

# **ORDINANCES AND REGULATIONS**

**M.TECH**

**(Applicable for 2015 Batch)**



**INDIAN INSTITUTE OF TECHNOLOGY MADRAS**

**CHENNAI- 600 036**

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Revised up to 269<sup>th</sup> Senate held on 2-09-2015

## M.Tech (Master of Technology)

(Applicable for 2015)

### ORDINANCES

- O.1 Candidates who have qualified for the award of the Bachelor's degree in Engineering / Technology or Master's degree in Science and who have qualified in **GATE (Graduate Aptitude Test in Engineering)** are eligible to apply for admission to the M.Tech programme. B.Tech Graduates from IITs with a minimum CGPA of 8 for GE, and 7.5 in case of SC/STs, are eligible for admission without GATE Score.
- Candidates who have qualified for the award of the Bachelor's degree in Engineering / Technology or Master's degree in Science through distance education/ correspondence mode and who have qualified in **GATE (Graduate Aptitude Test in Engineering)** are also eligible to apply for admission to the M.Tech programme.
- O.2 In addition to 0.1, a candidate who possesses **Associate Membership of Professional Bodies** approved by the Senate who has qualified in **GATE** shall also be eligible to apply for admission to the M.Tech programme, subject to regulations approved by the Senate.
- O.3 Notwithstanding what has been stated in 0.1 above, applications from **candidates sponsored** by organisations recognised by the Senate, and applications from **foreign nationals** received through proper channel, may be considered for admission to the M.Tech programme **without a GATE qualification**. Their admission shall, however, be governed by the regulations prescribed by the Senate.
- O.4 Candidates from Government / Public Sector Organizations with Associate Membership qualification (AMIE, AESI, AMIM, AMIChemE, AMIETE as listed in M.Tech Admission Brochure) and having two years of experience, can be permitted to apply for admission to M.Tech under sponsored programme without GATE score.
- O.5 The exact eligibility criteria for admission to the M.Tech programme shall be as approved by the Senate of the Institute from time to time and announced by the Institute in the "M.Tech Admission Brochure" for admission, each year.
- O.6 The normal duration of the M.Tech programme, including project work, shall be **four semesters**. Candidates may be permitted to do their project work in the industry and other approved organisations as prescribed in the regulations.
- O.7 The award of **Half-time Teaching Assistantship (HTTA)** to the candidates admitted to the M.Tech programme shall be in accordance with the regulations of the Senate of the Institute.
- O.8 The award of the M.Tech degree shall be in accordance with the regulations of the Senate of the Institute.

## REGULATIONS

### **R.1.0 Admission to the M.Tech Programme**

- R.1.1 Candidates who have qualified in **GATE** (Graduate Aptitude Test in Engineering) are eligible to apply for the M.Tech programme as full time students on Institute HTTA.
- R.1.2 Candidates **sponsored under Quality improvement Programme** or other similar programmes are also eligible to apply.
- R.1.3 Candidates **sponsored by the Industries**, established Institutes/R&D Organisations/National laboratories are also eligible to apply.
- R.1.4 **Foreign nationals who got degree from India – Bachelor’s degree in Engineering / Technology / Architecture or equivalent or a Master’s degree in Mathematics / Chemistry / Physics / Life Sciences / Related Subjects and a valid GATE score are eligible to apply.**

**Foreign nationals** whose applications are received through **Indian Council of Cultural Relations**, Government of India are also eligible to apply.

**Foreign Nationals** are also eligible under the self-financing scheme, for which applications are invited through their embassies.

Supernumerary seats: The number of such supernumerary seats will be decided by the departments that can be accommodated in the in new proposal.

**GRE/GMAT Score with TOEFL, academic record and letters of reference will be considered as additional requirement for Foreign nationals.**

- R.1.5 Announcements for M.Tech Admission will be made by the Institute and the candidates under categories R.1.1, R.1.2 and R.1.3 mentioned above should apply online before the specified dates.
- R.1.6 The eligibility criteria for admission including the GATE qualification required for admission as full-time students with HTTA, or as sponsored or other candidates, mentioned under R.1.1, R.1.2 and R.1.3 will be decided by the Senate.
- R.1.7 The Senate of the Institute will decide on the number of seats for various specialisations/ Departments/ Centres. Seats are reserved for SC, ST, OBC and persons with disabilities (PWD) as per the Government of India rules. However, to be considered for admission, they should have qualified in GATE and should satisfy other Senate requirements.
- R.1.8 The M.Tech Admissions Committee constituted by the Chairman, Senate, will decide on the operational aspects of selection of candidates based on the criteria laid down by the Senate.
- However, in the case of service officers under the control of Army / Navy / Airforce / DRDO, the selection will be through a central selection committee(s) with the Institute faculty serving on the selection committee.
- R.1.9 Vacancies, if required to be filled up after the admission date, will be decided by the Chairman, Senate, and reported to the Senate for post-facto approval.
- R.1.10 In all matters concerning the selection of candidates, the decision of the Chairman, Senate, or his / her nominee, viz. Chairman, M.Tech Admissions Committee, is final.
- R.1.11 In addition to satisfying the conditions given in the information Brochure for M.Tech Admission sent along with the application forms, the selected candidates should satisfy the other admission requirements indicated in the offer letter of admission. Only then, they will be

admitted to the M.Tech programme, after payment of the prescribed fees. However, if at any time, if any of the requirements are not fulfilled by the candidate, then his/her admission to the programme may be cancelled.

## R.2.0 Structure of the M.Tech programme

R.2.1 The programme of instruction for each stream of specialisation will consist of

- i. core courses to be compulsorily taken by all the students of the programme.*
- ii. elective courses including domain specialization courses offered (Electives will have to be opted from the courses offered by the Department in the particular quarter from amongst the list of approved courses)*
- iii. Laboratory courses*
- iv. project work*

The student may be required to give one or more seminars and undergo industrial / practical training during the programme.

R.2.2 The complete programme will be of **4 semesters duration**. The academic programmes in each semester may consist of course work and/or project work as specified by the Senate for each specialisation.

R.2.3 Every stream of specialisation in the programme will have a curriculum and syllabi for the courses approved by the Senate. The curriculum should be so drawn up that the minimum number of credits for successful completion of the M.Tech programme of any stream is **200 ± 10credits**.

R.2.4 A student will have to register in all the **core courses** listed in the curriculum of his/her stream of specialisation and successfully complete all of them.

However, the Departmental Consultative Committee may grant permission to a student not to register for some of the core courses and substitute them with some other courses, depending on the courses successfully completed by the student in the undergraduate programme.

This has to be intimated to and approved by the Dean of Academic Courses.

R.2.5 Electives will have to be taken from the courses offered by the Department in that particular semester from among the list of approved courses.

However, departments may permit the selection of electives other than those listed against the stream, provided they have relevance to the area of specialisation and subject to the approval of the Faculty Adviser.

R.2.6 Students may be permitted to register for a maximum of two B.Tech courses. The concerned departments will identify such courses and get prior approval of the Senate.

R.2.7 The medium of instruction, examination, seminar and project reports will be in English.

## R.2.8 Definition of new credits system

- (i) One credit indicates an effort of 50 minutes (1 *credit-hour*) per working week.
- (ii) One *credit-hour* of lecture is assumed to need two *credit-hours* (1 hour 40 minutes) outside the class room in terms of student effort to thoroughly comprehend the subject material, do the home works etc. Thus, a course with 3 lectures a week will be a  $3+(3_2) = 9$  credit course, indicating that a student needs to put in 9 *credit-hours* (7 hours 30minutes) of work a week on this course, inside and outside the classroom put together.

- (iii) A one *credit-hour* supervised session with no effort required outside should count for one credit. Thus, an afternoon (2 hours 30 minutes) laboratory session, where the student runs an experiment, collects data, interprets it and writes a report should be awarded 3 credits. If a laboratory course requires effort outside of the allotted 2.5 hour slot, appropriate credit should be awarded (1 credit for 1 *credit-hour*, i.e., 50 minutes). In the same vein, a 1 *credit-hour* tutorial session should be awarded 1 credit, if no work is expected outside.
- (iv) In any given semester, a student should not be required to register for more than 60credits. This means a maximum academic time commitment of about 50 clock hours every week.

In line with the above credit definition, sample credit mapping for typical courses/laboratory structure is summarized below:

Nature of Course	Credit hours per week for					
	Lecture	Tutorial	Extended Tutorial	Afternoon Lab Session	Time to be spent outside of class	Total credits in new system
		(b)	©	(d)	(e)	a+b+c+d+e
Theory	3	0	0	0	3 x 2 = 6	9
Theory + Tutorial <sup>§</sup>	3	1	0	0	3 x 2 = 6	10
Theory + Tutorial <sup>§</sup>	3	1	1	0	3 x 2 = 6	11
Theory + Lab	2	0	0	3	2 x 2 = 4	9
Laboratory	0	0	0	3	0	3
Laboratory	0	0	0	3	2	5
Project	0	0	0	0	27	27

<sup>§</sup> Assuming tutorial does not require any work outside

Each time unit specified in the table = 50 minutes

### R.3.0 Faculty Adviser

R.3.1 To help the students in planning their courses of study and for getting general advice on the academic programme, the concerned Department will assign a certain number of students to a Faculty Member, who will be designated as **Faculty Adviser**.

### R.4.0 Class Committee

R.4.1 For I and II semesters of M.Tech Programme, branchwise class committees will be constituted by the Heads of the Departments comprising of:

- i. Course teacher / co-ordinators of all subjects (not covered under R.4.2)
- ii. One Professor, preferably not offering courses for the class, as chairman
- iii. Four student members, or 20% of the class strength, whichever is less
- iv. Faculty Adviser – Ex-Officio Member

R.4.2 A common class committee for Mathematics and Humanities and Social Sciences (HSS) courses of I and II M.Tech Programme will also be formed for the courses open to all M.Tech streams. These committees will be constituted by the Heads of Mathematics/HSS departments comprising of:

- i. Course teachers of all subjects
- ii. One Professor, preferably not offering courses for the class, as Chairman and
- iii. Four student members.

R.4.3 The basic responsibilities of the class committee are :

- a) to review periodically the progress of the courses, to discuss issues concerning curricula and syllabi and the conduct of the classes.
- b) The type of assessment for the course will be decided by the teacher in consultation with the class committee, and will be announced to the students at the beginning of the semester in accordance with R 19.0.
- c) Each class committee will communicate its recommendations to the Head of the Department and the Dean of Academic courses.
- d) The class committee, without the student members, will also be responsible for the finalisation of the semester results.

R.4.4 The class committee is required to meet at least twice in a semester, once at the beginning of the semester and another time after the end-semester examination, to finalise the grades.

#### **R.5.0 Upgradation to (M.Tech+Ph.D) programme**

M.Tech students will be eligible for upgradation to (M.Tech+Ph.D.) if they satisfy the following criteria:

- a. The candidate should have successfully completed a minimum of 2 semesters in the M.Tech. Programme.
- b. The candidate should have a minimum CGPA of 8.0 in the prescribed courses.

A Committee duly constituted by the Head of the Department will consider such applications for upgradation to Ph.D. and make its recommendation to the Chairman, as per the rules.

For detailed requirement for award of M.Tech+Ph.D degree refer to Ph.D Ordinance

#### **R.6.0 Registration and Enrolment**

##### **R.6.1 Enrolment:**

From the second semester onwards, ***all students have to enroll on the first day at the beginning of a semester.*** A student will become eligible for enrolment only if he/she satisfied R.10.1 and in addition he/she has cleared all dues to the Institute, Hostel and the Library upto the end of the previous semester, provided he/she is not debarred from enrolment by the Institute, on disciplinary grounds.

The list of students who don't enroll for the current semester will be forwarded to the CCW office for further action.

##### **R.7.0 Registration**

R.7.1 Except for the first semester, online registration of courses for the ensuing semester will be done during a specified week before the end-semester examination of the previous semester.

Those students who register beyond the last date prescribed for registration, a late registration fee as prescribed by the senate will be charged upto the last date as per academic calendar of respective semester and the students should seek readmission into the hostel. Beyond this period, concerned students will not be permitted to enroll for the following

semester and their registration status will be declared as “withdrawn”. The list of such students will be sent to Dean (Students) for further necessary action regarding hostel accommodation.

R.7.2 The registration done by students will be shown online for Faculty Advisor’s approval.

If a student finds his/her academic/course load heavy in any semester, or for any other valid reason, he/she may drop courses before the last date mentioned in the Academic Calendar with the approval of course Teacher and his/her Faculty Adviser. Request for dropping courses can be approved up to 45 working days from the commencement of the class provided the student maintains a minimum attendance grade of G (Good-85% to 94%) till the time of dropping (i.e. date of getting the approval of course faculty). In specific courses, the teacher can reduce this period to less than 45 days by prior intimation to the class.

R.7.3 The **M.Tech students are eligible to take extra courses apart from the courses prescribed** in the curriculum viz. one course in the 3<sup>rd</sup> semester and not more than two courses in the 4<sup>th</sup> semester, subject to a maximum of 27 credits, provided a student has no backlog and has earned a minimum CGPA of 7.0 at the end of the previous semester. Students taking extra courses **should obtain the prior approval of the Dean (Academic Courses)**. This will be shown in the grade card as EXT category and will be considered for CGPA calculation.

R.7.4 During the final project semester, students are not normally permitted to register for courses.

However, students who are short of a few credits required for the degree may be allowed by the Dean of academic Courses to register for one or two courses along with the project under the specific recommendation from the Head of the department. In such cases the project duration may have to be extended accordingly beyond the normal period.

However, ***the M.Tech students are eligible for HTTA till the date of viva voce at the end of the fourth semester and not for the extended period of project or 24 months, whichever is earlier***, as per the existing Government of Indian rules.

R.7.5 The number of courses for which they have registered should enable the student to earn the credits required to continue the studies as per R.10.

Course(s) withdrawn will have to be taken as and when they are offered, if they belong to the list of core courses (Compulsory courses).

R.7.6 In extraordinary circumstances like medical grounds, a student may be permitted by the Dean of Academic Courses to withdraw from a semester completely. ***Normally, a student will be permitted to withdraw from the programme only for a maximum continuous period of two semesters.***

#### **R.8.0 Supplementary Examination**

R.8.1 Students who get “U” grade and attendance code “G” (Good) and above in a core course are eligible to seek Supplementary Examination.

R.8.2 A student is eligible for only one Supplementary Examination in any course. No second chance is given. In case a student fails in the Supplementary Examination he/she has to repeat the course in a regular semester, as and when it is offered.

R.8.3 The Supplementary Examination will be offered by the same teacher who offered the course earlier.

R.8.4 The Supplementary Examination will be held during the supplementary exam week as per the next semester Academic Calendar.



- R.8.5 Those students who have failed as per R.8.1 alone in the previous semester alone are eligible for taking supplementary as per R.8.4.
- R.8.6 For taking Supplementary Examinations, the students need not attend classes in that course once again. The same attendance code earned in the earlier examination will be retained for the Supplementary Examination.
- R.8.7 The end semester alone is given as a Supplementary Examination and the sessional marks already secured by a student in that course will be taken into account for finalizing the grade and the same cut-off for the grades shall be used.

#### **R.9.0 Contact Courses**

- R.9.1 A Contact course will be offered during the regular semester or summer by a Department only
- i. to final year students who have obtained a “**U**” **grade** in a core course.
  - ii. when a teacher who is **willing to offer** this course is identified by the Department
- R.9.2 ***No student should register for more than two contact courses during the semester or in summer.***
- R.9.3 The contact course will not be offered if a regular course is offered on the same subject during that period.
- R.9.4 Such final year students who are desirous of registering for a contact course, should make a request, in the prescribed form, to the Dean, Academic Courses through the Faculty advisor & HoD well before the commencement of the semester in which the contact course is to be taken.
- R.9.5 The assessment procedure for a contact course will be similar to that of the regular semester course.
- R.9.6 ***Withdrawal from a contact course is not permitted.***

#### **R.10.0 Minimum Requirement to Continue the Programme and Readmission**

- R.10.1 A student should have earned not less than **30 successful credits** in the first semester, **80 successful credits** at the end of the second semester and **110 successful credits** at the end of the third semester.

If a student fails to earn the required minimum credits at any particular semester, he/she will be relieved from the programme at the end of the semester.

- R.10.2 In addition to the above, to be eligible to continue in the programme the student ***should have a minimum CGPA of 5.0***, calculated according to the formula in R.26.2. However, in calculating the CGPA for eligibility to continue the programme only courses that the student has successfully completed, up to the point under consideration, will be taken into account. ***If the CGPA of any student so calculated falls below 5.0, the student will be issued a warning and if he/she does not make good and continues to get a CGPA less than 5.0 in the following semester also then he/she will be relieved from the programme.***

#### **R.10.3 Readmission**

The students who do not satisfy the minimum requirement vide R.10.1 and relieved from the programme may seek readmission to Dean, Academic courses with recommendation from Faculty Advisor and Head of the Department.

### **R.11.0 Maximum Duration of the Programme**

R.11.1 A student is ordinarily expected to complete the M.Tech programme in **four semesters**.

In case students do not complete their project work in four semesters, they are permitted to submit the report in the fifth semester with the prior approval of project guide, HoD and Dean, Academic Courses.

Under no circumstances should students be permitted to spend more than **5 semesters** to complete the course work and **8 semesters** for the total programme, including the project work, from the date of admission to the programme.

### **R.12.0 Discontinuation from the Programme**

R.12.1 Students may be permitted to discontinue the programme and take up a job, **provided they have completed all the course work**. The project work can be done during a later period either in the organisation where they work, if it has R and D facility, or in the Institute. **Such students should complete the project within eight semesters from the date of admission to the programme.**

Students desirous of discontinuing their programme at any stage with the intention of completing the project work at a later date should seek and obtain prior permission of the Dean of Academic Courses through the Faculty Advisor & HoD.

### **R.13.0 Discipline**

R.13.1 Every student is required to observe discipline and decorous behaviour both inside and outside the campus and should not indulge in any activity which will tend to bring down the prestige of the Institute.

R.13.2 Any act of indiscipline of a student reported to the Dean, Academic courses, will be referred to the **Discipline and Welfare Committee** constituted by the Senate from time to time.

The Committee will enquire into the charges and recommend suitable punishment if the charges are substantiated. The Senate will consider the recommendation of the Discipline and Welfare Committee for appropriate action. The committee will report the action taken at the next meeting of the Senate.

R.13.3 **Appeal:** The student may appeal to the Chairman, Senate, whose decision will be final.

R.13.4 Ragging in any dimension is a criminal and non-bailable offence in our country. The current State and Central legislations provide for stringent punishment including imprisonment. Once the involvement of a student is established in ragging, the offending student will be dismissed from the Institution and will not be admitted into any other Institution. Avenues also exist for collective punishment, if individuals can not be identified in this inhuman act. Every senior student of the Institute, along with the parent, shall give an undertaking every year in this regard and this should be submitted at the time of enrolment.

### **R.13.5 Grievance Resolution Committee**

Each department has a Grievance Resolution committee consisting of 3 faculty members who may be approached by the students of the concerned departments for addressing their complaints.

An institute-level Grievance Resolution committee is constituted by Dean (Academic Courses).

#### R.14.0 Attendance

R.14.1 Every teaching staff member handling a class will take attendance till the last instructional day in the Semester. The percentage of attendance, calculated up to this point, will be indicated by a letter code as follows:

Attendance Rounded to	Remarks	Code
≥ 95%	Very Good	VG
85 to 94%	Good	G
<85%	Poor	P

R.14.2 A student who has an attendance lower than 85%, whatever may be the reason for the shortfall in attendance, will not be permitted to appear in the end-semester examination of the course in which the shortfall exists.

His/her registration for that course will be treated as cancelled, and he/she shall be awarded 'W' grade (Failure due to insufficient attendance in course). **This grade shall appear in the grade card till the course is successfully completed.**

Students securing W grades in two or more theory courses in a semester will be placed under parental care. After maintaining regular attendance, a student can request Dean (Students) for hostel accommodation.

R.14.3 The teacher handling a course **must finalise the attendance on the prescribed date as per the academic calendar.**

The particulars of all students who have attendance less than 85% in that course must be announced in the class by the teacher himself/ herself. Copies of the same should be sent to the Dean, Academic Courses and Heads of Departments concerned. Students who maintain less than 85% should not be permitted to sit for the end-semester exam without the permission of the Dean Academic Courses.

R.14.4 Condonation of Attendance: Every student is expected to maintain 100% attendance. The minimum-attendance requirement is 85% (i.e to take care of short duration of ailment, attending family function / ceremony, participation in competition / events Senate permits a student to avail 15% leave with prior permission of class teacher).

For cases of casual absenteeism, no condonation of attendance is permissible. If a student has less than 85% attendance, he/she should be assigned 'W' grade in that subject along with 'P' as the attendance code. The percentage of attendance in a subject shall be computed as:

(a) For calculation of attendance in normal cases:

For cases of minor illnesses and casual absenteeism actual % of attendance is computed as:

$$\frac{\text{Actual no. of classes attended} \times 100}{\text{Total no. of classes held till date of compilation of attendance}}$$

which should be ≥ 85%. Otherwise, W grade shall be awarded. Such cases will not come under the purview of condonation of attendance.

a) For calculation of attendance in case of prolonged illness and/or hospitalization with medical certificate:

A student should have more than 40% attendance calculated as per (a) above to be eligible for condonation.

Notional % of attendance =

$$\frac{\text{Actual no. of classes attended} \times 100}{(\text{Total no. of classes held in the semester}) - (\text{No. of classes held during the days of prolonged illness and or hospitalization})}$$

which should be  $\geq 85\%$  for condonation.

### **R.15.0 Leave Rules**

R.15.1 All M.Tech students should apply to the Head of the Department for leave stating the reasons whenever they are not in a position to attend classes/project work. They will not be eligible for HTTA for the period of absence, if it is unauthorised leave even if they have not fully utilised the eligible leave.

R.15.2 These students are eligible for

- i) 8 days of casual leave per academic year, and
- ii) 15 days of vacation leave per academic year.

The unutilized leave from the first year cannot be carried over to the second year. Since the project work has to be commencement on 1<sup>st</sup> June, following the second semester, long leave can not be availed in that month.

### **R.16.0 Assessment Procedure : Tests and Examinations**

R.16.1 For Lecture / Lecture and Tutorial based subject to a minimum of two sessional assessments will be made during the semester. The sessional assessment may be in the form of periodical tests, assignments or a combination of both, whichever suits the course best. The assessment details as decided at the Class Committee will be announced in the class by the teacher right at the beginning of the semester.

### **R.17.0 End Semester Examination**

R.17.1 There will be one end semester examination of 3 hours duration in each lecture based subject.

### **R.18.0 Project Evaluation**

**R.18.1 The project work of all M.Tech students will commence not later than 1<sup>st</sup> June following the 2<sup>nd</sup> semester, regardless of whether the students are eligible for HTTA or not.**

R.18.2 The methodology followed by each department for project assignment will be enunciated and brought to the notice of the students well before registration at the time of assignment of project Title/Guide. Project registration through workflow will include Name of the Project title/Guide and broad area of work.

The project deliverables must be clearly enunciated by the faculty for the benefit of the students at the time of offering, commensurate with the levels of a PG project.

R.18.3 Binary Assessment of whether student is expected to complete as per schedule or not has to be submitted through the workflow by the committee / Guide by 1<sup>st</sup> March.

The grades of students who complete the project as per schedule shall be submitted through workflow 7<sup>th</sup> June.

1<sup>st</sup> May is the last date for recommending extension up to 30<sup>th</sup> June by committee/Guide. The grades of these students shall be submitted through workflow by 7<sup>th</sup> July.

If the project could not be submitted by 30<sup>th</sup> June, such students are required to get extension for the next semester.

R.18.4 At the completion of a project, students will submit a project report which will be evaluated by duly appointed examiner(s). The evaluation will be based on the report and a viva-voce examination on the project.

R.18.5 The project reports of M.Tech students who have not completed their course work will be evaluated in that semester itself and the result sent to the Dean, Academic Courses. The result of the project work evaluation will be declared by the Dean, Academic Courses only after the successful completion of the course requirements.

R.18.6 Wherever the progress made by the student is not commensurate with the credits assigned, the Departmental Project review committee will (i) recommend extension of project till satisfactory performance and (ii) send intimation to Dean (Academic Courses) for informing the parents of such students.

### R.19.0 Weightage

R.19.1 The following will be the weightages for different courses:

a)	Lecture or lecture and tutorial based courses: : Sessional assessment: End Semester examination:	Minimum of 40% Minimum of 40%
b)	Laboratory based courses: Sessional Assessment: Practical examination must be conducted for all the lab courses. For End-semester examination, if held: Maximum weightage:	75–100% 25%

R.19.2 The markings for all tests, tutorial assignments (if any), laboratory work and examinations will be first made on an absolute basis.

The final percentages of marks are calculated in each subject as per the weightages given in R.19.1.

### R.20.0 Make-up Examination

R.20.1 Students **who have missed sessional assessments for valid reasons** should apply to the concerned teacher indicating the reasons for the absence and the teacher shall consider these requests suitably.

R.20.2 Students **who have missed the end-semester examinations for valid reasons**, should make an application to the Dean of Academic Courses within ten days from the date of the examination missed. Permission to appear for a make-up examination in the course(s) is given under exceptional circumstances (like hospitalization, etc.)

**A student who misses this make-up examination will not be normally given another make-up examination.**

However, in exceptional cases of illness resulting in the students missing a make-up examination, the Dean of Academic Courses, in consultation with the Chairman of the Senate, may permit the student to appear for a second make-up examination.

R.20.3 **For application on medical grounds**, students residing in the hostels should produce a Medical Certificate issued by an Institute Medical Officer only.

Students staying outside the campus permanently/temporarily should produce a medical certificate from registered medical practitioners and the same should be forwarded by the parents/guardians for the purpose of make-up examinations.

The Dean of Academic Courses can use his/her discretion in giving permission to a student to take a make-up examination, recording the reasons for his/her decision.

R.20.4 A slot-wise make-up examination will be held during the makeup/supplementary week as per next semesters Academic calendar for those who are permitted to take the make-up examination.

The question paper will be common to all the students taking makeup examinations in a given subject.

However, the question paper will be so structured that a student will be required to answer only parts of the paper carrying marks in proportion to the weightages of the tests/examinations missed by him/her.

### R.21.0 Subjectwise Grading of Students into Categories

#### R.21.1 Letter Grades

Based on the performance, each student is awarded a final letter grade at the end of the semester for each of the registered courses. The letter grades and the corresponding grade points are as follows.

Grade	Grade points	Remarks
S	10	
A	9	
B	8	
C	7	
D	6	
E	4	
U	0	
P	-	Pass
F	0	Fail
W	0	Failure due to insufficient attendance in course
I	0	Incomplete (Subsequently to be changed into pass (E to S) or U grade in the same semester).
R		Registered.

R.21.2 **Pass/Fail Course:** If an elective is registered as Pass/Fail (P/F) course than the teacher will upload the marks scored by the student and based on the cut off marks P grade will be assigned if it is above U grade cut off and F grade will be assigned if the mark is less than or equal to the U grade cut off. The credit earned by the P/F course will not be considered for CGPA/GPA calculation.

R.21.3 A student is considered to have completed a subject successfully and earned the credits if he/she secures a letter grade other than U/ F or W or I in that subject. **A letter grade U/F or W in any subject implies a failure in that subject.**

Faculty will send marks scored and the attendance grade (VG, G and not “W”) of the student who is given an “I” grade after the class committee along with the grades of other students as approved by the class committee.

It is the responsibility of the student to get an “I” grade resolved on or before the date specified in the Academic calendar. For such students the faculty members will communicate the revised grade, to the academic section.

If the student does not get the “I” grade resolved within, the specified date, “I” grades will be replaced with a valid grade based on the marks scored at this point of time and relative grading cut-off for various grades his/her batch, along with an attendance “G or VG” as secured.

## **R. 22.0 Method of Awarding Grades**

R.22.1 A final meeting of the **class committee** without the student members will be convened within **seven days after the last day of the end semester examination**. The letter grades to be awarded to the students for different courses will be finalized at this meeting.

R.22.2 The faculty member shall upload grade through workflow and the Chairman of Class Committee approve the grade within the senate prescribed deadline specified in the academic calendar.

## **R.23.0 Declaration of Results**

R.23.1 After finalization by the Class Committee the letter-Grade awarded to the students will be uploaded through online by the teachers. After online approval by the Chairperson of the respective Class Committee, it will be available in academic website for the students to view their grades.

R.23.2 The **W** grade once awarded stays in the record of the student and is deleted when he/she completes the subject successfully later. The grade acquired by him/her will be indicated in the grade card of the appropriate semester with an indication of number of attempts made in that course.

R.23.3 **‘U’** grade obtained by the students will be deleted in the grade card once that course is successfully completed. The grade acquired by the students will be indicated in the grade card of the appropriate semester indicating also the number of attempts made in that course.

## **R.24.0 Re-examination of Answer Papers**

R.24.1 In case any student feels aggrieved, he/she can contact the teacher concerned within three weeks from the commencement of the semester immediately following the announcement of the results.

The student shall have access to his/her answer paper(s) in the end semester examination which may be shown to him/her by the teachers concerned. If the teacher feels that the case is genuine, he/she may re-examine the case and upload a revised grade, if any, through workflow. After approval by HoD and Dean(Academic Courses) the revised grade will be reflected in the grade card.

## **R.25.0 Course Repetition**

R.25.1 A student who earns a ‘U’ grade in any “core course” has to repeat it compulsorily when offered next.

R.25.2 A student who earns a “U” grade in an elective course has an option to repeat it in order to get a successful grade or substitute with any other elective, with the permission of the Faculty Adviser.

R.25.3 A course successfully completed can not be repeated. **In some cases where students have taken all core and elective courses but still fail to minimum CGPA of 5.0 and thus will not be eligible to get degree. In such cases the student be permitted to repeat the core or elective courses to earn the minimum CGPA.**

*Option can also be given to such students to select courses to be considered for calculating CGPA for eligibility for award of degree.*

#### **R.26.0 Grade Card**

R.26.1 The grade card issued to students at the end of each semester will contain the following:

- a. Course no, name of the course and the credits for each course registered in the semester.
- b. the performance in each subject by the letter grade obtained vide R.21.1.
- c. the attendance code secured in each course vide R.14.1.
- d. the total number of credits earned up to the end of that semester.
- e. GPA for each semester
- f. the Cumulative Grade Point Average (CGPA) of all the courses taken from the first semester will be shown in the final semester grade card.

R.26.2 The Grade Point Average (GPA) will be calculated by the formula.

$$\text{GPA} = \frac{\sum_i (C_i \times \text{GP})}{\sum_i C_i}$$

Where  $C_i$  = credit for the course, GP = the grade point obtained for the course and  $\sum_i C_i$  = the sum of credits of all courses taken in that semester, including those in which the student has secured U or W grades.

For the cumulative Grade Point Average (CGPA), a similar formula is used except that the  $\sum_i C_i$  is the sum of credits of all courses taken in all the semesters completed upto the point in time, including those in which the student has secured U or W grades.

R.26.3 No class/division/rank will be awarded to the students at the end of the M.Tech programme. However, for conversion of (i) CGPA into percentage and (ii) Percentage to CGPA for admission purpose as well as for issuing certificate to the alumni for their professional carrier purpose, the Senate has approved the following conversion formula: Percentage = 55 + 10 (CGPA) – 6.

#### **R.27.0 Project work in Industry or other Organisations**

R.27.1 Sponsored candidates from organisations which have R and D units and facilities for research work and those students who get employment in such organisations after completion of the course work may be permitted to carry out their project work in such organisations during the final year, under the following conditions:

R.27.2 A departmental committee shall examine the requests from such students, and fix in advance

- i. an internal guide (a faculty member of the institute)
- ii. area of project work, and
- iii. the name and designation of an external guide (Scientist or Engineer in Industry).

R.27.3 The above details should be submitted to the Dean of Academic Courses through the Head of the Department and the Dean's approval should be obtained before the commencement of the project.



R.27.4 The students who are permitted to do the project work in an industry as per R.27 will have to pay the tuition and other fees to the Institute for the third and fourth semester as well.

### **R.28.0 Half-Time Teaching Assistantship**

R.28.1 Students who are eligible for M.Tech admission and who have qualified in GATE and are admitted as full time students of the Institute, will be eligible for the award of the HTTA notified by the Institute from time to time. HTTA students are not entitled to avail any other scholarship.

R.28.2 Students specifically admitted under Non-HTTA category will not be eligible for HTTA. However, these candidates may apply for conversion, and eligible students will be converted to HTTA from the second semester, subject to the number of vacancies and based on their first semester performance.

R.28.3 Students joining the M.Tech programme under sponsorship scheme with full salary will not be granted any HTTA even if they are qualified in GATE.

R.28.4 Foreign nationals are not eligible for HTTA.

R.28.5 B.Tech students from IITs who get admitted to M.Tech with 8.0 CGPA are also eligible for HTTA.

### **R.29.0 Eligibility for the award of M.Tech Degree**

R.29.1 A student shall be declared to be eligible for the award of M.Tech degree if he/she has

- a. registered and successfully completed all the core courses and the project.
- b. successfully acquired the minimum number of credits vide R 2.3 prescribed in the curriculum of the given stream within the stipulated time vide R.11.0
- c. no dues to the Institute, Library and Hostels and
- d. no disciplinary action pending against him/her.

secured a CGPA of 5.0, considering only the successfully completed courses.

### **R.29.2 Credit Transfer**

The following procedure will be followed for credit transfer:

For students visiting Universities abroad under Exchange programme of NUS/DAAD or any other University.

The credits / grades indicated in the grade sheet obtained from the university in which the student has completed the courses should be used by the student as part of his/her transcripts.

IIT Madras transcripts will only indicate the courses, credits and grades completed at IITM and the total no. of credits (without grades) earned in other Universities in a particular semester.

The **CGPA calculation based on credits earned/completed at IIT Madras alone is to be considered for award of prizes.** However, students who have studied one semester in other universities under student Exchange programme are not to be considered for annual prizes of the corresponding year.

The credits earned at Universities abroad will be taken into account for calculation of minimum required credits for the award of the degree.

R.29.3 The final award of the Degree must be recommended by the Senate and approved by the Board of Governors of the Institute.

### **R.30.0 Power to Modify**

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

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