

NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR
SILCHAR- 788 010, ASSAM

Ph. D. REGULATIONS

1. GENERAL

- 1.1 The National Institute of Technology, Silchar, awards the degree of Doctor of Philosophy (Ph.D.) in Engineering/Science/Humanities and Social Sciences (HSS) to a candidate who has successfully completed the stipulated Programme of Research.
- 1.2 The Programme of Research with the governing rules and regulations are formulated by the Board of Governors of the Institute. The Board can modify or change the structure, the governing rules and regulations from time to time.
- 1.3 A candidate to be awarded the Ph.D. degree has to submit a thesis embodying the findings of his/her research carried out this programme. The thesis should make an original contribution of high quality to the advancement of knowledge as judged by experts in the relevant area.
- 1.4 A candidate becomes eligible for the award of the Ph.D. degree after fulfilling all the academic requirements prescribed by the SENATE of the Institute.
- 1.5 The award shall be made upon the recommendation of the SENATE of the Institute and after approval by the Board of Governors of the Institute.
- 1.6 The Ph.D. degree shall be awarded in the discipline of the department which registers the student for the Ph.D. programme.

2. CATEGORIES OF Ph.D. STUDENTS

The Institute admits Ph.D. students under the following categories:

I) REGULAR (FULL-TIME)

These are students who work full time for their Ph.D. and may receive assistantship from the Institute or fellowship from CSIR/UGC or any other recognized funding agency or may be self financed.

II) SPONSORED (FULL-TIME) STUDENTS

A candidate in the category is sponsored by a recognized R&D organization, national institute, Govt. organization or industry organisation for doing research in the institute on a full time basis. He/She should have at least two years of working experience in the respective field. He/She will not receive any financial support from the Institute. Sponsorship letter (Form-I) should be attached with the application.

III) PROJECT STAFF

This category refers to the candidates who are working on sponsored projects in the Institute and admitted to the Ph.D. programme. The duration of the project at the time of admission should be at least 2 years.

IV) PART-TIME STUDENTS

This category refers to the candidates who are locally and professionally employed personnel, who can attend classes at the Institute while employed. These candidates should be able to attend regular classes as per the schedule of the Institute.

The applicant must be a regular employee of a recognized R&D organization, national institute, government organization or industry organization at the time of admission and be engaged in professional work in the discipline in which admission is sought. No financial assistance will be provided by the Institute to such students.

A No Objection Certificate from the Head of the Institute/Organization in which he/she is employed (Form-II) must be enclosed at the time of application.

V) SPONSORED STUDENTS (EXTERNAL REGISTRATION)

This category refers to candidates employed in R&D organizations having adequate research facilities. The research work leading to the Ph.D. degree may be carried out largely in the parent organization of the candidate under a Local Supervisor from the organization but with the overall guidance and advice provided by a faculty member of the department (Institute Supervisor) in which he/she is registered. The appointment of the local Supervisor is to be reported to the SENATE through Dean (Academic) for final approval. Sponsorship certificate from the Head of the organization where the candidate is employed (Form III) must be enclosed at the time of application. No financial assistance from the Institute will be provided to such students.

VI) INSTITUTE EMPLOYEES

Institute employees may be sponsored as part-time students by the Director, on recommendation of the Head of the Department of the employee's Department.

3. MINIMUM QUALIFICATIONS

- 3.1 Students for admission to Ph.D. Programme in Engineering Departments must satisfy one of the following criteria:
 - (i) Masters Degree in Engineering/Technology or equivalent in an appropriate area with a minimum CPI of 6.5 or equivalent (60% of marks).
 - (ii) Bachelors Degree in Engineering/Technology with an excellent academic record and with a CPI of at least 8 or equivalent (70% of marks)
- 3.2 Students for admission to the Ph.D. Programme in Science Departments must have a Master degree in the relevant discipline with a first class or a minimum of 60% of marks or equivalent.
- 3.3 Students for admission to the Ph.D. Programme in Humanities and Social Sciences (HSS) Departments must have a Masters degree with a minimum of 55% marks or equivalent.

4. ADMISSION PROCEDURE

- 4.1 Admission to the Ph.D. Programme of the Institute will normally be in the months of January and July every year. For the admission in the month of January and advertisement will be issued in the month of October/November and for admission in the month of July an advertisement will be issued in the month of April/May.
- 4.2 Admission to all the category of students is granted on the basis of an interview/admission test and/or performance in M.Tech/M.E./B.Tech./B.E./M.Sc/M.A./M.C.A. held usually during the month of December and June every year.

Candidates whose selection is approved by the Chairman, SENATE will be admitted to the Ph.D. programme of the Institute after payment of the prescribed fees.
- 4.3 In the case of external registration candidates the following additional conditions are to be satisfied:
 - 4.3.1 The candidates will be required to be in residence at the Institute for one semester during his/her Ph.D. Programme. The candidate will have to produce a certificate from his/her employer that he/she will be fully relieved from all the duties of the organization during the first semester to complete his/her residential requirements at NIT Silchar.

- 4.3.2. The candidate must submit full details of the facilities relevant to the research programme available in the organization where he/she is employed, duly certified by the sponsoring authority.
- 4.3.3. The candidate will have to submit a certificate from the sponsoring authority that required facilities will be made available by the organization.
- 4.3.4. In the case of these students the Biodata of the External Supervisor should be submitted for consideration of DPPC and for approval of the SENATE.
- 4.4 When in residence, a student has to reside on campus in the designated hostel / house. Exemptions will be granted only in rare cases on proper justifications being provided.**

5. FINANCIAL SUPPORT

Students admitted to the Ph.D. Programme will be considered for assistantship according to the following norms:

- 5.1 A student with B.Tech. degree in Engineering must have a valid GATE score at the time of admission.
- 5.2 Students having M.Tech/M.E. degree do not require a valid GATE score but will be subject to the rules of the Institute in force from time to time.
- 5.3 Students with a post graduate qualification degree in Science/Humanities must have a valid GATE/NET score for the award of Institute fellowship.
- 5.4 Students with fellowship tenable at the time of admission from CSIR/UGC/NBHM or any other organization recognized by the Institute will also be permitted.
- 5.5 Students receiving assistantship from the Institute or from any other funding agencies will be required to perform academic duties assigned to them by the departments as per rules in force from time to time.
- 5.6 The continuation of the assistantship/fellowship will be subject to satisfactory performance of the duties assigned by the department and satisfactory progress in the Programme of Research.
- 5.7 Assistantship will initially be for a period of one year and it can be extended upto a maximum period of 4 years.
- 5.8 Extension and enhancement of the assistantship will be subject to satisfactory progress.
- 5.9 No financial assistance from the Institute will be available to part time students. Project staff will get funding from project as per rules but will not get any additional assistance from the Institute.

6. LEAVE RULES

- 6.1 A Ph.D. student is eligible for 30 days of leave in an Academic Year.
- 6.2 A female Ph.D. student is eligible for 3 months of maternity leave once during the entire period of her Ph.D. programme.

7. ACADEMIC REQUIREMENTS

7.1 Supervisor(s)

- (a) Every student admitted to the Ph.D. programme of the Institute must carry out his/her research work under the guidance of faculty member of the department which admits the students. This faculty member will be called the Supervisor of

the student. In the case of external registration there will also be a Local Supervisor in the parent organization.

- (b) The student may have a second supervisor from the same department or from another department. In this case each of the supervisors will be called as a Co-Supervisor. One of the Co-Supervisors will be nominated by the DPPC for the administrative responsibilities connected with the Ph.D. Programme.
- (c) The following categories of persons are permitted to be associated with the Ph.D. Programme of a student only as a Joint Supervisor but not as a Supervisor.
 - (i) Faculty members nearing superannuation with not more than 3 years of service left at the Institute.
 - (ii) Faculty members on contract for not more than 3 years.
 - (iii) Visiting faculty members.
 - (iv) Scientists from industry other than those in the category of Local Supervisor (See 7.3(a) as above).

7.2 Appointment of Supervisor(s)

- 7.2.1 The Department Post Graduate Programme Committee (DPPC) will appoint Supervisor(s) of Ph.D. students.
- 7.2.2 The Supervisor(s) should be identified and appointed at the earliest and within six months from the date of admission.
- 7.2.3 Sponsored students (external registration) shall have one Supervisor from the Department (Institute Supervisor) and one from the parent organization (Local Supervisor).

7.3 Change of Supervisor(s)

The Chairman, SENATE may permit a student to change his/her Supervisor(s) for valid reasons on recommendation of the DPPC.

7.4 Doctoral Committee (DC)

- 7.4.1 To monitor the progress of research of the students, there will be a committee called Doctoral Committee (DC) consisting of:

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|-------|---|----------|
| (i) | One faculty member other than the Supervisor(s)
to be nominated by the DPPC. | Chairman |
| (ii) | The Supervisor(s) | Member |
| (iii) | Two other faculty members of which at least one
must be from the Department. | Member |

- 7.4.2 The DC will be constituted by the DPPC.
- 7.4.3 The Chairman may convene the DC meetings as and when necessary in addition to the mandatory meetings mentioned in 7.10.
- 7.4.4 Until the DC is constituted, the DPPC will perform the duties of the DC.

7.5 Course Work

- 7.5.1 The DC will normally meet within 15 days of the last date of admission to the Ph.D. Programme. The DC will interview the student and prescribe the course of study for the student.
- 7.5.2 Students with Masters degree will have to register and pass a minimum of 24 credits and obtain a CPI of at least 6.5. Students with only a Bachelor degree will have to register and pass a minimum of 36 credits and obtain a minimum CPI of 6.5.

- 7.5.3 Course work should be completed within two semesters for regular students with an M.Tech degree.

7.6 Comprehensive Examination

- 7.6.1 To test the overall competence and academic preparation of the student in the relevant field and specific area of the research programme, a Comprehensive Examination will be held before the completion of 18 months for the students with Master's Degree and 24 months for students only with Bachelor degrees from the date of admission. All the course work must be completed before the Comprehensive Examination.
- 7.6.2 The mode of Comprehensive Examination (oral or written or both) as well as the modus operandi (common to all students in a Department) will be decided by the DPPC and will be intimated to the students.
- 7.6.3 A student failing in the Comprehensive Examination in the first attempt will be given a second Comprehensive Examination after 1 month but within 6 months from the date of the first Comprehensive Examination. If the student fails in the second attempt also he/she will be asked to leave the Ph.D. programme.

7.7 Registration for Ph.D. Programme

After the successful completion of the Course Work and Comprehensive Examination, the candidate has to submit a plan of work defining the research problem identified and course of investigation proposed to be pursued. As assessment of the current status of problem area and a justification for the work, have to be projected at this time. The student will make an oral presentation of the above proposal at a meeting of the Doctoral Committee for approval.

7.8 Progress Review

The DC will meet to review the progress of the Research Programme of the student every six months after approval given in 7.9. The DC will report the progress of the student to Dean of Academic Affairs after every such meeting through the Head of the Department.

7.9 Enrolment

- 7.9.1 Students of all categories in the Research Programme will have to enroll in person each semester on the stipulated date till the submission of their thesis.
- 7.9.2 They are required to pay the prescribed fees till the submission of their thesis within stipulated dates.

7.10 Cancellation of Registration

The Ph.D. registration of a student is liable to be cancelled for any of the following reasons:

- (a) Consistent lack of progress in research.
- (b) Violation of Discipline and Conduct Rules of the Institute (as given in the Regulations for the M.Tech Programme).
- (c) Non-submission of the thesis within the stipulated period.
- (d) Nonconformity with the regulations of the programme.
- (e) Giving false information at the time of application/admission.

7.11 Minimum Duration of the Ph.D. Programme

The minimum duration of the Ph.D. Programme will be as follows:

- (a) Full time Ph.D. students with Post Graduate degree must have been enrolled for a minimum of four semesters.
- (b) Full time Ph.D. students with Bachelor degrees must have been enrolled for a minimum of six semesters.

- (c) Part-time Ph.D. students must have been enrolled for a minimum of six semesters.

7.12 Maximum Duration of the Ph.D. Programme

The maximum duration of the Ph.D. Programme will be 6 years from the date of admission for full time students. For part-time students this period will be 7 years.

7.13 Synopsis of thesis

- 7.13.1 At least 3 months prior to the submission of the thesis, the student shall submit 10 copies of the synopsis of his/her research to the DC. The synopsis will contain an outline of the research work done by the student.
- 7.13.2 The student will make presentation of his/her thesis work before the DC. The DC will, if it approves, permit the student to submit the thesis and forward the synopsis to the Dean (Academic). The concerned Deptt may invite one external expert (India) from outside the Institute. Necessary TA/DA may be paid as per rule.

7.14 Panel of Examiners

DC of the concerned Ph.D. student shall forward the panel(s) of examiners, along with their contact details –

- (a).(i) at least three examiners from India.
- (ii) at least three examiners from outside India.
- (b). At least six examiners from India under special circumstances considering the subject matter of the thesis
- through the Head of the Deptt to the Dean, Academic Affairs for necessary action and approval of the Chairman, SENATE.

7.15 Submission of Thesis

Within three months of the acceptance of the synopsis the student shall submit 7 copies of his/her thesis to the Dean (Academic) through the Head of the respective Department.

7.16 Examiners of the Thesis

The thesis shall be referred to two examiners chosen by the Chairman, Senate from the panel of examiners recommended by the DC in the following manner:

- (a) (i) One from the approved panel of Indian examiners in order of priority.
- (ii) One from the approved panel of foreign examiners in order of priority

OR

- (b) Two from the approved panel of Indian examiners in order of priority.

7.17 Thesis Reports

- (a) The examiners are expected to send the reports on the thesis within two months from the date of receipt of the thesis.
- (b) If an examiner does not send the report within 3 months, a reminder will be sent by the Dean, Academic. If the report is not received within 5 months (from the original date of sending the thesis), Dean, Academic Affairs will refer the thesis to the next examiner from the approved respective panel(s). The appointment of the examiner who does not send the report within 6 months shall be deemed to be cancelled. This process will continue till the approved panel is exhausted.

The Dean, Academic Affairs will issue cancellation letter.

- (c) If one of the two thesis examiners does not recommend the thesis for the award of the Ph.D. degree, the Chairman, SENATE will refer the thesis to a third

examiner from the approved panel. In case, an examiner who did not send his/her report within 6 months, sends a delayed report, the Chairman, SENATE may revive the appointment of that examiner and consider his/her report as the third report, if necessary.

- (d) If an examiner suggests resubmission of the thesis, the student is allowed to resubmit the thesis after due revision within the time stipulated by the DC. The revised thesis, recommended by DC, be sent to the Dean, Academic Affairs through the Head of the Deptt for onward transmission to the examiner.
- (e) If two of the examiners do not recommend the thesis for the award, the matter may be referred to the SENATE which will take an appropriate decision.
- (f) If the two examiners recommend the award of Ph.D. degree, the Dean, Academic Affairs shall forward the reports to the Head of the respective Deptt. The DC will consider the report and recommend the conduct of oral examination.
- (g) In all other cases, not covered by the above Regulations, the matter will be referred to the SENATE for a decision.

7.18 **Oral Examination**

- (a) The following is the composition of the Oral Examination Board(OEB):

(i)	Chairman of the DC	Chairman
(ii)	One examiner of the thesis within the country, or an expert from the same panel nominated by the Chairman, SENATE from the panel of examiners approved by the DC.	Member
(iii)	Supervisor(s)	Member(s)
(iv)	A faculty member of an allied department to be nominated by the DPPC.	Member
(v)	One faculty member of the department with knowledge of the subject of the thesis	Member

However, the oral examination will be open to all interested in the field.

- (b) The OEB conducts the defense of the thesis by the candidate ensuring that he/she answers all the written queries of the thesis examiners satisfactory.
- (c) If the OEB finds the performance of the students unsatisfactory, the student will be asked to reappear for another oral examination at a later date (not earlier than a month and not later than six months from the date of the first oral examination).
- (d) If the OEB evaluates performance of the Research Scholar as unsatisfactory on the second occasion also, than the matter will be referred to the SENATE for a decision.
- (e) The OEB may also recommend revisions to be made in the final version of the thesis after taking into consideration the suggestion of the examiners who evaluated the thesis and the discussion at the oral examination. The Chairman of the OEB shall forward the report to the Dean(Academic) certifying that the recommended revisions by the OEB, if any, have been incorporated in all copies of the thesis.

7.19 **Award of Ph.D. Degree**

If the performance of the research student in the Oral Examination is satisfactory, he/she will be awarded Ph.D. degree on the recommendation of the SENATE and with the approval of the Board of Governors of the Institute.

Form I – SPONSORSHIP LETTER

(this should be typed on the letter head of the sponsoring organization)

Reference No.

Date :

To

The Director,
National Institute of Technology,
Silchar.

Sub: Sponsoring an Employee for Ph.D. Programme

Dear Sir,

We hereby sponsor the candidate of Mr./Ms.....
..... who is an employee in our organization, for joining Ph.D.
Programme in at your Institute as a full-time student.

We shall relieve him/her of his/her duties in the organization during the first three
years of the Ph.D. Programme.

**Signature and Seal of the
Sponsoring Authority**

Form II – No Objection Certificate for Part-Time Students

(This should be typed on the letter head of the sponsoring organization)

Reference No.

Date :

To

The Director,
National Institute of Technology,
Silchar.

Sub: No objection Certificate

Dear Sir,

We have no objection if Mr./Mrs/Ms.
.....,
an employee in our organization, is admitted to the Ph.D. Programme in
..... at your Institute as a part-time student.

We shall give him/her leave of absence to attend/research work at NIT Silchar during the first two years of the Ph.D. programme.

**Signature and Seal of the
Sponsoring Authority**

Form III – Sponsorship Certificate of External Registration

(This should be typed on the letter head of the sponsoring organization)

Reference No.

Date :

1. Name of the sponsoring organization:

Address

2. Designation of the applicant:

3. Present status of the applicant:

4. Division/Section where research work is proposed to be done:

5. Name of the Local Supervisor:

(Bio-data of the Local Supervisor to be enclosed giving details of designation, qualification, research experience etc.)

6. Details of relevant facilities which will be made available to the candidate:

7. Statement of Local Supervisor:

If Mr./Mrs/Ms. is admitted to the Ph.D. programme at National Institute of Technology, Silchar, I agree to supervise his/her research programme jointly with the Supervisor from NIT, Silchar.

Signature of Local Supervisor

If Mr./Mrs/Ms. is admitted to the Ph.D. Programme, we agree to relieve him/her to enable him/her to be in residence at NIT, Silchar during the first semester of his/her Ph.D. Programme.

Mr./Mrs/Ms..... will be permitted to carry out research leading to the Ph.D. degree at our organization under the guidance of Dr. The necessary facilities will be provided for the purpose.

**Signature and Seal of the
Sponsoring Authority**