

Indian Institute of Information Technology Guwahati
M.Tech Programme Ordinances

1. All M.Tech. programmes offered by the Institute shall be governed by these M.Tech Ordinances.
2. The M.Tech Ordinances shall be applicable to any new discipline(s) under these programmes that may be introduced in future.
3. A student becomes eligible for the award of the M.Tech degree after fulfilling all the academic requirements as prescribed by these Ordinances.
4. The Institute shall have the following M.Tech branches:

Computer Science Engineering (CSE)

Electronics and Communication Engineering (ECE) – Specialization: Communication and Signal Processing

CATEGORY OF M.TECH STUDENTS

- 1.1 The Institute admits M.Tech students under Regular category. This is a self-financed program.

ACADEMIC CALENDAR

- 2.1 Each academic session is divided into two semesters of approximately eighteen weeks duration (with at least seventy working days for classes in each semester): a Monsoon semester and a Winter semester.
- 2.2 In addition, there may be a semester during the summer break, called a summer semester.
- 2.3 The Senate approved schedule of academic activities for a session, inclusive of dates for registration, mid-semester and end-semester examinations, inter-semester breaks etc., shall be laid down in the Academic Calendar for the session.

ADMISSION

- 3.1 Eligibility criteria for admission will be laid down by the Senate from time to time.
- 3.2 Relaxation in academic qualification for reserved categories of students is as per Government of India guidelines.
- 3.3 Minimum qualifying degree is given below for different disciplines. However, a valid GATE score in the appropriate discipline is the desirable criterion.

Computer Science and Engineering : Bachelor's degree in Computer Science and Engineering / Technology or equivalent in an appropriate area or MSc (Computer Science/Information Technology) or Graduates (AMIETE) from Institution of Electronics and Telecommunication Engineers (IETE) in Computer Science and Engineering or MCA from a recognized Institution.

Electronics and Communication Engineering: Bachelor's degree in Electrical/ Electronics / Electronics and Communication Engineering or Equivalent or MSc(Electronics) or Graduates (AMIETE) from Institution of Electronics and Telecommunication Engineers (IETE) in Electronics and Telecommunication Engineering

- 3.4 Admission to the M.Tech. Programme of the Institute normally takes place in July every year.
- 3.5 Admission to all categories of students is granted on the basis of interview/admission test.

RESIDENCE

- 4.1 The institute is residential and all the students are recommended to stay in the hostels within the campus.
- 4.2 All students must abide by the rules and regulations of the hostel as may be framed from time to time by the competent authority.
- 4.3 Students not residing in hostels shall be attached to a hostel for extracurricular activities.

ATTENDANCE

- 5.1 Students are required to attend all the classes (Lectures, Tutorials, Laboratories, Practical, Workshops etc) for which they have been registered.
- 5.2 Students will have to attend all the classes. A student may be debarred from appearing in an end semester examination if his/her attendance falls below 75 percent and will then be awarded an "F grade due to attendance" in that course.

LEAVE RULES

LEAVE OF ABSENCE

- 6.1 (a) Students are not expected to be away from the institute during a semester.
 - (b) Students may be granted permission to leave for special occasions like death in the immediate family circle. Such leave will in no case exceed one week.
 - (c) Absence due to illness not exceeding three weeks will be allowed after taking due permission. Due to emergencies, such permission may be taken later, and by the guardian if necessary.
 - (d) If the period of absence in a semester exceeds three weeks, the student will have to drop the semester by dropping all courses he /she has registered for. The Senate may allow longer absences only in special circumstances and only after ascertaining the student's ability to make up for the lost time.
 - (e) The leave of absence as per Clauses 6.1 (a) to 6.1 (d) will not be condoned for attendance.
- 6.2 It will be the responsibility of the student to intimate the Warden of the hostel in which he/she is residing, and the concerned instructors regarding his/her absence before proceeding on leave.

CONDUCT AND DISCIPLINE

- 7.1 Students shall conduct themselves within and outside the precincts of the Institute in a manner befitting the students of an institution of national importance and the same will be governed by the IIT Guwahati Ordinances on Code and Conduct of students.

COURSE STRUCTURE

- 8.1 Every M.Tech. Programme will have a curriculum and syllabi for the courses approved by the Senate. DPPC will discuss and recommend the syllabi of all the post graduate courses offered by the department from time to time before sending the same from the departments and make recommendations to the Senate for consideration and approval.

The composition, tenure and functions of DPPC, are indicated at *Appendix-A*.

- 8.2 Teaching of the courses shall be reckoned in credits; Credits are assigned to the courses based on the following general pattern:
 - i. Two credits for each lecture period
 - ii. Two credits for each tutorial period

- iii. One credit per hour for each Laboratory or Practical or Project session.
- 8.3 In order to qualify for an M.Tech. degree of the institute, a student is required to complete the credit requirement as prescribed in the curriculum for a particular programme.
- 8.4 No semester will normally have more than six lecture based courses and four laboratory courses.
However, in special cases, students may be permitted to take seven lecture-based courses.
- 8.5 The total course package for a department will consist of the following components:
 - i. Common Engineering course(s)
 - ii. Departmental Core courses
 - iii. Departmental Elective courses
- 8.6 Medium of instruction, examination and project/thesis reports will be in English.
- 8.7 Faculty Advisor: To help the students in planning their courses of study and getting general advice on the academic programme, the concerned department will assign a Faculty Advisor to each student. Otherwise, Secretary, DPPC will act as faculty advisor till the Thesis supervisor is appointed.
- 8.8 Thesis supervisor: Master's Project/Thesis supervisor(s) for a student will be appointed from amongst the faculty members of the IIT Guwahati.
- 8.9 Departments will evolve modalities for appointing of supervisors keeping in view of the students' aspirations and faculty interest. The DPPC will co-ordinate this activity.
 - 8.9.1 No student will have more than two supervisors.
 - 8.9.2 No student once registered for thesis/project units will be allowed to continue the programme without a Thesis Supervisor having been appointed by the DPPC.
 - 8.9.3 No change in thesis supervisor(s) will be allowed without the consent of the DPPC.
 - 8.9.4 With prior approval of the Chairman, Senate, on the recommendation of the Chairman DPPC, a student may be allowed to have a co-supervisor from outside the institute, in exceptional cases.

REGISTRATION

- 9.1 Every student is required to register for approved courses through the assigned Faculty Advisor/Thesis Supervisor/Secretary DPPC at the commencement of each semester on the day fixed for such registration and notified in the Academic Calendar.
- 9.2 Only those students will be permitted to register who have
 - 10.1.1 cleared all Institute, Hostel and Library dues and fines (if any) of the previous semesters;
 - 10.1.2 paid all required advance payments of Institute and Hostel dues for the current semester, and
 - 10.1.3 not been debarred from registering on any specific ground.
- 9.3 A student who obtains a CPI lower than 5.00 with grade "DD" in some subjects may be permitted by the Chairman, Senate, on the recommendations of the DPPC to repeat one or more DD graded subjects, provided, the subject(s) is /are being offered therein. The number of such courses to be repeated will be as many as are required to get a CPI of 5.00.
- 9.4 When a student re-registers for a subject, in accordance with clause 10.3 and clause above, his/her new grade will be used for SPI calculation, whereas for CPI calculation, the better of the two grades (the old and the new) of that subject will be considered.
- 9.5 Students may add and drop subject(s) with the concurrence of the Thesis Supervisor/Faculty Advisor/Secretary DPPC, and under intimation to the concerned course instructors and the academic

section, provided this is done within the date mentioned in the Academic Calendar and as per the conditions given in clause 9.2.

DURATION OF THE PROGRAMME

10.1 The duration of the M.Tech. programme is as follows:

11.1.1 The minimum duration of the M.Tech. Programme (excluding dropped semester(s)) is four semesters from the date of admission.

11.1.2 The maximum duration of the M.Tech. programme is 4 years from the date of admission.

TEMPORARY WITHDRAWAL FROM THE INSTITUTE

11.1 A student who has been admitted to an M Tech. program of the Institute may be permitted to withdraw temporarily from the Institute on the grounds of prolonged illness or grave calamity in the family for a period of one semester or more, provided:

12.1.1 he/she applies to the Institute within at least 6 weeks of the commencement of the semester or from the date he last attended his/her classes whichever is later, stating fully the reasons for such withdrawal together with supporting documents and endorsement of his/her guardian.

12.1.2 the Institute is satisfied that, counting the period of withdrawal, the student is likely to complete his/her requirements of the M.Tech. Degree within the time limits specified in Clause 11.1.2 above.

12.1.3 there are no outstanding dues or demands in the Institute/Hostel/Department/Library.

11.2 A student who has been granted temporary withdrawal from the Institute under the provisions of Clause 11.1 will be required to pay fees/charges (except tuition fees and hostel dues) till such time as his/her name is on the Roll List. However, fees once paid will not be refunded.

11.3 A student will be permitted only one such temporary withdrawal during his/her tenure as a student of the M.Tech. programme.

TERMINATION FROM THE PROGRAMME

12.1 A student's studentship in a programme may be terminated on the following grounds:

- a. If a student is absent for more than 6 (six) weeks in a semester without sanctioned leave.
- b. A decision is taken on disciplinary grounds.
- c. On having been found to have produced false documents or having made false declaration at the time of seeking admission.
- d. A student fails to secure a SPI of 4.0 in two consecutive semesters. However, a student securing a CPI below 4.0 may be allowed to continue in the following semester on the recommendation of DPPC. Subsequently the student will be issued a warning.
- e. The maximum permissible duration of the programme has been exceeded.
- f. On having been found to be pursuing regular studies and/or correspondence courses (leading to degree or diploma) in any other college, university or an educational institution.
- g. For Regular category students, on having found to be concurrently employed and performing duty or carrying out business.

GRADING SYSTEM

13.1 Based on the performance of a student, each student is awarded a final letter grade in each subject at the end of the semester. The letter grades and the corresponding grade points are as follows :

Grade	Point
AA	10
AB	9
BB	8
BC	7
CC	6
CD	5
DD	4
F	0

In addition, there shall be two transitional grades I and X.

13.2 A student is considered to have completed a subject successfully and earned the credits if he secures a letter grade other than I, X or F in that subject. A letter grade F in any subject implies a failure in that subject.

13.3 The Transitional Grades I and X

- The teacher of a subject may award the grade 'I' to a student if the latter was compelled to absent himself from the end semester examination on account of: (i) Illness or accident which disabled him from appearing at the examination. (ii) A calamity in the family at the time of the examination, which, in the opinion of the Institute, required the student to be away from the campus. A student will be eligible for the award of grade 'I' only if his/her attendance at classes and performance in other components of assessment are complete and satisfactory.
- The teacher of a subject may award the grade 'X' to a student if the overall performance of the student in the course is good, but is likely to get grade 'F' based on his/her end semester examination.
- All 'I' and 'X' grades awarded by teachers will be converted to a letter grade after a make-up examination. There may be a make-up examination shortly after the end semester examinations, or the supplementary examination for the subject will be used as the make-up examination. There will be no restrictions on grades even though the supplementary examination is being used in evaluation (see section 12).

13.4 A Semester Performance Index (SPI) will be computed for each semester. The SPI will be calculated as follows:

$$SPI = (C1*G1 + C2*G2 + C3*G3 + \dots + Cn*Gn) / (C1 + C2 + C3 + \dots + Cn)$$

where, n is the number of courses registered during the semester,

C_i is the number of credits allotted to a particular course, and

G_i is the grade points corresponding to the grade awarded for the course.

13.5 A Cumulative Performance Index (CPI) will be computed at the end of each semester and communicated to the students along with the SPI and the grades obtained by them for that semester.

The CPI gives the cumulative performance of the student from the first semester up to the end of the semester to which it refers, and will be calculated as follows:

$$CPI = (C1*G1 + C2*G2 + C3*G3 + \dots + Cm*Gm) / (C1 + C2 + C3 + \dots + Cm)$$

where, m is the number of courses registered up to that semester,

C_i is the number of credits allotted to a particular course, and

G_i is the grade points corresponding to the grade awarded for the course.

Whenever a student repeats or substitutes a course in any semester, the lower grade(s) obtained by him/her in the course is to be ignored in the computation of CPI from that semester onwards.

- 13.6 Both SPI and CPI will be rounded off to the second place of decimal and recorded as such. Whenever these CPI are to be used for the purpose of determining the merit ranking of a group of students, only the rounded off values will be used.
- 13.7 When a student gets the grade 'I' or 'X' for any course during a semester, the SPI for that semester and the CPI at the end of that semester will be tentatively calculated ignoring 'I' and 'X' graded course(s). After conversion of 'I' and 'X' grade(s) to appropriate grade(s), the SPI and CPI for that semester will finally be recalculated after taking the converted grade(s) into account.

The Faculty advisor may permit a student to register for an audit course provided the course instructor allows auditing a course. The word "AU" shall be written alongside the Course Name in the Grade Card. The audit course & the grade "AU" shall not carry any credits and grade points. Pass or fail status will be shown in the grade card as "PP" for passed and "NP" for not passed. However, a student is not required to register again for passing a failed audit course.

THE F GRADE AND DD GRADE AND REPETITION OF COURSES

- 14.1 Students obtaining the grade 'F' in any subject (other than an elective and lab practical) will be deemed to have failed in that course. To pass in the course, the student will have three options:
- 14.1.1 The student can repeat the course by registering for it in a regular semester when the course is offered.
 - 14.1.2 The student can repeat the course by registering for it in a summer semester when it is offered.
 - 14.1.3 The student can sit for a supplementary examination in that subject. Such a supplementary examination will be held before the start of the regular semester following the one in which the student obtained the F grade. If this option is taken by the student, the grade will be decided only on the basis of the performance in this examination. However, the highest grade that a student can get through this option is BC.

The maximum number of times a supplementary examination can be taken after a student fails in a course is two. If the student fails to clear the course in spite of these two supplementary chances, he / she will have to repeat the course. If the student fails the course on repeating it, he /she will again be given a chance to appear in two supplementary examinations and the cycle will repeat till the student passes the course.

- 14.2 The above rules will also apply for the repetition of a course with a DD grade.
- 14.3 Students obtaining the grade 'F' in an elective subject may either opt for a supplementary examination if it is offered, or register for any course that is deemed by the authorities to be an equivalent elective subject (this could be the same subject).
- 14.4 In case of failure in Laboratory/Practical subject the student will have to re-register for it in the next appropriate semester.
- 14.5 When a student registers for a course, his/ her grade will be used for SPI calculation in that semester. A student taking a course again or giving a supplementary examination will get two grades for the same course. The supplementary examination grades will be shown separately, the way summer course grades are to be shown. The better of the two grades (the old and the new) of that course will be considered for CPI calculations.

ASSESSMENT OF PERFORMANCE

15.1 There will be continuous assessment of a student's performance throughout the semester and grades will be awarded by the teacher concerned or the appropriate committee appointed for this purpose on the following basis.

In case of

- i) theoretical subjects, the evaluation will be based on instructors' assessment, quizzes, mid semester examination and end semester examination, and
- ii) sessional subjects (Laboratory etc.), the evaluation will be on the basis of attendance, assessment of the tasks assigned and end semester test/viva.

15.2 The evaluation of the project/thesis work will be based on sessional work assigned by the thesis supervisor; seminar, project/thesis report and project/thesis evaluation committee's assessment (mentioned in Clause 16.8 below).

15.3 In case of other requirements such as seminar etc., evaluation will be as determined by the grade awarding authority.

15.4 The mid-semester and end-semester examinations will be conducted centrally by the Academic Section of the Institute every semester. Every theory course must have a mid-semester and an end-semester examination. The durations of the examinations will be 2 hours and 3 hours respectively. No course can have an examination of shorter durations. The class-tests or quizzes will be organized by the instructor concerned.

15.5 The weightage assigned to different components of assessment will be announced by the concerned instructor(s) in the beginning of the semester.

15.6 The results of performance of the students in the mid-semester examination shall be announced by the instructors. The instructors should work out the following points for returning evaluated mid-semester answer scripts:

- i) for spot verification by students, the evaluated answer scripts shall be made available during one of the lecture classes/lab classes/tutorials or during a special session, as may deemed fit by the instructor;
- ii) at least a week ahead of the notified time-schedule for verification of answer scripts by the students, individual course instructor(s) may display the model answers relating to the question paper, through website for information to the students;
- iii) students shall point out discrepancies in the evaluation by the instructor, if any, on the spot;
- iv) after conclusion of the spot verification of answer scripts, the students shall be allowed to carry their answer scripts; and no claim whatsoever shall be entertained afterwards.

15.7 The final grades for a subject must be submitted after the end-semester examination by the concerned instructor(s) to their Head of Department for onward transmission to the Associate Dean, Academic Affairs, within the date stipulated in the academic calendar.

15.8 Evaluation of M.Tech. Project/Thesis:

- a. The project work is normally in two stages, each spread over a semester. At the end of the first stage, the student is required to submit a preliminary report of his/her work by a prescribed date to be evaluated by an Internal Project Evaluation Committee. The second stage of the work is continued in the following semester.
- b. The second stage of project work is also evaluated in the same manner as in the first stage. However, in the second stage the students are required to submit unbounded copies of the report for examination.

On successful completion of the oral examination, each student will be required to submit corrected bound copies of the project report one each to the department and the supervisor(s).

- c. Those who fail in the first stage assessment will be required to re-register for the first stage in the following semester. Likewise, those who obtain an 'F' grade in the final (second stage) assessment will be required to re-register for it in a subsequent semester (including a summer semester).

For students having insufficient progress either in the second stage of a two stage project or in a single stage project, extension of time not exceeding ten weeks from the announced last date for submission of the project report may be granted. In such cases, the concerned students will be temporarily awarded an 'I' grade. Further, if the reports are not submitted within the allowed period of time, the 'I' grade will be automatically converted to an 'F' grade.

METHOD OF AWARDING LETTER GRADES

- 16.1 The instructor(s) shall submit a copy of letter grades to the Academic section, by the due date specified in the Academic Calendar.
- 16.2 End-semester examination answer scripts and the sheet containing details of marks converted to grades shall be preserved by the instructor(s) concerned for a period of one semester.
- 16.3 Changes in Grades Already Awarded: If a student feels that he/she has not been awarded a deserving grade in a course, he/she may request the instructor of the course within one week of the start of the next semester, to show him/her the end-semester answer script in order to ensure that all the questions have been evaluated properly. In case of any change in grade, the same with due justification has to be communicated by the instructor to the Associate Dean, Academic Affairs, through the Head of Department. However, changes in M.Tech. project/thesis grades are not permitted.

EXAMINATIONS

- 17.1 **Debarring:** A student may be debarred from appearing in the end semester examination due to the following reasons:
 - a. If any disciplinary action is taken against him/her.
 - b. On recommendation of a teacher, if his/her attendance in the Lecture/Tutorial/Practical classes has less than the prescribed minimum during the semester.

17.2 Make-up examination

- a. Students who have missed an end-semester examination on valid reasons and have been awarded "I" grade are eligible for a make-up examination which may be held a few days after the end semester examinations. Alternatively, a supplementary examination for the course can be used as a make-up examination.
- b. No make-up examination will be scheduled for the mid-semester examination and quizzes. It is entirely up to the instructor to ascertain the proficiency of the student by whatever means considered appropriate to him/her if he/she is satisfied of the bonafides of the case.

WITHHOLDING OF GRADES

- 18.1 Grades shall be withheld when the student has not paid his/her dues or when there is a disciplinary action pending against him/her.

ELIGIBILITY FOR THE AWARD OF M.TECH. DEGREE

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

- 19.1.1 completed all the credit requirements for the degree with a grade "DD" or higher grade in each of the subjects (Theoretical, Laboratory, Sessional etc.), Seminar, Project/Thesis etc.;
 - 19.1.2 obtained a CPI of 5.00 or more at the end of the semester in which he/she completes all the requirements for the degree;
 - 19.1.3 no dues to the Institute, Department, Hostels; and
 - 19.1.4 no disciplinary action is pending against him/her.
- 19.2 The award of M.Tech. degree must be recommended by the Senate and approved by the Board of Governors of the institute.
- 19.3 Every programme has to have a requirement of at least 120 credits, out of which, the credits for *thesis project* must be at least 30 credits.

FINE ON STUDENTS

20.1 Fine for leave of absence from classes:

A fine of ₹1000.00 per day to be imposed on students who are absent from the Institute without taking prior permission.

20.2 Fine for late registration:

A late registration fee will be imposed on students registering late. A "last date" will be defined, and a late registration fee will be defined which will change from time to time (currently ₹5000/-). Students, registering after the due date and on or before the "last date" will have to pay a fine upto Rs. 5000/- as decided by the administration based on circumstances. Any student registering after the "last date" will not be allowed to register and his semester will be "dropped". Exceptions on medical grounds will be approved by the Chairman Senate.

APPENDIX-A

DEPARTMENTAL POSTGRADUATE PROGRAMME COMMITTEE (DPPC)

(i)	Head of the Department (HOD) (ex-officio)	Chairperson
(ii)	Three faculty members to be nominated by the HOD (Note : If faculty strength of a department is less than or equal to four, then all the faculty members will be members of the DPPC)	Members
(iii)	Faculty Member to be nominated by the HOD	Member Secretary
(iii)	One faculty member from another department. The department will be chosen by the committee. The faculty member from the chosen department will be nominated by the HOD of that department.	Member
(iv)	One student to be selected by the M.Tech students of the 2nd year, and two students in the PhD programme, to be selected by all the full-time PhD scholars of the Department.	Members
	Tenure :	
	Two years for faculty members and one year for student members. Tenure of the Secretary shall also be two years.	
	Functions of the Committee:	
(i)	To oversee the conduct of all postgraduate courses of the department, and to ensure that the Ordinances relating to the programmes are being followed.	
(ii)	To ensure proper academic standards are being maintained in the courses offered by the department.	
(iii)	To consider malpractices by students in academic matters referred to DPPC by a course instructor, and to recommend actions to be taken	
(iv)	To consider cases of students not performing as per requirements and to recommend follow up action to be taken on a case-by-case basis	
(v)	To discuss and recommend changes in the syllabi of all postgraduate courses offered by the department from time to time before sending the same to the Senate	
(vi)	To review student feedback (summary data only) of courses and to recommend corrective measures, if any.	
(vii)	To monitor the progress of PhD scholars in their programme	
(viii)	To recommend Doctoral Committee (DC) members which will be approved by the HOD.	
	Functions of the Secretary, DPPC	
(i)	To hold meetings of the DPPC, at least twice in a semester, and as often as required	
(ii)	To prepare agenda for meetings and to prepare Minutes of meetings	
(iii)	To keep track of academic performance of students in the PG programmes, and to put up cases to the DPPC as per need.	
(iv)	To manage the progress of PhD scholars and to manage and monitor the following: Comprehensive Examinations, State-of-Art Seminars, Progress Seminars, Synopsis Seminars, thesis submission, and viva-voce. To place before the DPPC a summary of the progress of all PhD students.	
(v)	To co-ordinate assignment of M.Tech students to faculty for projects	
(vi)	To co-ordinate the feedback from students of the courses offered by the Department	

