

# **NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL**



## **RULES AND REGULATIONS**

### **MASTER OF TECHNOLOGY (M. Tech.) PROGRAM**

**(with effect from 2021 - 2022)**



## Rules and Regulations of M.Tech. Programs effective from 2021-22

**1. INTRODUCTION:** Provision of these regulations shall come into force with effect from the academic year 2021 - 2022 and shall be applicable to all M.Tech. programs (unless otherwise stated) offered by the Institute.

1.1 M.Tech Degree Programs are offered in the following specializations by the respective Engineering departments:

| S. No. | Department                                | M.Tech Program Name                                                                                                                                                                                                                                          |
|--------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1      | Civil Engineering                         | 1. Engineering Structures<br>2. Geotechnical Engineering<br>3. Transportation Engineering<br>4. Water Resources Engineering<br>5. Remote Sensing and GIS<br>6. Environmental Engineering<br>7. Construction Technology and Management<br>8. Waste Management |
| 2      | Electrical Engineering                    | 1. Power Systems Engineering<br>2. Power Electronics and Drives<br>3. Smart Electric Grid                                                                                                                                                                    |
| 3      | Mechanical Engineering                    | 1. Thermal Engineering<br>2. Manufacturing Engineering<br>3. Computer Integrated Manufacturing<br>4. Machine Design<br>5. Automobile Engineering<br>6. Materials and Systems Engineering Design<br>7. Additive Manufacturing                                 |
| 4      | Electronics and Communication Engineering | 1. Electronic Instrumentation and Embedded Systems<br>2. VLSI System Design<br>3. Advanced Communication Systems                                                                                                                                             |
| 5      | Metallurgical and Materials Engineering   | 1. Industrial Metallurgy<br>2. Materials Technology                                                                                                                                                                                                          |
| 6      | Chemical Engineering                      | 1. Chemical Engineering<br>2. Systems and Control Engineering                                                                                                                                                                                                |
| 7      | Computer Science and Engineering          | 1. Computer Science and Engineering<br>2. Computer Science and Information Security                                                                                                                                                                          |
| 8      | Biotechnology                             | 1. Biotechnology                                                                                                                                                                                                                                             |

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 medium of instruction for all programs offered in the Institute is English.



## 2. ADMISSION:

- 2.1 Admission to National Institute of Technology Warangal shall be made in accordance with the instructions received from the Ministry of Education (MoE), Government of India from time to time. Seats are reserved for candidates belonging to Scheduled Castes (SC), Schedules Tribes (ST), Other Backward Classes (OBC), Persons with Disability (PWD), Economically Weaker Section (EWS) and other categories as per the guidelines issued by MoE, from time to time.
- 2.2 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 through CCMT. The sanction of stipend will be as per the guidelines prescribed by MoE, Government of India from time to time.
- 2.3 The admissions under self-finance M.Tech. Programs will be based on written exam and interview conducted by the Department.
- 2.4 A limited number of admissions are offered to Armed Officers, Self- Finance and Foreign Nationals in accordance with the rules applicable for such admission, from time to time, issued by the MoE.
- 2.5 If, any time after admission, it is found that a candidate had not fulfilled all the requirements stipulated in the offer of admission, in any form whatsoever, including possible misinformation etc., the Dean-Academic shall report the matter to the Senate recommending for the cancellation of admission of the candidate.
- 2.6 The institute reserves the right to cancel the admission of any student and ask him/her to discontinue his/her studies at any stage of his/her studies on the grounds of indiscipline or any misconduct.
- 2.7 The decision of the Senate, regarding sections 2.5 and 2.6 above, is final and binding.
- 2.8 Candidates must fulfill the medical standards required for admission as prescribed by the Institute.
- 2.9 Every graduate student of the Institute shall be associated with his/her parent department offering the degree program that the student undergoes, throughout his/her study period.
- 2.10 Candidates seeking admission into M.Tech. in Engineering (including Self-finance) should have passed BE/B.Tech. or equivalent degree in the subject concerned from a recognized University/Institute with First Class not less than 60% marks aggregate or equivalent CGPA of 6.5/10. In case of SC/ST/PWD candidates 55% marks aggregate or equivalent CGPA of 6.0/10 is the eligibility requirement.
- 2.11 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:

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

3.2 Each M. Tech degree program will typically consist of the following components:

| Category Description                | Credits      |
|-------------------------------------|--------------|
| Professional Core Courses (PCC)     | 24-33        |
| Professional Elective Courses (PEC) | 12-18        |
| Comprehensive Viva-Voce             | 2            |
| Dissertation Work                   | 32 (12 + 20) |
| Seminar – I and II                  | 2            |
| Total Credits                       | 80           |

3.3 The Departmental Academic Committee – PG&R will discuss and finalize the exact credits offered for the program for the components of 3.2, the semester-wise distribution among them, as well as the syllabi of all M. Tech. Programs along with course outcomes of each course, course articulation matrix and pre-requisites, from time to time and recommend the same to the Senate through Board of Studies for consideration and approval.

3.4 **Assignment of Credits to Courses:** Each course has a certain number of credit(s) assigned to it depending upon its lectures/tutorials/practical hours as shown below:

- Lectures and Tutorials: One lecture or tutorial hour per week over the period of one 14 week semester is assigned one credit.
- Practical: One laboratory hour per week over the period of one 14 week semester is assigned half credit.

### 3.5 DEGREE REQUIREMENTS:

A student shall fulfil the following requirements for the award of the M.Tech. degree:

- (a) Credit Requirements: Minimum Earned Credit Requirements for the award of Degree is 80 with a CGPA of *not less than 4.00*.
- (b) The minimum duration for a student for complying with the Degree requirement is *TWO* academic years from the date of first registration for his/her first semester.
- (c) The maximum duration for a student for complying with the Degree requirement is *FOUR* academic years from the date of first registration for his/her first semester.

### 4. ACADEMIC CALENDAR:

The Institute follows a semester system. An academic year generally runs from July through June next year and is essentially comprised of two semesters. Typically, the 1<sup>st</sup> semester starts in the last week of July and ends in the 1<sup>st</sup> week of December; the 2<sup>nd</sup> semester starts in the 1<sup>st</sup> week of January and ends in the 2<sup>nd</sup> week of May.

4.1 The senate shall approve the schedule of academic activities for an academic year including the dates of registration and End-semester examinations. The duration of each semester will normally be of 17 weeks, which includes all examinations. The number of effective teaching weeks in a semester shall be 14.

4.2 Academic calendar is approved by the Senate in the beginning of each academic year, which also includes the date of the co-curricular and extra-curricular programs like



Technical seminars / Spring Spree/Institute Fest etc. Both students and faculty are required to strictly adhere to the academic calendar for completion of academic activities.

## 5. RESIDENTIAL REQUIREMENT:

The Institute is essentially residential in nature. Unless otherwise exempted/permitted, every student shall reside in one of the Halls of Residence and be a boarder of a mess to which he/she is assigned. Rules relating to the residential requirements are given in Appendix I.

## 6. ATTENDANCE:

Following are the rules relating to attendance requirements:

- 6.1 Every student is expected to have 100% attendance in each course in which he/she has registered at the beginning of the semester. However, condonation for shortage of attendance up to 20% (i.e., not lower than 80% aggregate attendance in any course) may be granted by the Head of the concerned Department.
- 6.2 For the purpose of attendance calculation, every scheduled practical class will count as one unit irrespective of the number of contact hours.
- 6.3 Students not having the mandatory requirement of minimum 80% attendance in any course, shall not be permitted to appear for the end semester examination in that course, and is awarded “R” Grade in that course. Such student has to register for the course in which he/she has shortage of attendance as and when the course is offered next.
- 6.4 If a student is absent from the institute continuously for more than four weeks without notifying the Dean Academic, his/her registration for that semester will stand cancelled.
- 6.5 A student representing the Institute in approved extracurricular activities such as Sports, Games, Cultural meets, Seminar, Workshop, Conference and Interviews arranged through Centre for Career Planning and Development (CCPD), NCC/NSS Camps shall be considered as on-duty, subject to a maximum of **five working days** in a semester. Prior permission from the concerned Heads of the Department is required for availing on-duty permission. The period of absence, in such cases, will be counted as ‘present’ for the computation of percentage of attendance at the end of semester.

## 7. LEAVES:

- 7.1 An M.Tech. student is 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 stipend, beside other action as may be decided by the Institute

| S.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 5 days at a time. Casual leave cannot be combined with medical leave | Head of the Department (HOD)                                    |
| 2.   | Medical Leave | 8 days per semester                                                                                                                                                   | HOD with Medical Certificate from the Institute Medical Officer |



## 8. REGISTRATION:

- 8.1 Every student is required to be present and register at the commencement of each semester on the day(s) notified in the Academic Calendar.
- 8.2 Percentage attendance for all students will be counted from the date of commencement of class work, irrespective of his/her date of registration. However, in case of I Year I Semester, attendance will be counted from date of admission into the Institute or date of commencement of class work, whichever is later.
- 8.3 The registration will be organized at the respective Department under the supervision of the Head of the Department / Coordinator of a respective specialization / program.
- 8.4 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 next week on payment of additional late fee as prescribed by the Institute from time to time. In special cases where the delay is beyond one week, Dean Academic may allow, on a case to case basis, for late registration with appropriate fee.
- 8.5 After registration in each semester, each student should collect a registration sheet, which indicates the courses registered by him/her in that semester, signed by the faculty advisor. The student should carry this registration sheet for all the examinations in that semester. This registration sheet along with Institute ID card serve the purpose of hall ticket for appearing the examinations in that semester.
- 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-para (a) and (b) above must however be done within one week after registration and should be intimated to the Dean- Academic.
- 8.7 Every student is required to register every semester without fail. If a student is permitted to take a semester break, he/she has to register for that particular semester and complete it before registering for the subsequent semester.
- 8.8 Only those students will be permitted to register who have
- i. Cleared all the Institute and Hostel dues of the previous semesters,
  - ii. Paid all required fees for the current semester, and
  - iii. Not been debarred from registering for a specified period on disciplinary or any other ground.
- 8.9 A Student can register for a backlog subject whenever it is offered. His/her previous marks/grades are cancelled and will have to attend all classes and examinations as and when they are conducted. Alternatively, a student can appear for make-up examination in the backlog subject as and when it is conducted.
- 8.10 **Registration in next Semester:**
- A student with a CGPA of 4.0 or above is eligible to register for courses in the next semester with the following conditions:
    - Mandatory registration for backlog courses is first in study mode and the remaining from the courses offered in the next semester so that maximum credit



- registration should not exceed 28 credits.
- The timetable should permit.
  - A clear recommendation from the Faculty Advisor for the registration of courses.
- A student with a CGPA below 4.0 will be placed on slow-paced learning. The students will be permitted to take courses both backlogs and next semester at a slower pace satisfying the following conditions:
    - Mandatory registration for backlog courses is first in study mode and the remaining from the courses offered in the next semester so that maximum credit registration should not exceed 22 credits.
    - The timetable should permit
    - A clear recommendation from the Faculty Advisor for the registration of courses

## 9. EVALUATION - Grading System:

- 9.1 As a measure of student's performance, an 8-scale grading system using the following letter grades and corresponding grade points per credit shall be followed. Grading will be done based on the total marks obtained by the student in that course.

| Letter Grade | S  | A | B | C | D | E | P | F |
|--------------|----|---|---|---|---|---|---|---|
| Point        | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 0 |

**Relative grading scheme shall be followed in general for all the M.Tech Programs. However, if the class strength is less than 20, the concerned faculty can follow absolute or relative grading by announcing it in the beginning of the semester in the lecture schedule.**

- a) The norms for the award of the letter grade in Relative Grading are as follows:
- Class average shall be calculated by considering all the students who have written the end semester examination and it shall be within the range of "C" grade.
  - "S" Grade shall be awarded to those students securing total marks > (average + 1.5 to 2 times standard deviation) with a minimum of 40% in the end semester examination.
  - "E" or higher Grade shall be awarded to those students securing total marks  $\geq 40$  with a minimum of 40% in the end semester examination.
  - Students securing less than 40% marks in end semester examination may be awarded "P" grade, if they secure total marks greater than half the class average or 40 whichever is less.
    - Other grades are to be distributed, preferably maintaining the range for each grade between 0.5 to 1.0 times standard deviation. DAC-PG&R may review these ranges with appropriate justification.
  - A student, who has not written end semester examination, or getting total marks less than half the class average or 40 whichever is less, shall be awarded "F" grade.
    - Further, there shall be four transitional grading symbols, which can be used by the examiners to indicate the special position of a student in the course.
      - **I:** for "Incomplete assessment", when the student misses the End-semester examination on Medical grounds (see rule 11.4).
      - **R:** for 'Insufficient attendance' in the course (see Rule 6.3).



- **W:** for "Temporary withdrawal" from the Institute (see rule 17).
- **X:** for "Debarred" on grounds of indiscipline/ malpractices in examinations (See rule given 19 and 20).

b) The norms for the award of the letter grade in Absolute Grading are as follows: (Ref. 120<sup>th</sup> senate meeting)

| Grade | S    | A     | B     | C     | D     | E     | P   | F   |
|-------|------|-------|-------|-------|-------|-------|-----|-----|
| Marks | ≥ 90 | 80-89 | 70-79 | 60-69 | 50-59 | 40-49 | 40* | <40 |

- Scoring 40% or more in the end exam is mandatory for awarding "S to E" Grades.
- \*Scholars securing less than 40% marks in end semester examination may be awarded "P" grade, if they secure total marks greater than 40. Writing end exam is mandatory.

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

$$SGPA = \frac{\sum_1^n C_i GP_i}{\sum_1^n C_i}$$

where  $C_i$  = Credits for the course

$GP_i$  = the grade point obtained for the course

$n$  = Number of courses registered in the Semester.

9.3 Starting from I Year II Semester a Cumulative Grade Point Average (CGPA) will be computed for every student at the end of every semester. The CGPA would give the Cumulative performance of the student from the first semester up to the end of the semester to which it refers and calculated as follows:

$$CGPA = \frac{\sum_1^n S_i C_i}{\sum_1^n C_i}$$

where,  $n$  = the total number of Semesters under consideration

$C_i$  = Total number of Credits Registered during a particular Semester

$S_i$  = SGPA of the Semester.

9.4 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 excepting last semester. In its place a consolidated grade sheet (with 80 credits) will be issued. This consolidated grade sheet supersedes all the earlier grade sheets.

9.5 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.

9.6 CGPA to Marks Conversion: CGPA shall be converted into percentage marks, if required, using the following formula:

$$\% \text{ marks} = (CGPA - 0.5) \times 10$$

9.7 **Transitional Grades:**

- a) **Grade I:** When a student gets "I" Grade for any course(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) course(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 considering the new grades.

- b) **Grades R, W and X:** When a student gets any of these transitional grades in any course(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 course(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 considering the new grades.
- c) **Grade F:** When a student gets the 'F' grade in any course during a semester, the SGPA and the CGPA from that semester onwards will be tentatively calculated, taking only 'zero point' for each '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.

## 10. ASSESSMENT OF ACADEMIC PERFORMANCE:

10.1 There will be continuous assessment of a student's performance through class tests/Quizzes/Assignments etc. throughout the semester and grades will be awarded by the faculty member.

10.2 Each theory course in a semester is evaluated for 100 marks, with following weightages.

| Sub-component                                                                                                                               | Weightage |
|---------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| (a) Continuous assessment: class tests / Quizzes / Minors/Assignment etc. with a written (conventional) exam component of at least 20 marks | 60 marks  |
| (b) End-semester Examination                                                                                                                | 40 marks  |

10.3 The mode and nature of the evaluation and the corresponding weightages, for the subcomponent (a) shall be intimated to the students at the beginning of the semester along with the lecture schedule.

10.4 If due to any compelling reason (such as his/her illness, calamity in the family etc.) a student fails to meet any of the requirements within/on the scheduled date and time, the faculty member in consultation with the concerned Head of the Department may take such steps (including the conduct of compensatory tests/examinations) as deemed fit.

10.5 Each laboratory course in a semester is evaluated for 100 marks, through continuous assessment. The marks for continuous assessment may be distributed among various components like class work performance, Lab records, Quizzes, skill tests/ assignments/ mini projects. It is not mandatory to conduct end semester examination for a laboratory course. However, if it is conducted, the weightage for the end semester examination shall be less than or equal to 40 marks. The scheme of evaluation has to be informed to students by the respective faculty in the beginning of the laboratory course.

10.6 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.

10.7 Comprehensive Viva Evaluation:

- i. The comprehensive viva voce examination carrying 2 credits will cover the entire course of study up to I year II semester. The viva voce shall be conducted by a committee constituted by the Head of the Department. The committee will also have an expert from outside the institute nominated by Director.
- ii. 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.

10.8 Dissertation Evaluation:

- i. The dissertation carried out by a student is evaluated for 32 credits. The dissertation shall be submitted as per the schedule given in the academic calendar.
- ii. The dissertation supervisor will periodically review the progress of the student and finally give his/her assessment of the work done by the student.

- iii. The Dissertation Part – A will be evaluated for 100 marks, with the following weightages:

| Sub-component                         | Weightage |
|---------------------------------------|-----------|
| a) Periodic evaluation by Guide       | 40 marks  |
| b) Mid-term review                    | 20 marks  |
| c) End Semester viva-voce examination | 40 marks  |

The midterm review and the end semester viva-voce examination will be conducted by a committee constituted by the Head of the Department.

- iv. The Dissertation Part – B will be evaluated for 100 marks, with the following weightages:

| Sub-component                         | Weightage |
|---------------------------------------|-----------|
| a) Periodic evaluation by Guide       | 40 marks  |
| b) Midterm review                     | 20 marks  |
| c) End Semester viva-voce examination | 40 marks  |

The end semester viva-voce examination will be conducted by External Examiner along with an evaluation committee constituted by the Head of the Department. The midterm evaluation will be done by the evaluation committee.

- v. A student will be permitted to submit the dissertation only if he/she completes all the courses as required in the program.
- vi. The Departments have to evolve rubrics for evaluation of Dissertation Part-A and Part-B. The marks may be distributed among various components like selection of topic, problem statement, literature review, methodology, oral and written presentation of the work done and performance in viva-voce examination.
- vii. Dissertation and Viva-Voce: A student shall be required to submit a report on the Dissertation work carried out by him/her. The template for the dissertation report may be downloaded from (<https://www.nitw.ac.in/path/?dept=/nitwForms>). The students are required to submit a report showing that the plagiarism is within 20%. 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. Dissertation viva - voce will be held within the date fixed in the academic calendar and the grades will be finalized by the committee.

- viii. If the performance of the student in either Dissertation Part-A or Dissertation Part-B is not satisfactory, he/ she will be awarded 'F' grade. The student has to repeat the dissertation work by registering in the next semester. Such students may be given an option either to continue with the same topic and with the same guide or change the guide and the topic of his/ her dissertation.
- ix. Extension of dissertation work (Part-B) beyond the deadline of submission in very special case may be granted by the Dean (Academic) on recommendation of the department/center for a maximum period of 3 months and he/she will be awarded "I" Grade. 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 dissertation 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.

10.9 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 to SC/ST/PWD it is 6.0. The scholarship will be restored with retrospective effect based on recommendation of Head of the Department whenever the CGPA crosses at least 6.5 (for SC/ST/PWD 6.0).

## 11. END-SEMESTER EXAMINATIONS:

- 11.1 The End-semester examinations in respect of theory courses will be conducted centrally by the examination branch as per the schedule given in the academic calendar.
- 11.2 Head of the Department sends the list of courses registered by each student for the semester along with percentage of attendance.
- 11.3 Appearing in the end-semester examination in the theory and laboratory (if conducted) courses is mandatory for a student. Unless exempted as stated in rule 11.4, if a student fails to appear for the end semester examination, he/she shall be awarded 'F' grade in the course.
- 11.4 However, if a student misses the end-semester examinations due to a compelling reason like serious illness which necessitates hospitalization or a calamity in the family, he/she may appeal to the Dean-Academic before commencement of examination through his/her Head of the Department after getting Medical Officer from Institute Medical Officer for permitting himself/herself to appear in the subsequent examination(s), when conducted next. A committee consisting of the following members may, after examining the documents and being convinced about the merit of the case, recommend permitting him/her to appear in the subsequent examination(s), when conducted next, condoning his/her absence. In such cases, transitory grade 'I' is temporarily awarded to the student in the course. **Re-end examination will be conducted once in a year, at the time of Make-up examination.**

### **Committee:**

- a) Dean-Academic, Chairman.



- b) Dean, Students Welfare
- c) Concerned Head of the Department
- d) The Institute Medical officer
- e) Associate Dean, Examinations (Member Secretary)

- 11.5 Students will be permitted to appear in the examinations in only those courses for which they have registered at the beginning of the semester.
- 11.6 The final grades awarded to the students in a course must be submitted by the faculty member, within five working days from the date of the last examination to the concerned Head of the Department. The Head of the Department shall place the grades of students in all courses before the DAC-PG&R for its consideration and recommendation. The grades recommended by the DAC-PG&R shall be sent to the examination branch.
- 11.7 Any change of grade of a student in a course consequent upon detection of any genuine error of omission and/or commission on part of the concerned faculty member must be recommended by the DAC-PG&R and shall be forwarded by the faculty member through the Head of the concerned Department within 5 (five) working days from the date of publication of the results.
- 11.8 As a process of learning by students and also to ensure transparency, the answer scripts after correction of class tests, written examinations, assignments etc., shall be shown to the students within two weeks from the date of test/examination. The performance of the students in these examinations shall be discussed in the Class Review Committee meeting.
- 11.9 In order to ensure transparency in the evaluation of scripts of end-semester examination, those answer scripts also shall be shown to the students up to one day before the finalization of grades in the DAC-PG&R. Once the Grades are finalized by DAC-PG&R, the student will no longer have any right to verify his/her answer scripts.
- 11.10 The student can appeal to DAAC for any arbitration within 5 working days from the date of official publication of results in the Institute Website.

## **12. EVALUATION OF INTEGRATED (THEORY + LABORATORY) COURSES:**

- 12.1 For integrated courses, the criterion of 80% minimum attendance shall be satisfied separately in theory and laboratory classes. Otherwise he/she will be awarded 'R' grade.
- 12.2 The weightage for evaluation shall be based on credit ratio of the theory to laboratory in that course. For example, in a 2-0-2 (3 credit course), the weightage for the laboratory shall be 33% (1/3). For a 3-0-2 or 2-1-2 (4 credit course), the weightage for the laboratory shall be 25% (1/4).
- 12.3 For the integrated course, the total marks need to be calculated based on the above weightage.
- 12.4 All the rules for grading applicable to other courses may be followed for grading any integrated course.
- 12.5 The evaluation scheme for both theory and laboratory components shall be informed to the student through lecture plan in the beginning of the course.
- 12.6 In case of makeup examination, the student shall be evaluated in both theory and laboratory components and after arriving at the total marks based on the weightage, the applicable rules shall be followed for awarding a grade.



### 13. AWARD OF CLASS:

- 13.1 **First Division with Distinction:** A student who has passed all the courses without securing R, X, or F Grades during the period of study and with a **CGPA of 8.00 and above** is considered eligible for the award of First Division with Distinction.
- 13.2 **First Division:**
- a) A student failing to satisfy Rule 13.1, even if he/she gets a **CGPA of 8.00** or more will be eligible for the award of First Division only.
  - b) A student with a CGPA of 6.50 and above but less than 8.00 is considered eligible for the award of First Division.
- 13.3 **Second Division:** A student with a CGPA of 5.00 and above but less than 6.50 is considered eligible for the award of Second Division.
- 13.4 **Pass Division:** A student with a CGPA of 4.00 and above but less than 5.00 is considered eligible for the award of Pass Division.

### 14. MAKEUP EXAMINATION:

Makeup examinations will be conducted once in an academic year, during summer. Students appearing in Makeup examination shall be governed by the following rules:

Makeup examinations will be conducted once in an academic year, during summer. Students appearing in Makeup examination shall be governed by the following rules:

- 14.1 A Student with 'F' grade(s) can appear in Make-up examination conducted at the end of Academic year, or register in Study mode, whenever the course is offered. In case of Study mode, his/her previous marks/grades are cancelled and he/she will have to attend all classes and examinations along with next batch of students. Major changes in the timetable shall not be entertained to accommodate backlog students.
- 14.2 Students with "R" Grade in any course are not eligible for writing the makeup examination for that course.
- 14.3 Students with "F" or "I" Grade only are eligible to write makeup examination. The marks obtained by the student in continuous evaluation will be added to the marks obtained in makeup examination and will be graded as per the grading used for his/ her class.
- 14.4 A student can appear only once in the makeup examination (the earliest opportunity) in the courses in which he / she has obtained "F" grade.
- 14.5 Failing to clear/appear the course in the makeup examination (the earliest opportunity), the student shall have to register for the course in study mode, whenever it is offered.
- 14.6 The schedule for makeup examination will be given in the Academic calendar.
- 14.7 A student can register for makeup examinations in any number of courses. The schedule of makeup examinations will not be altered to suit individual students.
- 14.8 The student will be awarded 'P' grade, if he/she gets at least 40% marks and less than 50% marks; "E" grade for at least 50% marks and less than 70% marks and "D" grade for 70% marks or more in the makeup examination.

### 15. DISSERTATION WORK IN COLLABORATION WITH INDUSTRY:

- 15.1 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.

- 15.2 A student may, with the approval of Head of the Department/Centre, do the dissertation work in collaboration with an industry or 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.
- 15.3 It is mandatory for all students (especially those who do their dissertation 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.
- 15.4 In addition to the Supervisor from the department/center guiding the dissertation work, a Joint Supervisor may be appointed from the Industry and Research Laboratory with the approval of 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.

## **16. SUMMER INTERNSHIP (Optional):**

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

## **17. TEMPORARY WITHDRAWAL:**

- 17.1 A student who has been admitted to an M.Tech. program of the institute may be permitted to withdraw temporarily for a period of one semester or more from the Institute on grounds of prolonged illness/acute problem in the family, which compelled him/her to stay at home, provided that:
  - (a) He/she applies to the Institute through Head of the department within 15 days of the commencement of the semester or from the last date of attending the classes, whichever is later, stating fully the reasons for such withdrawal together with supporting documents and endorsement of the parent/guardian.
  - (b) The institute is satisfied that, inclusive of the period of withdrawal, the student is likely to complete all the requirements for the degree within the time limits specified.
  - (c) There are no outstanding dues against him/her or demands from him/her in the Institute/ Department/ Hostel / Library etc.
- 17.2 A student who has been granted temporary withdrawal from the institute under the above provisions will be awarded 'W' grade. He/she will be required to pay tuition fee and other fees for the current semester when the student re-joins the program.
- 17.3 A student shall be granted only one such temporary withdrawal during his/her tenure.
- 17.4 A student who wishes to join the job, after successful completion of the entire course work, may be permitted to pursue dissertation on part-time basis provided:
  - i. Sufficient facilities are available in the organization where he/she is working



- ii. There is a competent supervisor in the organization
- iii. The minimum period for submission of dissertation work shall be double the amount of the balance period.
- iv. 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.
- v. If the student at the time of joining the job has completed substantial part of his/her dissertation work (Part-B) such student may be permitted based on the recommendations of DAC-PG&R to submit his/ her thesis along with the regular students. There is no need for co-supervisor from his/ her organization.

### **18. EXIT POLICY FOR M.Tech.:**

The student is permitted to exit with a PG Diploma based on the student's request at the end of first year subjected to passing all the courses in first year and meeting the eligibility requirements (Refer to PG Diploma rules and regulations).

### **19. HONOUR CODE and MALPRACTICES:**

See (<https://nitw.ac.in/dms/>)

### **20. CERTIFICATE RETENTION FEE:**

Students will be charged with Certificate retention fees as per the details shown below: All students –

- Who have passed in current and previous academic year - No charge.
- Who have passed in the last 2 to 10 academic years - Rs. 1,000
- Who have passed in the last 11 to 20 academic years - Rs. 5,000.
- Who have passed more than 20 academic years back - Rs. 10,000

### **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 within the due date. At the end of 2<sup>nd</sup> year - II semester, Exit feedback is also to be submitted.

Results will be withheld for those students who have not submitted the feedback within the due date. All such students have to:

- i. pay a fine of Rs. 500/-
- ii. obtain permission from Dean – Academic
- iii. Fill the feedback for viewing the withheld result.

### **22. EXAMINATION RECORDS:**

- 22.1 The valued answer scripts shall be preserved for a maximum period of 6 months after publication of results and submission of course files.
- 22.2 Examination record of all students shall be maintained in both soft and hard copy form in the Examination Branch.



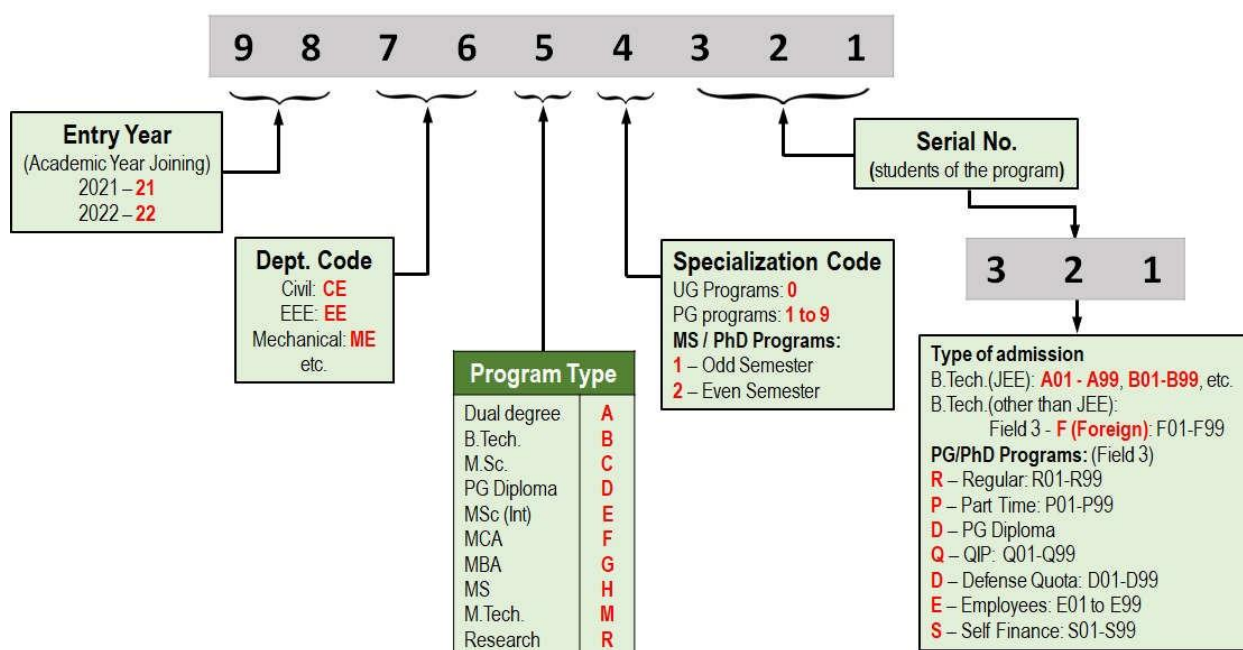
## 23. CHANGE OF REGULATIONS:

The academic programs of the Institute are governed by Rules and Regulations approved by the Senate from time to time. The Senate is a statutory and supreme body that governs all academic matters of the Institute, and the rulings of Senate Chairperson (Director of The Institute) are final in regard to all academic issues.

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.

## 24. ROLL NUMBER FORMAT:

The Roll (entry) number of a student consists of nine alpha-numerals, as described below:





## **APPENDIX - I**

### **RULES RELATING TO RESIDENTIAL REQUIREMENT**

1. All the students are normally expected to stay in the hostels and be a boarder of one of the messes.
2. Under special circumstances, the Director/Dean-Academic may permit a student to reside with his parent(s) within a reasonable distance from the institute. However, this permission may be withdrawn at the discretion of the Institute at any time considered appropriate without assigning any reason.
3. Married accommodation shall not be provided to any student of the graduate courses.
4. No student shall come into or give up the assigned accommodation in any Hall of residence without prior permission of the Chief Warden.
5. A student shall reside in a room allotted to him/her and may shift to any other only under the direction/permission of the Chief Warden.
6. Students shall be required to make their rooms available whenever required for inspection, repairs, maintenance or disinfecting and shall vacate the rooms when leaving for the vacation/ holidays.
7. Students shall be responsible for the proper care of the furniture; fan and other fittings in the rooms allotted to them and shall generally assist the Warden in ensuring proper use, care and security of those provided in the Halls for common use of all students.
8. Students will be responsible for the safe keeping of their own property. In the event of loss of any personal property of a student due to theft, fire or any other cause the Institute shall accept no responsibility and shall not be liable for payment of any compensation.
9. Engaging personal attendants, keeping pets and use of appliances like electric heater, refrigerator, etc. by a student in Halls of Residence are prohibited.
10. A resident student must take prior permission from the corresponding warden before proceeding on leave. Failing to do so will be construed as breach of discipline and will be dealt with as per provisions.
11. All students must abide by the rules and regulations of the Halls of Residence as may be framed from time to time.



## ACADEMIC COMMITTEES: FUNCTIONS AND RESPONSIBILITIES

| Committee                                                       | Constitution of the Committee                                                                                                                                                                                                                                                                                                                                                                                      | Guidelines                                                                                                                                                                                                                                                       | Functions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>DEPARTMENTAL ACADEMIC COMMITTEE – PG&amp;R</b><br>(DAC-PG&R) | <p><b>Chairman:</b> Head of the Department</p> <p><b>Members:</b> All Professors and Associate Professors and Faculty Advisors, Program Coordinators</p> <p>• <b>Tenure:</b> two years.</p>                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>• There shall be one DAC-PG&amp;R for every department, which is involved in the teaching for any of the M.Tech. program.</li> <li>• The Head of the department will nominate one of the members as secretary.</li> </ul> | <ul style="list-style-type: none"> <li>• To monitor the conduct of all postgraduate courses offered by the Department and course work of M.Tech program.</li> <li>• To ensure academic standards and excellence of the courses offered by the department.</li> <li>• Review and Recommend the grades to senate for approval.</li> <li>• To consolidate the registration of the students and communicate to the course instructor and Dean- Academic.</li> <li>• To consider any matter related to the postgraduate program(s) of the Department.</li> <li>• To take up any responsibility or function assigned by the Senate or the Chairman of the Senate or Chairman of DAC-PG&amp;R.</li> <li>• To report the cases of malpractices to the Malpractices and Disciplinary Action Committee.</li> </ul> |
| <b>CLASS REVIEW COMMITTEE</b><br>(CRC)                          | <p><b>Chairman:</b> Head of the Dept. / Senior Faculty of the Department concerned, preferably not associated with teaching of the class, to be nominated by the Head of the Department concerned.</p> <p><b>Members:</b> All faculty members handling the class, four students, to be chosen by the students of the class from amongst themselves.</p> <p><b>Convener / Secretary:</b> Faculty advisor of the</p> | <p>Every Class (group of students registered for a course and taking the course together in a section/class) of the M.Tech Program shall have a Class Review Committee, consisting of Faculty and Students.</p>                                                  | <ul style="list-style-type: none"> <li>☐ The Class Review Committee shall meet at least twice in a semester, once between four to five weeks and another between eight to nine weeks after the commencement of classwork.</li> <li>☐ The basic responsibilities of the Class Review Committee are to review periodically the progress of the classes, to discuss problems concerning curriculum and syllabi and the conduct of the classes.</li> <li>☐ The committee will review the performance of the class in various exams conducted as part of continuous evaluation till</li> </ul>                                                                                                                                                                                                                |



|                                                |                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                | class<br><b>Tenure:</b> One Semester                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                      | that date.<br><ul style="list-style-type: none"> <li>Each CRC will communicate its recommendations to the Head of the Department / DAC-PG&amp;R of the parent teaching department.</li> <li>The minutes of each CRC meeting shall be recorded in a separate register maintained in the parent/teaching department.</li> <li>Any appropriate responsibility or function assigned by the DAC- PG&amp;R or the chairman of the DAC- PG&amp;R</li> </ul>                                                                                                      |
| DEPARTMENTAL ACADEMIC APPEALS COMMITTEE (DAAC) | <b>Chairman:</b> Head of the Department<br><b>Members:</b> Three faculty members of the Department consisting of one Professor, one Associate Prof. and one Asst. Prof.<br><b>Nominee:</b> One Professor from outside the Department nominated by Dean-Academic | <ul style="list-style-type: none"> <li>There shall be one DAAC for every department.</li> <li>The Chairman may co-opt and / or invite more members.</li> <li>If the concerned instructor is a member of DAAC then he/she shall keep himself out of the Committee during deliberations.</li> <li>The quorum for each meeting shall be a minimum of THREE (Professor from outside department is mandatory).</li> </ul> | <ul style="list-style-type: none"> <li>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.</li> <li>To interact with the concerned course instructor and the student separately before taking the decision.</li> <li>The decision of the DAAC will be based on simple majority</li> <li>The recommendations of the DAAC shall be communicated to the Dean-Academic for further appropriate action as required.</li> </ul> |
| DEPARTMENTAL BOARD OF STUDIES (BOS)            | <b>Chairman:</b> Head of the Dept.<br><b>Members:</b> All professors and Associate Professors having Ph.D., One Professor from allied department, one external expert each from Industry and Academia                                                           | <ul style="list-style-type: none"> <li>All the members must possess Ph. D.</li> <li>The Chairman will nominate one of the members as secretary.</li> <li>The Chairman may co-opt and / or invite more members including external experts while framing / revising the curriculum.</li> </ul>                                                                                                                         | <ul style="list-style-type: none"> <li>To develop the curriculum for the postgraduate courses offered by the department and recommend the same to the Senate.</li> <li>The Board of studies is required to meet at least once in two years.</li> <li>To review the internal audit reports submitted by faculty</li> </ul>                                                                                                                                                                                                                                 |



|                                                   |                                                                                                                                                          |                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ACADEMIC AUDIT<br>COMMITTEE –<br>DEPT. (AACD)     | <b>Chairman:</b> Professor<br>nominated by Director<br><b>Members:</b> One<br>Department Nominee<br><b>Convener/Secretary:</b><br>Head of the Department | <ul style="list-style-type: none"><li>• The duration of the members of the committee will be two years</li></ul> | <ul style="list-style-type: none"><li>• To recommend corrective measures, if any.</li><li>• To send a consolidated report to Academic Audit Committee – Institute</li></ul>                                                                                                                                                                                                                   |
| ACADEMIC AUDIT<br>COMMITTEE –<br>INSTITUTE (AACI) | <b>Chairman:</b> Director<br><b>Members:</b> Dean<br>(Academic), Two<br>professors nominated<br>by Director                                              | <ul style="list-style-type: none"><li>• The members of the duration of the committee is TWO years.</li></ul>     | <ul style="list-style-type: none"><li>• To review the recommendations of AACD of each department</li><li>• To initiate appropriate measures (counseling / training etc.).</li></ul>                                                                                                                                                                                                           |
| FACULTY ADVISOR                                   | <b>Faculty Advisors:</b><br>nominated by the Head<br>of the Department                                                                                   | <ul style="list-style-type: none"><li>• In case of PG, One Faculty advisor for each program.</li></ul>           | <ul style="list-style-type: none"><li>• To help the Students in planning their courses and activities during study.</li><li>• To guide, advice and counsel the students on academic program and registration.</li><li>• To register the students for the course work in both the even and odd semesters.</li><li>• To present the results of even and odd semesters to DAC-PG&amp;R</li></ul> |