

M. Tech. Regulations



**Dr. B R Ambedkar
National Institute of Technology Jalandhar – 144011
(An Institute of National Importance)**

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Definitions

- NITJ/Institute: Dr. B R Ambedkar National Institute of Technology, Jalandhar
- Academic Calendar: The exact dates for the important academic events scheduled during the Academic Session shall be specified in the Academic Calendar.
- Academic year: Institutes academic year begins from July, 1 and ends on June, 30 every year.
- Candidate: Aspirant desirous to take admission in M. Tech. programme.
- CCMT- Centralized Counselling for M. Tech./M. Arch./M. Plan. Admissions
- SGPA- Semester Grade Point Average
- CGPA- Cumulative Grade Point Average (SGPA)
- BoS- Board of Studies
- Course Work: Mandatory requirement for Registration where a student has to write examinations and deliver state of art seminar to earn minimum required credit and CGPA.
- SMPC: Senate Masters Programme Committee
- Supervisor: Faculty who mentors, advises, and is associated with the M. Tech. student in his Dissertation work.
- HoD: Head of the Department
- Co-Supervisor: Another Supervisor who is from outside NITJ.
- NET: National Eligibility Test
- GATE: Graduate Aptitude Test in Engineering
- Registration: Enrolment for the courses/research that a student wants to pursue during a semester as required by the Program.
- SENATE: Senate of the Institute

Regulations for Full-Time M. Tech. Programme

1. Eligibility Criteria for Admission

- 1.1 Candidates who have been awarded 4 year Bachelor's Degree in Engineering/Technology/ BSc (Engineering) from recognized University with a valid GATE score or Master's Degree in appropriate branch of sciences with a first class or minimum 60% marks (CGPA 6.5) or equivalent and a valid GATE score or UGC/CSIR fellowship are eligible to apply for admission to M. Tech. Programme of the Institute. In qualifying degree, the candidates should have passed and secured at least 6.5 CGPA (on a 10- point scale) or 60% for OC/OC-EW/OB, whereas 6.0 CGPA (on a 10-point scale) or 55% in case of SC/ST/PwD candidates. The above mentioned CGPA/Percentage should be awarded by a recognized University/Institute. Only primary mode of evaluation (CGPA or percentage) as mentioned in the qualifying degree certificate/mark sheet shall be considered while verifying eligibility. Conversion from CGPA to percentage or vice versa given by individual Institute/university will not be allowed. However, if the seats remain vacant after admitting GATE qualified candidates, candidates without GATE score may be considered for the purpose of admission. However, such candidates will have to qualify the entrance test conducted by the Institute.
- 1.2 Candidates sponsored by UGC/AICTE approved technical Institutes having same academic qualifications as required at Serial No. 1.1 and preferably two-years' experience of full-time job are eligible to apply for M. Tech. Programme. A valid GATE score or UGC/CSIR fellowship is not required.
- 1.3 Candidates sponsored by industries/R&D organizations/national laboratories having academic qualifications as in 1.1 with preferably two years of experience are eligible to apply for the M. Tech. Programme. However, a valid GATE score or UGC/CSIR fellowship is not required.
- 1.4 For a foreign national candidate who applies through Ministry of Human Resource development, Govt. of India, or Indian Council of Cultural Relation, Govt. of India, are eligible to apply provided that they possess the same minimum academic qualifications as given in 1.1.
- 1.5 All in-service candidates must have to submit No Objection Certificate of their employers.

As the Institute is now participating in Centralized Counselling for M. Tech. Programmes jointly conducted for various NIT's, so clause 1.2 and 1.3 for "Eligibility criterion for M. Tech. Programmes will apply only to left out seats after centralized counselling for M. Tech. Programmes (CCMT).

2 Admission Process

- 2.1 Admissions to M. Tech. programme of the Institute shall be carried out through Centralized Counselling for M. Tech./M. Arch./M. Plan. Admissions (CCMT) jointly conducted by various NIT's.
- 2.2 The Board of Governors of the Institute on the recommendations of the Institute Senate will decide on the number of seats for various Departments/Centers/specializations. The reservations of seats for the reserved category candidates will be as per the Govt. of India norms provided the candidates have valid GATE score and satisfy other Senate requirements.
- 2.3 For each programme, eligibility is defined based on certain combinations of degree-disciplines and GATE paper. The students are advised to visit the CCMT website for the seat matrix and eligibility matrix, which provides number of seats available under different category in each programme. The selected candidates should satisfy all the admission requirements as stipulated on the CCMT website and the Institute M. Tech. Regulations and only then they will be admitted to M. Tech. Programme after payment of the prescribed fee and other charges. If at any subsequent time, it is found that the candidates do not fulfill any of the stipulated requirements, the Dean (Academic) may revoke his/her admission to the programme, with the approval of the Director-cum-Chairman Senate.

3 Programme Structure

- 3.1 Each stream of M. Tech. Programme will have the following components:
 - (i) Core course (Theory), practical and seminar/independent study
 - (ii) Elective Courses
 - (iii) Dissertation Work

In addition, the M. Tech. students may be required to give one or more seminars and undergo industrial/practical training as per the requirements of the programmes.

- 3.2 Each regular M. Tech. Programme will be completed in four semesters. During each M. Tech. semester, the student will register for course work and/or dissertation work as specified by the Institute Senate for each programme. The curriculum for different courses should be drawn up so that minimum number of credits for successful completion of any M. Tech. Programme is not less than 65 credits.

- 3.3 Each M. Tech. student will be required to register for all the core courses specified in curriculum of his programme of studies and he/she will have to successfully complete all the core course.
- 3.4 Each M. Tech. student will have to register for elective courses offered by the department in that particular semester from the list of courses approved by the Institute Senate. However, a student may be permitted selection of elective other than those listed by the departments provided these have relevance to the area of specialization.
- 3.5 A M. Tech. (Full Time) students is required to pass 10 course in 1st and 2nd semesters (i.e. 5 courses in each semester). The remaining two courses and an independent study (as per teaching scheme) shall be offered to the student in 3rd semester in addition to the start of dissertation work. The dissertation work has to be completed by 4th semester for the consideration of evaluation of the dissertation.
- If the student is not able to complete all the course work within 03 semesters of admission then his/her stipend-cum-teaching assistantship and contingency grant shall be stopped. In any case, no stipend/contingency shall be admissible to any M. Tech. student after two years from the date of registration. This will be applicable from 2017 Batch students.
- 3.6 The students may be allowed to complete dissertation work either in the Institute or in any CSIR/ Industrial R&D organization/ any other reputed Institute. The students will attach his/her monthly progress report through their respective another supervisor (Co-Supervisor) allotted in CSIR/ Industrial R&D organization/ any other reputed Institute for claiming Stipend/teaching assistantship from the Institute.

3.7 Internship Policy:

The M.Tech. students who after completion of 1st year are selected for internship at some reputed organization are allowed to carry out their internship subject to the following:

- a. Project/Dissertation work is to be completed during internship period.
- b. The course work in the 3rd semester can be done through MOOC and the successful credits earned through MOOC shall be counted by the Institute for overall credit calculation. The equivalence of the MOOC courses shall be decided by a committee comprising of HoD, Senior Most Faculty in the Department and concerned M.Tech Supervisor(s). These two courses of 3rd semester can also be carried out in any nearby CFTIs/Central University/IISER/CSIR Lab/ICAR Lab/NITTTTR/State University.

The students can appear for examination at these nearby Institutes, the grade obtained there will be considered by NITJ, and the credits transfer shall be allowed. However, the seminar/independent study shall have to be completed in 3rd semester alongwith the other students of their Batch.

- c. No stipend-cum-teaching assistantship shall be paid by the Institute to such students during the period of internship.

If at any stage it come to the notice of the Institute that the student has indulged in any kind of malpractice, this will lead to the cancellation of the M.Tech. degree of the concerned.

4 Registration

- 4.1 Every student will enroll and register for the courses he/she intends to undergo during the first semester of M. Tech. Programme on a pre-specified date notified for the purpose.
- 4.2 In case of subsequent semester, the registration for the course will be done on a specified date/dates before the end semester examination of the previous semester. In this connection, there may be proper registration card, which will contain details of the core and elective courses, seminars and dissertation work to be taken up in the semester along with the number of credits for each course/seminars/project work.
- 4.3 During the 4th semester, students will normally be registered only for the dissertation work and not for theory courses. In case a student is short of a few credits required for the M. Tech. Degree, he/she may be permitted by the Dean (Academic) to register for one or two courses along with project under the clear recommendations from the concerned head of the department. However, the teaching assistantship wherever applicable will be paid only for a maximum duration of four semesters.
- 4.4 Late registration will be allowed with a late fee of Rs. 500/- up to one week beyond the last date specified for the registration. However, under special circumstances, the period may be relaxed by the Dean Academic Programmes.
- 4.5 From 2nd semester onwards, all M. Tech. students are required to enroll on a specified date at the beginning of a semester. A student will become eligible for enrollment only if, in addition to satisfying all the academic requirements, he/she has cleared all dues to the Institute, hostel, library etc., up to the end of the previous semesters and he/she has not been debarred from enrollment by the institute discipline committee. At the time of enrollment, a student can drop a course for which he/she was registered earlier and opt for another course with the consent of all faculty advisors and on valid grounds.

- 4.6 Withdrawal from course, in which a student is earlier registered, is permissible up to two weeks from the date of commencement of the semester. However, its substitution by another course is not permitted. The number of courses after withdrawal should enable the students to earn the necessary credits to continue his/her studies.
- 4.7 In case the withdrawal has been from the list of core courses, the student will have to register for these courses when offered next.
- 4.8 A student may be allowed by Chairman, Senate to withdraw from a semester completely under extra-ordinary circumstances (e.g medical grounds). However, withdrawal from a semester will be allowed only for a maximum continuous period of two semesters.

5. M. Tech. Coordinator/Faculty Coordinator/Supervisor

The following criteria may be followed for Faculty/Supervisor/Coordinator Allotment to M.Tech. students for their project work:

1. Faculty will research which will help students in deciding their choices for the supervisor.
2. Students will be required to fill all the faculty names in order of their preference.
3. Faculty members starting from senior-most will get to choose from students who have mentioned them as their first choice. If a particular faculty is the first preference of a student and his/her quota is filled then the student's second choice will be treated as their first choice for subsequent rounds and thereon. The respective faculty will choose one candidate at a time. In case he is entitled for additional candidate, subsequent choice will be available in the next round, subject to the availability of the candidate.
4. Further in case a faculty is not opted as a first choice, his turn will be kept in waiting and he shall be allowed to pick the student as soon as he surfaces as the top choice of any of the student. If still he does not get a student, he will have the choice to pick from the top choice of the student at the end of each round. Decision of Head will be binding.
5. Each faculty will get a minimum and maximum student as explained in the following example:
Number of students = 30
Number of faculty = 8
Number of Students a faculty should get = $30/8 = 3.75$ i.e. Min students will be 3 and Max students will be 4.
6. Faculty decision on accepting or not accepting a student will be honoured to the extent that all students are allocated a supervisor each. In case a particular student is not opted by any faculty, then allocation of supervisor will be made by Head and that will be binding.

7. Rolling Roaster will be applied on allocation of supervisors in the subsequent years. That means suppose Faculty 6 (Faculty at Number 6) gets 4 students (suppose that the number of students exhaust here for particular year, refer to the example at Sr No. 4) whereas Faculty 7 gets 3 then for next year allotment will start from the Faculty 7.
8. Any unforeseen conflict will be resolved with mutual understanding; however, the decision of Head will be binding.

6. Maximum Duration of the Programme

- 6.1 Minimum duration of the M. Tech. Programme for regular candidates shall be four semesters.
- 6.2 The students who do not complete their dissertation work upto the end of 4th semester and are permitted to submit the report on the subsequent date; next date of successful completion of the dissertations work will be mentioned in the grade card.
- 6.3 An M. Tech. student will be allowed to submit the dissertation regarding the project work, only if he has appeared in all the theory papers of the Programme. The result of the dissertation shall be declared after the candidate has passed all the theory papers and the seminars etc.
- 6.4 In case the dissertation is rejected or if a student is not able to complete his/her dissertation work within 02 years, then extension for a period of maximum 06 months shall be considered by the Dean Academic. The student in such case is required to apply for extension with his/her progress report through his/her supervisor and Head of the Department to the Dean (Academic). Such students are required to pay a continuation fee of Rs. 5,000/- till submission of their dissertation.
A further extension of 06 months for completion of M. Tech. (Full-Time) degree can be granted by the Chairman, Senate. No extension after 3 years shall be granted to M. Tech. (Full-Time) students.
- 6.5 An M. Tech (Full-Time) student who after completion of his 3rd Semester gets appointment in Central Govt/State Govt/PSU/Reputed private companies can get his/her M. Tech (Full-Time) degree converted into Part-Time degree subject to the following conditions:
 - (a) The student shall be required to apply in writing to Dean (Academic) for conversion of M. Tech. (Full-Time) into Part-Time degree alongwith a copy of appointment letter.
 - (b) All these students shall be required to pay complete course fee per semester till completion of the minimum period of 02 years. After completion of 02 years, they will be required to pay continuation fee of Rs. 5,000/- per semester.

- (c) The maximum time limit to complete the M. Tech. (Part-Time) degree shall be 04 years.
- (d) Further, no stipend-cum-teaching assistantship/contingency shall be admissible to the student after conversion from M. Tech. full time to part-time.

7. Minimum Requirement to Continue the Programme

7.1 A M. Tech. (Full Time) student is required to pass 10 courses in 1st and 2nd semesters @ 5 courses in each semester. The remaining two courses and an independent study (as per teaching scheme) shall be offered to the student in 3rd semester in addition to the start of dissertation work. The dissertation work has to be completed by 4th semester for the consideration of evaluation of the dissertation.

- (a) A full time M. Tech. student should earn minimum 15 successful credits at the end of 2nd semester. In case an M. Tech. student does not satisfy these requirements, he/she will be given one chance to repeat the 1st year without any scholarship. If any student, after repeating for 1st year (without scholarship) is still not able to secure 15 credits, he will have to leave the program.
- (b) A full time M. Tech. student should earn minimum 28 successful credits at the end of 2nd semester, to be eligible to draw scholarship/stipend in 3rd semester. In case a M. Tech. student does not satisfy these requirements, the stipend/scholarship shall be discontinued from 3rd semester onwards. Such students are required to submit an undertaking regarding their consent to continue their studies without stipend in the prescribed format.
- (c) If the student is not able to complete the requirement of 06 credit less than the total credit requirements till 3rd semester within 03 semesters of admission in the M. Tech. programme, his/her stipend-cum-teaching assistantship and contingency grant shall be stopped. In any case, no stipend/contingency shall be admissible to any M. Tech. student after two years from the date of registration. This will be applicable from 2017 Batch students. *The credits for Dissertation Phase-I shall not be taken into account for the above exemption.

These modifications shall come into force from the Academic Session i.e. 2018-2019 and shall be applicable to all students on rolls of the institute.

7.2 For continuation in the Programme, an M. Tech. student should have a minimum CGPA of 5.0. While calculating the CGPA for eligibility to continue in the Programme, only courses successfully completed up to the point under consideration by the concerned student will be taken into account.

If the CGPA of any student, calculated in this manner, falls below 5.0, the student will be issued a warning and in case he/she again obtain the CGPA less than 5.0 in the following semester, then he/she will be disqualified of the Programme.

8. Attendance Requirements

- 8.1** The Institute desire 100% attendance with a provision for consideration for absence on account of late registration, sickness or other such contingencies. The attendance requirements of 75% of the scheduled classes in course are needed for appearing in the examination.
- 8.2** A student with less than 75% attendance in a course during a semester will be awarded “W” grade in that course irrespective of his/her performance in the tests. The course coordinator, while awarding the grades, will take into account the consolidated attendance record for the whole semester.
- 8.3** In order to maintain the attendance record of a particular course, a roll call will be taken in every scheduled lecture.
- 8.4** The course coordinator will consolidate the attendance record for the course from the beginning the semester up to class test-I and class test-II and also up the end of the semester. The teacher offering the course shall notify the students having less than 75% attendance with an intimation of the same to the same concerned HOD and Deputy/Assistant Registrar (Academics).
- 8.5** Every faculty offering a course will take attendance till three calendar days before the last instruction day in the semester. The percentage of the attendance, calculated up this instruction day, will be indicated in code number/letters follows:

Attendance Rounded to	Code No./Letter
95% and above	H
85% to 94%	9
75% to 84%	8
Below 75%	L

A student who has attendance code letter L will not be allowed to sit for end semester examination in the course in which the short fall exists.

9. Dissertation Work

9.1 Allocation of Dissertation: The broad areas in which M. Tech. dissertation work is feasible will be displayed by the concerned HOD on the notice board. The minimum qualification of a faculty member for M. Tech. supervisory work shall be Ph.D. or M. Tech. with 5 years teaching/research experience. The procedure mentioned at point 5 shall be followed for the allocation of Supervisor. At the most, two supervisors from NIT Jalandhar/Outside will be allowed for supervision of a M. Tech. student. The allocation of supervisors for M. Tech. dissertation work should be completed by the end of the second semester.

9.2 (a) Submission of Dissertation

- (i) The candidate is required to submit three copies of M. Tech. thesis (spiral bound) to the Office of concerned HOD through his/her supervisor(s).
- (ii) The candidate will submit a certificate from his/her research supervisor stating that the research work undertaken has been original and has not been published/printed anywhere else for the award of any.
- (iii) A certificate from the Account Section of the Institute stating ‘No Dues Pending’ against candidate will also be submitted along with the thesis.
- (iv) HoD will forward the list of all eligible candidates along with the proposed list of Examiners (Minimum three names for each dissertation) to the Office of Dean (Academic) within three working days of the last date of submission of Thesis/Dissertation. The Dean (Academic) shall appoint the examiner(s) for evaluation of M. Tech. dissertation(s). The Chairman, Senate is empowered to amend/change the panel of examiners submitted by the supervisor(s) for the evaluation of M. Tech. dissertations.
- (v) All the M.Tech. students must ensure that their publication does not include any other student’s name. They should take credential of their publication as per M.Tech. guidelines.

(b) Evaluation of Dissertation: The credit allotment will be based accordance to the following weightage

First Presentation	: 20%
Second Presentation (pre submission)	: 20%
Thesis evaluation by external examiner	: 30%
Viva voce examination	: 30%

First and second presentation shall be made towards the end of third and fourth semester, respectively. During first and second presentation, the candidate will be jointly evaluated by HOD/nominee and the candidate’s dissertation guide.

The thesis examination shall be conducted in open public defence. If a candidate is found unsuitable, he/she can appear again in the next semester provided the final submission be within three years.

Grading Criterion for M. Tech. Dissertation for all students on roll of the institute from Academic Session 2017 admitted batch onwards:

(i) A M. Tech. student can be considered for award of S Grade only if 01 research paper has been published/accepted for publication in Scopus/SCI Journals, out of his/her research work.

(ii) A M. Tech. student can be considered for award of A Grade only if 01 research paper has been published/accepted for publication in a Conference of International repute/Journal other than mentioned at (i) above, out of his/her research work.

9.3 Panel of Examiners for Viva- Voce Examination:

- i. Internal Examiner- dissertation guide
- ii. External Examiner- To be appointed by the Dean (Academic) from a panel of three examiners submitted by the dissertation guide through the Head of the Department.
- iii. Head of the concerned Department

9.4 The candidate shall prepare his/her dissertation under the supervision of the concerned faculty at the Institute. If, however, the HOD is convinced that facilitates for carrying out the work exist elsewhere (recognized by NIT, Jalandhar) the candidate may be deputed by Dean (Academic) to some other Institute/Organization after the recommendation of the concerned guide and Head of the Department.

9.5 In case the dissertation supervisor leaves the Institute and joins some other institution or some R & D organization, he/she may continue to guide the research work of the candidate registered with her/him provided he/she has guided the candidate for minimum period of 6 months. Further in case of any dispute between the candidate and guides, the case will be refereed to Dean (Academic) for necessary action.

9.6 The dissertation shall present an orderly and critical exposition of the existing knowledge of the subject or shall embody results of original Investigation and shall demonstrate the capability of the candidate to do Independent research work.

9.7 Thesis write up:-The dissertation should be written in English in specific format it should include the following:-

- a. Abstract
- b. Introduction and objectives
- c. Literature review
- d. Experimental/Theoretical work

- e. Result and discussions
- f. Conclusions
- g. References

Further following guidelines should be followed:

- The dissertation should be typed 1.5 spaced on both sides of the paper, of approximately 200 x 250 mm or A4 size, leaving 40mm margin on the left-hand side. Dix copies of the dissertation, with all photographs and illustration are to be submitted.
- Heading of sub-divisions of the text should be in lower case capitals, left aligned and bold. Sub-headings should be in lower case capitals and placed immediately next to the margin and the text should start from the next line. Further, sub-heading should be lower case capitalized first letter only and placed next to the margin with colon. The matter would be in continuation of sub-heading.
- All symbols should be defined wherever they first appear and confirm to the internationally accepted symbols.
- Tables should also be typed on paper size 200X250 mm. These should be numbered serially with the work Table towards the left margin followed by title at the top of the table. Figure captions should be provided at the bottom of the figure.
- References cited in the text should be indicated by the author's name and the year of publications in parenthesis. They should not be numbered and should be typed at the end of the paper in the alphabetical order. The title of the work referred to should be within inverted commas. References should be given in the following form.

Fan, W, Gordon, MD & Pathak, R (2000) "Personalization of search engine services for effective retrieval and knowledge management", Proc. 21st International Conference on Information Systems, 20-34

Mukhopadhyay, A, Monica Puri Sikka and Vinay Kumar Midha (2018) 'Speciality dressings for managing difficult to heal wounds' in Advanced Textiles for Wound Care, 2nd Edition, Eds. S Rajendran, Woodhead Publishing Limited, Cambridge, 391-421

Sikka MP, Ghosh S, Mukhopadhyay A. (2016) Mathematical modelling to predict the sub-bandage pressure on a conical limb for multi-layer bandaging. Med Eng Phys.38(9),917-21

Terzaghi K (1943), Theoretical Soil Mechanics", John Wiley and Sons, Inc, New York,210

9.8 (i) Exclusion of material while checking plagiarism:

- A. All quoted work reproduced will require necessary permission and/or attribution from the Journal/Author.
- B. All references, bibliography, table of content, preface and acknowledgments.
- C. All generic terms, laws, standard symbols and standards equations.
- D. Matches up to 11 consecutive words.
- E. All material (i.e. figures/images and tables) which is referred/cited from the original source.
- F. Material/s published by student/supervisor from their own thesis/dissertation/self-publications/self-publications/duplication.
- G. Standard experimental and theoretical methods.

(ii) Acceptance Level/reasonable duplication:

- A. Introduction and literature review portion up to 25%.
- B. Remaining material up to 10%.

At the time of submission, the report obtained from Turnitin to be attached with the Thesis/Dissertation and should be verified by the Supervisor.

10. Academic System:

The academic system at NIT Jalandhar is framed on credit-based semester examination system. The credit system envisages a continuous evaluation of student's performance, and provides flexibility for academic progress at an optimum pace based on individual ability and convenience, subject to the constraint of the minimum requirements for continuation in the academic programme.

The student is awarded a letter grade from the prescribed grading system in each course registered by him. For each pass grade, the students accumulate the course credits as earned credits. The academic performance of the student is indicated in terms of the number of credits that he/she earns and the weighted grade point average. A specified number of credits that he/she earns and the weighted grade point average. A specified minimum number of credits should be acquired on semester or session basis in order to qualify for continuation the academic programme and for the award of M.Tech. degree.

10.1 Grades

The grading system, the evaluation in terms of marks is replaced by the award of letter grades. The structure and guidelines for award of grades are given as under:

Grade	Point	Description of performance	Recommended cut off Marks*
S	10	Outstanding	90
A	09	Excellent	80
B	08	Very Good	70
C	07	Good	60
D	06	Average	50
E	05	Marginal	40
U	-	Unsuccessful	-
I	-	Incomplete	-
W	-	Withheld due to shortage of attendance or withdrawal	-
NP	-	Audit Pass	-
NF	-	Audit Fail	-

*Subject to confirmation based on standard deviation, if the sample size is greater than 20, and is flexible to the recommendations of the individual course coordinators with proper justification.

The grades will be awarded to a student in each registered course, based on his/her performances evaluated through a prescribed scheme of evaluation. In theory courses, the evaluation is weighted on class tests, assignment and end semester examinations in prescribed proportions. The recommended weightage for class tests is 40%, for assignments 10% and for end semester's examination is 50%. The credits for the course in which a student has obtained "E" (minimum passing grade for a course) or a higher grade will be considered as credits earned by him/her. For the other (elective) course in which U or W grade have been obtained, the student may take the same course or any other course from the same category when it is offered next. Further, 'U' grade secured in any course stay permanently on the grade card. The weightage of these grades is not counted in the calculation of the SGPA and CGPA.

An 'I' grade denotes incomplete performance in any course due to absence at the end of semester. Upon completion of all course requirements, the 'I' grade is converted to a regular grade.

These grades (NP and NF) are awarded in a course that the student opts to audit. Audit applications are allowed during the first four weeks of a semester. The audit pass (NP) grade is awarded if a minimum 'E' grade is obtained in the course and attendance is above 75% in the classes. If either of these requirements is not fulfilled the audit fail (NF) grade is awarded. In courses, where NP grade is obtained, the corresponding course credits are considered in the calculation of SGPA or CGPA.

W' grade is awarded in a course where the student has opted to withdraw from the course. Withdrawal from a course is permitted until one week after the class test-I.

10.2 Grade Point Averages

The performance of a student will be evaluated in terms of two indicates, viz, the Semester Grade Point Average (SGPA) which is the Grade Point Average for a semester and Cumulative Grade Point Average (CGPA) which is the Grade Point Average for all the completed semesters at any point of time. The SGPA is calculated on the basis of grades obtained in all courses, except audit courses, registered for in the semester.

$$\text{SGPA} = \frac{\sum(\text{Course credit} \times \text{Grade point}) \text{ except audit course}}{\sum \text{Course credits except audit courses}}$$

The CGPA is calculated on the basis of all pass grades, except audit courses obtained in all completed semester

$$\text{CGPA} = \frac{\sum(\text{Course credit} \times \text{Grade point}) \text{ for courses with pass grade except audit courses}}{\sum(\text{Course credits}) \text{ of courses with pass grade except audit courses}}$$

10.3 Summer Contact Course and Additional Carry Course Pattern

For students having U/W Grade: A student having U/W grade in a subject can opt for:

- (a) A student with W grade can carry his/her backlogs as an additional carry subject with the regular semester examinations subject to the condition that he/she will not take more than 30 credits in a regular semester. There will be no limit of credits for additional carry subject for a student having U grade in his/her subjects. Evaluation pattern shall be the same and there will be no change in the Grade obtained by the student if appeared in regular semester examinations.

(b) A student can apply for a maximum of 3 courses as Summer Course as a special chance. Only one paper of 100 marks with a time duration of 3 hours shall be conducted by the course coordinator. The students with U grade will not be required to attend any classes. The students with W grade will be required to attend the classes during the Summer Course. The candidates during Summer Course shall be awarded one grade less than the actual grade obtained and the maximum Grade awarded shall be B.

11. Leave Rules for Full-Time Students

- 11.1** All the M. Tech. students would apply to the concerned HOD for leave stating the reasons whenever they are not in position to attend the classes/work related to dissertation. They will not be allowed to avail an unauthorized leave even if they have fully utilized the permissible leave.
- 11.2** All M. Tech. students are eligible for leave of 30 days in a year (15 days per semester). The intervening holidays will be treated as part of leave with provision of suffixing and prefixing holidays. In no way the leave rules would affect the attendance requirements for M. Tech. students.
- 11.3** All M. Tech. students shall be eligible to leave station for visiting other places preferably after completion of their course work or during vacations when there is no teaching work scheduled, if recommended by Supervisor(s) and approved by HOD well in advance for various purposes, e.g library consultation, meeting experts, presentation of research papers/participation in the conferences/short term courses/symposiums etc., getting samples tested from other laboratories, using the lab facilities elsewhere is the same is not available at NIT Jalandhar, interaction with the External "Supervisor , and any other similar purpose as recommended by his/her supervisor(s) and HOD. For these purposes, he/she shall be permitted for 30 days per year. The leave as mentioned at Clause 11.2 shall be in addition.

12. Discipline

Every M. Tech. Student is required to observe proper discipline and decorous behavior both inside and outside the campus. He/she should not indulge in any activity, which will tend to lower the prestige of the Institute.

Any act of indiscipline on the part of M. Tech. student, which is reported to Dean (Academic) will be referred to the Discipline Committee of the Senate from time to time. The committee will investigate the charges. If the charges are substantiated, it will recommend suitable punishment for the same to the Director. The decision of the Director will be final in this regard.

13. Project Work in Industry or R & D Work

The students may also opt to carry out their dissertation work in industry (having R & D facilities) and R & D organizations (like national research laboratories etc.) during the final semester, subject to the following condition.

A committee constituted by the Dean (Academic) on the recommendations of the Head of the Department shall examine all such requests and will give the approval.

The students who are allowed to do the dissertation in the industry/R&D organizations will have to pay tuition fee and other charges to the Institute for 4th semester also.

The payment of stipend shall be made on the basis of monthly progress report received from the industry (having R & D facilities) and R & D organizations (like national research laboratories etc.).

14. Award of M. Tech. Degree

A M. Tech. student will be eligible for the award of M. Tech. Degree:

- (i) If he/she has successfully completed all the core courses/elective courses, dissertation work and any other requirement of the curriculum as required by the institute senate.
- (ii) If he/she has earned the required credits as applicable to the respective batch and approved by the Institute's Senate.
- (iii) If he/she has obtained a minimum CGPA of 6.0 in the entire course.
- (iv) If he/she has paid all the Institute dues including hostel dues, library dues etc.
- (v) No disciplinary action is pending against him/her.

The award of M. Tech. Degree will be approved by the Board of Governor of the Institute on the recommendations of the Institute Senate.

Improvement in CGPA

Those students whose CGPA is below 6.5 can apply for improvement in their CGPA. However, such students can apply for a maximum of 6 subjects with course fee of Rs. 5000/- per subject. Only two such chance can be availed by a student. This scheme shall be applicable from PG-2018 batch onwards. Only improved result will be considered in these cases.

15. Stipend cum Teaching Assistantship

M. Tech. full time students may be awarded Stipend as per the guidelines of Ministry of HRD, Govt. of India.

Satisfactory report is required for continuation of the stipend to be paid. In case of non-satisfactory report received for any M. Tech stipend case(s) of student(s) from the concerned Supervisor/HOD, the stipend cum teaching assistantship will be stopped till

the Satisfactory report is received and the stipend cum teaching assistantship not paid during the non-satisfactory month(s) will not be released in any case. The concerned M. Tech. student cannot claim for stipend during the period of non-satisfactory performance. Further, 75% cumulative attendance is also mandatory for M. Tech. students for claim of stipend.

16. Senate Masters Programme Committee:

The Senate Doctoral Programme Committee (SDPC) shall have the following constitution:

- | | | |
|------|---|------------------|
| i. | Dean Academic | Chairman |
| ii. | Associate Dean –Academic (PG) | Member Secretary |
| iii. | HoD/UG Coordinator from four Academic Departments
(one from Sciences and three from allied Engineering
Departments/Management, to be nominated by Chairman, Senate) | Member |
| iv. | Six Additional Members | |
| i. | Immediate former Chairman, SMPC*
(if not otherwise a member, *first time, to be nominated by Chairman, Senate) | Member |
| ii. | Associate Dean-Academic (UG) | Member |
| iii. | Two Nominees of Chairman, Senate
(from Senate Members) | Member |
| iv. | Two Students (one Male and one Female),
one from M. Tech. and one from other Masters Programme
(to be nominated by the Dean Academic) | Member |

Jurisdiction of SMPC:

The proposed Senate Masters Programme Committee (SMPC) shall have jurisdiction in recommending the following matters concerning the postgraduate programme of the Institute:

1. the recommendation of new PG programmes
2. the recommendation of new courses
3. recommendation for desirable modification of courses already approved
4. the credit value of courses
5. the admission of qualified students to candidacy for degrees
6. the formation of rules governing the evaluation and disposal of Dissertation/Project
7. recommendations for granting of degrees
8. in such other related matters as may be referred to it by the Senate

The functions of the Senate Masters Programme Committee (SMPC) 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/centers concerned while recommending a case to the Senate. This Committee shall take up the matters related to Masters Programme referred by concerned BoS of various Departments.

The tenure of committee and the Chairperson, SMPC shall normally be of two years.

17. M. Tech. (Self-Sponsored) Eligibility Criteria

4 year B.Tech./ BE/ BSc (Engineering-4year) in relevant branch of Engineering/Technology with a first class or minimum 60% marks (or CGPA of 6.5 on 10 point scale).

18. M. Tech. (Self-Sponsored) Admission Procedure

- i. GATE Qualified candidates shall be admitted without any entrance test, based upon the GATE score.
- ii. Non-GATE candidates shall be admitted based upon the admission test to be carried out by the respective department(s).

19. M. Tech. (Self-Sponsored) Stipend:

No stipend shall be granted to the candidates admitted under M. Tech. (Self-Sponsored) programme as this is a self-financed programme.

All other rules and regulations shall be same as applicable for the candidates admitted through CCMT.

20. Depository:

Digital Content Creation

Each M. Tech. (Regular & Self-Sponsored) student enrolled with the Institute must be aware that he/she has to submit the electronic copy of the Dissertation to the Institute library in PDF/Postscript format within two weeks of his/her defense. In this regard the following guidelines are proposed:

1. The student is notified about his/her supervisor(s) within a week of his/her enrolment.
2. Within 3 months of supervisor allotment, the student has to submit a form "Student Undertaking for Thesis Work" to the Office of Dean (Academic) forwarded through his/her supervisor and Head of Department.
3. The student will carry out his/her M. Tech. Dissertation work and other requirements of the M. Tech. degree as per Institute regulations/ rules.

4. Before submission of the Thesis for Evaluation, if third party copyrighted matter is to be included in the Dissertation, the student must have obtained a written consent from the copyrighted matter owner(s). It is the responsibility of the student to obtain the relevant consent(s) and if the student has not done so at the time of Thesis submission, such cases need to be approved by the Supervisor.
5. On successful completion of open House viva (Dissertation defense), the student has to submit the “Electronic Dissertation Submission Form” within two weeks of the Defense.

Further, the student has to specify any one of the access level for his/her Dissertation as per following norms: (i) Unrestricted Internet Access – It provides open and immediate digital access to the Dissertation immediately for submission to National Digital Library, NDLI through IDR, Institute Digital Repository OR (ii) Access Restricted to NITJ Intranet for Limited Period – It provides restricted digital access to NITJ intranet users for specific period, up to a maximum of six months. After this period, the Dissertation will be submitted to National Digital Library, NDLI through IDR, Institute Digital Repository OR (iii) Totally Restricted Access for Limited Period – It withhold access to the entire Dissertation for specific period, up to a maximum of six months. After this period, the Dissertation will be submitted to National Digital Library, NDLI through IDR, Institute Digital Repository. However, due to some reason, if a student needs a further extension to withhold access to the Dissertation for up to another six months, such extension will need to be approved by the Dean (Academic).

For the already existing Dissertation the access will be restricted to NITJ Intranet users, after receiving the consent form duly signed by the student, supervisor and the head of the department. However, last three-year Dissertation will be submitted to National Digital Library, NDLI through IDR, Institute Digital Repository after receiving the consent form duly signed by the student, supervisor and the head of the department.

GENERAL

Notwithstanding anything contained in these Regulations, all categories shall be governed by the rules and procedures framed by the Senate, and in force from time to time. Any doubt or dispute about the interpretation of these Regulations shall be referred to the Director whose decision shall be final. Eligibility for admission to M. Tech. programmes in different disciplines may, from time to time, be reviewed, approved by the Senate, and implemented.

All exceptions and issues not covered above may be referred by the Director to the Senate Masters Programme Committee (SMPC). Recommendations of the SMPC are to be put up to the Director for consideration and to be implemented only if approved.