

Regulations for

Master of Technology (M. Tech.)

(Summarised Version as approved vide resolution Senate-91[2020]-03 dated
Mar 18, 2020 for information only)



**NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA**

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1. Introduction

1.1 The provisions contained in these regulations govern the conditions for imparting courses of instruction, conducting examinations and evaluation of students' performance leading to the Degree of Master of Technology (M. Tech.). The original regulations were made effective for the batches of students admitted in the Academic Session 2007–08 onwards. They were also applicable to the earlier batches with some necessary modifications as were decided by the Senate from time to time. This summarized version is applicable to all students studying in the Institute on the date of its approval by Senate and all students to be admitted in future.

1.2 Disciplines: The disciplines in which the courses of study are available and degrees will be offered are given in the following table. Additional programmes will be included from time to time on recommendation of the Senate and approval of the Board of Governors.

Sl.	Department	Specialization
1	Biotechnology and Medical Engineering	Biomedical Engineering
		Biotechnology
2	Chemical Engineering	Energy and Environmental Engineering
		Chemical Engineering
3	Civil Engineering	Geotechnical Engineering
		Structural Engineering
		Transportation Engineering
		Water Resources Engineering
		Environmental Engineering
4	Ceramic Engineering	Industrial Ceramics
5	Computer Science & Engg.	Computer Science
		Information Security
		Software Engineering
6	Earth and Atmospheric Sciences	Atmosphere and Ocean Science
7	Electronics & Communication Engineering	Microwave and Radar Engineering
		Communication & Networks
		VLSI Design & Embedded Systems
		Electronics & Instrumentation Engineering
		Signal & Image Processing
8	Electrical Engineering	Electronic Systems & Communication
		Power Electronics & Drives
		Control & Automation
		Power Systems Engineering
9	Food Process Engineering	Food Process Engineering
10	Mechanical Engineering	Machine Design & Analysis
		Production Engineering
		Thermal Engineering
		Cryogenics & Vacuum Technology

11	Metallurgical & Materials Engineering	Metallurgical & Materials Engineering
12	Mining Engineering	Mining Engineering
13	Industrial Design	Industrial Design

- 1.3 The provisions of these regulations shall also be applicable to any new discipline(s) that is(are) introduced from time to time and added to the list in Section 1.2.
- 1.4 The M.Tech. programme is ordinarily of 2 years (4 semesters) duration. Persons employed in industry and other organizations within a reasonable distance from the Institute may, however, take a "Slow Pace Programme" with consent of their employers.
- 1.5 The slow pace programme shall be of 3 or 4 years duration. In this case, the course work will be at least of 2 years (4 semesters) duration, the rest being devoted for Project/Thesis as usual. The course structure and the subjects to be studied remain the same as those of the regular programme. [In addition to regular and slow pace M.Tech. programmes, the Institute also offers a Master of Technology Degree by Research, named M.Tech. (Res) with greater emphasis on research, which is governed by a different set of regulations.]

2. Admission Requirement

2.1

- 2.1.1 The minimum qualification for admission to any postgraduate programme is B.E. / B.Tech. in the same or a related discipline or M.Sc. in an appropriate branch of Science. The eligible candidates must have secured CGPA not less than 6.5 in the 10 point scale or secured marks not less than 60% in B.E. / B.Tech. or equivalent examination.
- 2.1.2 Candidates with degrees considered equivalent to B.Tech. such as those obtained in the examinations conducted by Professional bodies (such as AMIE and AMIIM) are also eligible for admission.
- 2.1.3 There is no relaxation of marks requirement for SC/ST/OBC-NCL/PWD/EWS candidates or any other disadvantaged group, because the stated requirements are the minimum to meet the academic requirements of the programmes. Preference to SC/ST/OBC-NCL/PWD/EWS students is extended through reserved seats over and above their entitlement as general candidates

- 2.2 The Senate, or the Chairman Senate on its behalf, may relax the grade / percentage marks requirement upto CGPA 6.0 or 55% marks for candidates with proven research or professional experience in the appropriate field. The Senate's decision shall be based on published or unpublished documents produced by the candidates. However, when the Institute admits students through a common admission arrangement, the decisions of the Central authorities will prevail.

2.3

- 2.3.1 Candidates with valid GATE score and satisfying the other academic requirements as specified in Section 2.1-2.2 can be given admission to any M.Tech. programme on the basis of their GATE scores directly. This is applicable for all categories of candidates while SC/ST/OBC-NCL/PWD/EWS candidates being considered separately for seats reserved for the purpose. Departments if so desire, with approval of the Senate, may conduct additional written and/or oral examination to choose between GATE qualified candidates

2.3.2 When sufficient number of GATE qualified candidates are not available for admission to an M.Tech. programme, students meeting the rest of the admission criteria can be admitted on the basis of merit to be decided by the department, broadly following the guidelines of the institute. They, however, will not be entitled to any scholarship from Government sources.

2.4

2.4.1 In addition to regular and sponsored candidates, foreign nationals who satisfy Sections 2.1-2.2 and who are either (a) selected for award of Government of India scholarship under an approved programme or (b) permitted by the Govt. of India to undergo studies as self-financing foreign students may also be admitted.

2.4.2 Foreign nationals who passed the qualifying degree examination (B.Tech., M.Sc. or equivalent degree) from an Indian Institute or University may follow the same procedure as followed by Indian students in addition to that in Clause 2.4.1.

3. Admission Process

3.1 Admission to First semester of M.Tech. programme will be as per approved Academic Calendar. Ordinarily admission is given only in the Autumn semester. Applications for admission is made on Form AC/201. Sponsored students must fill up Form AC/202 [Part-I and Part-II] in addition to Form AC/201.

3.2 At the time of admission the student is required to provide the following documents:

- (a) A certificate for proof of age (Birth certificate or Board certificate).
- (b) Pass certificate and grade card (or mark sheet) of the qualifying examination.
- (c) College leaving certificate/Transfer certificate.
- (d) University migration certificate (If applicable)
- (e) 3 recent passport size colour photographs.
- (f) Application for enrolment
- (g) GATE score card (if applicable)
- (h) Reservation Category certificate (if applicable)
- (i) Address slips of parents including both postal and electronic addresses
- (j) Admission fee receipt

Original certificates (except GATE score card, transfer certificate, migration certificate and conduct certificate) will be returned after verification.

3.3 Students desirous of staying outside hostel need to apply in Form AC/104, available in Chief Warden's Office, with full justification after the admission process is over.

3.4 Provisional admission due to non-submission of documents

3.4.1 A provisional admission may be given if any of the certificates is not produced. It has to be submitted before September 30 of the admission year, or any other date to be fixed by the Senate, failing which admission will be cancelled and all fees deposited will be forfeited.

- 3.4.2 Students who will fail to submit their result/certificates by 30th September are required to submit a letter from their concerned Universities/affiliated colleges by 15th December to the effect that all examinations leading to qualifying degree were completed before admission at NIT Rourkela and the result is awaited. With the above letter and presently available result (if published in any form, may be downloaded from the website) students will make an application to the Institute, based on which they may be given extension of time for submission of result/certificates till 31st March of the same academic year.
- 3.4.3 Students who are appearing at qualifying examinations mentioned in Clause 3.2(b) (regular or supplementary) after originally scheduled date of examination by the University/Institute are not eligible under Clause 3.4. The studentship of such students will be terminated and all dues paid (except mess dues) will be forfeited.

3.5 **Sponsored candidates**

Sponsored candidates must produce the following additional documents at the time of admission:

- a) Employment Certificate in support of 2 years of continuous full time employment in a regular position in the sponsoring organization along with relevant documents such as pay slip, appointment order and ID card. This completion of 2 years full time employment shall be counted on 31st July of the admission year.
- b) Documents to prove that he / she has been officially relieved of his / her duties for the purpose of joining the M.Tech. programme.

3.6 **Slow pace programme for local sponsored students**

- 3.6.1 The M. Tech. programme is also offered in the slow pace mode to students staying in and around Rourkela who are employed in Government or private institutions and cannot join full time programmes.
- 3.6.2 Under the slow pace programme a student will be registered for half the courses in a semester and will take 4 semesters to complete the course work, and upto 4 years to complete the full programme. There is no other concession and no compromise in quality.
- 3.6.3 Such students are required to take one year leave from their sponsoring organization after successful completion of course work to complete their project work unless permitted by NIT Rourkela to carry out the project in the place of employment on the strength of facilities available in the sponsoring organization and this will be decided at the time of admission.
- 3.6.4 These students are not entitled to a hostel room but will be attached to a hostel for administrative purposes. He needs to pay full tuition and other fees for all semesters of study at par with regular students even if he takes only partial academic load. In case a student completes 8 semesters with a few F grades or has a course CGPA less than 6.00, he must leave the Institute without obtaining a degree.

3.7 Faculty advisor

- 3.7.1 The department will assign a faculty member to each batch/specialization of students to serve as Faculty Adviser, during first year or till completion of the course work. He will serve as a mentor to the students and shall proactively monitor their academic progress. He will approve selection of elective courses, liaison with course teachers in matters of students' attendance and performance, recommend leave of the students to HOD, and communicate with their parents. His role is critical in case of academically weak or de-motivated students, who need to be guided out of their academic or social situations.
- 3.7.2 After a student successfully completes two semesters (four semesters for slow pace students) of course work, his thesis supervisor will serve as his faculty advisor till the student graduate or leave the Institute.
- 3.7.3 The Institute reserves the right to cancel the admission of any student and ask him to discontinue studies at any stage of his career on grounds of unsatisfactory academic performance, unsatisfactory attendance or undisciplined behavior.

4. Course Structure

- 4.1 The duration of the course leading to M. Tech. degree will ordinarily be two years. A student may, however, opt for the slow pace programme if he does not feel comfortable with the workload.
- 4.2 The maximum duration allowed to complete the M. Tech. programme is 4 years (8 semesters) and 5 years (10 semesters) for students granted withdrawal with the intention of returning to the Institute for one year to complete the project work.
- 4.3 The curricula will contain 5 theory and 4 laboratory courses each during the first two semesters. The second year will be totally dedicated to project work supplemented with Summer Research Project to be counted in 3rd semester and comprehensive viva-voce in 4th semester. The total credit load will be at least 88 credits.
- 4.4 The summer vacation will constitute a part of the 3rd semester. A student will carry out a mini project during the summer vacation, which should be distinguished from the traditional summer training or SIRE (Short term Industrial or Research Experience) undergone by UG students. The summer project (an internship in industry or an R&D institution, an assigned work in the Institute or a combination of the three) will carry 4 credits which will be counted in the 3rd semester.
- 4.5 The summer project (either in-house or industrial) will be assigned and monitored by the student's thesis supervisor. It may be related to the thesis topic or may be an independent work, to be decided by the thesis supervisor. The topic and place of work will be decided before the middle of the Spring Semester. There is no summer or winter vacation for M.Tech. Students.
- 4.6 In addition to regular course work, an M. Tech. student must carry out a major project in final year under the guidance of one or two supervisors. The project will be of 2 semesters duration and carry 20 credits in each semester.

4.7 While the Principal Supervisor shall normally be a faculty member of the department, the second supervisor can be from the same or another department, or from another organization. In special circumstances, the Principal Supervisor may be from another department.

4.8 Every programme shall provide a “Seminar and Technical Writing” course [2 credits] in any one semester where the students shall learn and practise essential writing and presentation skills, and attend seminars by reputed engineers and scientists organized by the Departments.

4.9 **Online courses**

The Ministry of Human Resource Development (MHRD), GOI has started programmes like Global Initiative of Academic Networks (GIAN), Study Webs of Active Learning for Young Aspiring Minds (SWAYAM) etc. where the students can register for the online courses, attend, and get evaluated. The credit obtained in these online courses can be transferred to the student’s account as per the following criteria:

- a) Maximum up to 20% of the total credits per student in the career will be permitted under this scheme.
- b) The Massive Open Online Course(s) (MOOC) registered under **SWAYAM** will be considered within the Institute credit requirement.
- c) None of the core course of the department can be substituted with any online course.
- d) Departmental Academic Committee will identify the list of online courses which can substitute the non-core courses of the respective departments.
- e) The student after completing the online course is required to produce the course completion certificate before DAC to claim exemption for the regular non-core course offered by the department during semester registration. DAC will also finalize the equivalent grade of such course and submit to Academic office.
- f) The course(s) and credits completed under GIAN/ SWAYAM will be included in the grade card and CGPA calculation.
- g) The credits of GIAN course(s) will be over and above the Institute credit requirement but it will be considered for CGPA calculation.
- h) Selected students will get academic leave to attend the GIAN course(s). This will be over and above the permissible limit for academic travel of the student.
- i) Students of 2nd year M.Tech and 5th year Dual Degree not getting minimum ‘P’ grade in the GIAN course will be denied academic leave, financial support for the programme and fellowship during programme period.
- j) Since the grading pattern of GIAN is same as NIT Rourkela system, the grade given by the Teaching Institute will be accepted.

5. Registration

5.1 Every student of the M. Tech. programme is required to be present and do semester registration at the commencement of each semester on the date fixed and notified in the Academic Calendar. The registration process has the following 4 components:

- (a) Pre-Registration for the said semester to be done during the previous semester,
- (b) Physical presence of the student in campus on the first day of the semester. This may not be applicable to students permitted officially to go out for their project work. Their cases will be dealt with on case to case basis depending on the nature of permission granted,
- (c) Payment of semester fees including any unpaid dues of past semester(s), including hostel fees, and
- (d) Selection of courses to be studied during the semester.

Semester fees including hostel dues are to be paid during the period as decided by the Institute. In deserving cases, particularly students receiving an external scholarship or a bank loan, the Institute may permit deferment of payment of fees beyond the date notified with a late fee. If a student fails to pay the fees, his result for the semester will remain withheld and he will not be in a position of registering for the next semester, unless specifically approved by the competent authority.

5.2 **The registration will be done in respective departments supervised by the Faculty Advisors, the choice of subjects being finalized by the student and his Faculty Advisor.** Registration of only those students will be approved who have:

- (i) completed pre-registration or paid applicable late registration fee.
- (ii) cleared all Institute and Hall dues of the previous semester(s)
- (iii) paid all prescribed fees for the current semester during the period notified (unless otherwise permitted)
- (iv) not been debarred from registering for a specified period on disciplinary or any other ground
- (v) satisfied all academic requirements
- (vi) not been struck off the rolls of the Institute.

5.3 Registration amendment and permitted late registration

5.3.1 Once registered, a student may amend the registration within 10 working days of original registration date. The same Form (AC/109) shall be used for the purpose with "Amended Registration" marked on the top.

5.3.2 A student who does not register on the day announced for the purpose, can register within next 10 working days on payment of late fine as prescribed by the Institute. Normally no late registration shall be permitted after the tenth working day from the scheduled date, except in special cases like those directed by MHRD or MHRD approved authorities in 1st semester, a serious medical problem, a family calamity or participation in a national event, to be approved by the Director on recommendation of Dean (Academic).

5.3.3 Under no circumstances, even with approved leave, late registration after 30 calendar days from the scheduled date of registration is allowed. A student must repeat the semester in the following year. In case of late registration, all classes between the expected date of registration and the actual date will be considered as absence. The student may, however, apply for leave to Dean (Academic), if admissible under leave rules. No special allowance may be claimed in the matter of assessment / evaluation or grading.

5.4

5.4.1 Students who secure SGPA less than 5.00 in the First semester shall leave the Institute.

5.4.2 Students who secure SGPA 5.00 and above in the First semester will be permitted to register in the Second semester.

5.4.3 However, students with $5 \leq \text{SGPA} < 6.00$ in the first semester are advised to register for second semester in slow pace in order to avoid the possibility of leaving the Institute after second semester pre-maturely. Fellowship for such students will be temporarily suspended till publication of second semester results. If the CGPA improves above 6.00, fellowship will be restored with arrears.

5.4.4 If the CGPA is less than 5.50 at the end of second semester, the student shall leave the institute. The unpaid scholarships of second semester will not be paid.

5.4.5 After 2nd semester for $5.5 \leq \text{CGPA} < 6.00$, the student will be allowed to continue in slow place but without resumption of fellowship. If he/she secures CGPA 6.00 or above after 3rd semester, fellowship will be resumed without any arrear and be paid for only 4th semester. He/she will be allowed to register for only 1st year courses in slow place to improve his/her CGPA to a minimum of 6. The student will be given a maximum period of two semesters to improve his/her CGPA to a minimum of 6, failing which he/she shall leave the institute.

5.5 **Backlog courses and promotion to higher semesters**

5.5.1 To be able to register in the 2nd year (3rd semester) and continue his/her study in the Institute at the end of 1st year, a student must have

- (i) Completed satisfactorily at least 32 credits of courses prescribed for the two semesters, i.e., secure 'P' or higher grade in at least 32 credits. [The courses with F grade must be cleared as backlog papers in 3rd and 4th semesters to qualify for a degree.], and
- (ii) Obtained a Cumulative Grade Point Average (CGPA) of not lower than 6.00 (considering all courses including those in which the student has secured an F grade).

- 5.5.2 While registering in 3rd or 4th semester, a student will register for backlog papers of 1st or 2nd semester respectively. In a backlog course, the student need not attend the class but has to sit for both mid-semester and end semester examinations and the grade will be awarded based on the scores of the latest examinations. The Teacher's Assessment (TA) component will be same as that given by the instructor in the original semester, when he attended classes. In all such cases of "backlog paper", the grade awarded will be one step lower than what the student actually obtained, except for the grade 'P' which remains unchanged.
- 5.5.3 Alternatively, a student may opt to repeat a course afresh, in which case he will attend classes, and there will be no reduction of grade awarded. If regulations and examination schedule otherwise permit, a student may register for an even semester elective in odd semester and vice versa. A student may change an elective course if he satisfies the prerequisites and if the time table permits.
- 5.5.4 A student who has been debarred from appearing at an examination either (i) as a measure of disciplinary action or (ii) for adopting malpractice at an examination and consequently awarded a grade 'X' is not eligible to appear in an examination as a backlog paper. He needs to formally register for the course and attend classes as per rules.
- 5.5.5 If a student is debarred from examination or his paper cancelled due to unsatisfactory attendance, he will be given 'X' grade in that paper. He will need to register for the course afresh and attend classes.
- 5.5.6 If a student spends a part of his time in third or fourth semester in course work (except as backlog papers) as a consequence of poor grades or unsatisfactory attendance in first two semesters, his thesis submission date will be forwarded by one semester. His thesis will be evaluated along with those of the next batch students, and he will be awarded the degree in the following year. The extension period will be without fellowship.

6. Attendance

- 6.1 **Attendance requirement in classes:** Attendance in all classes (Lectures, Tutorials, Laboratories, Seminars etc.) and in research laboratories is compulsory. A student shall be debarred from appearing at an examination or, if he has already written the examination, the grades will be rejected on ground of unsatisfactory attendance, if the attendance is below what is prescribed in Clauses 6.1.1-6.1.6, or if in the opinion of the course teacher the student has not participated effectively in the class in terms of home assignments, class tests etc. In such a case a student shall be given 'X' grade, and the student will need to register for the course once again and attend classes with seriousness.
- 6.1.1. Considering that attendance in classes, participating in the teaching-learning process is the basic foundation of our academic programme, a student is expected to attend all classes conducted as per Institute calendar and time table. However, to provide for exigencies, absence to the extent of 15% (approximately) of scheduled number of classes in every course will be condoned as a matter of routine.

6.1.2. In deserving cases, a further relaxation of 15% (i.e., 30% of scheduled number of classes) may be given; but the student's grade will be reduced by one step. A 'P' grade will be reduced to 'F', and the student will be permitted to register for the course as a backlog paper in the following year.

6.1.3. The following table gives the number of classes that a student may miss with or without penalty in grade.

L-T-P	without penalty	with reduction of one step in grade
3-0-0	6	12
3-1-0	8	16
0-0-3	2	4
0-1-3	2	4

It may be noted that missed classes are of 1 hour duration in theory courses and of 3 hours sessions in lab (0-0-3) or (0-1-3) courses.

6.1.4. If a student has attendance lower than that prescribed under Clause 6.1.3, he/she will get 'X' grade. He will register for the course in a subsequent semester. In such a case he may not be able to complete the programme in two years.

6.1.5. The Institute will fix a cutoff date before every examination to compute the percentage of absence.

6.1.6. In case there are truly exceptional circumstances, the Senate or the Director as Chairman Senate, may relax attendance requirements as they think fit.

6.2 **Attendance requirement during Project duration:** If a student has poor attendance or unsatisfactory record of active work in the department, the following provisions will apply. The "project duration" starts soon after completion of the second semester (say, on May 16 or another convenient date fixed by senate and posted on the Academic Calendar) and continues for a full calendar year (365/366 days).

No. of working days absent	Earliest date of thesis submission (Start May 16)	Additional absence permitted	Reduction of grade	Date of oral examination	Year of award of degree
0-20	Normal (along with current batch)	Not applicable	None	Normal (current batch)	Current year
21-40	End of Mid-semester exam of following (Autumn) semester	10 days	One step	Along with current batch of students	Current year
41-60	End of Autumn semester (Registration required)	15 days	None	Along with next batch of students	Next year
Above 60	Register afresh in Autumn +Spring of next year	20 days	Not applicable	Along with next batch of students	Next year

Leave Rules

6.3 Leave and scholarship

- 7.1.1 An M.Tech student is entitled to 15 working days of “Casual Leave” in a year for the purpose of scholarship only. For this purpose, the first year starts with admission and ends with the last examination of spring (second) semester. The second year starts the day after and ends on completion of the 4th semester. This leave will not govern academic record, neither in first year nor in second year. Leave under course work will be governed by the provision of Clause 6.1 while that during the project duration will be as per Clause 6.2.
- 7.1.2 Absence upto 15 days in an Academic year will be treated as leave and there will be no deduction of scholarship. Absence for 16 – 20 days, scholarship will be deducted at the rate of per day. Absence beyond 20 days, for one day of absence two days’ scholarship will be deducted.
- 7.1.3 Students need to apply for the leave for the absent period. If the leave is approved on merit then s/he will be paid Scholarship/Fellowship for the period of absence beyond the eligible date or the date of thesis submission whichever is earlier.
- 7.1.4 Under no circumstances, the total duration of scholarship/fellowship including the period of extension should not exceed 2 years for M Tech.

6.4 Leave and penalty

- 7.2.1 An postgraduate student is eligible for the following leaves per academic year if his/her application is forwarded by the HOD on recommendation of the faculty advisor and then approved by Dean (AA):
- a) Medical leave: Details regarding Medical leave is described in **Appendix– I** (see Policy on sanction of Medical leave).
- Penalty can be imposed on the students producing false medical documents; the minimum penalty being deduction of one month scholarship and extension of minimum thesis submission period by 3 months and repeat cases being referred to ISDC. In case of unauthorized absence, fellowship will be deducted proportionately and further academic penalties may be imposed
- b) Family calamity: Dean (AA) may approve leave upto 20 working days in a semester on ground of a family calamity, death of a parent or sibling, a serious illness (involving a serious heart, brain or kidney disease, any kind of cancer, or a major operation of a parent) will normally satisfy requirement for sanction of leave.
- 7.2.2 Family functions (social or religious), illness of family members, participation in student activities such as organizing functions or raising money, preparing for other examinations or searching of jobs are **NOT** adequate grounds for leave of absence from classes including project work.
- 7.2.3 Ordinarily leave must be sanctioned before the student leaves the campus. In case of emergency a student may leave campus without prior approval, but must inform his/her thesis supervisor / faculty advisor over telephone/email at the first available opportunity.
- 7.2.4 The **total leave** to be sanctioned shall not exceed 30 working days in a semester.

- 7.2.5 A married female student will be entitled to maternity leave twice in her career up to a maximum duration of 180 days in total and will be paid full fellowship/scholarship during her maternity leave period. However, without compromising in the academic front, the duration of programme of study will be extended to the extent of leave period. The student will not be eligible for fellowship/scholarship if the extended period is beyond the maximum period approved for fellowship/scholarship. Semester registration is mandatory for every semester covering leave period.
- 7.2.6 No sanction of leave is necessary if a student wants to leave station over weekend or holidays except when there is a scheduled compensatory class. No mess rebate is admissible for such absence. The student, however, is required to inform the Warden of his hall of residence and his faculty or thesis advisor before leaving Rourkela. Such permission is essential (though not sufficient) for sanction of any hospitalization leave, if such a situation arises.

7. Assessment of Performance

8.1 There will be continuous assessment of a student's performance throughout the semesters and grades will be awarded by the course teachers.

8.2 In general, there is no strict marks-to-grade linkage. The following should be taken as a guideline to ensure uniformity of grading among all courses.

- 8.2.1 For arriving at a grade obtained by a student for a particular course, initially numeric marks obtained by the student out of 100 (hundred) are to be determined and then the same is to be converted to letter grade following the guidelines given in Appendices–II & III.
- 8.2.2 For theory subjects, the subcomponents and the respective weights assigned to them are given below.

<u>Subcomponent</u>	<u>Weight</u>
Teacher's Assessment (T.A.)	20%
Mid-Semester Examination	30%
End semester Examination	50%

- 8.2.3 For assigning marks in Teacher's Assessment (T.A.), performance in home assignments, class tests, tutorials, quizzes, viva-voce, attendance etc. are to be considered. It is recommended that at least two class tests for 4 credit theory courses and 1 test for 3 credit theory courses are to be conducted for a subject. The weights of different subcomponents of T.A. may be announced to the students by the teacher at the beginning of the Semester
- 8.2.4 For assignment of marks in design/laboratory component (P – component) the relevant subcomponents that are to be considered are: regularity, day-to-day work, pre-class study, practical skill, quality of observation and quality of lab records etc. Percentage weights of the different subcomponents in deciding the final marks are to be announced at the beginning of the Semester. The evaluation process must be completed before the beginning of end semester examination.

- 8.2.5 Unlike purely examining universities, design and laboratory courses at NIT Rourkela will put greater emphasis on day-to-day work than on end semester examinations. To the extent possible, design and laboratory work should be completed and evaluated every class thus ensuring continuous evaluation. No external examiner shall be associated with evaluation of design/laboratory or theory courses.

8. Examination

8.1 Examination procedure

- 9.1.1 All the examination will be centrally conducted by the Academic office.
- 9.1.2 The examinations will normally be “closed book type”, where the students are not permitted to bring any material from home or hall of residence. All necessary charts and tables will be provided by the Institute. While normal scientific calculators are permitted, other electronic devices such as programmable calculators and calculators containing communication devices and mobile phones are forbidden. Any exception to these provisions must be specially approved by the Senate.
- 9.1.3 All question papers submitted by the teachers will be treated as “confidential documents” till the end of the examination of the subject concerned. It is an open document after the examination is over. The institute will archive question papers in physical and electronic form, and make them available to future students.
- 9.1.4 On request from a department or student, the Institute shall provide sick room facility within the Institute or in a nearby hospital as deemed convenient by the Institute to assist students who may fall sick during the examinations.

- 8.2 **Eligibility to write the examination:** A student will be permitted to appear in an examination, only if he/she has:

- (i) attendance record as per these regulations in theory and laboratory classes and has completed the assigned works,
- (ii) paid all Institute and Hall dues of the semester,
- (iii) not been debarred from appearing in the examination as a result of disciplinary proceedings, or on recommendation of the subject teacher, and
- (iv) has formally registered for the subjects at the beginning of the semester.

- 8.3 **Debarred from writing the examination:** A student may be debarred from appearing at the Mid-Semester or End semester Examination in the subject if his

- (i) attendance at lecture/tutorial/laboratory classes in that subject has not been satisfactory during the period, and/or,
- (ii) performance in the assignment works in that subject during the semester has not been satisfactory.

- 8.4 For the benefit of and as a process of learning by the students, the scripts after correction of all class tests, mid-semester examinations, assignments etc. will be shown to the students within 3 weeks from the date of Tests / Examinations. The evaluated scripts of the end semester examinations are to be shown to the students at the beginning of the next semester, but not later than 2 weeks from the starting of classes. There is no limit on how early a teacher can show the evaluated scripts to the students.

- 8.5 Any change of grade of a student in a course [Form AC/120], consequent upon detection of any genuine error of omission and/or commission on part of the concerned teacher, must be

recommended by the Departmental Academic Committee (DAC) and forwarded by the Head of the concerned Department to the Academic Office within three weeks from the date of commencement of the next semester. Every Department will send one comprehensive report for each semester in a standard format.

8.6 If a student is dissatisfied with his/her grade, he/she may bring it to the attention of the teacher within two weeks from the first day of commencement of classes in the next semester. The teacher may change the grades if he finds an error in evaluation or reporting of grade. The teacher will report the change of grade to the DAC [Form AC/120] along with all relevant papers (answer scripts, attendance register, grade calculation sheet etc) before a specified date. The DAC only with the Head of the Department will examine the records in detail, and if convinced, will submit a consolidated report as per standard form to the Academic office for correction of records. The records will be presented by the HOD before the grade change committee chaired by the Director, whose decision will be final. If the student still feels aggrieved, he/she will file a formal complaint with Dean (Academic) through his/her faculty advisor and HOD with a copy to the teacher (evaluator). If no complaint is filed within one month from the first day of classes in the next semester, the student is deemed to have accepted the results and no further change of grade is permitted.

8.7 The teachers are expected to retain all answer scripts, assignments and laboratory records for a period of two months from the starting of classes in the next semester. After that the material may be disposed off, except for the students who have filed a complaint. In case of complaint filed before the expiry of two months, the material need to be saved till all disputes are settled and final grade awarded. All relevant material will be handed over by the teacher to the Head of the Department for safe keeping in the department office. The teacher, at his discretion, may retain a photo copy.

8.8 **Missing an examination**

9.8.1 Appearing both at the Mid-Semester and End semester Examination of theory courses is compulsory. Normally, if a student fails to appear in the Mid-Semester Examination without any valid reason he/she should get zero for that component. If his case is examined and cleared as per Clause 9.8.2, the student will be permitted to sit for Alternate Mid-Semester examination in the same year. In such cases, the grade will be reduced by one step, but not below the grade P. In deserving cases, the student may be given full credit only if he has a 95% attendance in the course.

9.8.2 If a student misses the End semester Examination due to compelling reason like participation in a national / international event with due approval of the Institute, serious illness of himself or a calamity in the family, he may appeal to the Dean (Academic), through his faculty advisor and Head of the Department for permitting him to appear at the Supplementary Examination(s) if offered, subject to fulfilling of attendance requirement. [See Appendix IV for rules on Supplementary exams]

9.8.3 A student must apply in Form AC/113 to appear in an alternate mid-semester or supplementary end semester examination.

8.9 **Alternate mid-semester examination**

Students who miss a mid-semester examination due to serious illness, family calamity or some other reason specifically approved by Director may be permitted to appear at an alternate mid-semester examination, if there exists sufficient reason to miss the examination. When a student writes supplementary (for end semester) or alternate mid-semester examination, the grade

awarded will be lowered by one step, with a 'P' grade remaining as 'P'. However, if a student has class attendance exceeding 95% (approximate) at the end of the semester, he may be given full credit. Thus, to be eligible for full credit, a student's absence from classes in any course must not exceed 2 hours in a theory course and one class in a Lab course. Students permitted to avail full credit shall be eligible for medals and prizes.

10. Withdrawal

- 10.1. In case of a student already employed (sponsored students), or if he secures new placement (including long term internship), he may be allowed to become non-resident on the recommendation of Faculty adviser and Head of the Department and with approval of the Director after he has completed successfully two or three semesters of course work respectively. [Students with any F, I, X or UR grade at the end of second semester will not be granted withdrawal.] The student so permitted has to pay the prescribed fees in all subsequent semesters till submission of thesis. In such cases, however, the student has to submit the dissertation not later than four/five years from the date of admission.
- 10.2. Students who discontinue their study without taking a formal withdrawal as per Clause 10.1 shall be deemed to have abandoned the studies. The names of such students will be struck off the rolls and no fees including caution money of Institute & Halls will be refunded to them.
- 10.3. The following arrangement will be made for carrying out the project after a student takes withdrawal from the Institute in accordance with Cause 10.1:
 - (i) Withdrawal of regular M. Tech students is permitted only after completion of 3 semesters of study. The student shall work under the guidance of his present supervisor (if the supervisor certifies it to be feasible) and submit his thesis at least one year after his normal date of submission. He will be evaluated and awarded degree along with the next batch of students.
 - (ii) Sponsored students, who had indicated so at the time of admission, may return to their place of employment for carrying out the project. Such a student shall have 2 supervisors: the Principal Supervisor from the Institute and the Co-supervisor from industry decided at the time of admission. If the student seeks withdrawal after the completion of mini project during the summer vacation, the credit (4) of the mini project will be counted for the 3rd semester. If the withdrawal is sought before the completion of the mini project, the student has to work on a new summer project under the guidance of the external supervisor in the place of employment which should not have a bearing on the thesis.
- 10.4. Students will not be entitled to any fellowship after taking withdrawal from the course.
- 10.5. Students taking withdrawal will register for the paper "Seminar & Technical Writing" in the normal mode along with the other students.
- 10.6. Students who have taken withdrawal must report to the department when so directed for the purpose of seminar, viva voce and other modes of evaluation.

11. Project Work and Submission of Thesis

- 11.1. The project is an important component of the Institute's M.Tech. programme. It gives an opportunity to the student to express his creative talents and prepare for his future career.
- 11.2. Each topic will be taken by one student only. In case of specially challenging problems, larger teams may work on a single problem; the supervisor will define the individual contribution so that each student's research problem becomes unique.
- 11.3. The Departmental Academic Committee will invite research topics for M.Tech. projects from its own faculty (including adjunct faculty) and from other departments across the Institute towards the middle of the first semester. One member of the Committee may be designated to coordinate this activity. Faculty members may propose project topics, singly or in collaboration with a colleague from the same or another department. Co-Supervisors from industry or other institutions may also be accepted. The topics should be advanced in academic content and, preferably, relevant to industry/field application. It is expected that research topics offered by an academic group fall into a pattern, and reflect the long term research plans of the faculty members.
- 11.4. The Departmental Academic Committee will assign research topics to students at the end of the first semester, after taking into consideration the requirements of the projects and choice of the students. Initial assignments of projects will generally be broad titles, which will crystallize as the work progresses. It is not mandatory for the student or his supervisor to inform the DAC about such incremental changes. In case of a major change of field during the course of a work, the DAC should be informed to decide if the student shall need additional time to complete the work.
- 11.5. M.Tech. projects may be analytical, computational, experimental or developmental or combination thereof. The department will make the necessary resources available to the students, including access to laboratory and computing facilities outside normal working hours. It will be the moral and legal responsibility of the supervisor (s) to arrange the facilities. Students are encouraged to discuss such matters with their supervisors, and if not satisfied, with HODs and higher authorities.
- 11.6. The Institute encourages research projects in collaboration with industry, R&D organizations and other reputed educational institutions. Such projects must be proposed and actively pursued by the faculty supervisor, instead of being a private arrangement between the student and the external Institution. The supervisor may propose to DAC a co-supervisor from the collaborating institution. The student may accept financial support from the external institution, to offset the additional cost of travel, and living expenses. But he cannot accept a second fellowship/scholarship while enjoying a fellowship from the Institute.

The Institute specifically discourages internships in industry where a student works in an organization without active participation by his supervisor in pursuing the research topic. Indicators of such arrangement are initiation of a problem after allotment of research topics, interview of the student by the company, long stay of student in the premises of the employing organization with intermittent visit to the Institute, absence of meetings between the supervisors from the industry and the Institute, withholding of information in the thesis by the company, absence of share of IPR to the faculty supervisor etc. Reputation of the industry, expertise of its engineers and standard of the research topic do not justify non-participation of the student in the Institute's academic programme.

11.7. The Head of the Department is the competent authority to approve travel of students for all academic purposes including those for working on research projects irrespective of the duration. Travel support from the Institute, however, needs to be approved by Dean (Academic) if the period of support exceeds 30 days. In case of joint R & D projects with industry or another institute, the HOD may obtain financial approval from Dean (Academic) for the expected number of visits and cumulative duration of stay right at the beginning of the project period. During the year, the student may travel only with permission of HOD and be reimbursed the expenses

12. Graduation Requirement

12.1. In order to qualify for the M. Tech. degree of the Institute, a student must:

- (a) complete all credit requirements for the degree as laid down in the prescribed curriculum of the discipline, with a minimum grade 'P' each subject.
- (b) obtain a CGPA of 6.00 or higher at the end of the semester in which he completes all the requirements of the degree, separately in both course work (1st and 2nd semesters) and thesis (3rd and 4th semesters) components.
- (c) have cleared all dues of the Institute, Halls of residence, Library, Department and Student Activity Centre.

12.2. Normally a student should complete all the requirements consecutively in four semesters for the M. Tech. degree. [Six semesters in the Slow Pace programme.] Students taking withdrawal in the middle of a programme will be governed by rules given in Section 10.

12.3. All graduating students are required to submit their suggestion for improvement of courses to the Director in Form AC/123. The suggestions will be summarized on Form AC/124 and presented before the Senate.

12.4. Students who do not satisfy all graduation requirements within 4 years (5 years for students granted withdrawal under Clause 10.3) from the date of admission will leave the institute without being awarded a degree.

POLICY ON SANCTION OF MEDICAL LEAVE TO STUDENTS

1. Ordinarily a student is expected to attend all classes and participate in the teaching - learning process. Research and postgraduate students in the project duration are expected to spend their full time in their assigned laboratories. But human beings do fall ill, and a student should not be academically penalised if he falls ill and is unable to attend classes or to work in his laboratory. Concurrently, a student must not get a degree without sufficient participation in the learning process. The following rules reflect a pragmatic compromise between the two opposing requirements.
2. Every student is given some default discount in attending classes or project work: approximately 15% of classes in a semester and 20 working days of project work per year. This period covers all minor illnesses for which a student is sometimes forced to miss his classes. They also cover post-hospital convalescence periods, if any. When a student loses too much time in sickness and participates too little in the teaching - learning process, he may need to repeat a semester to justify his grades.
3. In addition to the standard discount, UG and PG students attending class or laboratory based courses can be sanctioned leave against medical prescription of "rest from classes" or on ground of hospitalisation (with referral). The total medical leave thus sanctioned shall not exceed 15 working days in a semester. In special cases, involving at least 10 working days of hospitalisation (with referral), Dean (SW) may approve up to five additional working days of medical leave in a semester. Prescription of "rest" must be given by an Institute Medical Officer on the first day of the rest period. Students recommended "rest" by outside specialists or hospitals on referral by the institute need to get it confirmed by an institute medical officer. The institute doctor will consider these outside prescriptions of "rest" on merit. Prescription of "rest" by outside doctors without a referral by Institute Health Centre, shall not qualify for sanction of medical leave either against outdoor treatment or against post-hospitalisation convalescence.
4. Research students and full time project students (M. Tech. 2nd year) are permitted 20 working days of absence in a year (2 semesters + summer) that covers minor illness and prescription of rest by institute doctors. They may, however, be granted additional medical leave on ground of hospitalisation on prior referral (only by an institute medical officer excluding convalescence) up to 20 working days per year.
5. "Home stay" on explicit direction of Institute Medical Officer or a hospital referred by him (e. g for chicken pox, viral hepatitis) will be counted as "hospitalisation" for the purpose of medical leave.
6. Under very special circumstances, hospitalisation only (excluding outdoor treatment and convalescence) in a reputed Government or highly reputed private hospital without referral may be accepted for medical leave with approval of director. In such cases, the student must convince the director that he had a valid reason for being present in the place where he fell ill, and that he either had approval of his HOD/faculty advisor or Warden before leaving hostel or continuously kept in touch with them during the illness.
7. In all cases, an application for medical leave must be accompanied by all relevant medical papers – prescriptions, admission and discharge reports, diagnostic reports, medicine purchase slips etc that will convince the institute authorities about the genuineness of the request. Medical certificates issued by treating physicians, which do not constitute a part of the treatment process, will not be considered in decision making.
8. Medical leave applications must be filed within 2 weeks of joining the classes. Delayed applications may be considered on merit with approval of Director only. But in no case, a medical leave application will be considered after the student has registered for the next semester.

9. In all cases of medical leave, the student shall need to make a formal application. However, the institute shall strive to create a process whereby students whose prescription of rest is made on-line by the institute Medical officer can be exempted from making a paper application.
10. Except for hospital treatment without referral, or a delayed application Dean (SW) shall be the authority for sanction of all Medical leaves, on recommendation of an Institute Medical Officer.
11. Notwithstanding anything contained in the regulations above, if the conditions are sufficiently unique, the Senate in a formal meeting may approve medical leave to deserving students. The HOD of the concerned department shall present the case to the Senate.



GUIDELINES FOR AWARD OF LETTER GRADES

1. In general there shall be no rigid marks-to-grade linkage. Difficulty levels of the examinations, tests, assignments, viva-voce and other factors that contributed to the final marks are to be considered by the teacher / coordination committee of a subject while converting marks into letter grades. Still adherence by teachers to these guidelines will help in evolving a common standard that is easy to implement and easy to understand.
2.
 - (a) The grades 'F' and 'Ex' are to be considered as bench mark grades.
 - (b) Ordinarily the cut-off marks below which a student would be assigned and 'F' grade is 35/100 in theory courses and 40/100 in for the laboratory courses. These cut off marks may be lowered to the extent of 5 marks at the discretion of the course teacher.
 - (c) The exceptionally brilliant performance is to be assigned an 'Ex' grade. Even the best student of any class needs to be judged against best students of previous batches to be awarded the 'Ex' grade. Normally a score of 90 out of 100 shall give an Ex grade; but this threshold may be lowered to the extent of 10 points at the discretion of the course teacher.
3. In case of a relatively large class and/or classes where the performance level depicts more or less a normal distribution:
 - (a) Teachers should strive to set up standards so that the average performance (around mean value of marks) yields a 'C' grade. However, if by the teacher's/coordination committee's perception the general level of the class is considered to be appreciably higher than that of other batches, the average performance may be assigned 'B' grade.
 - (b) All other marks for grade conversion are to be done relatively with respect to the average performance in between (but excluding) the 'F' and 'Ex' grades, which have already been assigned, by choosing appropriate boundary marks between grades.
 - (c) Normally, in a reasonably large class of students distribution of grades is expected to be as follows:

Ex	:	≤ 10%
A	:	10 – 20 %
B,C,D	:	20 – 35% each
P	:	10 – 25%
F	:	0 - 5 %

In extreme cases, teachers may present the results to DAC and seek its advice before final submission.

4. For classes where there is a reasonably uniform or normal distribution of marks, conversion from marks to grade may be done using the table given below. However, the teacher may, on his/her perception of the difficulty level of assessment process undertaken, lower the boundary (cut-off) marks of Ex grade to the extent of 10 marks and that of the P grade to the extent of 5 marks.

Range of Marks	Grade
(90 – 100)	Ex
(80 – 89)	A
(70 – 79)	B
(60 – 69)	C
(50 – 59)	D

(35 – 49)	P for Theory Courses
(40 – 49)	P for Laboratory Courses
< 35	F for Theory Courses
< 40	F for Laboratory/Design Courses

Once the threshold marks for Ex and P grades are defined by the teacher, the threshold marks for other grades may be worked out proportionately.

While the above scheme is prescribed for large classes, it is not binding on the teacher of any course, who is at liberty of fixing his own grade scheme. It is, however, necessary for the teacher to record the grade scheme, if different from the table given under this clause.

5. The Coordination Committee will moderate the results of the different sections of a class if wide disparity in performance across sections is observed.
6. In the case where a student appears in an alternative mid semester or a supplementary examination, the conversion from marks to grade would be done applying the same norm as was framed for the original class.

Ordinarily a student appearing in an alternative mid semester or supplementary examination in a theory course or repeating experiments in a laboratory / design course will get one grade less than what he/she deserves otherwise (to account for the additional time the students get for preparation), but not less than P grade. Award of full credit in a supplementary examination or in a backlog paper will require at least 95% attendance in the class, in addition to providing a justified cause for missing the examinations.

The teachers will send the basic grade to the Deputy/Assistant Registrar (Academic) who will adjust the grade as per rules before posting in the Institute records.

7. All the requirements for the laboratory courses are to be satisfied by a student within deadline set-up by the teacher/coordination committee before the start of the end-semester examination. If a student, due to a reason like participation in national / international event or illness of himself/herself or calamity in the family, cannot complete a particular course, the teacher/coordination committee may allocate him/her additional time with permission of Dean (Academic). In this case, an I-grade may temporarily be allocated to the student in the subject. However, the requirement has to be fulfilled within 3 weeks after the end of the end-semester examination and the grade finalized.
8. There is no provision for formal examination in laboratory courses. If a student cannot clear a particular laboratory course, he/she will be assigned the grade 'F' in that subject. In extraordinary circumstances, to be decided by the Senate or the Chairman, Senate on its behalf in consultation with subject teacher and concerned Head of the Department, a student may be given a chance to complete the laboratory requirement in the summer or winter vacation. If a student cannot satisfactorily complete the laboratory work and again gets 'F' Grade in the laboratory, he/she has to repeat the subject in the next academic year, or carry it forward to the project semesters where he may complete the courses deferring the project courses to summer vacation and beyond.



GRADING SYSTEM

1. As a measure of students' performance, a 7-scale grading system using the following letter grades and corresponding grade points per credit, shall be followed:

Performance	Letter grade	Grade point per credit
Excellent	Ex	10
Very Good	A	9
Good	B	8
Fair	C	7
Average	D	6
Pass	P	5
Fail	F	2

In addition, there shall be four transitional grading symbols which can be used by the examiners to indicate the special position of a student in a subject.

I - for "Incomplete Assessment" because of institutional constraints, not students' deficiency.

X - for "Debarred" (*due to poor attendance, examination malpractice, disciplinary action, not clearing a paper due two years earlier or any other reason*)

UR - for "Unregistered or De-registered" (*a student needs to register for the course afresh and attend classes.*)

The grade I be converted to the normal letter grade when the assessment process is over or when the student completes the examination. Normally, he does not have to attend classes for the conversion.

A student gets grade X in a paper for one of the following reasons: Very poor attendance in class (<70%), examination malpractice, disciplinary action or for failing to clear a course in 2 years (once in the normal semester and once as backlog) including supplementary and summer courses if offered. **Grade X yields no credit points; but it is counted as a course taken, albeit unsuccessfully and counted in CGPA calculation.** A student is required to register afresh for a course with X grade and to attend classes in the normal semester. These courses are not eligible for Summer courses.

When a student is required to register afresh for a course and to attend classes without one of the above reasons, he is given the status "UR" in that course. Such a situation shall arise when a student proceeds in slow pace without registering in an expected course or voluntarily deregisters during the semester.

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

$$SGPA = \frac{\sum_{i=1}^n c_i g_i}{\sum_{i=1}^n c_i}$$

Where 'n' is the number of subjects registered for in a semester, 'c_i' is the number of Credits allotted to a particular subject, and 'g_i' is the grade points carried by the letter corresponding to

the grade awarded to the student on the subject. SPGA will be rounded off to the second place of decimal and recorded as such. The SPGA would indicate the performance of the student in the semester to which it refers.

3. Starting from the second semester, at the end of each semester S, a Cumulative Grade Point Average (CGPA) will be computed for every student as follows:

$$\text{CGPA} = \frac{\sum_{i=1}^m c_i g_i}{\sum_{i=1}^m c_i}$$

Where 'm' is the total number of subjects the student has registered for from the first semester onwards up to and including the semester S, 'c_i' is the number of Credits allotted to a particular subject s_i and 'g_i' is the grade point carried by the letter corresponding to the grade awarded to the student for the subject s_i. CGPA and SGPA will be rounded off to the second place of decimal and recorded as such. All courses registered including EAA will count towards calculation of SGPA and CGPA. In addition to registered courses, a student may 'audit' additional courses with the consent of the teacher. Those courses will not appear in official records and will not count towards calculation of SGPA and CGPA.

The CGPA would indicate the cumulative performance of the student from the first semester up to the end of the semester to which it refers. The SGPA, CGPA and the grades obtained in all the subjects in a semester will be communicated to each student at the end of every semester. For determining the inter se merit ranking of a group of students, only the rounded off values (to 2 decimal places) of the CGPAs will be used.

4. When a student gets the grade 'I' for any subject(s) during a semester the SGPA of that semester and the CGPA at the end of that semester will be tentatively calculated ignoring this (these) subjects. After the 'I' grade(s) has (have) been converted to appropriate grades, the SGPA and CGPA for that semester will finally be recalculated after taking into account this (these) grade(s).
5. When a student gets the grade 'F' in any subject during a semester, the SGPA and the CGPA from that semester onwards will be tentatively calculated, taking only '2' points for each such 'F' grade. After the 'F' grade(s) has/have been substituted by better grades during a subsequent semester, the SGPA and the 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.
6. Courses with status "UR" and "I" will not be counted in calculation of grade point averages; i.e. the corresponding figures will appear neither in the numerator nor in the denominator. In contrast, courses bearing F, X grades will be counted in SGPA and CGPA calculation, adding 2 and Zero points per credit for F, and X grades respectively to the numerator and full points in the denominator.



RULES REGARDING ALTERNATIVE MID-SEMESTER AND SUPPLEMENTARY EXAMINATIONS, SUMMER COURSES AND BACKLOG PAPERS

Supplementary and Alternative Mid-Semester Examinations

1. Supplementary exams will normally be offered at the discretion of the Institute only in subjects where the number of **failure** is 3 or above, if a summer course is not offered in that subject. Supplementary exams may also be made available to students who have otherwise completed their academic programmes and are forced to extend their study beyond 8 semesters, (10 semesters for B.Arch, Dual Degree & Integrated M.Sc.) provided their attendance record is above 95%; i.e., 2 or less class absent in the concerned subject. In special cases, the Senate, or Chairman Senate on its behalf, may at their discretion approve supplementary exams in other subjects, during mid-semester examination of the following semester.
2. The privilege of supplementary examination in subjects where a summer course is being offered is available only to students who are granted leave during End-Semester examinations, but not to those who have scored an F, X or UR grade due to failure, shortage of attendance, Examination Malpractice, disciplinary action or comparable reasons. In this case the End-semester examination of the summer course will serve as supplementary examination.
3. A student will ordinarily not be allowed to register for more than 12 credits (courses covering all previous semesters) in summer including Supplementary, Summer Course, Guided Self Study Course, Project and SIRE, the only exceptions being those who missed the end semester exams on ground of approved medical leave, family calamity or deputation by the institute. This will include maximum three courses as Summer course and guided self-study.
4. Students intending to appear supplementary examination must submit their application in the proforma given in this book through their faculty advisors and Heads of the Departments, along with the necessary fees to the Academic office by the date as announced by the office.
5. The supplementary examination shall be held on such dates as laid down in the Academic Calendar for the year or as notified separately.
6. The grade in the subject scored by the student appearing in the supplementary examination will be recomputed by substituting the marks scored in the last end-semester examination by that score in the supplementary examination. The final grade awarded to the students must be sent to the Examination Office within 5 days of receipt of answer scripts.
7. Students who miss a mid-semester examination due to serious illness, family calamity or some other reason may be permitted to appear in an alternative mid semester examination, if there exists sufficient reason to miss the examination.
8. When a student writes supplementary or alternative mid-Sem. examination, the grade awarded will be lowered by one step. However, if a student has class attendance exceeding 95% (overall, approximate) at the end of the semester, he may be given full credit as given in Section 8.4 [ii (a)]. Thus, to be eligible for full credit, a student's absence from classes in any course must not exceed 2 hours in a theory course and one laboratory session in a practical course. Students permitted to avail full credit are eligible for medals and prizes.
9. Unless exempted as per regulation in Clause 8.4 (ii) (a & b), a student writing Alternative Mid-Semester/Supplementary/backlog examination is entitled only to one grade lower than the actual grade thus scored, except that the performance grade 'P' remains unaltered, as elucidated in the table below.

Original Grade	With proper attendance	With attendance penalty
FF		F
P	P	F
D	P	P
C	D	P
B	C	D
A	B	C
Ex	A	B

For the students who have grade back due to shortage of attendance, original grade will be reduced by two steps, one for shortage of attendance first and the next due to Alternative Mid-Semester/ supplementary/backlog examination. However, an original grade of D will translate to P. The conversion of grade will be done by the Academic office.

Summer Courses

10. When the situation so demands, e.g. large number of students (typically more than 10) failing in a subject, the Institute may decide to offer summer courses to students with an F grade in Autumn or Spring semester. Attendance in such a course shall be compulsory and no separate supplementary examination shall be offered in the subject. There will be summer courses only for 1st year and 2nd year students.
11. Students securing an X or UR grade due to shortage of attendance, examination malpractice, disciplinary action or comparable reasons are not permitted for Summer Course. For students awarded X grades due to shortage of attendance Dean(AA) may condone upto 4 classes of absence per course but 8 classes in total and permit registration in summer course.
12. A student can register for a maximum of three summer courses concurrently.
13. There will be no Supplementary Examination for final year students irrespective of the numbers of failures in the subject. For such students department will offer Summer Course if viable depending on number of failures in the subject. If regular Summer Course will not be possible, students may be permitted to register for the course under "Guided Self Study" mode, where a teacher will be assigned by the department for every course and evaluation will be afresh under 3 components T.A., mid- Semester, and End Semester examinations. There will be regular contact between the students and teacher; the teacher will be giving assignments and evaluating the scripts. Mid-Semester & End- Semester Examinations will be conducted separately by the Academic Office. Students are required to give biometric attendance by registering their biometric impression in the Computer Centre. Minimum number of biometric attendance should be 20 working days in each Course. This is also applicable to the students failing in Spring End Semester Examinations.
14. Attendance requirement will be counted on the basis of the usual 15% and 30% (Approximately) criteria i.e. absence beyond 15% of total classes held leads to reduction of grade by one step and absence beyond 30% of total classes held leads to 'X' grade in the particular course. Permissible absence in summer courses are enumerated in the table below:

In Regular Semester			In Summer Course	
L-T-P	without penalty	with reduction of one step in grade	Without penalty	With reduction of one step in grade
3-0-0	6	12	5	9
3-1-0	8	16	6	12
0-0-3	2	4	2	3

15. Students who have missed the mid or end semester examination due to serious illness or family calamity may appear in the corresponding semester examination of the summer course without attending classes if permitted to do so.
16. If a student secures at least P grade in a course and has CGPA higher than 6.00, he will not be permitted to upgrade his grade in that particular course. However, for enhancement of knowledge he/she can audit that course during summer courses with the consent of the course teacher and by paying the fees.
17. If a student's CGPA falls below 6.00, he may attend summer courses or repeat the course by registering afresh in the subsequent semester when offered to improve grade in the courses with P grade. The higher of the two grades will be recorded. A student is not permitted to improve the grade only by writing Supplementary examination.
18. If a student does not clear a course during a semester including supplementary exams (or summer course), he may register for the course in the following semester (when offered) as a "BACKLOG PAPER". In case of 'backlog papers' the student is not required to attend classes, but must write both mid- and end- semester examinations. The TA marks will be carried forward from the previous semester.
19. If a student fails in a backlog paper, he may write supplementary examination in summer (if offered) or attend summer courses once again. If he still does not clear the paper, he must register for the course and attend classes, thus automatically joining the slow pace programme. The status in the grade sheet will appear as "X".
20. If a student completes all 8 semesters (10 semesters for B.Arch, Dual Degree and Integrated M.Sc.) with some uncleared F grades, or CGPA less than 6.00, he must continue to live in the hostel and attend classes. He must register for as many courses as time table permits, the balance (the more recent courses) being taken as backlog papers.
21. If a student does not clear all courses in 6 years (7 years for B.Arch, Dual Degree and Integrated M.Sc) or has CGPA less than 6.00 at the end of the 6th year (7th year for B.Arch, Dual Degree and Integrated M.Sc.) including supplementary exams (if offered), he must leave the Institute without being awarded a degree, unless granted additional time by the Senate. Such time extension shall not exceed one year.

