatory to continue the benefit of fellowship during SRF period.

**3.2.7** The assessment for upgradation from JRF to SRF will be conducted based on the recommendation of the Supervisor and approval from Dean (Academics) after fulfilling all the requirements as per Ordinances. The student has to submit the two years completion form one month before completion of two years. The supervisor has to either forward the application to Academic section through proper channel or return to the student for improvement with a copy to Dean (Academics). The supervisor can further initiate the process for nomination of expert from Competent Authority. The date of recommendation for enhancement of fellowship of PhD scholars from JRF to SRF shall be considered accordingly with the approval of Chairman (Senate).

#### **3.3 ABSENCE DURING THE SEMESTER FOR COURSES REGISTERED**

- a. A scholar must inform the Supervisor or HoD or Dean (Acad) immediately of any instance of continuous absence from classes.
- b. A scholar who is absent due to illness or any other emergency, up to a maximum of two weeks, should approach the course coordinator for make-up quizzes, assignments and laboratory work.
- c. A scholar who has been absent from Mid Term Examination of a course work, regulations of UG and PG programme shall be applicable.

- d. In case the period of absence on medical grounds is more than 20 working days during the semester, a scholar may apply for withdrawal from the semester, i.e. withdrawal from all courses registered in that semester. Such application must be made as early as possible and latest one week before the start of the End Sem Examination. No applications for semester withdrawal will be considered after that. Dean (Academic Affairs), depending on the merit of the case, will approve such applications. Partial withdrawal from courses registered in a semester is not allowed.
- e. If a scholar is continuously absent from the institute for more than four weeks without notifying the Supervisor / HoD / Dean (Academic Affairs), his/her name will be removed from Institute rolls.

#### 4. REGULATIONS GOVERNING PH.D. SCHOLARS

#### **4.1 THESIS WRITING**

The thesis shall normally be written in English in the specific format and shall contain a critical account of the candidate's research. It should be characterized by discovery of facts, of fresh approach towards interpretation of facts and theories or significant contribution to knowledge of design or development, or a combination of them. It should bear evidence of the candidate's capacity for analysis and judgment and also his / her ability to carry out independent investigation, design or development. A thesis should normally be supplemented by published work. No part of the thesis or supplementary published work shall have been submitted for the award of any other degree/ Diploma. The format of thesis cover page, and other inner pages including declarations are uploaded on Institute website. The thesis should be bounded in the same sequence. The list of publications along with the front pages of each publication should be attached at the end of the thesis. Following criteria should be followed for the thesis:

Sr. No.	Item	Specification
1.	Colour of the Ph.D. thesis	Sky Blue, Colour code
		#87CEEB
2.	Margin setting of inside pages	Orientation Portrait
		Тор 0.98"
		Inside 1.38"
		Bottom 0.49"
		Outside 0.49"
		Multiple Mirror Margin
		Pages
3.	Line spacing	1.5
4.	Size of Ph.D. thesis	A4 size

5.	Papers to be used for printing	A4 size bond papers with 80
		gsm or above

Initially, four soft-bound copies of the thesis along with one CD should be submitted for review which should be submitted in the form of hard bound after final revision of the thesis.

#### 4.1.1 FORMS FOR SUBMISSION OF PHD THESIS

The various forms in respect of submission of Ph.D. thesis are available in Academic Section or it may be downloaded from Institute website.

#### **4.2 SUBMISSION OF THESIS**

**4.2.1** A scholar can submit his / her Ph.D. thesis only after a period of **3** years from the date of initial Ph.D. Registration for full-time or part-time Programme provided that he/she has completed required course work with minimum 7.0 CGPA.

**4.2.2** Candidate who has re-Registered under the supervisor and with the topic identical to earlier registration will not have minimum time restriction for submission of thesis.

**4.2.3** A candidate must have:

(i) One paper accepted/published in SCI/SCIE indexed journals and at least one paper accepted/published in non-paid SCI/SCIE/Scopus indexed journals or International/National conference from his/her Ph.D. thesis for the award of degree in Engineering and Science stream.

(ii) One paper accepted/ published in Scopus Indexed UGC approved journals and at least one paper accepted/published in an International/National conference, from his/her Ph.D. thesis before the submission of Ph.D. Thesis for Humanities stream. However, the other journal "*The Indian journal of English Studies*" will be considered for submission of thesis for Humanities.

However, the students admitted from 2023 onwards must have two papers accepted/published in SCI/SCIE/Scopus indexed journals from his/her Ph.D. thesis for submission of thesis and award of PhD degree in Engineering and Science stream.

**4.2.4** Pre-submission seminar will be delivered by the candidate on completion of work. The thesis can be submitted if pre-submission seminar report by RPC is satisfactory.

**4.2.5** Thesis should be submitted within 3 months of pre-submission seminar.

**4.2.6** The student is supposed to have completed the work when the thesis is submitted. The student remains registered with the Supervisor till the successful defence.

**4.2.7** A student is required to submit 4 copies of the synopsis (soft bound) along with the soft copy in PDF format in a CD to the Academic Section.

**4.2.8** A student is required to submit 4 copies of the Ph.D. thesis (soft bound) along with the soft copy in PDF format in a CD to the Academic Section.

#### 4.2.9 Color specification of the Thesis cover page: Sky blue [Colour code #87CEEB]

#### 4.2.10 The Limit of confidence for the plagiarism report of Ph.D. thesis:

10% similarity index shall be the threshold for Ph.D. thesis after excluding the selfpublications, references, quoted text and matches upto 10 words. The limit may be relaxed upto 20% with proper justification of the supervisor and approval of the Dean (Academic Affairs). The supervisor shall be responsible for the plagiarism Check and a record of which will be maintained in the office of Dean (Academics).

#### **4.3 EVALUATION OF THE THESIS**

**4.3.1** The Supervisor(s) will submit a list of five Examiners within India & five Examiners from abroad who are Professors and Associate Professors, directly to Dean (Academic Affairs) in a sealed envelope. Any Professor and at most maximum two Associate Professors (with five years experience) can be a possible external examiner for evaluation of Ph.D. thesis. H-index of faculty must be mentioned while submitting the list of examiners. Dean (Academic Affairs) will submit the same list before Chairman, Senate for his consideration and approval. The Chairman, Senate will select two examiners for evaluation of the thesis from this list.

**4.3.2** The Thesis should be evaluated by one Indian and one Foreign Examiners or two Indian examiners nominated by Chairman (Senate) from the panel of five Examiners within India & five Examiners from abroad.

**4.3.3** After the synopsis has been submitted and the thesis examiners have been selected by Chairman Senate, the Dean Academics will send a confidential letter/E-Mail to each approved member of the thesis board enclosing a copy of the synopsis and requesting him/her to serve as an examiner for the thesis. If, either of the examiner refuses or no response is received within four weeks (with a reminder being sent after two weeks), then steps will be taken to appoint another Examiner(s).

**4.3.4** On receipt of the acceptance from the examiner, a hard copy of the thesis along with a copy of Ph.D examiner's recommendation form will be sent to each examiner. The soft copy of the thesis can be sent via e-mail also.

**4.3.5** The names of the Examiners of the thesis shall be kept confidential till successful completion of the Ph.D. viva. However, on completion of Ph.D. thesis evaluation, Dean, Academic will send the copy of thesis evaluation report to the thesis supervisor(s) along with the

details of the Indian examiner so that the name can be included in the proposed list of the members of Ph.D viva.

**4.3.6** In case Dean Academics is the supervisor of the student concerned, above processing will be done by the Chairperson, SPGB.

**4.3.7** If both the Examiners give favorable reports, the candidate will be eligible for Ph.D. degree on successfully defending the open defence and viva-voce and after the recommendation of the Senate.

**4.3.8** If the Examiner(s) recommends acceptance of the thesis subject to major modifications, the thesis can be resubmitted only once after incorporating the modifications, within a period of one year. The thesis so resubmitted shall be examined by the same Examiner(s).

**4.3.9** If Examiner(s) recommend acceptance of the types with minor modifications only, the thesis is to be corrected before open defence and viva-voce. External Examiner shall be confirmed regarding corrections suggested by both Examiners are included. Candidate shall be provided a copy of detailed reports of both Examiners.

**4.3.10** In case the report of one of the Examiners is not favorable then the thesis will be sent to the third Examiner. If the report of third Examiner is favorable then only the candidate will be considered eligible for Ph.D. degree.

**4.3.11** If reports of two examiners are favorable then the candidate shall be required to defend his / her Ph.D. thesis (open defence and viva-voce) before the committee consisting of the following members.

- i) One of the External Examiners of the Ph.D. thesis (Indian Examiner)
- ii) Supervisor & Co-Supervisor (If any).

The final Ph.D. Defense will be an Open House event. However, only the above members will sign the certificate. In case, the Examiner is unable to attend the viva-voce for any reason, the Director is empowered to nominate one expert in the field from the local area. The candidate should submit 3 hardbound copies of thesis incorporating all suggestions of Examiners. After successful defence, out of three copies, one copy each will be issued for record, library and department.

**4.3.12** Before viva-voce, the student must have two papers accepted /published in SCI/SCIE/Scopus indexed journals from the thesis. This is applicable for the PhD students admitted from 2023 onwards.

**4.3.13** A thesis rejected by two examiner(s) may be resubmitted after revision, not earlier than one year and not later than three years from the date of such intimation to the scholar by the Academic Section. The thesis so resubmitted may be examined by the same referees or by new referees.

**4.3.14** Rejection of the thesis so resubmitted will disqualify the scholar from further consideration for the award of the Ph.D. degree, in the topic of research chosen by him / her.

#### 4.3.15 Remuneration for Ph.D. Thesis evaluation

The following remuneration is payable for the PhD thesis evaluation

Indian Examiner	Rs. 5000/- for Thesis evaluation and	
	Rs. 5000/- for viva voce examination	
Foreign examiner	USD 400/-	

#### 4.4 CANCELLATION OF REGISTRATION

**4.4.1** Candidate alone or candidate & supervisor(s) jointly can apply for cancellation HoD, Dean (Academic Affairs) shall consider these cancellations.

**4.4.2** Supervisor can apply cancellation of registration of scholar without consent of scholar giving reasons. However, such applications shall be considered by SPGB.

#### 4.5 SENATE POST GRADUATE BOARD (SPGB)

The annual intake of Ph.D. students at Institute shall be decided by SPGB. All issues related to Ph.D. curriculum and its conduct shall be framed and approved by SPGB. Accordingly, the Ph.D. Ordinances be updated from time to time after due approval of the same by Senate.

#### 4.6 BOARD OF STUDIES IN INTERDISCIPLINARY RESEARCH

a) The board of studies in interdisciplinary research shall comprise the following :

Chairman : Dean (R&C)

Members : All HoDs

- **b**) The faculty (Engineering / Science) in which the candidate shall be registered for interdisciplinary research would be based on his/her qualification and eligibility.
- c) For monitoring the progress of Research, a Research Progress Committee (RPC) may be constituted as per the regulations (item 1.4.2.11) already in force.

#### 4.7 FINAL SUBMISSION OF THESIS AND AWARD OF DEGREE

(a) After the viva-voce examination, the viva-voce recommendation form should be submitted in the Academic Section through proper channel for approval of the Competent Authority.

(b) The candidate has to submit three hard bound copies of the thesis [excluding supervisor(s) and student copies] along with soft copies in CDs after incorporating all necessary corrections after viva-voce (if any) for the award of degree. All three copies of thesis along with CDs should be submitted in the Academic Section.

(c) The student has to submit the degree award form in the Academic section for the award of the degree.

#### **4.8 IPR NOTICE**

The relevant IPR notice to be incorporated in the soft/hard bound thesis, reports etc. shall be chosen from the following:

a) The thesis/report etc. for which formal copyright application has NOT been filed should carry the copyright notice as:

© National Institute of Technology Uttarakhand (NITUK), 200 ... [year of submission of the thesis/ report].

b) The thesis/report etc. for which formal copyright application has been filed with the copyright office. Should carry the copyright notice as:

© National Institute of Technology Uttarakhand (NITUK), 200 ... [year of submission of the thesis/ report]. All right reserved. Copyright Registration Pending.

c) The thesis/report etc. and for which in-addition to a formal copyright application with the Copyright Office, patent/design application has also been filed with the patent office, should carry the "IPR Notice" as:

## Intellectual Property Right

#### Notice

**Part of** this thesis may be protected by one or more of Indian Copyright Registrations (Pending) and/or Indian Patent/ Design (Pending) by Dean, Research & Consultancy, National Institute of Technology Uttarakhand (NITUK), 200 ...[year of submission of the thesis/ report]. India. NITUK restricts the use, in any form, of the information, in part or full, contained in this thesis ONLY on written permission of the Competent Authority: Dean, R&C, NITUK.

The notices at b and 'c' should **ONLY** be, repeat **ONLY** be inserted after the formal application(s) has (have) been filed with the appropriate office(s) as the case may be and the same has been confirmed by Dean R&C office.

#### 4.9 ADDITIONAL RULES FOR STAFF OF THE INSTITUTE

**4.9.1** If a member of the academic staff, who is registered for the degree, leaves the Institute before the minimum period of registration is completed, he/she will be permitted to submit his thesis in due course, provided RPC recommends that:

(a) A substantial part of the research has been completed at the Institute; and

(b) Any additional work required can be adequately supervised.

**4.9.2** A member of the academic staff who has commenced his research before joining the Institute may, at the discretion of the RPC and on the recommendation of the Supervisor through the RPC concerned, be permitted to include in his period of registration, part or all of the time spent on research before joining the Institute, up to a maximum of one year.

**4.9.3** A member of the non-academic staff of the Institute who satisfies eligibility qualifications may be considered for admission to the degree as a part-time candidate provided the Director of the Institute duly approves his/her application.

### 4.10 MULTIPLE ENTRY MULTIPLE EXIT AND ACADEMIC BANK CREDIT AS PER NEP 2020

Flexible Academic Program (FAP) in Academic Curriculum of NIT Uttarakhand is proposed through Multiple Entry Multiple Exit and Academic Bank Credit as per NEP 2020. The details are as follows:

#### (a) Multiple Exit Policy

After successful achievement of the target, Ph.D. student may opt for exit as under:

Degree	Year	Entry	Exit	Certificate/ Diploma Degree/
Ph.D. (Total number of students to be admitted will be 10% of Ph.D Intake)	-	As per entrance requirement of NITUK	satisfactory in Registration	Post Research Diploma

- (b) Multiple Entry Policy: A PhD student, who leaves the programme mid-way due to some unforeseen circumstances, shall be allowed re-entry into that programme in the year in which he/she would have otherwise continued, on the production of a valid reason.
- (c) Academic Bank of Credits: In order to implement Multiple Exit and Multiple Entry policies, Academic Bank of Credits shall be established for all the students.