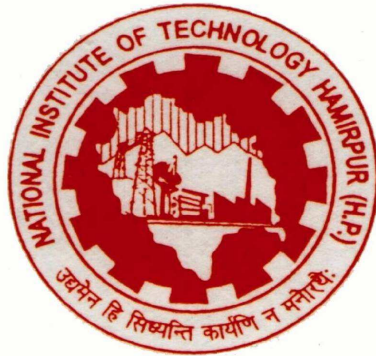# RULES AND REGULATIONS

FOR

POSTGRADUATE PROGRAMMES

(M.Tech & Ph.D)

NATIONAL INSTITUTE OF TECHNOLOGY

HAMIRPUR -177 005 (H.P.)

NATIONAL INSTITUTE OF TECHNOLOGY

HAMIRPUR (HP)

POSTGRADUATE MANUAL

CONTENTS

1. INTRODUCTION

The objectives of the postgraduate programmes at the National Institute of Technology, Hamirpur (HP) are:

- To ensure high standard of performance in teaching & research
- To develop the scientific and engineering manpower of the highest quality to cater to the needs of the industry
- To be a role model of educational institutions in the country
- To provide a broad grasp of the fundamental principles of the sciences and scientific and technological methods through its curriculum
- To provide a deep understanding of the area of specialization
- To provide an innovative ability to solve new problems
- To provide a capacity to learn continually and interact with multidisciplinary groups
- To develop the students with a capability for:
  - Free and objective enquiry
  - Courage and integrity
  - Awareness and sensitivity to the needs and aspirations of society.

With these objectives in mind, the postgraduate programmes are designed to include courses of study, seminars and project/thesis through which a student may develop his/her concepts and intellectual skills. The procedures and requirements stated in this manual embody the philosophy of the postgraduate education and ensure a high standard of performance at the Institute. Within this general framework, subject to the approval of the *Senate Post-Graduate Committee* (SPGC)/Senate, the various departments may impose such additional requirements as will serve their particular academic goals. The Departmental Post Graduate Committee (DPGC) shall ensure that all the Rules and Procedures given in this manual are adhered to and implemented without any change. While considering an issue if the manual does not specifically mention something, the same shall be forwarded to SPGC for its consideration. The set of regulations, on approval by the senate, shall supersede all the corresponding earlier set of regulations of the institution, with all the amendments thereto, and shall be binding on all parties concerned including students undergoing PG programmes, Faculty, Staff, Departments and Institute Authorities. In order to guarantee fairness and justice to all the parties concerned, in view of the periodic evolutionary refinements, any specific issues or matters of concern shall be addressed separately, by the appropriate authorities, as and when found necessary. The effect of year to year (periodic) refinements in the Academic Regulations & Curriculum, on the students admitted in earlier years shall be dealt with appropriately and carefully, so as to ensure that those students are not subjected to any unfair situation whatsoever, although they are required to conform to these revised set of Regulations & Curriculum, without any undue favour or considerations. The senate may consider any issue or matters of concern relating to any or all the Academic Activities of the Institute, for appropriate action, irrespective of whether a reference is made (or the nature and extend of any reference if so present) to the set of regulations or otherwise. This manual sets out the procedure and requirements of the M.Tech / Ph.D programmes of study that fall under the jurisdiction of the Senate, NIT Hamirpur (H.P.). Further, any legal dispute arising from this set of Regulations shall be limited to the legal jurisdiction determined by the location of the Institute and not that of any other parties.

1.1 Postgraduate Programmes

The Institute shall offer the following postgraduate programmes or as decided by the Institute with approval from appropriate bodies such as BOG/MHRD/AICTE from time to time.

CIVIL ENGINEERING DEPARTMENT

a. Water Resources Engineering (4 Semesters)
b. Geotechnical Engineering and Under Ground Structures (4 Semesters)

ELECTRICAL ENGINEERING DEPARTFMENT

a. Power System (4 Semesters)
b. Signal Processing and Control (4 Semesters)

MECHANICAL ENGINEERING DEPARTMENT

a. Thermal Engineering (Computational Fluid Dynamics & Heat Transfer) (4 Semesters)
b. Computer Aided Design and Manufacturing (4 Semesters)

ELECTRONICS & COMMUNICATION ENGINNERING DEPARTMENT

a. VLSI Design, Automation & Techniques (4 Semesters)

COMPUTER SCIENCE & ENGINEERING

a. Computer Science and Engineering (4 Semesters)

and any other additional programmes approved by the Senate from time to time.

The institute offers programmes leading to the Doctor of Philosophy (Ph.D) degree in various departments of the institute i.e. Applied Sciences and Humanities, Civil Engineering, Computer Science and Engineering, Electrical Engineering, Electronics & Communication Engineering, Mechanical Engineering under the following categories:

a. Full Time Institute Scholars
b. Full Time Sponsored Scholars
c. Part-Time Institute Scholars
d. Part-Time Sponsored Scholars
e. Off Campus Scholars

The Senate Post-Graduate Committee (SPGC), established according to the bylaws of the Senate, operates through the Departmental Post-Graduate Committees (DPGCs) to administer all aspects of the programmes. The constitution, jurisdiction and functions of the SPGC and the DPGC are given in Annexure I.

1.2   Senate Post Graduate Committee

The Senate Postgraduate Committee (SPGC) shall consist of one representative from each of the academic departments/interdisciplinary programmes/Centres who must be the Convener of DPGC, Dean academics and six additional members of whom one shall be the outgoing Chairman (if not otherwise a member), Senate Under Graduate Committee Chairman (SUGC) and two students, one each from Ph.D. and M.Tech programmes and nominated for the purpose among the Class Seniors on the basis of merit. The student members shall be nominated by the Dean of Academic affairs among the class seniors. In addition to it Senate shall nominate two members from the senate. The Senate Postgraduate Committee shall have jurisdiction in the following matters concerning the postgraduate programme of the Institute:

- ➢ the recommendation of new courses,
- ➢ formal approval of the new course,
- ➢ desirable modification of courses already approved,
- ➢ the credit value of courses,
- ➢ the admission of qualified students to candidacy for degrees,
- ➢ formal approval of advance standing to the students admitted if required,
- ➢ the rules governing the form of presentation and disposal of theses/dissertation,
- ➢ the conduct of oral and written examinations,
- ➢ evaluation of academic performance,
- ➢ granting of degrees and diplomas and
- ➢ in such other related matters as may be referred to it by the Senate.

The functions of the Committee shall consist primarily of general policy determination, coordination and review, but the Senate shall retain the power of final review. In the discharge of its responsibilities the committee shall make full use of the appraisals and recommendations of the various academic departments concerned. This committee shall be assisted by the Departmental Postgraduate Committees (DPGC).

Each department/interdisciplinary programme (approved by the Senate) shall have a Departmental Postgraduate Committee (DPGC) consisting of a Convener, the Head of the Department, Convenor DUGC and preferably four to six faculty members to be chosen from the Department, minimum of one faculty member from other department/interdisciplinary programme and two students, (one from the Ph. D and other from the M. Tech programme). If M.Tech. programme does not exist then both shall be from the Ph.D programme. The student members shall be nominated for a period of one year. The DPGC Convener shall be nominated by the Head of Department in consultation with the faculty of the department for a term of two years. The duration of the committee shall be two years. The fifty percent of the initial members of the committee shall be replaced after one year. The student members shall not participate when the cases of academic evaluation of individual students are being considered, although the student's opinion might be sought prior to taking any decision.

The DPGC is responsible for the following

a.   Supervision and conduct of lecture, tutorial and practical classes.

b. Supervision and conduct of class tests, quizzes, practical tests, end semester examination, thesis work, seminar and project presentation and its quality.
c. Monitoring of quality of instructions to students.
d. Proposing and implementing new courses and program.
e. Attending to the problems of students and advising them in academic matters.

The DPGC is expected to have its meeting regularly and to keep record of its decisions.

1.3   Office of the Dean Academics

The office of the Dean Academics (DA), called the Academic Section, is responsible for the implementation of the decisions taken on academic matters by the Senate and the SPGC. It (i) receives, processes and maintains all records relating to the undergraduate and Post Graduate programmes including curricula, courses offered, academic calendar, registration, leave, examinations, grades and award of degrees and prizes, (ii) disseminates information pertaining to all academic matters, (iii) issues necessary memoranda/orders, (iv) acts as a channel of communication between the students, instructors, departments/ interdisciplinary programmes and SPGC. Academic section assists the SPGC and its Sub Committees in their functioning.

2. Admission

2.1 Academic Session

The academic session of the PG Programmes is divided into two semesters (odd and even). The odd semester will normally commence around fourth week of July every year, and the even semester around the first week of January every year. Departments may choose to admit students in both the semesters for which the reasons should be communicated to the Senate.

2.2 Admission Calendar

a. The admissions to the M.Tech and Ph.D programmes may be made in either or both of the two regular semesters. The Head of the Department in consultation with DPGC concerned may take the decision in this regard.
b. Admissions to the M.Tech and Ph.D programmes are normally made in June/July for the first semester and in December for the second semester. The Dean Academic will notify the academic calendar for each semester.

2.3   Eligibility for Admission

a. The eligibility conditions given below are the absolute minimum. Departments may prescribe any requirements over and above these, subject to the approval of the SPGC.
b. The "specified minimum" marks/CGPI (Cumulative Grade Point Index), referred to in subsequent sections, implies a minimum of 60 % (6.75 on 10 point scale) for M.Tech and Ph.D.

c. In each programme seats are reserved for the Scheduled Castes / Scheduled Tribes / OBC / Physically Handicapped candidates as prescribed by Government of India / MHRD from time to time.

2.3.1 (a) M.Tech (Full Time)

The applicant must have a Bachelor's degree in Engineering/AMIE in appropriate discipline or a Master's degree in appropriate discipline with CGPI of 6.75 on 10-point scale or equivalent or 60% marks in aggregate wherever marks are awarded.

(b) M.Tech (Slow Pace, Only for Institute employees)

In case of Slow Pace M.Tech Programme,

i) The applicant must have a Bachelor's degree in Engineering/AMIE in appropriate discipline or a Master's degree in appropriate discipline with CGPI of 6.75 on 10-point scale or equivalent or 60% marks in aggregate wherever marks are awarded.

ii) At least one year regular service in the institute for working employees of NIT Hamirpur.

iii) Candidate working under various sponsored projects in NIT Hamirpur.

Clause (i) and (ii) is applicable to working regular employees of NIT Hamirpur. Clause (i) and (iii) is for employees working under various sponsored projects in NIT Hamirpur.

The department shall be responsible for deciding the equivalency and relevancy of discipline for a candidate seeking admission in a particular M.Tech Programme.

2.3.2 Ph.D in Engineering

The applicant must have a Master's degree in Engineering/Technology with marks/CGPI not below 60 % or 6.75 on a 10 point scale. Applicant with a Bachelors degree in Engineering or Masters Degree in Applied Science or any appropriate discipline with a minimum of 75% marks / 8.0 CGPI with sufficient experience and publications shall only be considered

2.3.3 Ph.D in Humanities & Social Sciences

The applicant must have the master degree with marks/CGPI not below 60% or 6.75 on a 10 point scale. Applicants with a Bachelors degree in Engineering with a minimum of 75% marks / 8.0 CGPI, shall only be considered.

2.3.4 Ph.D in Applied Sciences

The applicant must have a Master's Degree in the relevant Science subject with marks/CGPI not below 60% or 6.75 on a 10 point scale. Applicant with Bachelor's Degree in Engineering or in an allied field with a minimum of 75% marks/8.0 CGPI with sufficient experience and publications shall only be considered.

2.4 Admission Procedure

The applicants shall apply for admission on the prescribed forms available from Dean Academic office/ website of the institute. The duly completed application must be sent directly to the Head of the concerned department/ Programme.

1 All admissions shall be made only after approval of the Chairman, Senate on the recommendations of the duly constituted Departmental Selection Committees (DSC) and Chairman SPGC. The DSC shall consist of at least four faculty members, at least one of whom shall be from another department. The constitution of the selection committee will be proposed by the DPGC and approved by Chairman, SPGC.
2 Departments shall constitute Selection Committees for one year starting from first of October every year for selection of the candidates, belonging to different categories, viz., Sponsored, Regular, QIP, etc.
3 Admission to the M.Tech. Programme may be made directly based on the GATE scores of the candidates and performance in the qualifying examination, and in addition, the candidates may also be called for written tests and/or interviews if the department so desires. The selection criteria shall be communicated to Dean Academics depending upon the response of the candidates.
4 Admission to the M.Tech. / Ph.D. / Slow pace M.Tech. Programmes will be based on written test and/or interview/presentation of the candidates short listed by the DSC.
5 The admission of Scheduled Castes/Scheduled Tribes candidates will be decided without comparing them with the general category candidates.
6 The selected candidate, who has completed all the examinations including project/thesis examination and the viva voce before the date of registration but is unable to produce the certificate in proof of having passed and secured the minimum specified qualifying marks, may be considered for provisional admission. However, if admitted provisionally, they will be required to produce the evidence of their having passed the qualifying degree examination by the last date of registration, failing which the admission may be cancelled.
7 The provisions in para 6 above shall not be applicable in the case of M.Tech. / B.Tech. students of this institute, who have been provisionally selected for admission to a Ph.D. programme. These students will be admitted to the Ph.D. programme subject to the condition that they must have successfully completed all the prescribed requirements including acceptance of their Thesis/Project in a particular semester by the last registration date as specified in the academic calendar.
8 On approval by the Chairman, Senate, the Head of the Department will issue the admission letters to the candidates, who will be required to accept the offer of admission by depositing the prescribed fee before the specified date.
9 In case a candidate does not accept the offer by paying the prescribed fee by the specified date, the offer of admission may stand withdrawn, and the admission may be offered to the candidates in the waiting list, if any, in order of merit.
10 The offer of admission may also stand withdrawn if the candidate who has accepted the offer fails to register by the date for last registration.
11 Admission in an M.Tech. Programme shall be made only if there are at least 4(Four) candidates. In case of slow pace M.Tech. Programme, the total number of candidates shall not be more than 2 (Two) in a programme.

2.5 Admission of candidates Under Quality Improvement Programme (QIP).

The procedure and requirements for admission of QIP candidates will be as per the prescribed existing procedure. These candidates will have to satisfy the prescribed minimum marks and qualification as laid down in section 2.3.

2.6. Admission of Indian Nationals Residing Abroad (INRA) and Foreign Nationals

1   INRA candidates must have been residing abroad continuously for at least one year at the time of applying for admission. Their applications may be processed by the DSC as and when they are received or according to any schedule convenient to the department. The applications should be scrutinized to make sure that, both in terms of qualifications and attainment; they are comparable with the candidates admitted in the general category.
2   The applications of foreign nationals, who are sponsored by the Indian Council of Cultural Relations (ICCR)/MHRD will be scrutinized by the department concerned to assess their suitability for admission to the programme. The Department's Selection Committee recommendation shall be sent to the Chairman, Senate through the Chairman, SPGC.
3   The applications of non-sponsored foreign national candidates will also be considered for admission to the postgraduate programmes. Such candidates who are in India and are seeking admission to the M.Tech. Programme must satisfy the same GATE requirements (if eligible to take it) as the candidates in the general category. However, application of a candidate who is in India and has not been able to take GATE for valid reason will be considered by the DSC concerned on its merit. Admission of such candidates will be subject to *no-objection* from the *Department of Education, Ministry of Human Resource Development/ICCR etc.*

2.7. Admission of Sponsored Candidates

1   A candidate who is sponsored by his/her employer and who meets the additional conditions specified below may be admitted through the Selection Committee appointed as per clause 2.4 subclause 2.
2   A sponsored candidate must have been in service of the sponsoring organization for at least two years at the time of admission. The sponsoring organization must specifically undertake to relieve him/her to pursue the programme for its full duration. The part time candidates are required to submit No Objection Certificate(NOC) from their employer/organization stating that:
      a.   His/Her official duties permit him/her to devote sufficient time for Research.
      b.   He/She will have to reside in the institute for a period of not less than one year during his/her registration for the degree. However, this condition can be relaxed for a candidate working at Hamirpur or around Hamirpur with in a radius of 50 KM.

2.8. Admission to Off Campus Programme for Ph.D.

1   A candidate working in an R&D establishment or in other institution / organisation, which is equipped with the necessary research and library facilities, may be considered for admission only to the Ph.D. programmes in Engineering and Applied Sciences. Such a candidate must be sponsored by his/her employer and must have been in employment with the sponsoring organization for at least 2 years at the time of admission.

The employer must explicitly undertake to relieve him/her to stay on the campus to enable the candidate to complete the Course work, Comprehensive Examination and State of the Art seminar. However for such candidates the minimum residency requirement to stay on campus could be waved off by the Senate.

2 A candidate applying for admission to the off campus registration programme must provide detailed information about the research facilities available at his/her organization and a certificate that these would be available to him/her for carrying out research. He/she may have a supervisor from his/her organisation, if required. In such case he / she should provide the biodata of the prospective supervisor from his / her organisation.
3 On the recommendation of the DPGC, and SPGC, Chairman Senate may approve the admission.

2.9. Admission of Non-Degree Students

1 A non-degree student is a student who is registered for a degree in any other recognized institute or university in India or abroad, and who is officially sponsored by that institute or university to complete part of his/her academic requirements at NIT, Hamirpur (HP). For that purpose the non-degree student may carry out Research/Course work/and use other academic facilities.
2 The strength of non-degree students in any programme should not be more than 5% of the programme strength. Such candidates shall be required to deposit double the fee charged from the students of this institution. For course work fee should be double of pro-rata basis and for Infrastructure and Experimental work the department may decide about it.
3 Students so admitted will be governed by all rules, regulations and discipline of the Institute.

2.10   Admission of NIT Hamirpur Faculty

The regular faculty & staff of National Institute of Technology, Hamirpur who are eligible and interested to pursue their Post Graduate Education shall be given relaxation to the extent 50 % waiver in fees subject to the condition that they shall complete the M.Tech. / Ph.D programme with in a stipulated period of Three years and Five years respectively.

3. FINANCIAL ASSISTANCE

1 The Institute may provide financial assistance to postgraduate students in the form of teaching   or research assistantships (referred to as Institute Assistantship). Assistantships are awarded on a semester to semester basis for a period of up to four semesters for M.Tech students and up to Eight semesters for Ph.D students. The stipend for the assistantship is paid at the approved rates as notified by AICTE/MHRD from time to time. A student is expected to devote about eight hours per week towards job(s) assigned to him/her by the department. The renewal of assistantship is contingent on the student's satisfactory performance in the academic programme and in the discharge of assistantship duties as assigned to him by the department.
2 A student on teaching/research assistantship is also reimbursed some contingency expenses as per the approved terms and procedures to be notified from time to time by the institute. The reimbursement for a M.Tech. student is done only once at the time of end of his programme,

and for a Ph.D. student annually for the first four years of his/her programme, if he/she is on an Institute Assistantship.

3 Some financial assistantships in the form of research assistantships may also be available from sponsored research projects. Additional assistantships in the form of scholarships, fellowships, etc. may be available through other organizations, such as, the Council of Scientific and Industrial Research (CSIR)/ University Grant Commission (UGC) / Department of Atomic Energy (DAE)/ DST/ MHRD/ Corporate Houses etc.

4 In addition to the students admitted with financial assistance, students may also be admitted to the M.Tech. / Ph.D. programmes on a self-financing basis.

4. REGISTRATION

A student is required to register each semester for the courses that he/she intends to pursue in that semester. The registration process involves:

a. submitting a duly approved course programme to be followed in the semester in the prescribed registration card.

b. payment of fees for that semester and clearance of any outstanding dues of the previous semester.

1 All students who are not on authorized leave must continue to register in the following semester till they submit their thesis.

2 Ph.D. student, who has submitted his thesis and is waiting for the defence of the thesis, will register for zero units. He may, however, apply for leave from the Institute with permission to defend thesis while on leave.

3 In very special cases, a student who has completed all the experimental work and analysis related to the thesis and has completed his Open Seminar successfully and has got a job or has joined back his organization and is on sanctioned leave, the SPGC on the specific recommendations of the DPGC may allow submission of thesis without registration.

4 On the recommendation of the DPGC and the approval of the SPGC, the employees of NIT, Hamirpur (HP) and QIP students registered for the Ph.D. programmes who have completed the thesis unit requirements and the prescribed residence requirement, may not register in the following semester, provided they have completed experimental work related to their thesis and Open Seminar successfully. However, they will be required to submit their thesis within six months of such authorised leave (specified in section 7.1).

5 If maternity leave (granted before the date of registration) extends beyond the date of late registration and expires before the end of seven weeks from the specified date of registration in a given semester the student will be allowed to register only for thesis units. The number of units that a student will be allowed to register will be worked out on a pro-rata basis.

6 The student in the off campus registration programme can register as per academic calendar.

4.1 Late Registration

If for any compelling reason like illness, a student is unable to register on the day of registration, he/she will be allowed to register till the last date of registration specified in the academic calendar (which is about one week from the date of registration). Any student registering late will be required to pay Rs. 200/- per day subject to Maximum of Rs.1000/- up to last date of

registration. In no case student will be permitted to register after last date of registration as specified in the Academic Calendar.

4.2 Academic Advisory Committee

1. A student will be advised in the selection of courses by the DPGC of the concerned department. A student registering for thesis units must have a thesis supervisor assigned to him/her.
2. A student has to repeat the course in which he/she obtains F grade. The candidate shall be permitted to repeat or substitute courses in which he/she has obtained D grades provided his CGPI is below the minimum requirement. Permission to repeat/substitute a course will be governed by the guidelines as laid down in section 7.6. The request for repeat or substitution of a course must be given in writing duly endorsed by the DPGC to the Dean Academics at the time of registration.

4.3 Semester Load Requirements

1. A semester load usually is defined as equivalent to about 20 units. The structure in M.Tech as followed is of the type given in Table 1. Thus, a student who has registered for a full semester load solely by course work is expected to register for 5 courses.
2. A student in the off campus registration programme when registering for thesis work to be carried out at his/her organization, can register for a maximum of 20 units or a minimum of 08 units during the regular semester.

4.4. Adding/Dropping of Courses and Withdrawing from Courses

Adding and dropping of courses after registration is permitted only if the student's request is endorsed by the instructor of the course with justification that he/she is adding or dropping a course and is also endorsed by the Convener DPGC. The last dates of applying for adding and dropping of courses will be the last date of registration as specified in the academic calendar.

1. A student shall be required to drop a course at any stage if it is determined that he/she does not fulfil the prerequisites for the course, or any rule in this manual which forbids him/her to take the course(s) that he/she has registered for.
2. The DPGC in consultation with the instructor and with the approval of the SPGC may allow a student at his/her request to withdraw from one or more courses during the semester, if he/she has been sick for considerable time and has submitted a certificate to the satisfaction of the DPGC, but the reduced load shall not be less then the minimum semester load of 8 units. (specified in section 4.3).

4.5. Change of Registration from Off Campus to Full-Time Programme

A student admitted to the Ph.D. programme as off campus candidate may be advised by the DPGC to convert his status to a full time programme if there is not sufficient progress in his/her thesis work as adjudged by it. However, all such changes have to be incorporated at the time of

normal registration date. For the purpose of determining the maximum period of stay (specified in section 7.1), one half of the period spent as an off campus student shall be counted.

4.6. Change of Registration from Full-Time to Off Campus/Part Time Ph.D. Programme

1.   A student admitted to a fulltime Ph.D. programme may be permitted to change to an off campus/Part time Ph.D programme by SPGC. A student requesting such a conversion must:

a. Have completed the comprehensive examination successfully, given the "State of Art" seminar which is adjudged as satisfactory, and completed the residency requirements,
b. Such a request should be endorsed by the supervisor(s) and the DPGC,
c. Produce a "No Objection" Certificate from the Head of the institution/organisation, which he/she proposes to join.

2.   Such conversion, if approved by the SPGC, will be subject to the following conditions:

a. The student must complete his/her thesis within 6 years counted from the date of his/her first registration in the programme,
b. Provision of conversion from fulltime to off campus/part time status can be availed only once by the student during his/her programme, and
c. The status of the student will be reviewed by the supervisor and the DPGC at least once every semester after the conversion, and his/her continuation on off campus/part time status will be subject to his/her making satisfactory progress towards completing the Ph.D. thesis.

5.   LEAVE RULES

Students may be granted leave on submission of application to the Head of the concerned department through the DPGC. Applications must be submitted well in advance of the date of commencement of the leave requested. Leave for a period longer than specified in sections 5.1, 5.2 and 5.3 sanctioned by SPGC on the recommendation of DPGC will entail loss of financial assistantship for the extended period.

5.1. Vacation and Casual Leave

1. A postgraduate student may be allowed vacation leave during any period of the Institute's vacation. Such leave could be up to a maximum of 15 days in summer vacation and seven days in winter (Maximum of 22 days in an academic calendar). Leave not availed in one semester may be carried over to the next semester up to a maximum of 15 days.
2. In addition, a student may be allowed casual leave for up to 4 days per semester. The casual leave cannot be combined with any other kind of leave, and will not be carried over.
3. There will be no loss of financial assistantship for students going on prior sanctioned vacation or casual leave.
4. The students going for prescribed training will not be covered under this clause.

5.2. Medical Leave

Leave on medical ground, duly supported by a medical certificate from Institute Health Centre/ Chief Medical Officer of the Govt. Hospital, may be granted to a student for up to eight days per semester. However, at a stretch, the medical leave shall not exceed 15 days. Such leave shall not entail any loss of financial assistantship. In case the students requires more leave as advised by the medical officer he shall be asked to withdraw his registration for that semester and go on semester leave.

5.3. Maternity Leave

A female student may be granted maternity leave for a maximum of 3 months. Leave up to 6 weeks can also be granted for miscarriage including medical termination of pregnancy, if supported by a proper medical certificate. Such leave can be combined with any other leave due and will not entail any loss of financial assistantship. However academic requirements as laid down in the other clauses of this manual shall be applicable.

5.4. Semester Leave

Semester leave for up to a maximum of three semesters for M. Tech., Ph.D. students may be sanctioned for valid reasons. Except for medical reasons, such leave would not normally be sanctioned before a student has completed his/her residence requirements and in no case before the student has spent two semesters in the programme. However, on medical considerations such leave may be sanctioned after his/her stay of one semester. Leave for more than one semester at a time will not be granted.

5.5. Medical Certificate

If a student falls ill while on the NIT Hamirpur campus, the medical certificate must be obtained from the Institute's medical officer. If he/she falls ill outside the campus while on sanctioned leave, the medical certificate must be obtained from the District Medical Officer/ Chief Medical Officer.

5.6 Absence Without Sanctioned Leave

Absence without sanctioned leave for more than three weeks will entail loss of financial assistantship for the period of absence, and may result in the termination of the student's programme on the recommendation of the DPGC and approval of SPGC.

6. PERMISSION TO PROCEED TO OTHER ACADEMIC   INSTITUTIONS AS NON DEGREE STUDENTS

In order to help students broaden their horizons and enrich their cultural and academic experience, provision to proceed to other academic and research institutions in India or abroad as non-degree students is available. Rules and procedures to be followed for availing this provision are as follows:

i)   An M.Tech. or a Ph.D. student who satisfies the minimum conditions laid down in para (ii) below may proceed to another academic institution in India or abroad with prior permission of the SPGC on the recommendation of the DPGC.

ii)   Only those postgraduate students who have spent at least two semesters and have a CGPI of at least 8.0 are eligible to proceed as non-degree students elsewhere.

iii)   For permission to spend time as a non-degree student elsewhere, an eligible student will make an application to the SPGC through the DPGC and the thesis supervisor, duly supported by a statement of purpose to undertake the proposed work and sufficient information about the department/institution for the purposes of para (iv) below.

iv)   The DPGC will consider the student's application and will determine if the proposed programme of work is of such a nature that waiver for at least 8 units per regular semester is possible. The SPGC may approve the application on the recommendation of the DPGC. In all such cases, the student will be informed about the requirements he/she must fulfil to apply for academic credit on his/her return.

v)   Permission to proceed to an institution as a non-degree student does not imply that the student will automatically get any waiver from the academic requirements of NIT Hamirpur.

vi)   The student after completion of the work, will apply for waiver from requirements of his/her programme at NIT Hamirpur supported by an official transcript of the grades obtained and whatever material the DPGC may require for the purpose given in para (vii) below.

vii)   The concerned DPGC will evaluate the work done by the student and will make recommendations to the SPGC after determining by whatever means it deems fit, the equivalent NIT Hamirpur courses/requirements for which the student may be given a waiver.

viii)   On the recommendation of the DPGC, the SPGC may allow the waiver for a maximum of 10 units. Against each requirement for which a waiver is granted, a **W** would appear on the transcript with an explanatory note that **W** stands for waiver for work done at the Institution concerned. All such requirements will be deemed to carry zero weight for SGPI/CGPI calculations.

ix)   The minimum residence requirement for the students who avail of this provision will remain unchanged for Ph.D. students but may be reduced by one semester for M. Tech students, provided they spend at least one semester of 15 weeks duration or two quarters of at least 11 weeks duration each as non-degree students elsewhere with prior permission.

x)   Those students who are selected by the Institute using a Senate prescribed procedure to proceed on any institutional exchange programme will also have to go through the procedure and rules for the transfer of credits as outlined in paras (vi), (vii), (viii) and (ix) above.

7. ACADEMIC REQUIREMENTS

7.1. Minimum Residence, Maximum Duration and Academic Requirements

Table-1 lists the minimum residence and maximum duration allowed in the programme, and units requirements for graduation in the various programmes:

"Course Work" includes only postgraduate course units unless otherwise stated. To satisfy the "Minimum Residence" requirements, registration must be over consecutive semesters; exception will be made only if the student is on authorized leave. "Maximum Duration" is counted from the student's first registration date. SGPI/CGPI will be calculated on the basis of all undergraduate and postgraduate courses taken by the student.

Table-1

Programme	Minm Total credits	Minm. Units through course work	Minm. Units through Research /Project	Minimum Residence Period full(Part Time/Off Campus) (in Years)	Maximum Duration Full/(Part time/Off Campus) (in Years)	Remarks
M.Tech.	72*	40	32	2 years (Three Years)	Three & half Years/ (Five Years)	
M.Tech (Slow Pace)	72*	40	32	(3 years)	(Five Years)	
Ph.D. with M.Tech.	64*	0	64	2 years	Five Years (Six Years)	
Ph.D. with B.Tech. /MCA	96*	16	80	Three Years (6 semesters)	Five years (Six Years)	
Ph.D. (with Management/ Science and Hum. with M.Sc/ MA/ M.Phil/ M.Com.	64*	0	64	Two Years	Five years (Six Years)	

1 * Minimum requirement for submission of thesis.
2 May include credit from one undergraduate course (permitted by the DPGC).
3 May register for undergraduate courses as a special case; these courses will be deemed to have zero units.

4 Students in the Off Campus Registration Programme will be required to stay on the campus as long as required to complete comprehensive examination and to get a written proposal (prepared in consultation with his/her supervisor and co-supervisor) outlining the work proposed to be done for his/her thesis and completed satisfactorily the State of Art Seminar.

5 For Slow Pace M.Tech., the course work shall be for 2 to 3 years. The candidate will be desired to take 2 to 3 courses per semester along with regular M.Tech Classes.

A department may prescribe, with prior approval of the SPGC, additional units of courses/thesis work, over and above the minimum specified in the above table.

7.2 Extension of Programme

No student, who has completed the prescribed maximum duration in the programme, shall be allowed to register in the subsequent semester, unless he/she has been granted extension of the programme by the Senate on the recommendations of the DPGC and SPGC.

7.3 Audit Courses

The students are permitted to audit courses, such courses shall not be shown on the registration form and on the grade transcript. However for auditing a course prior consent of the instructor should be sought.

7.4 Residence Outside NIT Hamirpur

Students registered in the postgraduate programmes may count for residence and credit requirements, research or field work undertaken outside the institute under the supervision of the Institute supervisor(s), if facilities for such work are not available at this institute. Such cases must be recommended by the DPGC and approved by the SPGC before the student proceeds to the place of assignment.

7.4.1 Provision for completion of dissertation work on part-time/off campus basis

A student may be allowed to complete the dissertation work as part time/off campus if other academic requirements in M.Tech I^{st} & 2nd semester have been completed by the concerned student.

7.5. Grades, Semester and Cumulative Performance Index

1. (a) A student is awarded a letter grade in each course he/she is registered for, indicating his/her overall performance in that course. There are eleven letter grades: A, AB, B, BC, C, D, F, S, X and I. The correspondence between grades and points (on a 10-point scale)/rating is given below:

Grade	Value	Grade	Value
A	10	D	4
AB	9	F	0

B	8	S	Satisfactory
BC	7	X	Unsatisfactory
C	6	I	Incomplete

(b) Guidelines for the Award of Grades

"A teacher is the best judge in awarding the grades". However, he/she has to be impartial, logical and maintain complete transparency while awarding grades. The institute will normally follow relative grading system.

The following are the general guidelines for the award of grades:

1   All evaluations of different components of a course announced in the course plan shall be done in marks for each student.
2   The marks of various components shall be added to get total marks secured on a 100-point scale for theory courses and laboratory courses.
3   For any course, the statistical method (Table 2) shall be used for the award of grades with or without marginal adjustment for natural cut off.
4   The teacher will ensure coverage of all the contents of a course taught during the semester. The end semester examinations question paper shall cover all the sections of the syllabus. At the end of the semester a teacher will submit a complete course file to the Head of the Department having following documents.
    a.   Course Plan
    b.   Attendance record
    c.   Tutorial sheets/Assignment sheets
    d.   Question papers of periodical/minor exams
    e.   Quizzes
    f.   Question paper of end semester examination
    g.   Complete details of marks with final grades
5   The grades so awarded shall be moderated by a Grade Moderation Committee (GMC) of the Department if required. This committee will finalize the grades and the concerned teacher shall submit the final grades on-line as well as forward an authenticated copy of these grades to the head of the department for onward transmission to Dean (Academic) office within five days from the date of examination of their respective Subjects/Practical/Projects/Seminar/Workshop etc. The GMC shall consist of:
    a.   Head of the Department
    b.   Convenor, DPGC
    c.   Two members from DPGC
    d.   Course Coordinator/Teacher
6   In case a student repeats a particular course during summer term or along with his/her juniors, he/she will be awarded only up to a maximum of B grade as per his/her performance and with respect to his/her earlier class.

c)   Statistical Method for the Award of Grades

The statistical method shall invariably be used with marginal adjustment for the natural cut off. The mean and the standard deviation (σ) of marks obtained of all the students in a course shall be

calculated and the grades shall be awarded to a student depending upon the marks and the mean and the standard deviation as per Table 2 given below.

Table 2: Statistical Method for Grading

Lower Range of Marks	Grade	Upper Range of Marks
	A	$\geq$ Mean + 2.5 σ
Mean + 1.5 $\sigma \leq$	AB	< Mean + 2.5 σ
Mean + 0.5 $\sigma \leq$	B	< Mean + 1.5 σ
Mean – 0.5 $\sigma \leq$	BC	< Mean + 0.5 σ
Mean – 1.5 $\sigma \leq$	C	< Mean - 0.5 σ
Mean – 2.5 $\sigma \leq$	D	< Mean – 1.5 σ
	F	< Mean - 2.5 σ

$$\text{Here } \sigma = \sqrt{\frac{\sum_{i=1}^{n}(x_i - \bar{x})}{(n-1)}}$$

where x_i = marks of ith student,

$\bar{x}$ = arithmetic mean value and n = the number of students

2. A student may be awarded the grade 'I' (Incomplete) in a course if he/she has missed, for a genuine reason which are in the knowledge of DPGC, the end semester examination but has done satisfactorily in all other parts. An 'I' grade is not awarded simply because a student has failed to appear in examination(s). An 'I' grade must, however, be converted by the Course Coordinator into an appropriate letter grade within ten days from the completion of end semester examinations and communicated to the Dean Academics office by the last date specified in the academic calendar. Any 'I' grade still outstanding two days after the last scheduled date, shall be automatically converted into F grade.

3. A student getting F grade in a course must either repeat it or substitute it by another course as suggested by DPGC during the summer term as per the academic calendar. A student will have to register within the time stipulated in the academic calendar by paying prescribed fees as approved by Senate from time to time. The number of contact hours in any summer term course will usually be the same as in the regular semester course which is approximately 40. The assessment procedure in a summer course will also be same as that for a regular semester course. The effective duration of summer term course shall be about 8+1 weeks (classes+ examinations).
Withdrawal from a summer course is not permitted. Further in the summer term, the load will be assigned to a faculty member by the Head of the concerned department.

4. A student getting a D grade in a course may be allowed to repeat it or substitute it by another course during summer term, provided:

i) his/her SGPI/CGPI is less than the prescribed minimum and the student is allowed to continue in the programme (as per provisions of section 7.7).

In case a course is repeated or substituted only new grades will be accounted for calculation of SGPI/CGPI. All the courses attended by the student shall appear on the transcripts.

5. Seminars will be graded as satisfactory (S) or unsatisfactory (X) and will carry zero units for credit.

6. The grade S or X will be awarded for M. Tech. thesis units as follows:

At the end of the semester, the project/thesis supervisor(s) will assess the student's progress towards the project/thesis work during the semester and will award the grade S for each set of 4 units if the work is *satisfactory* and X for every *unsatisfactory* 4 units. Thus a student registered for 16 units can get one of the following five combinations SSSS, SSSX, SSXX, SXXX, XXXX.

7. If a student is on leave for a part of the semester or submits his/her thesis in the middle of a semester, the SPGC may reduce his/her thesis/ project units appropriately.

7.6 Computation of the Semester Grade Point Index (SGPI) and Cumulative Grade Point Index (CGPI)

The SGPI is an indicator of the overall academic performance of a student in all the courses he/she has registered during a given semester. For example, If the grades awarded to a student are G_1, G_2, etc in courses with corresponding credits C_1, C_2, etc, the SGPI is given by

SGPI = $(C_1G_1 + C_2G_2 + ...) / (C_1 + C_{2 + ...})$

In the above computation, courses with S and X grades are ignored. Similarly, the CGPI indicates the overall academic performance of a student in all the courses registered up to and including the latest completed semester/summer term. It is computed in the same manner as the SGPI, considering all the courses (say, n), and is given by

$$CGPI = \frac{\sum_{i=1}^{n} c_i g_i}{\sum_{i=1}^{n} c_i}$$

7.7. Academic Performance Requirement

1. The minimum CGPI requirement for continuing in M.Tech programme is 6.0.
2. In the first semester in which the student registers, the minimum CGPI (SGPI) **may** be relaxed to 5.5 by the SPGC.
3. If a M.Tech student secures a CGPI between 5.5 and 6.0 he/she may be allowed to continue in the next semester on the recommendation of the DPGC and with the approval of the SPGC. However, these students shall complete all the other requirements at the time of passing out.

4. A student shall not be allowed to continue in the M.Tech. programme if

   a. his/her CGPI is below 5.5.
   b. his/her CGPI is below 6.0 in two consecutive semesters (however, SPGC may consider continuation as per provisions of para 3).
   c. he/she obtains two F's in the same or different courses.
   d. he/she accumulates six or more X's towards thesis grades.

5. A student will normally not be allowed to continue in the Ph.D programme if

   a. he/she accumulates eight or more X's towards thesis grades.
   b. he/she accumulates six or more X's towards thesis grades in two consecutive semesters.
   c. he/she secures X's in all the thesis units registered for in two consecutive semesters.

6. HOD will issue a warning to an M.Tech. / Ph.D. student when he/she accumulates two or more X's.
7. The DPGC will keep a watch on the progress of every student and whenever a student fails to meet the requirements, will intimate to the SPGC. If a student's programme is terminated, the Head of the Department will issue the letter of warning/ termination under intimation to his/her parents.

8. Ph.D COURSE WORK

1. A Ph.D candidate will have to take courses if recommended by the supervisor/DPGC.
2. A candidate shall be required to attend 75% of the lectures and all tutorials for clearing an audit / regular course.

9. COMPREHENSIVE EXAMINATION OF Ph.D. STUDENTS

Students registered in the Ph.D. programme will be assigned subjects or syllabi for self study and then appear for examination. OR

Students are assigned current research topics for self study and present before a selected body (Comprehensive Examination Board) for comprehensive examination and approval.

1. Students registered in the Ph.D. programme must pass a comprehensive examination designed to test the overall comprehension of the student in the various subjects.
2. Students admitted with M.Tech or equivalent degrees may appear in the comprehensive examination earliest at the end of the first semester, but must pass it before the end of the second semester after their first registration. The above time limits are inclusive of the period of sanctioned leave, if any. If the student does not appear in the comprehensive examination before the end of second semester, then the special permission has to be sought from Chairman, Senate for the conduct of such examination.
3. The examination will be in oral form but may be supplemented with a written part if department so desires as a policy.

4. The comprehensive examination board will consist of at least three but not more than four faculty members (including external expert member) of the student's department plus one faculty member from outside the department (discipline, in case of Sciences). Constitution of the board will be proposed by the DPGC in consultation with the Head of the department and the thesis supervisor (if already assigned), and will be forwarded to the Chairman, SPGC who will approve it. The thesis supervisor of the student, if already assigned, will be the Convener of the board. In case no thesis supervisor is assigned, the Convener, DPGC will be the Convener of the Board.
5. A student will be considered to have passed the comprehensive examination if all except at the most one member of the board are satisfied with student's performance in the examination. The report of the comprehensive examination must be sent to the Chairman, SPGC within 8 weeks of the date of approval of the board.
6. When a student has not passed the comprehensive examination in his/her first attempt, a second comprehensive examination will be conducted by the same board that was constituted earlier unless the faculty member of the board has left/ the institute or has deceased. A student will not be allowed to appear in the comprehensive examination more than twice. In case the candidate fails to clear comprehensive in two attempts, he/she shall be deemed to be terminated from the programme. The HOD shall issue the letter in this regard. All such cases shall be brought to the notice of the Senate.

10. CONSTITUTION OF STUDENT RESEARCH COMMITTEE (SRC)

1. The DPGC shall constitute a Student Research committee (SRC) for each student keeping in view the area of specialization in which the student is working.
2. The constitution of SRC for each candidate shall be as under.
    a. Supervisor (will be the convener of SRC)
    b. Two Experts from with in the department related to student's specialisation (Experts must be having Ph.D degree)
    c. One expert from other departments of NIT Hamirpur (Expert must be having Ph.D degree)
    d. Incase the experts with Ph.D degree are less than three in any department, then experts from other alike department may be included as member of SRC.

11. CANDIDACY FOR THE Ph.D DEGREE AND STATE OF THE ART SEMINAR

A student is awarded the Ph.D. Candidacy on completion of the following requirements:

1. A student shall have to pass a Ph.D. Comprehensive Examination.
2. A student must have presented a State-Of-Art seminar based on the current state-of-the-art of the knowledge about the specific problem related to his/her knowledge domain. In this seminar a student should present a broad research proposal that should include the methodology and objectives of the proposal. This seminar should be presented before the SRC and faculty as an open seminar. After this seminar, a student is required to submit a copy of the broad research proposal to the academic section.
3. The state-of-the-art seminar shall be presented within three months of the successful completion of the comprehensive examination.

4. The report of satisfactory completion of both the comprehensive examination and state-of-the-art seminar shall be communicated by the supervisor(s) through convener DPGC to academic section for record.
5. The progress of the research work will be monitored through end-of-the-semester presentations by the student before the SRC as per the schedule mentioned in the academic calendar.
6. Only those students who are admitted to the Ph.D candidacy will be allowed to submit Ph.D thesis in accordance with the guidelines laid down in section 12.4.2.

12. THESIS AND THESIS EXAMINATION

12.1. Appointment of Thesis Supervisors of M Tech. and Ph.D. Students

1 A student has to select a thesis supervisor within one month of successful completion of the Comprehensive examination if not done earlier.
2 A student shall not normally have more than two supervisors at any given time.
3 Thesis supervisor(s) of a student will normally be appointed from amongst the faculty members at NIT Hamirpur (HP) using modalities decided by the departments.
4 A student can have a co-supervisor from outside the institute on the recommendation of the DPGC and the SPGC and with approval of the Chairman, Senate.
5 The appointment or change of supervisor(s) will be communicated to the SPGC by the DPGC.
6 In case there has been a change/addition in the supervisor(s), the M.Tech thesis will not be submitted earlier than three months and the Ph.D. thesis will not be submitted earlier then six months from the date of such change.
7 Normally a faculty member shall not supervise more than four individual Ph.D candidates at any time and five individual M.Tech candidates. However the department may evolve a transparent policy for the distribution of M.Tech./Ph.D students amongst the faculty members in the department.
8 In case a faculty member is suspended / debarred for indulging in lowering the prestige of the institute in any manner he or she shall cease to be a thesis supervisor.
9 A scholar being guided by two supervisors will be counted as ½ and if guided by three supervisors then it be counted as 1/3 and like wise.
10 A faculty member appointed as Ph.D. supervisor is normally expected to be available to the research scholar in the institute till the thesis is submitted. However, under unavoidable circumstances, such as long leave, resignation, retirement, or death; an alternative supervisor may have to be appointed. In such cases, the appointment of the supervisor will be regulated as under:

(i) If the synopsis of the thesis of the scholar has not yet been submitted,

a) and the supervisor proceeds on leave for one month or more but less than 18 months, then the supervisor should immediately inform the convener DPGC whether he will continue to guide and supervise the research work of his scholar effectively during his leave period or not. In case he does not inform within five days of the commencement of his leave, or informs that he will not be able to guide effectively, then he ceases to be the supervisor of that scholar. DPGC shall appoint new supervisor.

b) and if at any point of time, the total period for which faculty member goes on long leave exceeding 18 months, that supervisor automatically ceases to be his/ her supervisor. DPGC shall provide a new supervisor. However under special circumstances if the supervisor shows his or her willingness to continue supervising the candidate effectively during leave period based on the quantum of work as adjudged by the SRC of the candidate, the Chairman Senate on the recommendations of SPGC may allow him or her to continue to act as supervisor.

c) and once a supervisor ceases to be the supervisor, he cannot again become the supervisor of that scholar.

In above cases a), b) and c), when a supervisor ceases to be the supervisor, the other supervisor of NITH if any, shall act as the supervisor. In case there is no other supervisor, the DPGC shall immediately appoint alternative supervisor for the scholar.

(ii) If the thesis/ synopsis of the thesis have been submitted before the supervisor proceeds on leave and the supervisor

a. Shows his or her interest to supervise when on leave and there is no co-supervisor (of NITH), DPGC shall appoint a care taker supervisor.
b. Shows his or her interest to supervise but require major revision as suggested by new care taker supervisor, then care taker supervisor shall be the supervisor.

11 A faculty member, who is due to retire within the next two years, DPGC should not assign candidates to such faculty member. However if the faculty member shows his or her interest to supervise the thesis even after his or her superannuation and has a good academic record of guiding and publication, the chairman senate, may permit to allow the faculty member to continue to guide.
12 If a supervisor resigns, alternative/ caretaker supervisor be appointed by the DPGC.
13 If a supervisor expires, alternative/ caretaker supervisor be appointed by the DPGC.

12.2 Open Seminar of Ph.D. Students

Before proceeding to finalize the thesis, each Ph.D. student must deliver a seminar in which the research work will be presented to obtain comments and criticism, which may be incorporated in his/her thesis. Such a seminar shall be presented only after the student has earned at least 64 credits through his or her research work This will be an open seminar and candidate has to present it in the presence of the SRC, faculty and students. The SRC may recommend modification for extending the work required before the thesis is completed. A certificate from the supervisor stating that all modification, if any, recommended by SRC have been considered and incorporated, the research work being reported is the original contribution of the candidate and the work has not been presented anywhere else for the award of any other degree. A notice of the seminar must be displayed at least one week in advance. A thesis can be submitted only after the satisfactory fulfilment of this requirement but not later than six months. The candidate should inform the DPGC through his supervisor for his readiness to deliver the open seminar. On successful completion of this requirement, the DPGC shall inform the academic section within one month of such a seminar.

12.3 Constitution of Committee/Board for Thesis and Oral Examination

12.3.1. M Tech Thesis Oral Examination Committee

1. The thesis will be examined by an oral examination committee formed by the thesis supervisor(s) in consultation with the DPGC Convenor and recommended by the Head of the Department for approval of chairman SPGC.
2. The committee shall consist of the thesis supervisor(s), one faculty member from the department and one of the faculty members from the other department and one expert from out side the institute. The thesis supervisor will act as the Convener of the Committee.

12.3.2. Ph.D. Thesis Board

1. The thesis board shall consist of three members in addition to the thesis supervisor(s) approved by the Chairman, Senate. Unless some special circumstances make it impractical, the thesis board shall have normally the following composition:

   ➢ *Thesis Supervisor(s)*
   ➢ *One Examiner from outside the institute but from India who will conduct viva voce·*
   ➢ *Two examiners from outside the institute but at least one from outside the country.*

2. The procedure for constituting the thesis board is given below.

a. The thesis board may be proposed at the most 4 weeks before the submission of the thesis.
b. The thesis supervisor(s), in consultation with the Head of the Department shall propose a list of examiners (in addition to the thesis supervisor(s) consisting of at least three extra names over and above the required number of members for the thesis board. This list along with adequate number of copies of synopsis (prepared according to the format prescribed in annexure III) shall be forwarded by the DPGC to Chairman, SPGC.
c. The Chairman, Senate in consultation with Chairman, SPGC will select the members of the thesis board from this list. If considered necessary, the Chairman, Senate may require additional names of experts to be submitted. In case Chairman, SPGC is the supervisor of the student concerned, Chairman, Senate may consult Chairman, SUGC for the selection of the thesis board. If Chairman Senate is the thesis supervisor then Dean Academics will approve the Thesis board in consultation with SPGC/SUGC.
d. The names of the members of the thesis board shall be kept confidential till successful completion of the oral examination. However, on completion of Ph.D. thesis evaluation (as detailed in section 12.5.2), the Academic Section will send to the thesis supervisor(s), the names of the member who are from outside the institute but are from within the country so that these names can be included in the proposed list of the members of oral board.

12.3.3 Ph.D Oral Board

1. The oral board shall consist of three members in addition to the thesis supervisor(s) for conducting the viva voce examination. Of the three, two shall be from among the faculty members of the institute (including those, if any, on the thesis board) and one shall be from

among the members of the thesis board within the country but outside the institute. Of the three members from NIT Hamirpur at least one shall be from a department / IDP which is different from the student's own.

2. The thesis supervisor(s) in consultation with the Head of the Department shall propose the constitution of the oral board, to the Chairman SPGC who will forward it to the Chairman, Senate for approval.

12.4 Submission of Thesis

12.4.1 M.Tech. Thesis

After the M.Tech oral examination committee has been constituted, unbound copies of the thesis (as per annexure- III) one for each examiner of the oral board will be submitted at least a month before the probable date of oral examination. The Convener, DPGC shall arrange to send the copies of the thesis to the examiners. Two copies of the abstract (approximately 250 words) should also be submitted along with the thesis. After the final viva voce Examinations the modifications suggested if any, by the thesis board, may be incorporated and then the candidate shall submit to the academic section two copies of approved thesis, duly bound for further transmission to concerned departmental and institute library for record and one CD/DVD as soft copy. The student shall also vest or license copyright of their thesis in the name of NIT Hamirpur.

12.4.2 Ph.D Thesis

Ph.D. thesis can be submitted only after the thesis board has been duly approved and the intimation of the satisfactory completion of the open seminar has been received. Bound copies of the Ph.D. thesis (as per the prescribed format as per annexure-III) one for each examiner of the thesis board plus additional adequate number of copies for the oral board, will be submitted. The student shall submit a CD-ROM containing the total thesis document along with the thesis. The normal period for submission of thesis will be three years. However, if the work of the candidate has been satisfactory then the candidate be allowed to submit his/her thesis after completion of two year from the date of initial registration on the recommendation of DPGC &SPGC.

12.5 Processing of Thesis

12.5.1 M Tech Oral Examination

1. The oral examination will be conducted within two months from the date of submission of the thesis. If a student does not appear in the oral examination within this time period, his/her programme would be deemed to have been terminated. Request for reinstatement in the programme by such a student should be addressed to the Chairman, Senate. The request may be considered by the Senate from case to case basis. In case student does not appear second time the thesis submitted shall be deemed to be rejected.
2. The thesis supervisor in coordination with DPGC will intimate the date of the oral examination to the Academic Section.
3. The oral examination committee will evaluate the thesis, conduct the oral examination and send a report of the examination to the Chairman, SPGC through the Convener, DPGC.

4. A thesis will be considered to have been accepted if all members of the oral examination committee recommend its acceptance. A thesis, which is not accepted, will be considered to have been rejected.
5. If a thesis is rejected along with a recommendation for resubmission after incorporating any modification/correction suggested by the oral examination committee, oral examination of the re-submitted thesis will be conducted by the original committee. However if any member of the previous board has retired/left the institution/debarred by the senate then revised committee will be constituted with the approval of the Chairman, SPGC. If the re-submitted thesis is rejected, the matter will be reported to the Senate for appropriate action.
6. Acceptance of thesis will be reported to the Senate for approval by the Dean Academic.

12.5.2. Ph.D Thesis Evaluation by the Thesis Board

1. After the synopsis has been submitted and the thesis board constituted, the Dean Academics will send a confidential letter 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 the examiner refuses or no response is received for eight weeks (with a reminder being sent after four weeks), then steps will be taken to appoint another examiner.
2. On receipt of the acceptance of examiner-ship a copy of the thesis along with a thesis evaluation form (annexure IV) for the examiner's report will be sent to each examiner.
3. In case Dean Academics is the supervisor of the student concerned, above processing (detailed in paras 1 and 2) will be done by the Chairman SPGC.
4. When an examiner's report is received, the Chairman, SPGC in consultation with Dean(Academic) will place it in one of the following three categories:

   i) **Category I:** If all the reports are satisfactory, clearly recommending the award of degree.

   ii) **Category II:** If an examiner points out typographical errors, or minor technical mistakes, raises some queries or suggests modifications but does not imply that the acceptance of the thesis is subject to removal of these defects to the examiner's satisfaction, the supervisor will communicate to the Chairman, SPGC the student's response to the above and the same will be incorporated in the thesis to the satisfaction of the oral board, and examiner(s) concerned should be informed of the changes made on the basis of his/her suggestions.

   iii) **Category III:** If an examiner outright rejects the thesis or raises technical points or suggests modifications which must be answered/carried out to the examiner's satisfaction before the thesis is accepted and the revised thesis shall be submitted with in a period of one year from the date of communication in this regard from Chairman SPGC, the supervisor will communicate to the Chairman, SPGC the changes made in the thesis, if any, in response to the examiner's comments along with an explanatory note which will be sent to the examiner with a request to respond within six weeks; if the examiner's response is not received within this period, a reminder will be sent and if no reply is received within six weeks time, further action will be initiated.

5. Copies of the categorized report (without the identity of the examiner) will be sent to the thesis supervisor(s) and the Head of the Department.

6. On completion of the process detailed above, the Chairman, SPGC will intimate the supervisor the concurrence of the Chairman, Senate, if given, to initiate the constitution of the oral board. This concurrence of Chairman, Senate will be given if all the examiners recommend acceptance of the thesis. If one of the examiners rejects the thesis, the matter will be referred to Chairman, Senate for deciding further course of action. If two or more examiners reject the thesis, the thesis will be rejected. Rejection of the thesis will disqualify the candidate from further consideration for the award of the Ph.D degree, in the topic of research chosen by him/her.

7. In case Chairman, SPGC is the supervisor of the student concerned, the above processing (detailed in paras 4, 5 and 6) will be done by Chairman, SUGC.

8. If the Chairman Senate is the thesis supervisor the duties as performed by the Chairman senate as mentioned above shall be carried out by Dean Academics.

12.5.3 Ph.D Oral Examination

1. The Ph.D. oral examination will be an open examination. The supervisor(s) will be the convener of the oral board and will fix the date of the oral examination in consultation with the members of the board members and intimate the date to the Academic Section.

2. If a member of the oral board communicates his/her inability to be present in advance or fails to be present on the specified date and time, the Chairman, SPGC may recommend to appoint a substitute in consultation with the thesis supervisor(s), Head of the Department and Convener DPGC for approval of the Chairman senate.

3. Each member of the oral board will be given a copy of the thesis along with the entire technical correspondence with the thesis examiners at least one week before the date of the oral examination.

4. The oral board shall

i) examine the thesis reports,
ii) examine if necessary modifications suggested by the thesis examiners have been incorporated,
iii) elicit the candidate's replies to the questions raised by the thesis examiners,
iv) authenticate the work as the student's own,
v) judge if the presentation of the work by the student and the answers to the questions asked have been satisfactory replied, and
vi) give a report of the examination, which will be communicated by the supervisor(s)/Thesis coordinator to the Chairman, SPGC through the Convener, DPGC.

5. If all, except one member, declare the student as passed, the student shall be deemed to have passed.

6. If a candidate has not passed, the oral board will specify whether

(i)   the candidate may be given another chance to appear in the oral examination and will specify the appropriate date for re-examination. The original oral board will conduct the re-examination unless a different oral board is approved by the Chairman, Senate. In the re-examination, the board will declare whether the candidate has passed or failed but will not recommend holding a third oral examination.

(ii)   the candidate is declared to have failed.

7.   On receipt of the report that the student has passed the oral examination, the Dean Academic will recommend to the Senate for award of the Ph.D. degree, and the degree may be conferred upon the candidate after approval by the Senate.

8.   If the candidate has failed, the matter will be brought to the attention of the Senate.

9.   After successful completion of oral examination, the Ph.D candidate shall submit to the academic section two copies of approved thesis, duly bound for further transmission to concerned departmental and institute library for record and one CD/DVD as soft copy. The student shall also vest or license copyright of their thesis, including abstracts, in the name of NIT Hamirpur.

13   SCHOLARSHIPS, PRIZES AND MEDALS

The Senate Scholarships and Prizes Committee (SSPC) determine the general policy regarding recommendations for the award of the different types of scholarships, stipends, medals and prizes available to Institute students. It also coordinates and reviews the application of the policy and makes recommendations to the Senate for its final decision. The detailed norms and conditions for the award of various scholarships, prizes and medals are contained in the brochure entitled "Rules and Procedures for Scholarships and Prizes" of the Institute. These scholarships, etc. are liable to be withdrawn, partially or wholly, in case of misconduct, deliberate concealment of material, facts and/or giving false information. A student leaving the Institute on his/her own accord without completing the programme of study may be required to refund the amount of scholarship, etc. received during the academic session in which he/ she leaves the Institute.

13.1 Prizes and Medals

To promote and recognize academic excellence, constructive leadership and overall growth and development of students, the institute awards a number of prizes and Director's Medals, established by the Institute on its own or through endowments/ grants made by donors, with the approval of the Board of Governors.

14 CONDUCT AND DISCIPLINE

14.1 Code of Conduct

Each student shall conduct himself/herself in a manner befitting his/her association with an Institute of national importance. He/she is expected not to indulge in any activity, which is likely to bring down the prestige of the Institute. He/She should also show due respect and courtesy to

the teachers, administrators, officers and employees of the Institute, and good neighbourly behaviour to fellow students. Due attention and courtesy is to be paid to visitors to the Institute and residents of the Campus. Lack of courtesy and decorum, unbecoming conduct (both within and outside the Institute), wilful damage and/or removal of Institute property or belongings of fellow students, disturbing others in their studies, adoption of unfair means during examinations, breach of rules and regulations of the Institute, noisy and unseemly behaviour and similar other undesirable activities shall constitute violation of the Code of Conduct for students.

Ragging in any form is strictly prohibited and considered a serious criminal offence and violation of the code of conduct. Involvement of a student in ragging may lead to his/ her expulsion from the Institute.

To save guard its ideals of scholarship, character and personal behaviours, the institute reserve the right to require the withdrawal of any students at any time for any reason deemed sufficient.

14.2   Attendance Requirement.

All M.Tech./Ph.D students are normally required to have full(100%) attendance. A Ph.D scholars must attend to his/her research work on all the working days and marks attendance except when he/she is on duly sanctioned leave. However, a M.Tech. candidate having deficient attendance on account of illness, participation in Inter Institute Tournaments/NCC/NSS camp/Mountaineering skiing course/ competitive examinations or any other genuine ground can be given attendance condonation to the maximum extent of 25% of the total classes held in each course during the semester for the period of his/her absence by the Director on the recommendation of the concerned DPGC and SPGC. Candidates having less than 75% attendance (including the attendance benefits as prescribed above) shall not be allowed to appear in the examination and will be awarded F grade.

14.3 Disciplinary Actions and Related Matter

Violation of the Code of Conduct shall invite disciplinary action which may include punishment such as reprimand, disciplinary probation, fine, debarring from examinations, withdrawal of scholarship and/ or placement services, withholding of grades and/or degrees, cancellation of registration and even expulsion from the Institute. The Instructor-in-Charge of a course shall have the power to debar a student from the examination in which he/she is detected to be using unfair means. (All such cases should be brought to the notice of the Dean Academics along with all the supporting evidences. All such cases shall be looked into by a standing committee consisting of Dean Academics (Coordinator), Chairman SPGC, Chairman SUGC, Concerned Head of the Department, two Senate nominees). The Faculty/Tutor shall have the power to take appropriate action against a student who misbehaves in his/ her class. *All such cases should be reported to SPGC and Senate.*

The Dean Students & Alumni Affairs, Chief Warden, Warden-in-Charge of a Hostel shall have the power to reprimand, impose fine or take any other suitable measure against a resident who violates either the Code of Conduct or rules and regulations pertaining to the concerned Hostel.

Violation of the Code of Conduct by an individual or by a group of students can be referred to a Board of Discipline (BOD). The constitution of BOD shall be as under:-

1.	Dean (Students & Alumni Affairs)	Chairman
2.	Two Heads of Teaching Deptts.	
	(on rotation basis)	Member
3.	Registrar	Member
4.	HOD of concerned Dept.	Member
5.	Chief Warden	Member Secretary

A student, teacher or other functionary of the Institution can refer a case to this committee for consideration. Further, in very exceptional circumstances, the Chairman, Senate may appoint a special committee to investigate and/or recommend appropriate action for any act of gross indiscipline involving an individual or a number of students, which, in his/her view, has tarnished the image of the Institute. The recommendation for any action, including expulsion of a student from the Institute, shall be referred to the Senate for consideration and ratification.

14.4 Appeal against Termination

A student whose programme is terminated on account of inadequate academic performance or otherwise has the right to appeal to the Chairman, Senate for reconsideration. While making the appeal against termination, he/she is expected to give reasons for his/her poor academic performance and/or to explain why his/her position merits reconsideration. The Senate shall take a final decision after considering all the available inputs. However, the Senate will not entertain any further appeal for review unless substantial additional information is brought to its notice. The senate normally shall not entertain the appeal more than two times from the same student. The Senate may **not recommend** a student, who is found guilty of some major offence, to the Board of Governors for the award of a degree/diploma/certificate even if he/she has satisfactorily completed all the academic requirements.

15.   POST GRADUATION REQUIREMENTS

A student shall be deemed to have completed the graduation requirement, if the student has

   i)   passed all the prescribed courses,
   ii)   attained the minimum required CGPI with no course having F grade,
   iii)   satisfied the minimum academic and residence requirements,.
   iv)   satisfied all the requirements specified by the concerned department, if any,
   v)   satisfied all the requirements specified by the Senate and the Ordinances.

In addition, the student should have paid all the dues to the Institute and, should have no pending case of indiscipline.

16.   Waiver of Requirements in Special Cases

The procedures and requirements stated in this manual, other than those in section 2.3 (Eligibility for Admissions) and section 7.7 (Academic Performance Requirement) may be waived in special circumstances by the SPGC on the recommendation of the DPGC. All such exceptions shall be reported to the Senate.

17. General

Notwithstanding any thing contained in this Manual, all categories of students/candidates shall be governed by the Rules & Regulations framed by the Senate in this behalf and in force from time to time

18. Interpretations

Any doubt or dispute arising about the interpretations of the Rules & Regulations shall be referred to the Chairman Senate whose decision shall be the final.

POSTGRADUATE COMMITTEES

Senate Post Graduate Committee(SPGC)

(a)   Constitution

The Senate Postgraduate Committee (SPGC) shall consist of one representative from each of the academic departments/interdisciplinary programmes/Centres who must be the Convener of DPGC , Dean academic and six additional members of whom one shall be the outgoing Chairman (if not otherwise a member), Senate Under Graduate Committee Chairman (SUGC) and two students, one each from Ph.D. and M.Tech. Programmes and nominated for the purpose among the Class Seniors on the basis of merit. The student members shall be nominated by the Dean of Academic affairs among the class seniors. In addition to it Senate shall nominate two members from the senate members.

(b)   Jurisdiction

The SPGC shall have jurisdiction in the following matters concerning the postgraduate programme of the Institute: *the recommendation of new courses of instruction, modification of courses already approved, the credit value of courses, the admission of qualified students to candidacy for degrees, the rules governing the form of presentation and disposal of theses, the conduct of oral and written examinations and in such other related matters as may be referred to it by the Senate.*

(c)   Functions:

The functions of the Committee shall consist primarily of general policy determination, coordination and review, but the Senate shall retain the power of final review. In the discharge of its responsibilities the committee shall make full use of the appraisals and recommendations of the various academic departments concerned. This committee shall be assisted by the Departmental Postgraduate Committees.

Departmental Post Graduate Committee(DPGC)

Each department/interdisciplinary programme (approved by the Senate) shall have a Departmental Postgraduate Committee (DPGC) consisting of a Convener, the Head of the Department, Convenor DUGC and preferably four to six faculty members to be chosen from the Department, minimum of one faculty member from other department/interdisciplinary programme and two students, (one from the Ph D and other from the M. Tech programme). If M.Tech. programme does not exist both shall be from the Ph.D. programme. The student members shall be nominated for a period of one year. The DPGC Convener shall be nominated by the Head of Department in consultation with the faculty of the department for a term of two years. The duration of the committee shall be two years. The fifty percent of the initial members of the committee shall be replaced after one year. The student members shall not participate when

the cases of academic evaluation of individual students are being considered, although the students' opinion might be sought prior to taking any decision.

POSTGRADUATE COURSES

Course Number

Each postgraduate course will have a unique number consisting of two parts. The first part will consist of a code to identify the department/programme which will be of two characters of English alphabet and identical for all courses of a particular Department/Programme. In the case of Humanities and Social Sciences separate identification codes will be used for each of the approved disciplines. The first digit will denote the semester number and last two digits will unequally identify the course of that semester. To ensure active participation of the identified department to run a IDP, the nomenclature of the individual courses offered under the programme shall reflect the identity of the department offering the course.

Course Units

The units of postgraduate courses will be arrived at as per the table given below. No course will have units less than 2 or more than 5.

Contact hours/week for a course Units

Two lecture hours: 2

Three lecture hours: 3

Two lecture hours + one tutorial hour: 3

Two lecture hours + one lab session: 3

Three lecture hours + one tutorial hour: 4

Three lecture hours + one lab session: 4

Three lecture hours + one tutorial hour + one lab session: 5

Approval of a New Course

All Postgraduate courses require the approval of the SPGC before being offered. A course will be proposed by an interested faculty member in a prescribed format at least two months before the pre-registration dates of the semester in which it is proposed to be offered for the first time. The Convener, DPGC will send the proposal to all DPGC Conveners for circulation among their colleagues to elicit their comments and suggestions. One copy should be sent to the Chairman, SPGC. A minimum period of five weeks should be allowed for such comments to be received after which the Convener in consultation with the proposer of the course will write to the Chairman, SPGC for approval with two copies of the proposal in its final form after taking into

account all comments/suggestions and making suitable modifications. The comments/suggestions received should be enclosed with the letter to the Chairman, SPGC. If over 20 percent of the contents have been modified, the proposal should be re-circulated to all departments. At least two weeks should be allowed for the receipt of comments on the revised course proposal.

Discontinuation of Course

Any postgraduate course, which is not offered for three consecutive years, may be discontinued. The Academic Section will inform the department concerned about such course(s) and if a recommendation to keep the course in the list of approved courses is not received within one month, the course will be taken off from the list of approved courses. No course will be permitted to remain in the list of approved courses for over five years without being offered. The Head of the Department or Convener, DPGC can request in writing to the Chairman, SPGC to remove a course from the list of approved courses for the department.

A General Scheme of Examinations for M.Tech[*]

(Semester I & II)

S.No.	Subject Name	L	T	P/D	Credits	Distribution of Marks out of 100					
						TA	Mid Exam-I	Mid Exam-II	End. Sem. Exam	Practicals	
										Sessional	Exams
1	Course -1	3	1	0	4	20	15	15	50	-	-
2	Course -II	3	1	2	5	10	10	10	50	10	10
3	Course -III	3	1	3	5	10	10	10	50	10	10

(Semester III)

S.No.	Subject Name	Credit	Evaluation (%)
1	Special Study	04	100
2	Thesis	12	S/X

(Semester IV)

S.No.	Subject Name	Credit	Evaluation
1	Thesis	16	S/X

[*] A faculty member may change it marginally but such changes have to be announced to the class before the classes commence.

GENERAL GUIDELINES FOR DISSERTATION/THESIS WRITING

FORMAT OF DISSERTATION/THESIS

Preliminary pages (page i, ii, iii…):

- Inner Title page
- Certificate
- Acknowledgement
- Abstract
- Table of contents
- List of tables
- List of figures
- List of abbreviations

The main body (pages 1, 2, 3…) is divided as follows:

- Introduction
- Literature Review
- Materials and Methods
- Results and Discussion
- References
- Appendices

DESCRIPTION OF THE DIFFERENT SECTIONS OF A DISSERTATION/THESIS

General guidelines

- An established font of 12 Times New Roman and paragraph style must be followed consistently throughout the thesis.
- Type 1½ space throughout the text on both side of the paper.
- Margins: 38 mm from the left edge of the paper, 25mm from the top, bottom and right edge for A4 size paper.
- Units and symbols should conform to the international system of units.
- Avoid the use of jargon, nouns as adjectives, split infinitives, improper matching of subjects and verbs, changes of tense in mid-paragraph and redundancy and verbosity. More than a very few errors in spelling or typography leave an impression of carelessness on the examiners.

Outer Title Page

- Title of dissertation/thesis.
- M. Tech dissertation/ Ph.D Thesis.
- Name of student with registration number.

- ➢ Institute logo
- ➢ Place of submission.
- ➢ Month and year of submission (Example: May, 2007).

Inner Title page

- ➢ Title of dissertation/thesis.
- ➢ The following statement must also appear: This dissertation/thesis is submitted as a partial fulfillment of the M. Tech. or Ph.D. program in ---------------- (For Example: science or Engineering).
- ➢ Name of student with registration number.
- ➢ Institute logo
- ➢ Place of submission.
- ➢ Month and year of submission (Example: May, 2007).

Abstract

This section will contain statement of the problem, methods of investigation, major findings and main conclusion.

Introduction

This section will contain general introduction, scope of the work, objective of the study and chapter outline.

Literature Review

This section will contain a critical review of the literature, pertinent theory, experiment and the importance of the chosen problem.

Methodology

This section contains the research methodology of the test methods used (If applicable).

Results and Discussions

- ➢ Brief description of the methodology, primarily the experimental design.
- ➢ The text should describe the results.
- ➢ The figure and table legends contains
    - o Short title.
    - o Description of the symbols (if applicable).
    - o Description of the statistics used (if applicable).
- ➢ The figure or table and their legend should appear on the same page.
- ➢ Avoid repeating a description of the results – keep the description of the results in the body of the results section and not in the figure or table legend.

➢ Emphasize the most important contributions of the research. The discussion must not merely recapitulate results or review the literature.
➢ It is essential to discuss the research in relationship to the literature and to assess the significance of the findings.

Conclusions

This section contains the major findings and main conclusions.

References

There must be only one reference list for the entire dissertation/thesis in order of citation in the body of thesis/dissertation.

Appendices

This section can contain tables and figures of data that are necessary to show but that are not part of the dissertation/thesis.

NOTE:- The above guidelines are general in nature and writing style of dissertation/thesis will vary from department to department and nature of work carried out.

THESIS EVALUATION FORM

1. Name of Student: _____

2. Roll No.: _____   **3. Department:** _____

4. General Features of Thesis

(i) Organisation and Get up:

_____

_____

_____

(ii) Whether quality of work is comparable

with other universities of repute?

Yes	No

(iii) Whether the thesis has embodied any

new ideas with original thoughts?

Yes	No

5. Comments (*the examiner may give details on additional sheet(s), if required*)

(i) Corrections in punctuation, grammar,

Spelling or language

None	Minor	Require Changes

(ii) Technical content of the thesis

_____

_____

_____

_____

(iii) Highlights and strong/weak points of the thesis

_____

_____

6. Suggestions (the examiner may give details on additional sheets)

(Please cross out one of these *paras*)

i)   Minor queries or suggestions or modifications to which the student replies in writing and which is communicated to the oral board together with my report.

ii)   Suggestions and modifications to which the student's written response is sent to me. I will give my reply to the same in two weeks of its receipt. This is necessary before the thesis is considered by the oral board.

7. Specific Recommendations

(Please cross out any two *paras* out of the following)

i)   The thesis is acceptable in the present form for the award of the Ph.D degree.

ii)   The thesis is acceptable and the corrections, modifications, and improvement suggested by me would be incorporated in the thesis to the satisfaction of the oral board.

iii)   The thesis needs technical improvement/modifications, which must be carried out to my satisfaction before I recommend the thesis for acceptance.

iv)   The thesis be rejected

(Signature of the Examiner)

Name:

Designation:

Address: