

नियम और विनियम
Rules and Regulations

एम. टेक. डिग्री कार्यक्रम
M.Tech. Degree Programme

2013 बैच आगे
2013 Batch Onwards

राष्ट्रीय प्रौद्योगिकी संस्थान दिल्ली

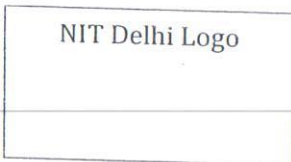
NATIONAL INSTITUTE OF TECHNOLOGY DELHI

(भारत के मानव संसाधन विकास मंत्रालय, भारत सरकार के तत्वावधान में एक स्वायत्त संस्थान)

(An Autonomous Institute under the aegis of Ministry of Human Resource Development, Govt. of India)

आईएमआर परिसर, सेक्टर -7, इंस्टीट्यूशनल एरिया, दिल्ली - 110040, भारत

IAMR Campus, Sector A-7, Institutional Area, Delhi – 110040, INDIA



**RULES AND REGULATIONS OF
M.Tech PROGRAMS**

Effective for the batches admitted in 2013-14 and onwards



**NATIONAL INSTITUTE OF TECHNOLOGY
M.Tech DEGREE PROGRAMS**

1. INTRODUCTION:

Provision of these regulations shall come into force with effect from the academic year 2013 - 13 and shall be applicable to all M.Tech courses (unless otherwise stated) offered by the Institute.

1.1 M.Tech Degree Program are offered in the following specialization by the respective department as listed below:

Department	Program	Course / Specialization (s)
Electronics and Communication Engineering	M. Tech	Electronics and Communication Engineering

1.2 The provisions of these regulations shall be applicable to any new discipline that may be introduced from time to time.

1.3 The sanction of stipend will be as per the guidelines prescribed AICTE/MHRD from time to time.

2. ADMISSION:

Admissions are made on All India basis for all the programs, with reservations as per Government of India norms. The selection criterion for admission into all the M.Tech. programs is based on valid GATE score. Candidates seeking admission into M.Tech. in Engineering should have passed BE/B.Tech. or equivalent degree in the subject concerned from a recognized University/Institute with First Class and not less than 60% aggregate marks (of all the years) or equivalent CGPA of 6.5/10. In case of SC/ST candidates 55% aggregate marks (of all the years) or equivalent CGPA of 6.0/10 is the eligibility requirement. Eligibility and other criteria for admissions to M. Tech. courses of the Institute will be reviewed and decided by the Senate from time to time.

3. COURSE STRUCTURE:

An M. Tech. program is of 4-semester duration, out of which 2 semester course work followed by two semester dissertation work.

The total course package for an M. Tech. Degree program will typically consist of the following components.

- | | |
|--|--------------|
| a) Core Courses | ≥ 24 Credits |
| b) Elective Courses | ≥ 15 Credits |
| c) Dissertation | = 26 Credits |
| d) Mandatory courses
(Seminars- 02, Comprehensive viva-voce-04) | = 06 Credits |

1.3 The Departmental Board of Studies will discuss and finalize the exact credits offered for the program for the above components 'a' to 'd' in the range of 76-84, the semester-wise distribution of the courses and credits, as well as the syllabi of all M. Tech. Programs offered by the department from time to time and recommend the same to the Senate for consideration and approval.

1.4 In order to qualify for a post graduate degree of the Institute, a student is required to complete all the credits specified in the scheme of instruction for that program as approved by the Senate from time to time.

4. ACADEMIC CALENDAR:

4.1 The academic year is divided into two semesters.

4.2 The senate shall approve the schedule of academic activities for an academic year including the dates of registration, Mid semester and End semester examinations, which shall be referred to as academic calendar of the year. Each semester will normally be of 19 weeks, which includes End semester examinations. It may be ensured that the minimum number of effective teaching weeks in a semester is 16.

4.3 Academic calendar declared by the Senate in the beginning of a semester shall also fix fest dates during which all the co-curricular and extra-curricular programs like Technical seminars / Spring Spree /Institute day / etc. must be organized.

5. RESIDENTIAL REQUIREMENT:

The Institute is essentially residential and unless otherwise exempted/permitted, every student shall be required to reside in and be a boarder of one of the halls of residence and mess to which he/she is assigned.

1. ATTENDANCE:

Attendance in all classes (lectures/tutorials, laboratories etc.) is compulsory. A student will not be permitted to appear in the end semester examination on grounds of unsatisfactory attendance.

Minimum required attendance in each theory /laboratory course is 80% for appearing in the End Semester examination.

Absence without obtaining sanction of leave will be considered as an act of indiscipline and shall entail deduction from scholarship on pro rata basis.

No student can receive scholarship/fellowship from more than one source, either Government or Private.

7. LEAVES:

7.1 A post graduate student shall be entitled to the following kinds of leave during every academic year, counted from the date of commencement of the session concerned as prescribed in the academic calendar of the institute.

7.2 Any absence over and above the prescribed type of admissible leave shall entail deduction from the scholarship, beside other action as may be decided by the Institute.

Sl.No.	Leave	Maximum Number of days	Sanctioning authority
1.	Casual Leave	8 days per semester subjected to the condition that such leave will not be allowed for more than 6 days at a time. Casual leave cannot be combined with	Head of the Department (HOD)



		medical leave.	
2.	Medical Leave	8 days per semester	HOD with Medical Certificate from the Institute Medical Officer.

8. REGISTRATION:

- 8.1 Every Student of the M.Tech. courses is required to be present and register at the commencement of each semester on the day fixed for and notified in the Academic calendar.
- 8.2 The registration will be organized departmentally under the supervision of the Head of the Department/ Coordinator of a respective specialization / program.
- 8.3 A student who does not register on the day announced for the purpose may be permitted, in consideration of any compelling reason, late registration within the first week on payment of additional late fee as prescribed by the Institute from time to time. Normally no late registration shall be permitted after the first week from the scheduled date.
- 8.4 Only those students will be permitted to register who have: (a) cleared all Institute and Hostel dues of the previous semesters (b) paid all required fees for the current semester, and (c) not been debarred from registering for a specified period on disciplinary action or any other ground.
- 8.5 The students will choose the subjects for registration in consultation with the Faculty Advisor. The students may also consult the Head of the Department/Division/Centre/Section/ any other teacher.
- 8.6 A student who has already registered may
 (a) register for a new course in addition to the courses he/she has already registered for (OR)
 (b) opt for a new course in place of the one already registered for with the concurrence of the faculty advisor.
 Any change of the course as permissible by sub-paras (a) and (b), above must however, be done within two weeks after registration.
- 8.7 A Student can register for a backlog subject either for (i) Study or for (ii) Examination. In case of Study, his / her previous marks

are cancelled and will have to attend all classes and examinations along with next batch of students. Major changes in the time table shall not be entertained to accommodate backlog students. In case of registration for examination, he/she will not attend the classes, but will appear only for the end-semester examinations or make-up examinations as and when they are conducted. In such a case, the student shall be awarded only P grade, if he/she gets 30% or more marks in the end semester/makeup examination. Backlog students registering for study or examinations have to submit an undertaking that they will not change the status of their registration in the subject during the semester.

9. ASSESSMENT OF ACADEMIC PERFORMANCE:

- 9.1 There will be continuous assessment of the performance of students throughout the semester and grades will be awarded by the subject teacher.
- 9.2 Each theory subject in a semester is evaluated for 100 marks, with the following weightages.
- | Sub-component | Weightage |
|--------------------------|------------------|
| Continuous Evaluation | 20 marks |
| Mid-semester Examination | 30 marks |
| End-semester Examination | 50 marks |
- 9.3 The mid-semester examination will be conducted after 7 or 8 weeks of instruction. The Mid semester and End semester examinations will be conducted centrally by the examination section.
- 9.4 For assigning marks in continuous evaluation, minor(s)/surprise test/ assignment / quiz etc. may be conducted.
- 9.5 The mode and nature of the evaluation and the corresponding weightages may be intimated to the students at the beginning of the semester along with the lecture schedule.
- 9.6 Each laboratory course in a semester is evaluated for 100 marks, with the following weightages:

Sub-component	Weightage
Continuous evaluation	25 marks
(Lab report, Viva, Quiz etc.)	
Skill test	25 marks
End Semester examination	50 marks



- 9.7 **COMPREHENSIVE VIVA-VOCE:** The oral examination carrying 4 credits will cover the entire course of study up to the I year II semester. The viva voce shall be conducted by an external examiner. A committee nominated by the Head of the Department shall be associated with the conduct of the comprehensive viva-voce.
- 9.8 A Seminar Assessment Committee will be formed by the Head of the Department/Centre for the evaluation of performance at Seminars. Every student is expected to attend all the seminars of all the students of the batch held in the Department/Centre during the semester. Due weightage shall be given to a student's attendance in the overall evaluation of this requirement.

10. DISSERTATION EVALUATION:

- 10.1 26 credits are assigned to the dissertation carried out by a student. The minimum period for submission of dissertation shall be 44 weeks. This minimum period shall be strictly adhered to. The method of evaluation is as per the guidelines given in Appendix-I.
- 10.2 The dissertation supervisor will periodically review the progress of the student and finally give his/her assessment of the work done by the student.
- 10.3 **Dissertation and Viva-Voce:** A student shall be required to submit a dissertation on the Project work carried out by him/her. The guidelines for preparation of Dissertation shall be followed by every student as per guidelines given Appendix VI. Three/four bound copies along with a soft copy of the dissertation shall be submitted to the Head of the Department/Centre within the last date prescribed in the Academic Calendar for the purpose.
- 10.4 Dissertation viva - voce will be held within the date fixed in the academic calendar and the grades will be finalized. External examiner for the evaluation of the dissertation at the end of fourth semester shall be from outside the Institution. The dissertation assessment committee constituted by the Head of the Department, along with the dissertation supervisor, shall be associated with the evaluation. The external expert who examines the Dissertation will conduct the viva voce.
- 10.5 Extension of dissertation work beyond the deadline of submission in very special case may be granted by the Dean - Academic on recommendation of the department/centre for a maximum period of 3 months. The viva-voce has to be completed

within the extension period. The student shall not be eligible either for award of scholarship during the extension period or any medal/prize. However, if the student had been absent on medical grounds and his/her project had been extended, he/she may be eligible for award of medal or prize, if any. If the above mentioned extension period encroaches into the next semester, the student will have to pay the tuition fee on par with full time student.

11. DISSERTATION WORK IN COLLABORATION WITH INDUSTRY:

- 11.1 A student may, with the approval of the Head of the Department/Centre, visit an industry or a Research Laboratory for data collection, discussion of the dissertation, experimental work, survey, field studies, etc. during the project period. Projects sponsored by the industry or Research Laboratories will be encouraged and a close liaison with such organizations will be maintained.
- 11.2 A student may, with the approval of Head of the Department/Centre, do the Dissertation work in collaboration with an industry, a Research and Development Organization. The student shall acknowledge the involvement and / or contribution of an industry, R&D organization in completing the project in his/her dissertation and a certificate to this effect, issued by the supervisor from the industrial organization, will be included in the dissertation.
- 11.3 It is mandatory for all students (especially those who do their project in an Industry, R&D organization in India or abroad) to make full disclosure of all data on which they wish to base their dissertation. They cannot claim confidentiality simply because it would come into conflict with the Industry's or R&D laboratory's own interests. Any tangible intellectual property other than copyright of dissertation may have to be assigned to the Institute. The copyright of the dissertation itself would however lie with the student as per the IPR policy in force.
- 11.4 In addition to the Supervisor from the department/centre guiding the project work, a Joint Supervisor may be appointed from the Industry and Research Laboratory with the approval of the DAC - PG &R. A certificate from the joint supervisor will be included in the dissertation. A member of faculty of the Institute, who is the internal supervisor, may, if felt necessary, visit the industry or the Research Laboratory in connection with the dissertation work of his/her student.



12. INDUSTRIAL TRAINING:

A student may undergo Industrial training for a period of eight weeks, if he/she wishes, immediately after the completion of I Year II semester.

13. EVALUATION – GRADING SYSTEM:

13.1 As a measure of student's performance a 7-scale grading system using the following letter grades and corresponding grade points per credit shall be followed. Grading will be done based on the absolute marks obtained.

Letter Grade	Ex	A	B	C	D	P	F
Grade Point	10	9	8	7	6	5	0

The norms for the award of the letter grade shall be as follows:

Grade	Ex	A	B	C	D	P	F
% Marks	≥ 90	80-89	70-79	60-69	50-59	40-49	< 40

No student can pass without securing at least 40% marks.

- In case of bunching, the DAC-PG&R may review the reasons for bunching and modify the ranges, marginally. In all such cases, the modified ranges and the reasons should be presented to the Senate for its approval.
- In addition, there shall be four transitional grading symbols, which can be used by the examiners to indicate the special position of a student in a subject.
 - I- for "Incomplete assessment", when the student misses the End- semester examination on Medical grounds (see rule 15.1).
 - R - for 'Insufficient attendance in the course (see rule 15.4).
 - W - for "Temporary withdrawal" from the Institute (see rule 19)
 - X - for "Debarred" on grounds of indiscipline /malpractices in examinations (see rule 20).

13.2 A semester Grade Point Average (SGPA) will be computed for each semester. The SGPA will be calculated as follows:

$$SGPA = \frac{\sum_{i=1}^n C_i GP_i}{\sum_{i=1}^n C_i}$$

Where C_i = Credit for the course

GP_i = the grade point obtained for the course

n = Number of subjects registered for the semester.

13.3 Starting from I Year II Semester a Cumulative Grade Point Average (CGPA) will be computed for every student at the end of every semester.

13.4 The CGPA would give the Cumulative performance of the student from the I Year I semester upto the end of the semester to which it refers and calculated as follows.

$$CGPA = \frac{\sum_{i=1}^m S_i C_i}{\sum_{i=1}^m C_i}$$

Where m = total number of semesters under consideration

C_i = total number of credits registered for during a particular semester.

S_i = SGPA of the semester.

13.5 The CGPA, SGPA and the grades obtained in all the subjects in a semester will be communicated to every student at the end of every semester.

13.6 Both SGPA and CGPA will be rounded off to the second place of decimal and recorded as such. Whenever these grade point averages are to be used for the purpose of determining the inter se merit ranking of a group of students, only the rounded off values will be used.



13.7 Transition Grades

(a) Grade I: When a student gets I Grade for any subject(s) during a semester, the SGPA of that semester and the CGPA at the end of that semester will be tentatively calculated ignoring this (these) subjects. After these transitional grades have been converted to appropriate grades, the SGPA for the semester and CGPA at the end of the semester will be recalculated after taking into account the new grades.

(b) About Grade F: When a student gets the 'F' grade in any subject during a semester, the SGPA and the CGPA from that semester onwards will be tentatively calculated, taking only 'zero point' for each such 'F' grade. After the 'F' grade has been substituted by better grades during a subsequent semester, the SGPA and CGPA of all the semesters starting from the earliest semester in which the 'F' grade has been updated, will be recomputed and recorded to take this change of grade into account.

(c) About grades R, W and X: When a student gets any of these transitional grades in any subject(s) during a semester, the SGPA of that semester and the CGPA at the end of that semester will be tentatively calculated by taking 'zero point' for these subject(s). After these transitional grades have been converted to appropriate grades, the SGPA for the semester and CGPA at the end of the semester will be recalculated after taking into account the new grades.

14. EXAMINATIONS:

13.2 The Institute Scholarship of a student will be withheld in case his/her CGPA at the end of any semester falls below 6.5. However, in the case of students belonging in to SC/ST it is 6.0. However, the scholarship will be restored with retrospective effect, based on recommendation of Head of the Department, the moment the CGPA crosses at least 6.5 (for SC/ST 6.0).

14.2 A student will be permitted to submit the dissertation only if he/she completes all the courses as required in the program.

14.3 Student with "F" grade is eligible to appear for makeup examination(s) as and when they are conducted by the Institute.

14.4 A student whose performance in the project work has been unsatisfactory may be assigned additional work on the same

problem or assigned a new problem. If the student is assigned additional work the student will have to complete the work and appear at the viva-voce as per the academic calendar fixed by the Senate. If the student is assigned a new problem on account of any reason, the student will have to submit the dissertation and complete the viva-voce by December 31 of that calendar year. The student will not be eligible for scholarship during the extended period of his/her stay but will have to pay semester fees during the extended period of stay.

14.5 A student who has failed in the comprehensive viva-voce shall be required to present himself/herself again within a period of two months for the viva-voce on a date to be fixed by the concerned Head of the Department /Centre.

15. THE GRADES 'I' AND 'R'

15.1 The grade "I" may be temporarily given to a student who is unable to appear in the end semester examination because of:

(a) Illness or accident, which disables the student from appearing in the examination. This must be duly certified by the Institute Medical Officer.

(b) A calamity in the family at the time of the examination which in the opinion of the Head of the Department/Centre and Dean-Student Affairs required the student to be away from the campus.

15.2 If a student is unable to appear in a mid-semester examination for any of the compelling reasons mentioned above, the teacher(s) concerned may use discretion, and take a test with the same weightage.

15.3 A student who has been awarded grade 'I' in a subject in the end-semester examination shall have to appear the makeup examination as and when conducted.

15.4 A Student who has insufficient attendance in a particular subject shall be awarded grade 'R'. He/she has to re-register for that course in the subsequent semester in which it is offered.

16. MAKEUP EXAMINATION:

16.1 Students appearing in Makeup examination shall be governed by the following rules:
Students with "F" or "I" Grade only are eligible to write makeup examination.



Students with "R" Grade are not eligible for writing the makeup examination.

A student, who has obtained 'F' grade in makeup examination, may register for the course either for "Study" or for "Examination". (See rule 8.7).

- 16.2 The schedule for makeup examination is given in the Academic calendar.
- 16.3 A student can register for makeup examinations in any number of courses.
- 16.4 Students registering for examination shall be awarded only P grade, if they get 30% or more marks in the end semester/makeup examination.

17. GRADUATION REQUIREMENTS:

- 17.1 In order to qualify for a PG degree of the institute, a student:
- Must have completed all the credit requirements for the degree, as prescribed by the senate with grade "P" or a higher grade in each of the subjects for which the student registered in all the semesters.
 - Must have obtained a CGPA of at least 6.00 at the end of the semester in which the student completes all the requirements (including the dissertation) for the degree.
- 17.2 The degree will be awarded to a qualified student only after
- The student has cleared all Institute and Hall/Hostel dues, if any, outstanding against the student and
 - The student has returned all library books borrowed by him/her and also returned instruments, apparatus issued to him/her in good condition.
- 17.3 A student with a CGPA of 8.0 and above, passing all subjects in the first attempt, is considered eligible for the award of First Division with Distinction.
- 17.4 A student with a CGPA of 6.5 and above but less than 8.0 is considered eligible for the award of First Division.
- 17.5 A student with a CGPA of 6.0 and above but less than 6.5 is considered eligible for the award of Second Division.

18. CONDUCT AND DISCIPLINE:

Students shall conduct themselves within and outside the precincts of the institute in a manner befitting the students of an Institute of National importance. Detailed rules regarding conduct and discipline are given in Appendix-V.

19. TEMPORARY WITHDRAWAL:

- 19.1 A student who has been admitted to M.Tech. program may be permitted to withdraw temporarily for a period of one semester or more from the Institute on account of prolonged illness/acute problem in the family provided that:
- 19.2 The student applies to the Institute within 15 days of commencement of the semester or from the last date of attending the classes, stating fully the reasons for such withdrawal together with supporting documents and endorsement of the parent/guardian.
- 19.3 The institute is satisfied that, inclusive of the period of withdrawal, the student is likely to complete all the requirements for the degree within 5 years of admission to the Program.
- 19.4 There are no outstanding dues or demand from the Institute/Department/Centre/Hall of Residence / Library.
- 19.5 A student who has been granted temporary withdrawal will be required to pay tuition fee and other fees for the current semester when the student rejoins the program.
- 19.6 A student shall be granted only one such temporary withdrawal during the program.
- 19.7 A student, who wishes to join the job, after completion of the entire course work, may be permitted to pursue his dissertation on part-time basis provided:
- sufficient facilities are available in the organization where he/she is working
 - there is a competent supervisor in the organization
 - the minimum period for submission of dissertation work shall be double the amount of the balance period.
 - the dissertation of such a part time student shall be under the guidance of two supervisors, one from the organization and the other from the Institute.

20. MALPRACTICES:



Students are not allowed to leave the Examination Hall without submitting the answer script. They will not be permitted to enter the exam hall after 30 minutes of commencement of the exam and to leave the exam hall before 30 minutes of the closure of examination.

The nature of malpractice and the minimum punishment are indicated in the following table:

Sl. No	Nature of the Malpractice	Punishment
1	Taking answer booklets out of the examination hall, used or unused.	Fine of Rs. 1000/- per paper. In case of used answer booklets. In addition to the above, the candidate shall be awarded F Grade in that subject.
2	Verbal or oral communication to neighbouring students even after warning.	Taking away the answer script and asking the student to leave the hall.
3	Possession of any incriminating material inside the examination Hall (whether used or not). For example: Written or printed materials, bits, writings on scale, calculator, hand kerchief, dress, part of the body and hall Ticket etc., Possession of cell phones, programmable calculator, recording apparatus or any unauthorized electronic	In case of Mid /Sessional examination, award zero marks. In case of End semester examinations, award 'F' Grade. The candidate may be allowed to write make-up examination.

	equipment. Copying from neighbour Exchange of Question Papers and Other Materials with some answers	
4	Possession of answer book of another candidate. Giving answer book to another candidate.	The candidate shall be awarded 'F' Grade in that particular subject.
5	Misbehavior in the examination hall (Unruly conduct, threatening the invigilator, or any other examination officials). Involved in malpractice for the second or subsequent times of serial number 2-4.	Cancellation of all theory examinations registered in that semester and further debarred from continuing his/her studies for one year (Two subsequent semesters). However the students are permitted to appear for makeup examinations of the previous semesters.
6	Cases of Impersonation	a)Handing over the impersonator (outsider) to the police with a complaint to take appropriate action. b)Cancelation of all examinations (all papers registered) for the bonafide student for whom the impersonation was done and further the bonafide student will be debarred from continuing his/her studies and writing



		all examinations for two years. c) If a student of this institute is found to impersonate a bonafide student, the impersonating student will be debarred from continuing his/her studies and writing all examinations for two years.
7	Physical assault causing injury to the invigilator or any examination officials.	Rustication from the Institute.

Any other type of malpractices reported, the enquiry committee may recommend appropriate punishment.

21. STUDENT APPRAISAL:

It is mandatory for every student to submit the feedback on each and every course, he/she has undergone, at the end of every semester.

22. CHANGE OF REGULATIONS:

Notwithstanding all that has been stated above, the Senate, has the right to modify any of the above rules and regulations from time to time. All such modifications shall be documented and numbered sequentially and shall be made available in the Institute website for the information of the students.

APPENDIX- I

DISSERTATION EVALUATION

Dissertation Evaluation:

The evaluation of the Dissertation work carrying 26 credits, is divided into two modules:

Part-A (at the end of II Year I Semester) 8 Credits

Part-B (at the end of II Year II Semester) 18 Credits

A student has to select a topic for his dissertation, based on his/her interest and the available facilities at the commencement of dissertation work. The supervisor will evaluate execution of the dissertation periodically.

The dissertation report shall have to be submitted as per the approved guidelines given in Appendix-VII.

For the purpose of assessment, the performance of a student in the dissertation may be divided into the following sub components:

At the end of II Year I semester (for 8 credits)

Assessment by the supervisor ... 50%

Assessment by the dissertation
assessment committee of the Department ... 50%

At the end of IV semester (for 18 credits)

Assessment by the supervisor ... 50%

Assessment by the External Examiner ... 50%

An external examiner shall conduct the viva-voce Examination. A dissertation assessment committee constituted by the Head of the Department, along with the supervisor shall be involved in the conduct of the viva-voce examination.

APPENDIX- II

DEPARTMENTAL ACADEMIC COMMITTEE POSTGRADUATE & RESEARCH (DAC -PG&R)

Head of the Department Chairman
All Professors of the Department having Ph. D. Members
All Associate Professors of the Department having Ph. D. Members
Two Assistant professors of the Department having Ph. D. Members
(by rotation for two years)

NOTE:



The Head of the department will nominate one of the members as secretary.

There shall be one DAC-PG&R for every department, which is involved in the teaching for any of the PG degree program.

FUNCTIONS:

- i. To monitor the conduct of all postgraduate courses and course work of M.Tech program.
- ii. To ensure academic standards and excellence of the courses offered by the department.
- iii. Review and approval of the grades.
- iv. To consolidate the registration of the M.Tech students and communicate to the course instructors and Dean-Academic.
- v. To consider any matter related to the postgraduate program(s) of the Department and make a suitable recommendation to the Senate.
- vi. To monitor the progress of research of all the candidates of the Department
- vii. To forward the recommendations of the Doctoral Scrutiny Committee and the panel of External Examiners as recommended by the DSC to the Dean-Academic.
- viii. To take up any responsibility or function assigned by the Senate.

APPENDIX- III

DEPARTMENTAL ACADEMIC APPEALS COMMITTEE (DAAC):

Head of the Department	...	Chairman
Three faculty members of the Department (1 Professor, 1 Associate Professor and 1 Asst. Professor)	...	Members
One Professor from outside the Department (Nominated by Dean-Academic)	...	Member

NOTE:

- There shall be one DAAC for every Department.
- The Chairman may co-opt and / or invite more members.
- If the concerned instructor is a member of DAAC then he/she shall keep himself out of the Committee during deliberations.

- The quorum for each meeting shall be a minimum of THREE (Professor from outside department is mandatory).

FUNCTIONS:

- i. To receive grievance /complaints in writing from the students regarding anomaly in award of grades due to bias, victimization, erratic evaluation, etc. and redress the complaints.
- ii. To interact with the concerned course instructor and the student separately before taking the decision.
- iii. The decision of the DAAC will be based on simple majority
- iv. The recommendations of the DAAC shall be communicated to the Dean-Academic for further appropriate action as required.

APPENDIX- IV

DEPARTMENTAL BOARD OF STUDIES (PG&R)

1. Head of the Department	Chairman
2. All Professors of the Department	Members
3. All Associate Professors of the Department	Members
4. One Professor (Allied Department)	Member
5. Two Experts	Members
(One from Industry and one from Academia)	

Note:

- All the members must possess Ph. D.
- The Chairman will nominate one of the members as secretary.
- The Chairman may co-opt and / or invite more members including external experts while framing / revising the curriculum.

FUNCTIONS:

- i. To develop the curriculum for the postgraduate courses offered by the Department and recommend the same to the Senate.
- ii. The Board of studies is required to meet at least once in two years.

APPENDIX-V

STUDENTS' CONDUCT AND DISCIPLINARY CODE

It is the responsibility and duty of each and every student of the Institute



to become acquainted with "Students Conduct and Disciplinary Code". It is presumed that every student from the date of his/her admission to the Institute has knowledge of this code. All students are required to strictly adhere to this code as a condition of their admission to the Institute and these rules would be binding on and enforceable against them or any one among them.

Section 1: Responsibilities of the Students

It shall be the responsibility of the students

- a) To behave and conduct themselves in the Institute campus, hostels and premises in a dignified and courteous manner and show due respect to the authorities, employees and elders.
- ii) To follow decent and formal dressing manners. Students should avoid clothing depicting illegal drugs, alcohol, profane language, racial, sexual and vulgar captions etc.
- iii) To access all educational opportunities and benefits available at the Institute and make good use of them to prosper academically and develop scientific temper.
- iv) To respect the laws of the country, human rights and to conduct in a responsible and dignified manner at all times.
- v) To report any violation of this Code to the functionaries under this Code.

Section 2: Behaviour of the Students

1. Groupism of any kind that would distort the harmony is not permitted.
2. Students are expected to spend their free time in the Library. They shall not loiter along the verandas or crowd in front of the offices or the campus roads. Students should refrain from sitting on places such as parapets, stairs, footpaths etc.
3. Possession or consumption of narcotic drugs and other intoxicating substances are strictly prohibited in the campus and hostels.
4. Silence shall be maintained in the premises of the Institute.
5. Students are not permitted to use mobile phones in the class room, library, computer centre, examination halls, etc.
6. **Students shall refrain from all activities considered as ragging which is a criminal offence.**
7. Students are prohibited from indulging in anti-institutional, anti-national, antisocial, communal, immoral or political expressions and activities within the campus and hostels.

8. Politically based students' and other organizations or outfits are not allowed in the campus. Students are strictly prohibited from organizing, attending or participating in any activity or agitation sponsored by politically based organizations.
9. Students shall not deface, disfigure, damage or destroy or cause any loss in any manner to all the public, private or Institute properties.
10. Without specific permission of the authorities, students shall not bring outsiders to the Institute or hostels.
11. No one shall bring, distribute or circulate unauthorized notices, pamphlets, leaflets etc within the campus or hostels. The possession, distribution or exhibition of any item by any means which is *per se* obscene is prohibited within the campus or on any property owned/ managed by the Institute.
12. No student shall collect money either by request or by coercion from others within the campus or hostels.
13. The Institute being a place of learning and an exclusive academic zone, nobody shall respond to any call for any form of strike, procession or agitation including slogan shouting, *dharna*, *gherao*, burning of effigy or indulge in anything which may harm the peaceful atmosphere of the Institution and shall eschew from violence in the campus and hostels and even out side.
14. Possession or usage of weapons, explosives or anything that causes injury/ damage to the life and limb or body of any human being or property is prohibited.
15. **Use of motorized vehicles within the Institute premises is strictly prohibited.**
16. Students shall only use the waste bins for dispensing waste materials within the campus including classrooms, hostels, offices, canteen and messes.
17. Any conduct which leads to lowering of the esteem of the Institute is prohibited.

Section 3: Disciplinary Sanctions

Any student exhibiting prohibited behaviour mentioned in this Code shall, depending upon the gravity of the misconduct or depending on its recurrence, be subjected to any of the following disciplinary sanctions. Any student who is persistently insubordinate, who is repeatedly or wilfully mischievous, who is guilty of fraud, in the opinion of the



competent authority, is likely to have an unwholesome influence on his/her fellow students, will be removed from the rolls.

I. Minor Sanctions

- i. Warning or Reprimand: This is the least sanction envisaged in this Code. The student engaged in any prohibited behaviour will be issued a warning letter.
- ii. Tendering Apology: The student engaged in any prohibited behaviour may be asked to tender an apology for his/her act and undertaking that he/she shall not indulge in such or any of the prohibited behaviour in future.

II. Major Sanctions

- i. Debarring from Examinations: A student/group of students may be debarred from writing all/any/some of the examinations, which forms part of the academic program for which he/she/they has/have joined.
- ii. Suspension: A student may be suspended from the Institute for violation of any of the provisions of this Code. The period of suspension and conditions, if any, shall be clearly indicated in the communication addressed to the student. The student shall lose his/her attendance for the suspended period.
- iii. Restitution: Restitution implies reimbursement in terms of money and/or services to compensate for personal injury or loss, damage/disfiguration to property of the Institute or any property kept in the premises of the Institute in any manner. The students/group of students may be asked to compensate for the loss that has been caused to any person or property of the Institute or any property kept in the premises of the Institute due to the act of vandalism perpetrated by the students. The students/group of students shall also be liable to put in their service to restore any loss or damage caused to any property and thereby bringing it to its original form if it is possible.
- iv. Forfeiture: Caution deposit of any student engaged in any prohibited behaviour shall be forfeited.
- v. Expulsion: This is the extreme form of disciplinary action and shall be resorted to only in cases where stringent action is warranted. Expulsion is the permanent dismissal of a student from the Institute. Such a student will not be eligible for readmission to any of the courses of this Institute.

Section 4: Functionaries under the Code

- i) **Heads of the Departments/ Faculty Advisors/Chief Warden/ Wardens of Hostels:** As the persons in charge of the Departments/Hostels, the respective functionaries of all Teaching Departments and Hostels shall have the power and duty to take immediate action to curb any prohibitory behaviour as envisaged under this code. As these functionaries cannot single handedly manage all the issues, they can assign part of the work to the teachers and the teachers of all the departments/wardens have the responsibility to inform any incident of prohibited behaviour to the Heads of the Departments/ Chief Warden so that any serious issue can be settled before the same goes out of control. The Head of the Departments/ Chief Warden shall have the power to impose minor sanctions as envisaged under section 3(I) of this Code.

They can also recommend imposition of major sanctions as envisaged under Section 3(II) of this Code to the Director. The Head of the Departments/ Faculty Advisors/Chief Warden/ Wardens of Hostels while taking any action as envisaged in the code shall do so in an impartial manner and see to it that the sanction imposed/proposed is commensurate with the gravity of the prohibited behaviour. Any lapse on the part of a teacher/ Warden to report any instance of violence and misconduct on the part of the students shall be reported to the Director by the respective Head of the Departments/Chief Warden. The Wardens of Hostels shall be responsible for maintaining strict discipline and decorum in the hostel. He/she shall specifically see to it that the inmates of the hostel do not involve themselves in violation of any clause under Section 2 of this Code.

- ii) **Deans**

Any authority of the Institute with delegated powers shall have the power to visit/inspect any premises, buildings or any property of the Institute when there is a genuine doubt that any act of prohibited behaviour is taking place and can take any lawful actions to curb such behaviour. The HODs/ Faculty Advisors/Chief Warden/ Wardens of Hostels shall report to the Dean (Students) any instances of prohibited behaviour, who in turn shall bring it to the notice of the Director. The Dean (Students) shall forward the recommendations from the HODs/ Chief Warden to impose a major sanction under Section 3(II) of this Code to the Director after noting his observations. The Dean (Students) can also *suo moto* recommend action against



any student/students indulging in prohibited behaviour which is brought to his/ her notice.

iii) Director

The Director shall be the ultimate authority in imposing major sanctions as envisaged under Section 3(II) against the students for acts of prohibited behaviour. The Director can also entertain any appeal from any student/students aggrieved by the action of any authority of the Institute under or subordinate to the Director and decide the case on merit.

Section 5: Right to Appeal

The student/students aggrieved by the action of any authority of the Institute under or subordinate to the Director can appeal to the Director and any student aggrieved by the action of the Director can appeal to the Senate. The decision of the Senate shall be final and binding on the students.

Section 6: Assistance from Law Enforcement Agencies

The Deans/ HoDs/ Chief Warden shall have the power and duty to call the Police immediately with the concurrence of the Director when there is a threat of Law and Order situation in the Campus and also when there is a genuine apprehension that any incident of rioting, vandalism or any other act prohibited by law is likely to take place. The Deans/ HoDs/ Chief Warden shall in such a case give a detailed report to the Director. The Director/ Deans/ HoDs/ Chief Warden can also arrange for video recording of the entire situation and take requisite actions through police and other concerned authorities.

Section 7: Grievance Redressal Committee

The Institute will also set up "Grievance Redressal Committee" where the students can air their grievances. The Committee shall consist of the Deans/ HoDs/ Chief Warden and also members of the Parent-Teacher Association. Till these committees are constituted, *ad-hoc* committees shall be formed by the Director.

Section 8: Undertaking by the Students

The students joining any academic program of the Institute will have to give an undertaking to the effect that he/she will comply with the provisions envisaged in this Code in letter and spirit and even if it is not given them as well, will be bound by the provisions of this Code.

Section 9: Opportunity for Hearing

No order other than the order suspending or warning a student shall be passed without giving an opportunity of hearing to the Student/ Students.

Section 10: Ultimate Authority

For all disciplinary matters related to students, the Director shall be the ultimate authority as provided herein.

Section 11: Amendments to the Code

The Senate of the Institute shall have the power to amend any of the provisions in this Code. The amendments shall be brought to the notice of the students and faculty of the Institute through notice put on the Institute web site, notice boards of the Institute or through emails.

APPENDIX-VI

GUIDELINES FOR PREPARATION OF DISSERTATION REPORTS

Preamble

While utmost attention must be paid to the content of the dissertation report, which is being submitted in partial fulfilment of the requirements of the M.Tech degree, it is imperative that a standard format be prescribed. The same format shall also be followed in preparation of the final soft copies to be submitted to the Library in future.

1. Organisation of the Dissertation

The dissertation report shall be presented in a number of chapters, starting with Introduction and ending with Summary and Conclusions. Each of the other chapters will have a precise title reflecting the contents of the chapter. A chapter can be subdivided into sections, subsections and sub-subsection so as to present the content discretely and with due emphasis. When the work comprises two or more mutually independent investigations, the dissertation report may be divided into two or more parts, each with an appropriate title. However, the numbering of chapters will be continuous right through, for example Part 1 may comprise Chapters 2 - 5, Part 2, Chapters 6 - 9.

1.1 Introduction



The title of Chapter 1 shall be Introduction. It shall justify and highlight the problem posed, define the topic and explain the aim and scope of the work presented in the dissertation report. It may also highlight the significant contributions from the investigation.

1.2 Review of Literature

This shall normally form Chapter 2 and shall present a critical appraisal of the previous work published in the literature pertaining to the topic of the investigation. The extent and emphasis of the chapter shall depend on the nature of the investigation.

1.3 Report on the present investigation

The reporting on the investigation shall be presented in one or more chapters with appropriate chapter titles. Due importance shall be given to experimental setups, procedures adopted, techniques developed, methodologies developed and adopted. While important derivations/formulae should normally be presented in the text of these chapters, extensive and long treatments, copious details and tedious information, detailed results in tabular and graphical forms may be presented in Appendices. Representative data in table and figures may, however, be included in appropriate chapters. Figures and tables should be presented immediately following their first mention in the text. Short tables and figures (say, less than half the writing area of the page) should be presented within the text, while large table and figures may be presented on separate pages. Equations should form separate lines with appropriate paragraph separation above and below the equation line, with equation numbers flushed to the right.

1.4 Results and Discussion

This shall form the penultimate chapter of the dissertation report and shall include a thorough evaluation of the investigation carried out and bring out the contributions from the study. The discussion shall logically lead to inferences and conclusions as well as scope for possible further future work.

1.5 Summary and Conclusions

This will be the final chapter of the dissertation report. A brief report of the work carried out shall form the first part of the Chapter. Conclusions derived from the logical analysis presented in the Results and Discussions Chapter shall be presented and clearly enumerated, each

point stated separately. Scope for future work should be stated lucidly in the last part of the chapter.

1.6 Appendix

Detailed information, lengthy derivations, raw experimental observations etc. are to be presented in separate appendices, which shall be numbered in Roman Capitals (e.g. "Appendix IV"). Since reference can be drawn to published/unpublished literature in the appendices these should precede the "Literature Cited" section.

1.7 Literature Cited

This should follow the Appendices, if any, otherwise the Summary and Conclusions chapter. The candidates shall follow the style of citation and style of listing in one of the standard journals in the subject area consistently throughout his/her report, for example, IEEE in the Department of Electrical Engineering, Materials Transactions in Department of Metallurgical Engineering and Materials Science. However, the names of all the authors along with their initials and the full title of the article/monogram/book etc. have to be given in addition to the journals/publishers, volume, number, pages(s) and year of publication. Citation from websites should include the names(s) of author(s) (including the initials); full title of the article, website reference and when last accessed. Reference to personal communications, similarly, shall include the author, title of the communication (if any) and date of receipt.

1.8 Publications by the candidate

Articles, technical notes etc. on the topic of the dissertation report published by the candidate may be separately listed after the literature cited. This may also be included in the contents. The candidates may also include reprints of his/her publications after the literature citation.

1.9 Acknowledgements

The acknowledgments by the candidate shall follow the citation of literature, signed by him/her, with date.

2. DISSERTATION FORMAT

2.1 Paper



- 2.1.1 **Quality:** The dissertation report shall be printed / photo copied on white bond paper, whiteness 95% or above, weight 70 gram or more per square meter.
- 2.1.2 **Size:** The size of the paper shall be standard A4; height 297 mm, width 210 mm.
- 2.1.3 **Type Setting, Text Processing and Printing:** The text shall be printed employing Laserjet or Inkjet printer, the text having been processed using a standard text processor. The standard font shall be Times New Roman of 12 pts with 1.5 line spacing.
- 2.1.4 **Page Format:** The Printed Sheets shall have the following written area and margins:
 Top Margin 15 mm
 Head Height 3 mm
 Head Separation 12 mm
 Bottom Margin 22 mm
 Footer 3 mm
 Foot Separation 10 mm
 Text Height 245 mm
 Text Width 160 mm
 When header is not used the top margin shall be 30 mm.

Left and Right Margins

Single sided
 Left Margin 30mm
 Right Margin 20 mm

- 2.1.5 **Pagination:** Page numbering in the text of the report shall be Hindu Arabic numerals at the centre of the footer. But when the candidate opts for header style the page number shall appear at the right and left top corner for the odd and even number pages, respectively. Page number "1" for the first page of the Introduction chapter shall not appear in print, only the second page will bear the number "2". The subsequent chapters shall begin on a fresh page. When header style is chosen the first page of each chapter will not have the header and the page number shall be printed at the centre of the footer. Pagination for pages before the Introduction chapter shall be in lower case Roman numerals, e.g., "iv".
- 2.1.6 **Header:** When the header style is chosen, the header can have the Chapter number and Section number (e.g., Chapter 2,

Section 3) on even numbered page headers and Chapter title or Section title on the odd numbered page header.

- 2.1.7 **Paragraph format:** Vertical space between paragraphs shall be about 2.5 line spacing. The first line of each paragraph should normally be indented by five characters or 12mm. A candidate may, however, choose not to indent if he/she has provided sufficient paragraph separation. A paragraph should normally comprise more than one line. A single line of a paragraph shall not be left at the top or bottom of a page (that is, no windows or orphans should be left). The word at the right end of the first line of a page or paragraph should, as far as possible, not be hyphenated.

2.2 Chapter and Section Format

- 2.2.1 **Chapter:** Each chapter shall begin on a fresh page with an additional top margin of about 75mm. Chapter number (in Hindu-Arabic) and title shall be printed at the centre of the line in 6mm font size (18pt) in bold face using both upper and lower case (all capitals or small capitals shall not be used). A vertical gap of about 25mm shall be left between the Chapter number and Chapter title lines and between chapter title line and the first paragraph.

- 2.2.2 **Sections and Subsections:** A chapter can be divided into Sections, Subsections and Sub-sub Sections so as to present different concepts separately. Sections and subsections can be numbered using decimal points, e.g. 2.2 for the second section in Chapter 2 and 2.3.4 for the fourth Subsection in third Section of Chapter 2. Chapters, Sections and Subsections shall be included in the contents with page numbers flushed to the right. Further subsections need not be numbered or included in the contents. The Section and Sub-Section titles along with their numbers in 5 and 4mm (16 and 14 pt) fonts, respectively, in bold face shall be flushed to the left (not centred) with 15 mm space above and below these lines. In further subdivisions character size of 3 and 3.5 with bold face, small caps, all caps and italics may be used for the titles flushed left or centred. These shall not feature in the contents.

- 2.3 **Table / Figure Format:** As far as possible, tables and figures should be presented in portrait style. Small size table and figures (less than half of writing area of a page) should be incorporated



within the text, while larger ones may be presented on separate pages. Table and figures shall be numbered chapter wise.

For example, the fourth figure in chapter 5 will bear the number Figure 5.4 or Fig 5.4 Table number and title will be placed above the table while the figure number and caption will be located below the figure. Reference for Table and Figures reproduced from elsewhere shall be cited in the last and separate line in the table and figure caption, e.g. (after McGregor[12]).

3 Auxiliary Format

3.1 **Binding:** The evaluation copies of the dissertation report may be spiral bound or soft bound. The final hard bound copies to be submitted after the viva-voce examination will be accepted during the submission of dissertation report with the following colour specification:

M.Tech. Dissertation

Grey

3.2 **Front Covers:** The front covers shall contain the following details:

Full title of report in 6 mm 22 point's size font properly centred and positioned at the top. Full name of the candidate in 4.5 mm 15 point's size font properly centred at the middle of the page. A 40 mm dia replica of the Institute emblem followed by the name of department, name of the Institute and the year of submission, each in a separate line and properly centred and located at the bottom of page.

3.2.1 **Lettering:** All lettering shall be embossed in gold.

3.2.2 **Bound back:** The degree, the name of the candidate and the year of submission shall also be embossed on the bound (side) in gold.

3.3 **Blank Sheets:** In addition to the white sheets (binding requirement) two white sheets shall be put at the beginning and the end of the report.

3.4 **Title Sheet:** This shall be the first printed page of the Dissertation and shall contain the submission statement: the Dissertation Report submitted in partial fulfilment of the requirements of the M.Tech Degree, the name and Roll No. of the candidate, name(s) of the Supervisor and Co-supervisor(s) (if any), Department, Institute and year of submission. Sample copy of the 'Title Sheet' is appended (Specimen 'A').

3.5 **Dedication Sheet:** If the candidate so desires(s), he/she may dedicate his/her report, which statement shall follow the title page. If included, this shall form the page 1 of the auxiliary sheets but shall not have a page number.

3.6 **Approval Sheet:** In the absence of a dedication sheet this will form the first page and in that case shall not have a page number. Otherwise, this will bear the number two in Roman lower case "ii" at the centre of the footer. The top line shall be:

Dissertation Approval for M.Tech

A sample copy of the Approval Sheet is appended (Specimen 'B')

3.7 **Abstract:** The 500 word abstract shall highlight the important features of the dissertation report and shall correspond to the electronic version to be submitted to the Library for inclusion in the website. The Abstract in the report, however, shall have two more parts, namely, the layout of the report giving a brief chapter wise description of the work and the key words.

3.8 **Contents:** The contents shall follow the Abstract and shall enlist the titles of the chapters, section and subsection using decimal notation, as in the text, with corresponding page number against them, flushed to the right.

3.8.1 **List of Figures and Tables:** Two separate lists of Figure captions and Table titles along with their numbers and corresponding page numbers against them shall follow the Contents.

Abbreviation Notation and Nomenclature: A complete and comprehensive list of all abbreviations, notations and nomenclature including Greek alphabets with subscripts and superscripts shall be provided after the list of tables and figures.



As far as possible, generally accepted symbols and notation should be used.

Auxiliary page from dedication (if any) to abbreviations shall be numbered using Roman numerals in lower case, while the text starting from the Introduction shall be in Hindu Arabic.

The first pages in the both the cases shall not bear a page number.

3.10 **A Declaration of Academic Honesty and Integrity:** A declaration of Academic honesty and integrity is required to be included along with every dissertation report after the approval sheet. The format of this declaration is given in Specimen 'C' attached.

Specimen 'A': Title Sheet

(Title)

Submitted in partial fulfilment of the requirements

of the degree of

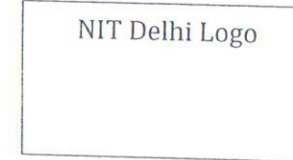
(Master of Technology)

by

(Name of the Student)

(Roll No. _____)

Supervisor (s):



(Name of the Department)

NATIONAL INSTITUTE OF TECHNOLOGY DELHI

(Year)



Place : _____

This dissertation entitled (Title) by (Author Name) is approved for the degree of _____ (Degree details).

Examiners

Supervisor (s)

Chairman

Date : _____

Specimen 'C' – Declaration

I declare that this written submission represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

(Signature)

(Name of the student)

(Roll No.)

Date: _____

