

First Amendment in Rules & Regulation approved by 4th

Senate Dec. 2016 and made effective from Monsoon 2017

Preamble

National Institute of Technology, Sikkim since 2010, has been in the forefront of providing technical education and supporting high end research programme. It is one among the ten new NITs established by the Ministry of Human Resources Development, Govt. of India. From an Institution developing specialized manpower in the service sector of Mechanical Engineering, Electrical Engineering, Civil Engineering, Computer Science and Engineering, Electronics and Communication Engineering, National Institute of Technology, Sikkim has emerged as a full-fledged technical higher education institution. Even other discipline such as advanced basic science disciplines, Humanities and Social Sciences, are also being probed from education and research prospect.

National Institute of Technology, Sikkim has put great efforts in maximizing quality education through improved research facilities, inducting increased number of research scholars gradually, enabling environment and rules and regulations to create a research culture for enhanced R&D, high end research in frontier areas of Science and Technology.

Realising that research has no rigid boundaries and is all-encompassing, National Institute of Technology, Sikkim has resolved to encourage cross-migration of research from science to engineering to management and *vice versa*.

The rules and regulations provided in the following pages are documentation of such initiatives, resolutions and progressive thinking.

1. Definitions

In these regulations, unless there is anything repugnant in the subject or context

- a. “**Regulations**” shall mean, regulations framed under the Society Rules of National Institute of Technology, Sikkim.
- b. “**Institute**” shall mean the National Institute of Technology, Sikkim.
- c. “**Academic office**” (AC) shall mean the Academic office of the Institute.
- d. “**Examination Board**” shall mean the Examination Board of the Institute.
- e. “**Director**” shall mean the Director of the Institute.
- f. “**Chairman**” shall mean the Chairman of the PG Committee.
- g. “**Dean (R&D)**” shall mean the Dean (Research and Consultancy) of the Institute.
- h. “**Registrar**” shall mean the Registrar of the Institute.
- i. “**HOD**” shall mean the Head of the Department or Centre (in the Institute) under whose jurisdiction the candidate is working for the Degree.
- j. “**IPG Committee**” shall mean the committee to scrutinize the application for PhD registration, Progress Monitoring, Award etc. of a candidate.
- k. “**DAC**” shall mean the Academic committee of particular department.

2. Registration

- 2.1. After admission the list of admitted students will be sent to the concerned departments from the academic office.
- 2.2. A pre-registration period must not exceed a period of four semester or two years whichever is lesser.
- 2.2. DAC of which HOD is the ex-officio member may assign any mentor supervisor with consent of the faculties for each candidate with approval of the Senate Chairman.
- 2.3. Each candidate has to complete course work of minimum one semester within 2 years or four semester. Credit requirement for the course works for various academic qualification is as follows:
 - a. **A compulsory Research Methodology course of 4 credits** is applicable for all PhD students.
 - b. **Students having Bachelor degree in Engineering/Technology**, the minimum credit shall be 16.
 - c. **Students having Master degree in Basic Sciences/Humanities /Engineering/Technology**, the minimum credit shall be 8.
- 2.4. To qualify in any subject minimum GPA required is 6 out of 10 (D grade) and minimum total CGPA required for the whole course work is 6.5 out of 10.
 - If a student obtained less than D grade in any subject, he/she may be allowed to appear in supplementary examination. If he/she failed again in the supplementary examination, he/she has to repeat the subject.
 - Grade card may be issued from the academic office as and when appropriate.
 - If the students complete their course work from other reputed institute with prior permission from the concerned department, grade conversion will be done subsequently and grade card will be issued from NIT Sikkim on the basis of conversion made. The mode of conversion will be decided by academic office.
- 2.5. After completion of course work, each student has to apply for comprehensive examination, allowing him/her to prepare comprehensive report in specified format through his/her mentor supervisor and HOD.
 - At the end of each semester a tentative date for comprehensive / state of art/ pre submission will be notified by academic office with consultation with HODs.

- 2.6. If any candidate fails to clear comprehensive examination then he/she has to appear again in the period of two to six months with effect from the date of last comprehensive examination. If he/she fails consecutive two times then his/her admission may be cancelled. However, the candidate is allowed to make his presentation of the case before DAC. DAC, if convinced, may consider to forward the case to the senate.
- 2.7. Examination board for comprehensive examination may be formed with approval from the Senate Chairman by the HOD of the concerned departments having following members-
- a. Head of the department
 - b. One senior faculty member from the department
 - c. One senior faculty from the other department
 - d. Chairman, IPG committee /FI, IPG committee/Dean academic
 - e. Mentor Supervisor (s)

The comprehensive examination may be open to all the Faculty members, Research scholars and PG students for incorporating the suggestions.

- 2.8. After successful completion of comprehensive examination, a notification will be made from the Academic Office. The successful students have to submit the registration form to academic office along with registration fee for their PhD registration. Accordingly filled Registration form will be sent to the concerned department. The registration form shall be accompanied by the following documents:
- a. Affirmation of consent
 - b. Synopsis of theses work indicating broad area of research.
 - c. Justification of having two supervisor(s) from same department.
- The supervisor (s) of a PhD candidate may be assigned by the DSC chaired by the HOD after admission in consultation with the student considering his/her broad area of research. At any stage, the decision of DSC is final.
- One of the supervisors must be from the concerned department, where the student wants to register.
- In case of any external supervisor, total number of supervisor normally should not be more than two and final decision on requirement of external supervisor will be taken by DAC.
- If the supervisor is not available due to retirement/foreign trip/resigned then a departmental coordinator/co-supervisor may be assigned by the concerned HOD in consultation with the DAC for academic and administration work purpose.

- 2.9. Registration of a candidate will be valid for a maximum period of **five** years with effect from enrolment/admission. The registration period may be extended for one year subject to the approval from the Senate. Maximum period will be of **seven** years with effect from the date of enrolment/admission.

For candidates under Institute full-time fellowship, fellowship will be available for maximum period of four years with effect from the date of admission. For candidates under any other schemes/projects, fellowship will be available according to the norms of the schemes/projects.

3. Academic Leave and Contingency Rules:

- 3.1 Academic Leave for attending conference, workshop, short term course etc.,
- For Students under FT-01, the approval from Dean (Academic Affairs)
 - For Students under FT-02, the approval from Dean (Research & Consultancy), However, in both case the application should be forwarded by Supervisor (s) and HOD of respective department
- 3.2 For Station leaving with or without leaves, Students must have to submit a station leave form forwarded by the supervisor(s) to the HOD of the respective departments.
- 3.3. **Weekly academic load for full time PhD Students:** In line with MHRD norms, a minimum of 8 hours academic load per week for full-time PhD students are compulsory. This will include departmental tutorial, laboratory classes, etc.
- 3.4 **Contingency grants for full time PhD Students;**
- 3.4.1 In line with MHRD norms, Rs. 30000/- annual contingency grant for full-time PhD students (**FT-01**) is applicable. However. The reimbursement of expenses may be done for the following purposes:
- Attending workshops/ conferences/Short term courses etc. in India.
 - Purchase of printer/cartridges/storage devices/laboratory equipment's /chemicals etc.
 - Purchase of books/stationeries etc.
- 3.4.2 For PhD students under full-time (FT-02) category, the expenditure from contingency fund shall be guided by the rules of the respective funding agencies.

4. Academic Advisory Activities

- 4.1. Adding of subjects and withdrawing subjects from Course work:
- Adding of courses even after PhD registration is permitted only if the student's request is endorsed by the supervisor as an audit course with justification and is also endorsed by the DAC.

- Withdrawing any subject(s) from course work is not allowed at any circumstances.

4.2. Change of Registration from Full-Time to part-time Ph.D. Programme

4.2.1. A student admitted to a fulltime Ph.D. programme may be permitted to change to a part-time Ph.D. programme. A student requesting such a conversion must:

- a. have completed the coursework, passed the comprehensive examination, given the "State of Art" seminar which is adjudged as satisfactory, and completed the residence requirements,
- b. get the request endorsed by the supervisor(s) and the DAC,
- c. produce a "No Objection" Certificate from the Head of the Institution/Organization, where he/she proposes to join.

4.2.2. Such conversion, if approved by the PG Committee, will be subject to the following conditions:

- a. The student must submit his/her thesis within five years (extendable upto maximum seven years subject to approval from the senate) counted from the date of his/her enrolment/admission [See 2.9].
- b. The status of the student will be reviewed by the supervisor(s) and the PG Committee at least once in every semester after the conversion, and his/her continuation on off campus status will be subject to his/her making satisfactory progress towards completing the Ph.D. thesis.

4.3 Formation of Doctorial Scrutiny Committee;

For each PhD candidate a DSC (Doctorial Scrutiny Committee) may be formed by the supervisor and approved by the Dean (AA). The members proposed are as follows:

- a. Head of the Department, Chairman
- b. Dean in-charge (Academic Affairs), Member
- c. One faculty member from the department in relevant field, Member
- d. One faculty member from allied department in relevant field, Member
- e. Co- Supervisor (if any), member
- f. Supervisor, Convener
- g. External member, if required

5. State of Art

A student enrolled in the Ph.D. program is formally admitted to the candidacy for the Ph.D. degree after he/she has completed the course requirements, with at least the minimum required CGPA, and has passed the comprehensive examination as per rule laid beforehand.

Every Ph.D. student admitted to the candidacy for the Ph.D. degree is required to give a general seminar in the Department covering the *State of Art* of the area of research. A student may apply for the state of art examination after completion of minimum of six months with effect from the date of Ph.D. registration. The state of art examination must be accompanied by an application, duly forwarded by the supervisor(s) and HOD of the concerned department.

5.1. Requisites for state of art examination

- 5.1.1. Earlier pre-requisites have to be satisfied up to Ph.D. registration.
 - 5.2.2. Minimum one international conference paper presentation where proceeding is published by reputed publishers (IOP/AIP/IEEE/Elsevier/ACM or any other equivalent international publishers).
 - 5.2.3. A state of art report with a list of publication and detail literature survey as per the specified format indicating the problem definition and working plan have to be submitted to the academic office prior to the examination of the State-of-the-art conducted.
- Committee as formed in clause no. 2.7 will be responsible for evaluation and if a candidate fails to clear state of art examination, then he/she has to appear again within a period of three to six months with effect from the date of previous state-of-art examination. If he fails consecutive two times, then his/her admission may be cancelled. However, the candidate is allowed to make his presentation of this case before DAC. DAC, if convinced, may consider to forward the case to the Senate.
 - After successful completion of state of art, approval for submission may be taken from the Senate. Usually, there will be no provision to change of supervisor as well as research topic after the state of art evaluation.

6. Submission and Evaluation of the thesis

After successful completion of state of art and publication of results, a candidate may apply for pre-submission seminar through Supervisor(s) duly forwarded by the HOD to academic office and following information must be enclosed.

6.1. Requisites for Pre-submission Seminar

- 6.1.1. The candidate must have at least one accepted SCI/SCIE/SSCI journal paper/Patent after first examination published in Gazette of India.

Communicated papers will not be considered under any circumstances.

6.1.2. Earlier pre-requisites have to be satisfied.

6.1.3. A draft of the thesis must be ready at the time of pre-submission seminar and one copy should be made available to DAC before the examination conducted. The PhD theses must be prepared as mentioned in appendix-IV [Page No. 27].

6.2. Pre-submission Seminar

6.2.1 The academic office send the application to Dean (R &C) to evaluate the research output of the candidate. If it is satisfied, an instruction to the supervisor will be send for conducting pre-submission seminar.

6.2.2 An examination board for pre-submission seminar may be formed with the approval from the senate chairman by the supervisor as follows: a. Head of the Department

b. One senior faculty member from the department

c. One senior faculty from the other department

d. Chairman, IPG committee /FI, IPG committee/Dean academic

e. Supervisor(s)

6.2.3. The candidate will be required to submit draft synopsis of the thesis (**5 copies**) and give a pre- submission seminar on a date that shall be notified adequately in advance by the Supervisor(s) so as to enable interested faculty members and students to attend the same.

6.2.4 The examination board shall assess the work of the candidate through the pre-submission seminar. The candidate will prepare the final synopsis of the thesis only if the Committee is satisfied about the quality of the research work.

6.2.5 The Chairperson, IPG Committee shall forward a satisfactory presubmission seminar report to the Academic Office, along with the proof of publication/acceptance of research papers.

➤ If the pre-submission examination board is not satisfied about the presubmission seminar, the candidate will be informed to give pre-submission seminar again within one year of the date of previous pre-submission seminar. If he/she fails consecutive two times then his/her registration may be cancelled. However, the candidate is allowed to make his presentation of the case before DAC. DAC, if convinced, may consider to forward the case to the senate.

6.3. Submission of Synopsis and List of Examiners

6.3.1. Candidate submits a soft copy (in PDF version) and two hard copies of the synopsis of the thesis, within seven days from the date of successful

completion of pre-submission seminar. The synopsis should be typed on A4 size paper using one and half line spacing. The length of the synopsis should be between 10-12 pages including tables and figures and references.

➤ *The Supervisor(s) should ensure that the literary presentation of the synopsis is of acceptable standard and the technical contents of the synopsis clearly spell out the original research contribution that will be detailed in the Ph.D. thesis later.*

6.3.2. The Supervisor(s) through the Head of the Department shall submit a list of Examiners to the Academic office, within seven days from the date of successful completion of pre-submission seminar. The list of tentative examiners shall consist of name, designation, complete postal address, telephone numbers and e-mail address of four foreign and six Indian examiners from Universities / Industries / Research Institutes having formal PhD degree.

6.4. Submission of the Thesis

6.4.1. Candidate through Supervisor(s) should submit to the Academic Section a soft copy (in PDF) and four soft bound printed copies of the thesis written in the prescribed format, within 60 days from the date of successful completion of pre-submission seminar. An extension of one month may be allowed, under special circumstances, if DAC is convinced and the candidate applies.

6.4.2. In case the synopsis and thesis are not submitted in the specified period, the candidate will be asked to present another pre-submission seminar.

6.4.3. The following are to be submitted along with the thesis:

- a. A NOC should be taken from all the laboratories, department, library and other divisions could be submitted in original along with the thesis.
- b. Certificate from the Supervisor(s) confirming that the thesis contains *bona fide* work carried out by the candidate and that the thesis does not contain any work, which has been previously submitted for the award of any degree at any other Institute.
- c. A certificate from the candidate countersigned by the Supervisor(s) stating that the thesis does not contain any classified information, or the requisite permission has been obtained from the concerned authority for using such information.
- d. Copyright form transferring all copyrights to the Institute.
- e. Certificate of the Academic office that requisite courses, if any, have been cleared by the candidate.

- f. A legal plagiarism check report (such as Turnil etc.)
- g. Cash receipt of Examination / Evaluation fee.

The items in Clause a to c must form a part of the thesis, and items in Clause d to g must be submitted separately.

6.5. Selection of Examiners from the Panel of Examiners

- From the list of examiners submitted by the supervisor, the academic office will approve a panel of examiners in order of preference, separately for foreign and Indian examiners.
- An academic committee comprising of the following members shall select the panel of examiners:
 - a. Dean Academic - Chairman
 - b. Dean (Research & Consultancy) - Member
 - c. HOD of the concerned department - Member
 - d. Chairman, IPG Committee - Member
 - e. Registrar -Secretary
- The recommendation of the committee shall be reported to the IPGC for further action.

6.6. Evaluation of the thesis

- 6.6.1. The thesis would be sent for evaluation to four examiners from the approved panel, out of which one would be from foreign University/Industry/Research Institute, two would be from other Indian University/Industry/Research and one would be the supervisor.
- 6.6.2. Permission to conduct the Ph.D. *viva voce* examination would be granted on receipt of favorable reports from any three appointed examiners within 45 days from the date of dispatch of the thesis, subject to the approval of the Dean Academic.
- 6.6.3 In case less number of favorable report is received within the stipulated time, the thesis shall be sent to another examiner from the approved panel. If reports from both the newly appointed examiners are not received within 30 days from the dispatch of the thesis, the matter will be referred to the Committee (as mentioned in 5.5) for appropriate action.
- 6.6.4. If any revision of the thesis is suggested by the examiners, the candidate shall be required to submit the revised thesis within a period of three months from the date of intimation to the candidate. The Supervisor(s) must give a compliance certificate to the effect that the required revisions have been incorporated.

6.6.5. If three of the reports are unfavorable, the thesis submitted by the candidate shall be required for reworking. The decision will be communicated to the candidate and the Supervisor(s) by the Dean Academic. The thesis can be submitted only after six months period of time showing sufficient reworking.

6.6.6. A thesis, which has been disapproved, may be permitted to be revised and resubmitted. In such cases all processes for evaluation of thesis shall be followed, and the external examiners shall be appointed by the Examination Board afresh.

6.6.7. Resubmission of thesis shall be permitted twice only during the whole programme or within the stipulated period of time.

7. Ph. D. Defence Seminar and *Viva Voce* Examination

7.1. After the thesis has been approved as detailed in Rule 5, the candidate shall be required to give a Ph.D defence seminar on a pre-specified date notified by the Supervisor(s). The Ph.D defence seminar will be followed by a *viva voce* examination conducted by the Examination Committee (mentioned in 5.2.2) comprising of the Dean (R & C), one of the External Examiners and supervisor(s).

7.2. Presence of at least three members including one External Examiner from among the approved panel of examiners (mentioned in 5.2.2) is essential during defence seminar and *viva voce*.

7.3. The external examiner could participate in the examination by means of video conferencing in case he/she is unable to be physically present for whatever reason(s).

7.4. In extraordinary situation, which will be recommended by IPG committee and permitted by the Chairman, Senate, the candidate can defend his/her thesis through video conferencing.

7.5. The Ph.D. defence seminar and *viva voce* examination should be with reference to the thesis and concerned topics only.

7.6. The Ph.D. defence seminar and *viva voce* examination should be conducted in public. However, the attendees other than members of the examination committee will be permitted as observers only.

7.7. The Supervisor(s) and external examiner shall send a report of the recommendations of the examination committee of the Ph. D. defence seminar and *viva voce* examination to the academic office indicating the recommendation of award.

7.8. After successful completion of Ph.D. defence seminar and *viva voce*, the candidate shall submit to the academic office, two hardbound copies and one soft (PDF

version) copy of the thesis for official record. The softcopy is required to submit to 'Shodh Ganga' project of undertaken by IIT Kharagpur.

8. Award of Ph. D. Degree

- 8.1. Based on the report of the Examination Committee, the Examination Board after being fully satisfied that the candidate is worthy of award of Degree of Ph. D. of the Institute, will recommend the candidate's name to be published for award of Ph. D. degree along with the title of the candidate's thesis and name of the Supervisor(s) and Department.
- 8.2. A provisional certificate shall be issued from Academic office after the results are declared with approval from the competent authority.
- 8.3. An appropriate Degree under the seal of the Institute with the title of thesis shall be awarded to the successful candidate in the ensuing annual convocation.

9. Miscellaneous

- 9.1 Any doubt or dispute arising about the interpretation of the regulations shall be referred to the **Chairman, Senate** whose decision shall be final.
- 9.2 If a candidate is likely to submit his/her thesis within two months from the due date of payment of tuition fees, he/she needs not to pay the fees for the next semester/year. However, this period will not be extended in any case. Also, prior approval in this matter should be obtained from the **Chairman, Senate**.
- 9.3 Full-time scholars may apply for conversion to part-time category after one year with effect from date of enrolment subject to completion of PhD course work. Fellowship (if any) will be discontinued with effect from the date of conversion.
- 9.4 Full-time PhD students may be permitted only 30 days of casual leave per year starting from January to December. The unspent casual leave cannot be carried forward to next year. *(There is no such provision of medical leave in MHRD notification no: 17-2/2014-TS-I, Dt: 18.02.2015)*

The paternity/maternity leave is admissible as per Govt. of India rules. Absence without sanctioned leave will entail loss of financial assistantship for the period of absence and may result in the termination of registration on the recommendation of DSC. No relaxation in the maximum period for thesis submission is permissible for such reason.
- 9.5 Those candidates who have joined NIT Sikkim as Project Fellow / Research Fellow under any research/project scheme shall be treated as a Full Time Research Scholars on the following terms and conditions:

- a. Projects Fellow / Research Fellow / any other similar nomenclature should be a Regular Scholar of a Project at NIT Sikkim for a minimum period of one year.
- b. The fellow should give an undertaking in writing that he / she would work for a minimum of one year in the Project.
- c. In the event of the Research Fellow leaving NIT Sikkim due to employment or any other reasons, NIT Sikkim Ph. D. Rules Clause 3.2 will apply.

10. Registration of Foreign Nationals

10.1 Foreign Nationals selected under various scholarship schemes of the Ministry, Government of India are considered for admission on the recommendation / sponsorship of the respective Ministry provided they fulfill the academic and other requirements. Such candidates should route their applications through the Ministry concerned.

10.2 Self-financing foreign students may be considered for admission provided they fulfill the requirement of qualifying examination. Offers of admission to them will be issued with intimation to the Ministry of Human Resource Development, Government of India. It will be the responsibility of the prospective foreign national student to ensure that he/she has the proper visa and other related documents.

Notwithstanding all that has been stated above, the Senate, has the right to modify any of the above rules and regulations from time to time.
