

# Ordinances and Regulations

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Bachelor of Technology (B.Tech.) &  
Bachelor of Technology (Honours) (B.Tech.  
(Honours))

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## **ORDINANCES AND REGULATIONS**

### **Bachelor of Technology (B. Tech.) & Bachelor of Technology (Honours) (B.Tech. (Honours))**

#### **ORDINANCES**

- O.1 Each academic session is divided into two regular semesters and two vacation semesters (Winter & Summer) and follows a Senate approved schedule of academic activities.
- O.2 Admission to B.Tech. degree program will be made through a Joint Entrance Examination (Advanced) (JEE (Adv)) conducted by Joint Admission Board (JAB) on behalf of all IITs.
- O.3 Admission to a particular branch of study shall be as decided by the JAB.
- O.4 The duration of the B.Tech./B.Tech. (Honours) program will be minimum 8 semesters and maximum 12 semesters.
- O.5 The award of merit scholarships to the B.Tech./B.Tech. (Honours) students will be governed by the regulations framed by the Senate from time to time.
- O.6 Student can opt for B.Tech. (Honours) at the end of the fourth or fifth semester of B.Tech. program subject to the conditions prescribed by the Senate from time to time.
- O.7 The award of the B.Tech./B.Tech. (Honours) degree shall be in accordance with the regulations of the program approved by the Senate.

## **REGULATIONS**

### **R.1 Academic Calendar**

- R.1.1 Each academic session is divided into two regular semesters of approximately eighteen weeks durations (with at least seventy working days for classes in each semester): an Odd Semester (normally August-November) and an Even Semester (normally February-June). Further, there are two vacation semesters (Winter & Summer) of nearly 8-10 weeks duration as well.
- R.1.2 The Senate approved schedule of academic activities for a session, including dates of registration, examinations, semester breaks etc. shall be laid down in the Academic Calendar of that session.

### **R.2 Admission**

- R.2.1 The maximum number of students to be admitted in each branch of the B.Tech. program will be decided by the Senate. The actual number of students to be admitted in each academic year will be decided by the Dean's Committee based on operational reasons. Statutory and legally mandated reservations will be followed as per Government of India orders from time to time.
- R.2.2 Admission to the B.Tech. programs in any year will be based on the results of a Joint Entrance Examination (Advanced) of that year by the IITs and allocations made by the Joint Seat Allocation Authority (JoSAA).
- R.2.3 The eligibility criteria for appearing at the Joint Entrance Examination (Advanced) in any year will be decided by the Joint Admission Board (JAB). The criteria will be set out in an Information Brochure to be made available to the applicants along with the relevant application forms.
- R.2.4 The JAB will decide on the procedure for conducting the Joint Entrance Examination (Advanced) and preparing merit lists subject to minimum performance criteria in the examination. The JAB will offer admission from these lists to candidates, taking into account the choice of branch indicated by the candidate and the available seats in each branch in various IITs.
- R.2.5 At the time of admission, a candidate should have passed in the final examination of any of the qualifying examinations and fulfill other eligibility criteria specified in the JEE (Advanced) Information Brochure of that year.
- R.2.6 A candidate has to fulfill the medical standards required for admission as set out in the Information Brochure of JEE (Advanced) examination.

- R.2.7 The selected candidate will be admitted to the B.Tech. program after he/she fulfills all the admission requirements as indicated in the letter of admission, after payment of the prescribed fees.
- R.2.8 In the matters of admission to the B.Tech. program, the decision of the Joint Admission Board is final.
- R.2.9 If, at any time after admission, it is found that a candidate has not fulfilled all the requirements stipulated in the Information Brochure and/or in the offer letter of admission, then the admission of the candidate may be cancelled and the matter shall be reported to the Senate.
- R.2.10 Students admitted to B.Tech. Program can opt for B.Tech. (Honours) degree during the fourth or fifth semester in accordance with the eligibility criteria defined by the Senate from time to time. As per the current criteria, a student may opt for B.Tech. (Honours) program if she/he has CGPA of 8.5 or more and no 'F' grade till fourth or fifth semester.
- R.2.11 A limited number of foreign nationals and other categories can be admitted on supernumerary basis to the B.Tech. programs as per the procedure laid down by the JAB from time to time.

### **R.3 Structure of the B.Tech./B.Tech. (Honours) Program**

- R.3.1 The curriculum consists of courses mainly in the following categories: Institute Core courses, Elective courses and Discipline Core and Discipline Elective courses. The courses belonging to these categories are grouped into various baskets as given in R.3.7. In each basket, the student has to earn a minimum number of credits as prescribed by the Senate approved curriculum to graduate the B.Tech./B.Tech. (Honours) program.

In addition, a student should satisfactorily complete the prescribed industry orientated Internship and NSO/NSS/Hiking & Trekking requirements as well.

- R.3.2 Every branch of the B.Tech. program will have a curriculum and course contents approved by the Senate

The curriculum of any branch of the B.Tech. program is designed to have a minimum credit requirement of 160 credits. For B.Tech. (Honours), the minimum credit requirement is 172 credits.

- R.3.3 Although the minimum requirement of credits under various course baskets adds up to 160 for a regular B.Tech. degree and 172 for B.Tech. (Honours), a range of 160-162 credits is generally prescribed for a regular B.Tech degree and 172-174 for B.Tech. (Honours). These ranges are prescribed in order to

accommodate the varying number of credits for different courses. Students are permitted to take extra credits, beyond 162 for regular B.Tech. and beyond 174 for B.Tech. (Honours). However, the extra credits earned will not be counted towards calculating the final Cumulative Grade Point Average (CGPA).

The final CGPA will be calculated based on the first 160-162 credits for regular B.Tech. and first 172-174 credits for B.Tech. (Honours) satisfying all the course basket requirements mentioned under R.3.7 and excluding the credits of any Pass/Fail course included in these baskets (for example: Internship is a Pass/Fail course and the 2 credits of this course will not be counted in final CGPA calculation; however, these credits will be counted in the total requirement of 160 credits for regular B.Tech. and 172 credits for B.Tech. (Honours)).

- R.3.4 The extra credits earned by a student over and above the minimum credit requirements of a particular basket (as given in R.3.7) will be excluded from the final CGPA calculation. Such credits will be excluded mainly from the higher semesters (8<sup>th</sup> Sem, 7<sup>th</sup> Sem, 6<sup>th</sup> Sem etc. in that order). If there are two courses in a semester belonging to the same basket and out of which one need to be excluded from the final CGPA calculation, the course with the lower grade point will be selected for exclusion. Effort will also be made to calculate the final CGPA based on the lowest possible credit value in the 160-162 range for regular B.Tech. and 172-174 range for B.Tech. (Honours) satisfying all the course basket requirements and excluding the credits of the Pass/Fail courses. In the final transcript, the courses which are not counted for CGPA will be denoted by an asterisk with a note at the bottom mentioning that '*the course is not considered in CGPA calculation*'.
- R.3.5 A student has to register for a minimum of 12 credits and upto a maximum of 22 credits in a regular semester. The number of credits can be less than 12 credits in a vacation semester. Any exception to this requires the permission of Dean (Academics).
- R.3.6 B.Tech. (Honours) students can register for additional courses from the Discipline Elective basket over and above the courses prescribed in the regular B.Tech. curriculum from the 5<sup>th</sup> semester onwards in consultation with the Faculty Adviser. Student who have registered for B.Tech. (Honours) are permitted to register for more than 22 credits in a semester.
- R.3.7 Every course of the B.Tech./B.Tech. (Honours) program will be placed in one of the course baskets listed in the table below:

	Category	B.Tech.	B.Tech. (Honours)
<b>1.</b>	<b>Institute Core courses</b>	<b>88</b>	<b>88</b>
	Basic Sciences	25	25
	Common Engineering	42	42
	Design & Innovation Practicum	6	6
	Humanities and Management	13	13
	Internship	2	2
<b>2.</b>	<b>Elective Courses</b>	<b>30</b>	<b>30</b>
	Design & Innovation Practicum	12	12
	Humanities Electives	5	5
	Free Electives*	13	13
<b>3.</b>	<b>Discipline Core and Discipline Elective courses</b>	<b>42</b>	<b>54</b>
	Discipline Core	30	30
	Discipline Electives	12	24

\*In addition to the credits of the courses classified as Free Electives, extra credits earned in any other course basket can also be considered for satisfying the credit requirement of Free Elective basket.

### R.3.8 Interactive Socio-Technical Practicum (ISTP)

Indian Institute of Technology Mandi encourages interactive academic culture and the curriculum is substantially oriented towards design and innovation. One of the signature courses under the Design & Innovation Practicum stream is the Interactive Socio-Technical Practicum (ISTP), which is offered to the 3<sup>rd</sup> year B.Tech. students. This is an elective course for regular B.Tech., however, compulsory for B.Tech. (Honours). If a regular B.Tech. student opts to substitute ISTP with other elective courses, he/she should opt 3 credits from Discipline Electives and 1 credit from Free Electives to complete the basket requirements.

### R.3.9 Major Technical Project (MTP)

MTP is the capstone of the 4-year B.Tech. program and of the 4-course Design & Innovation Practicum sequence. The project will be a single project extended over 7<sup>th</sup> and 8<sup>th</sup> semesters. The project can be an individual project or a group project. There will be one principal guide and co-guides (if required) for a project. Faculty members from all the Schools can be part of



the guidance of MTP projects. As the project is expected to have a major technical contribution in the student's discipline, faculty members whose expertise is in other disciplines are expected to co-opt a colleague having expertise in the student's discipline as a co-guide.

MTP is an elective course under Design & Innovation Practicum basket for regular B.Tech., however, compulsory for B.Tech. (Honours). If a regular B.Tech. student opts to substitute MTP with other elective courses, he/she should opt 6 credits from Discipline Electives and 2 credits from Free Electives to complete the basket requirement.

- R.3.10 The medium of instruction for B.Tech./B.Tech. (Honours) is English. The examinations will be conducted in English and the project report, theses, practical records etc. must be submitted in English.

#### **R.4 Definition of Credit System**

- R.4.1 For theory courses and tutorials, one credit indicates an effort of 50 minutes (1 contact-hour) per working week (14 contact-hours per semester).

- R.4.2 A student is expected to spend 2-3 hours outside the class for every contact hour. This time is devoted to self-study, assignments and so on.

- R.4.3 For laboratory courses, practicals and practicums, the credit distribution is as follows:

1-2 hour lab session per week - 1 credit

3-4 hour lab session per week - 2 credits

5-6 hour lab session per week - 3 credits

7-8 hour lab session per week - 4 credits

- R.4.4 A student is expected to spend 1 hour outside the lab per lab hour, for preparation, self-study etc.

- R.4.5 L-T-P-C Notation

L-T-P-C => Lecture – Tutorial – Practicum/Practicals – Credits

Credit structure of each course is given in L-T-P-C form (e.g. 2–1–0–3). The numbers corresponding to L, T and P denote the contact hours per week for Lecture, Tutorial and Practical/Practicum respectively, and that of C denotes the total number of credits for that course in a semester.

## **R.5 Faculty Adviser**

To help the students in planning their courses of study and for getting general advice on the academic program, the concerned School will assign students branch-wise to a faculty member who will be called their Faculty Adviser. Generally, a Faculty Adviser shall have responsibility for a particular batch of students from their first year until graduation.

## **R.6 Class Committee**

R.6.1 The Class Committee is a body consisting of faculty and students to monitor the conduct and progress of a set of courses in a semester. There will be one Class Committee for each set of courses being offered in a semester. The constitution of the Class Committee will be as follows:

One faculty member as the Chair who is not associated with the teaching activities of the courses listed under that Class Committee, instructors of the courses listed under that Class Committee and 1 or 2 student representatives for each course.

R.6.2 The Class Committee shall meet at least thrice in a regular semester: once at the beginning of the semester, once before the 2<sup>nd</sup> quiz and once after the end semester examination to finalize the grades. After each meeting of the full Class Committee, the Chair shall meet separately with the student representatives for confidential feedback. The final Class Committee meeting for the grade finalization should be conducted in the absence of the student representatives.

R.6.3 The basic responsibilities of a Class Committee are:

- a) to review periodically the progress of the courses.
- b) to discuss any issues concerning the conduct of the classes.
- c) to discuss and record the attendance criteria and evaluation scheme of each course. This should be done in the first Class Committee meeting.

R.6.4 The Class Committee Chair will communicate the minutes of the Class Committee meetings, especially those of the first and second Class Committee meetings, to the Dean (Academics).

## **R.7 Change of Branch**

The guidelines for the change of B.Tech. branch are as below:

R.7.1 To be considered for a branch change, the student will have to submit an application before the end of the second semester of his/her program. The

applicant will have to specify the choices, in order of preference, of the branch or branches that he/she seeks a change to.

- R.7.2 The student will have to be in good academic standing, having done the full complement of courses and having no backlog. The decision on the student's application will be made only after the grades of the second semester are received and the CGPA at the end of the second semester will be the relevant CGPA.
- R.7.3 In granting the change of branch of a student, the strength of a class shall not fall below the sanctioned strength by more than 50% and shall not exceed the sanctioned strength by more than 50%. Also, the strength of any branch shall not be allowed to fall below a minimum strength of 20 students because of the branch change. Notwithstanding this provision, the top-ranking student of each discipline may be awarded a branch change if he/she has a CGPA of at least 8.0.
- R.7.4 An eligible applicant who has secured a CGPA of 10.0 shall be allowed a change of branch of his/her choice without any constraint. This clause will override clause (R.7.3) if the need arises.
- R.7.5 Branch change applications will be considered strictly in order of merit as established by the CGPA and only to the extent of the applicants' choices and in the order of the preferences expressed in the application. If a seat opens up at any late stage in the process, it will be offered to the applicant with the highest CGPA by going back up the list, if necessary. In case more than one student with the same CGPA seeks the identical change, branch-to-branch, they will be treated equally and will be jointly subject to condition (R.7.3) above.
- R.7.6 In truly exceptional cases, the Senate may also grant a change of branch to a student who is in distress in his/her present branch. Branch change of this category may be granted in rare cases subject to the satisfaction of the Senate that compelling grounds for the same do exist. Application in this regard will have to be made at any time up to the end of the fourth semester.

## **R.8 Enrolment and Registration**

### **R.8.1 Enrolment**

From the second semester onwards, all students will have to report and register/enroll on a day specified in the Academic Calendar at the beginning of the semester. A student will be eligible for enrolment only if he/she satisfies the conditions under R.11 and will be permitted to enroll only if he/she has

cleared all dues to the institute up to the end of the previous semester, provided he/she is not debarred from enrolment, on disciplinary grounds.

- a) If a student fails to report on the specified date, he/she may be allowed by the Dean (Academics) to enroll within one week from the reporting date with a fine. The amount of fine will be specified from time to time.
- b) Under exceptional circumstances, a student may be allowed to enroll after one week of enrolment date with permission from Chairperson, Senate through Faculty Adviser and Dean (Academics).

#### R.8.2 Registration

Except for the first semester, course pre-registration for other semesters will be done during a specified week before the end-semester examination of the previous semester.

Pre-registration is to be done through an online portal of the office automation system (OAS) of the institute.

Students should have successfully completed the courses of (n minus 4)<sup>th</sup> semester to register for courses in n<sup>th</sup> semester. For example, to register for courses in 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup> & 8<sup>th</sup> semesters of B.Tech. program, the student should have successfully completed all the courses of 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> semesters respectively, as prescribed in the curriculum of the concerned branch of study.

- a) Students who have backlog courses under n-4 rule; the registration of courses shall be restricted to the average credit clearance capacity in the last two semesters. The student must register for the backlog courses first giving priority to the oldest backlogs.
- b) The semester used by a student to clear only the backlog course(s), will not be treated as effective for reckoning the number of semesters spent by the student with respect to the maximum permissible limit (R.12).

#### R.9 Course Add/Drop

If a student wants to modify the pre-registered courses, he/she may do so by adding or dropping courses after the start of the semester within the course add or drop deadline mentioned in the Academic Calendar with the approval of Faculty Adviser and the concerned course instructors. However, the student should ensure that the total number of credits registered in any semester should enable him/her to earn the minimum number of credit requirement as specified under R.3.5 and R.11.1.

## **R.10 Summer/Winter Vacation Semesters**

- R.10.1 The summer/winter vacation semester courses will be offered to clear the backlog courses of the students and for students who wish to spend a semester off-campus based on the availability of the course instructors.
- R.10.2 No student should register for more than three vacation semester courses during a particular vacation semester.
- R.10.3 A student has to pay a fee for each credit registered in the vacation semester.
- R.10.4 The assessment procedure for a course will be similar to that of a regular semester course.
- R.10.5 Withdrawal from a vacation semester course is not permitted.

## **R.11 Minimum Requirement to Continue the Program**

### **R.11.1 Unsatisfactory Academic Performance**

A student is in good academic standing if he/she stays abreast of the credit requirement at any particular stage of his/her academic program and if his/her CGPA is at least the minimum required for graduation (5.0). Any student who is not in good academic standing is performing unsatisfactorily. Seriously unsatisfactory academic performance will attract strictures such as “Academic Warning” and “Academic Probation”, accompanied by conditions laid down by the Senate. If the student fails to meet these conditions, his/her program at IIT Mandi may be terminated prematurely.

- a) A student will be placed on Academic Warning if, in any semester, any two of the following conditions hold:
  - (i) he/she fails to secure at least 15 credits
  - (ii) his/her SGPA is less than 5.0
  - (iii) his/her CGPA is less than 5.0

During the term of the Academic Warning, a student will not run for or hold any office concerning any student activity.

- b) A student will be placed on Academic Probation if, at the conclusion of any semester, he/she attracts a second consecutive Academic Warning or if any two of the following conditions hold:
  - (i) he/she fails to secure at least 12 credits
  - (ii) his/her SGPA is less than 4.0

- (iii) his/her CGPA is less than 4.0

A student on Academic Probation should sign an undertaking, countersigned by his/her parent, to the effect that his/her academic program will be terminated and he/she will cease to be a student of IIT Mandi if he/she fails to fulfil the terms of the probation.

- c) The terms of the probation shall be that, in the following semester,
  - (i) he/she shall secure at least 15 credits
  - (ii) his/her SGPA should be at least 5.0
  - (iii) any other special condition(s) laid down by the Senate

During the term of the Academic Probation, a student shall not run for or hold any office concerning any student activity.

R.11.2 A student who has not completed the NSO/NSS/Hiking & Trekking requirements in time as per the n-4 rule given in R.8.2 will not be permitted to continue the B.Tech. program.

#### R.11.3 Termination of Program

- a) The academic program of a student will be automatically terminated if he/she fails to graduate within the maximum permissible duration of the program. For B.Tech. and B.Tech. (Honours), the maximum permissible duration is 12 semesters, not counting semester withdrawal(s) for medical reasons or academic reasons (e.g. special internship). The semester used by a student to clear only the backlog course(s), will not be treated as effective for reckoning the number of semesters spent by the student with respect to the maximum permissible limit (vide R.12). If a student is suspended for any semester, or withdraws voluntarily from any semester, that semester will be counted.
- b) The academic program of a student will be terminated if he/she fails to fulfil the terms of Academic Probation.
- c) A student's academic program will also be automatically terminated if he/she fails to register, on the scheduled registration date, in any given semester or fails to sit for the end-semester examinations without clear and specific permission, or if he/she is absent from classes for a significant part of the semester, normally three weeks.
- d) A student's academic program may also be terminated on grounds of unacceptable conduct. In such instances, the Students' Welfare & Discipline Committee (SWDC), or a similar committee empowered by

the Senate, will deliberate on the violation and make a recommendation to the Senate.

#### **R.11.4 Readmission**

A student whose academic program is terminated under any of the above conditions may appeal to the Chairperson, Senate through Faculty Adviser and Dean (Academics) for mercy and a second chance to re-enrol in the program. The Chairperson, Senate may take appropriate decision on such applications on behalf of the Senate and the same shall be reported to the Senate.

#### **R.12 Minimum and Maximum Duration of the Program**

The minimum duration of the B.Tech. and B.Tech. (Honours) programs is eight semesters. However, a student may complete the program at a slower pace, but in any case not more than 12 semesters, excluding semesters withdrawn on medical grounds, etc. as per R.13. However, the students will have to satisfy R.11.1 every semester, failing which their registration will be cancelled.

#### **R.13 Semester Break/Temporary Withdrawal from the Program**

A student may be permitted by the Dean (Academics) to obtain semester break or temporary withdrawal from the program for a semester or longer duration for reasons of ill health or other valid reasons. Normally, a student will be permitted to withdraw from the program only for a maximum continuous or intermittent period of two semesters during the whole program duration.

#### **R.14 Discipline**

R.14.1 Every student is required to observe discipline and decorous behaviour both inside and outside the campus and not to indulge in any activity which will bring down the prestige of the Institute.

R.14.2 Any act of indiscipline by a student shall be referred to a Students' Welfare & Discipline Committee (SWDC). The Committee shall enquire into the charges and recommend suitable punishment if the charges are substantiated. Dean (Academics) will consider the recommendations for minor punishments and warnings and take appropriate action accordingly. In case of major punishment, Senate will take appropriate decision.

R.14.3 Appeal: The student may appeal against the disciplinary action to the Chairperson, Senate, whose decision will be final in such matters.

R.14.4 Ragging of any dimension is a criminal and non-bailable offence in our country. The current State and Central legislations provide for stringent punishment, including imprisonment. Once the involvement of a student is established in ragging, the offending student will be dismissed from the institute and will not be re-admitted. Avenues also exist for collective punishment, if individuals cannot be identified in this inhuman act. Every student of the institute, along with his/her parent, shall give an undertaking at the time of admission in this regard.

### **R.15 Attendance**

R.15.1 Generally, the minimum attendance requirement of a course is 70%. However, a course instructor can have a different criterion for his/her course. In such a case, the changed criteria should be announced to the students at the beginning of the course. It should also be announced in the 1<sup>st</sup> Class Committee meeting and recorded in the minutes.

The percentage of attendance in a course will be indicated in the grade sheet by a letter code as below:

<b>Attendance Rounded to</b>	<b>Remarks</b>	<b>Code</b>
92 to 100 %	Very Good	VG
80 to 92%	Good	G
70 to 80 %	Satisfactory	S
< 70%	Poor	P

R.15.2 A student who has an attendance lower than the required minimum attendance in a course, whatsoever the reason for the shortfall in attendance, will not be permitted to appear in the end-semester examination of the course. His/her registration for that course will be treated as cancelled, and he/she shall be awarded 'F' grade in that course.

R.15.3 The instructor of a course must finalize the attendance on the last instructional day of the semester. The instructor must announce the particulars of all students who have attendance less than the required minimum in the class.

### **R.16 Assessment Procedure – Tests and Examinations**

R.16.1 The system of assessment procedure may vary from course to course. However, the general practice of tests and examination consist the following components:

Mid-term tests: in lecture based courses, generally two quiz tests of approximately 50 minute duration shall be held.



End-semester examination: there shall be one end-semester examination, generally of three hours duration, in each lecture based course.

In addition, there may be other components as part of the assessment procedure such as surprise quizzes, assignments, projects, practical tests, viva voce etc. as per the requirements of a course.

R.16.2 The details of the weightage of marks for various components of the assessment procedure have to be announced and recorded in the first Class Committee meeting. The Dean (Academics) should be informed about the scheme of evaluation of a course after the first Class Committee meeting.

R.16.3 Students who have missed the regular quizzes or end-semester examination for valid reasons may request for a make-up examination to the respective course instructor within ten days from the date of the examination missed, explaining the reasons for absence. Applications received after this period shall not be entertained. If the course instructor is satisfied with the explanation provided by the student, he/she may conduct the make-up exam either during the make-up exam slots mentioned in the Academic Calendar or as per the convenience of both the parties. If the instructor is not satisfied with the explanation, he/she may reject the application.

R.16.4 In case of any grievance, the student may appeal to Dean (Academics).

## **R.17 Grading System**

### **R.17.1 Letter Grades**

The performance of a student in a course is denoted by a letter grade. The letter grades, their interpretation and the corresponding grade points are given below:

Letter Grade	Grade Point Value	Interpretation
O	10	Outstanding
A	9	Very Good
B	8	Good
C	7	Average
D	6	Below Average
E	4	Pass
F	0	Fail
I	0	Incomplete; subsequently be changed into a letter grade in the first month of subsequent regular semester.
P	0	Passed the course; however, the credits earned will not be counted for SGPA/CGPA calculations.

R.17.2 The I-grade indicates a temporary grade and that a small part of the total requirement of the course remains to be completed and that the student has done satisfactory work in all other aspects of the course. The student is required to complete this small part within a prescribed date, generally within one month of the start of the following regular semester, and the course instructor will amend the I-grade to a regular grade within this period. If the conversion to a regular grade is not done within one month of the start of the following regular semester, the I-grade will be automatically converted to an F grade.

#### **R.18 Method of Awarding Letter Grades**

A final meeting of the Class Committee without the student representatives will be convened within seven days after the last day of the end semester examination. The letter grades to be awarded to the students for different courses will be finalized in such meetings.

#### **R.19 Declaration of Results**

After finalization by the Class Committee, the course instructor will submit the letter-grades awarded to the students in a course to the academic office in prescribed format. The academic office will compile all the results and announce the same to the students through E-mail or through OAS portal of the institute.

#### **R.20 Re-evaluation of Answer Papers**

If a student has grievances about the result of a particular course, he/she can contact the concerned course instructor within one week from the commencement of the regular semester immediately following the announcement of the results. If the course instructor feels that the case is genuine, he/she may re-examine the case and submit a revised grade, if applicable. Any request to re-consider the grade after one week of the start of the subsequent regular semester will not be considered.

The course instructor will return answer scripts to the students after evaluation, as part of the learning process. If any student does not collect his/her answer script by the 1<sup>st</sup> week of the subsequent regular semester, the course instructor may discard it.

The evaluation pattern and all assignments, quizzes, exams etc. used in evaluation shall be posted on the course Moodle page.

## **R.21 Supplementary Examination**

- R.21.1 A student who earns an F grade in a Core course must secure a pass grade in that course.
- R.21.2 A student who gets “F” grade in a Core course is eligible to seek a Supplementary Examination in a subsequent semester to clear the backlog, provided he/she satisfies the minimum attendance criteria of the course. For taking such Supplementary Examination, the student need not attend classes of that course again.
- R.21.3 A student is eligible for only one Supplementary Examination in a course to clear the backlog. In case a student fails in the Supplementary Examination, he/she has to register for that course again in a regular semester/vacation semester and repeat the course by attending regular classes and exams.
- R.21.4 The Supplementary Examination may be offered by the same instructor who offered the course earlier or the instructor who offers the course in the current semester.
- R.21.5 The Supplementary Examination can be held along with the regular students of the subsequent semesters or during the make-up exam slots of the subsequent semesters or at the convenience of the course instructor.
- R.21.6 Generally, the end semester exam alone is given as the Supplementary Examination and the sessional marks (i.e. quiz marks etc.) earned by the student in the original semester will be taken into account for calculating the final marks. The grade cut-off used in the original semester shall be used for finalizing the grade.
- R.21.7 A student securing an F grade in an Elective course may also attempt the Supplementary Examination option as per the conditions (R.21.2–R.21.6) mentioned above in the case of a Core course to get a successful grade in that course.

However, a student may replace a failed Elective course with an Equivalent course approved by the Faculty Adviser. In such cases, the student has to declare in advance that a particular course he/she doing in a particular semester is an Equivalent course in place of a failed Elective course taken in a previous semester. This declaration has to be done before the course drop deadline of that semester given in the Academic Calendar by submitting the relevant form.

- R.21.8 A course successfully completed cannot be repeated/improved. In case a student passed all the required Core and Elective courses but failed to earn the

required minimum CGPA of 5.0 for graduation, the student may be permitted to repeat the Core or Elective courses to earn the minimum CGPA required to pass the program.

## **R.22 Grade Sheet**

R.22.1 The grade sheet issued at the end of a semester to each student will contain the following:

- a) the course number, course name and the credits for each course registered in that semester.
- b) the letter grade obtained in each course
- c) the total number of credits earned by the student upto the end of that semester
- d) the Semester Grade Point Average (SGPA, see R.22.4) for that particular semester
- e) the Cumulative Grade Point Average (CGPA, see R.22.5) of all the courses taken from the first semester

R.22.2 At the end of the program, a final Transcript containing details of all the courses taken by the student mentioning the overall CGPA will be issued along with the Degree certificate.

R.22.3 The record of the F grade(s) obtained for a course will be retained in the Grade Sheets and final Transcript.

R.22.4 Semester Grade Point Average (SGPA)

The performance of a student in a semester is indicated by SGPA, which is a weighted average of the grades in all the courses done by the student in the given semester. The SGPA is calculated as follows:

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

where  $c_i$  stands for the credit in a course and  $g_i$  the point equivalent of the grade obtained in that course. The summation is over the number of registered courses  $n$  in the semester.

R.22.5 Cumulative Grade Point Average (CGPA)

The performance up to any time in the course of the student's program is indicated by the student's CGPA, which is also calculated by the formula used for SGPA calculation, except that the averaging is done over all of the courses and credits that the student has taken during his/her entire program up to that point. This includes F grades as well, if not cleared.

**R.23 Minor Program**

R.23.1 A minor is intended for a student to gain expertise in an area outside his/her major B.Tech. discipline.

A specialist basket of at least 3 courses is identified for each Minor. Such course basket may rest on one or more foundation courses. A basket may have sequences within it, i.e. advanced courses may rest on basic courses in the basket. In order to successfully complete a Minor, a student needs to take at least 9 credits with a CGPA of 7.0 out of the courses defined in that Minor basket.

R.23.2 The area of the Minor must be different from the Major discipline of the student; the courses that are part of the Common Core (including HSS), or the Discipline Core/Electives cannot be counted towards a Minor. However, the 5 credits earned under Humanities Electives (see R.3.7) may be counted for Minor requirements if needed.

R.23.3 A student is allowed to take any number of Minors, but a particular course cannot be counted for more than 1 Minors.

R.23.4 The name of the Minor will appear on the Transcript and the degree certificate of the student.

**R.24 Semester Exchange**

IIT Mandi has memorandum of understanding (MoU) for semester exchange visits with some eminent academic institutions in India and abroad. Selection of candidates for such exchange visits will be done through a competitive process.

R.24.1 Selected students can go on exchange visit for one or two semesters. If the student goes on semester exchange visits for two semesters, these two semesters can be contiguous.

- R.24.2 No student exchange visit will be allowed during the final (normally eighth) semester.
- R.24.3 Some of the signature courses of IIT Mandi (Reverse Engineering, Design Practicum, ISTP, and any others that are notified from time to time) must be completed at IIT Mandi. This is so as to preserve the character of IIT Mandi B.Tech. degree.
- R.24.4 The semester exchange programs can only be undertaken with those institutes with whom IIT Mandi has an MoU for such visits.
- R.24.5 Credits and grades earned during semester exchange visits will be converted to IIT Mandi equivalent credits and grades as per the Senate approved conversion criteria in each case.

## **R.25 Internship**

- R.25.1 As part of the B.Tech. curriculum, the students are required to do an industrial internship in India for a minimum period of 6 weeks, during the winter vacation following the 5<sup>th</sup> semester or any subsequent vacation before the final semester. Only in exceptional situations and only with approval from the respective Faculty Adviser, a student will be allowed to do this internship at other time periods.
- R.25.2 The internship must be done in a technology oriented public/private sector company/industry or in reputed research organizations, such as CSIR, DRDO or BARC. Internships in IIT Mandi or other educational institutions will not be considered for this purpose.
- R.25.3 Internship with start-up companies, which are not registered yet, will not be considered.
- R.25.4 On successful completion of the Internship, two credits will be awarded to the student for the same. These credits will not be counted towards SGPA/CGPA calculations.

## **R.26 NSO/NSS/Hiking & Trekking (H&T) Requirements**

- R.26.1 All students admitted to the B.Tech. program will have to take either NSO or NSS or H&T as a non-credit extra-curricular program.
- R.26.2 The NSO/NSS/H&T requirement should be completed within the first two semesters of the program.
- R.26.3 As there are no tests/exams for these programs, the attendance requirement is 90%.

- R.26.4 If a student falls short of the attendance requirement of this program, he/she should make up the deficiency as below:
- a) If the absence is on valid grounds, the deficiency shall be made up through extra sessions
  - b) If the absence is unauthorized, the deficiency will have to be made up during the following year
  - c) The deficiency in NSO/NSS/H&T sessions will have to be made up at the rate of two classes for each class missed
- R.26.5 Dean (Students) will maintain the record of NSO/NSS/H&T activities of students and convey the results to the academic office.

### **R.27 Scholarships and Tuition Fee Exemption**

- R.27.1 The details of various scholarships available for students shall be displayed on Institute Website from time to time.
- R.27.2 The number of Merit Cum Means (MCM) scholarship for each year and each branch will be limited to 25% of the strength of students in that particular branch in that year.
- R.27.3 The eligibility criteria and other conditions for MCM scholarship shall be notified subject to terms and conditions and at the rates approved by the Government of India from time to time.
- R.27.4 The students who receive MCM scholarship are exempted from paying tuition fee and will receive a monthly scholarship as specified from time to time.
- R.27.5 In the cases of scholarships provided by private organizations, the rates and terms and conditions for the award of such scholarship shall be as approved by the Senate.

In the case of the SC/ST candidates, all are exempted from payment of tuition fees. The award of scholarships and other benefits will be in accordance with the rules framed or amended by the Government of India from time to time.

- R.27.6 The Dean (Academics) will lay down the administrative procedures to be followed in the selection of students for the award of various scholarships consistent with existing Government regulations if any. The number and names of the candidates selected for various scholarships will be reported to the Senate.

### **R.28 Eligibility for Award of the B.Tech. Degree**

A student should be declared to be eligible for award of the B.Tech. degree if he/she has:

- R.28.1 registered and successfully completed all the requirements as per the curriculum of the program.
- R.28.2 acquired a minimum of 160 credits satisfying all the course basket requirements and projects mentioned under R.3.7 and completed all other compulsory requirements such as the Internship, NSS/NSO/H&T requirements etc. within the stipulated time as mentioned under R.12.
- R.28.3 satisfied the minimum residence requirement of eight (8) semesters. “Residence” implies being formally registered for academic work. Any time on a semester exchange at another institute/university, with the approval of the Dean (Academics), shall count towards this residence requirement.
- R.28.4 secured a minimum cumulative grade point average (CGPA) of 5.0 in passed subjects.
- R.28.5 no dues to the Institute, Hostels, Libraries, NSS/NSO/H&T etc.
- R.28.6 no disciplinary action is pending against him/her.

**R.29 Eligibility for Award of the B.Tech. (Honours) Degree**

- R.29.1 In addition to the general eligibility criteria mentioned for the award of regular B.Tech. degree under R.28, a student must earn additional 12 credits (over and above the required 160 credits for regular B.Tech. degree) relevant to her/his discipline as recommended by the Faculty Adviser to be eligible for B.Tech. (Honours) degree.
- R.29.2 Student must do DP401P & DP402P: Major Technical Project and DP-301P: Interactive Socio-Technical Practicum (ISTP) and obtain a grade of ‘B’ or above in these courses.
- R.29.3 Student should not have received ‘F’ grade throughout the B.Tech. program.
- R.29.4 Student should secure an overall CGPA of 8.5 or more out of 172-174 credits.

**R.30 Power to Modify**

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

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