POSTGRADUATE MANUAL

RULES AND REGULATIONS
for
M.Sc., M.Sc.(Tech), M.Tech. and MBA Programmes

Indian Institute of Technology
(Indian School of Mines), Dhanbad

Effective from July, 2019

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Acknowledgement

PG Manual, IIT Kanpur

CHAPTER 1
PROGRAMMES OF STUDY

The Indian Institute of Technology (Indian School of Mines), Dhanbad offers a number of postgraduate (PG) programmes leading to Master's degree (**M.Sc., M.Sc. (Tech), M.Tech. and MBA**). The regulations as provided herein details the procedures and requirements of the PG programmes being offered by the Institute. These regulations will help generate an academic rigour required for the PG programmes so as to create a benchmark of standards and performance which could be improved in the coming years.

IIT(ISM), Dhanbad offers the following PG programmes:
1. Two Year M.Sc.
2. Three Year M.Sc.(Tech.)
3. Two Year M.Tech.
4. Two Year MBA.

Details of these courses are appended in Annexure I.

CHAPTER 2
ADMISSION PROCEDURE AND RULES

2.1. Eligibility and admission procedures

The minimum eligibility conditions for admission to the PG programmes of the Institute are stated below. However, these conditions may be made more stringent by the Departmental Post Graduate Committee (DPGC), provided these are approved by the Senate. The number of seats to which admissions can be made in a given programme shall be as approved by the Senate from time to time. An applicant possessing qualifications as stated in the following sub-sections is eligible to apply for admission to the appropriate programme.

Details of Departmental Post Graduate Committee (DPGC) and the Senate Post Graduate Committee (SPGC) are provided in Annexure II.

2.1.1. Admission in Two Year M.Sc. / Three Year M.Sc.(Tech) programme

An applicant with the following degree is eligible for admission:

    (a) Admissions to such programmes is through JAM.

    (b) All candidates admitted through JAM should have a Bachelors' degree.

    (c) In the qualifying degree, the aggregate marks or cumulative grade point average (CGPA) / CPI (without rounding-off and taking into account all subjects, including languages and subsidiaries, all years combined) should be at least 55% or 5.5 out of 10 for general / OBC (Non-Creamy Layer) category candidates and 50% or 5.0 out of 10 for scheduled castes (SC) / scheduled tribes (ST) and Persons with Disabilities (PwD) category candidates.

    (d) If CGPA / CPI is on a different scale, it would be linearly mapped to a scale on 10. The percentage of marks for letter grades / CGPA obtained by the candidate shall be decided by the Institute.

2.1.2. Admission in Two Year M.Tech. programme

An applicant with the following degree is eligible for admission:

    (a) The candidate should have a Bachelors' degree in Engineering or a Masters' degree in Science from Institutes recognized by the Government.

    (b) The minimum marks are 60% or CGPA of 6.0 (on a 10-point scale) in Bachelors' degree in Engineering or a Masters' degree in Science.

(c) Candidates belonging to SC / ST and who have the basic qualifying degree is eligible to apply, provided s/he has secured first class or marks not less than 55% or CGPA not less than 5.5 in the relevant degree.

(d) Admission to this programme is through the Common Offer Acceptance Portal.

(e) Candidate must be an Indian National.

(f) Candidates should have a valid GATE score that remains valid at the time of admission.

(g) Candidates with an equivalent degree and discipline recognized by professional bodies, such as the Institution of Engineers (India), the Institute of Chemical Engineers, the Aeronautical Society of India, the Institute of Electronics and Telecommunication Engineers, the Indian Institute of Metals, etc. are not eligible.

2.1.3 Admission in Two Year MBA programme

(a) The admission to this programme is through CAT.

(b) All candidates admitted through CAT should have a 3 Years Bachelors' degree with Mathematics / Statistics as one of the subjects or a 4 Years Bachelors' degree in Engineering or Master's degree with Mathematics / Statistics as one of the subjects at Bachelor's level.

(c) The minimum marks is 60% marks or CGPA of 6.0 (on a 10 point scale) for general / OBC (NCL) category candidates and 55% or 5.5 out of 10 for SC / ST and PwD category candidates.

2.2. Admissions under QIP / Sponsored Category / NRI / PIO / OCI / Foreign Nationals

2.2.1. Quality improvement programme (QIP) candidates and defence personnel category

The procedures and requirements for admission of QIP and defence personnel candidates will be as per the prescribed procedure. These candidates will have to satisfy the prescribed minimum marks / CGPA and qualifications as laid down under Section 2.1.1 / 2.1.2 / 2.1.3.

2.2.2. Non-resident Indians (NRI) / persons of Indian origin (PIO) / overseas citizens of India (OCI) and foreign nationals category

a. NRI candidates must have been residing abroad continuously for at least one year at the time of submission of their application for admission. However, PIO / OCI candidates shall have no such restriction. The equivalence of their qualifications (except that of JAM / GATE / CAT etc.) with that of the general candidates shall be assessed by the DPGC of

the respective departments and considered and approved by the SPGC. All such candidates who meet the qualifications may be admitted to the appropriate programme.

b. The applications of foreign nationals, who are sponsored by the Indian Council of Cultural Relations (ICCR) / under a MoU between IIT (ISM), Dhanbad and the sponsor, shall be scrutinized by the concerned department to assess their suitability for admission to the programme. Admission to such applicants shall be offered by the Institute after considering recommendation of the DPGC and on approval of the SPGC.

c. Non-sponsored candidates who belong to NRI / PIO / OCI / foreign national category, shall also be considered for admission to PG programmes. Those candidates who are residing in India for the time being and are seeking admission to M.Sc. / M.Sc.(Tech) / M.Tech. / MBA programmes, must satisfy the JAM / GATE/ CAT requirements (if eligible to take it). Such candidates who are currently in India but have not taken JAM / GATE / CAT may also seek admission to M.Sc. / M.Sc.(Tech) / M.Tech. / M.B.A. programmes, provided that the respective department recommends their application for admission based on their qualifications and other credentials and these recommendations are considered and approved by the SPGC. Admission of such candidates, however, shall be subject to the clearance of the Central Government.

2.2.3. Sponsored candidates

a. A candidate working in an academic institution / PSU / Govt. R&D organizations / Govt. recognized private R&D organizations / industry is considered as a sponsored candidate. Such candidates must have been in employment with the sponsoring organization for at least 2 years at the time of admission and must be sponsored by her / his employer. The sponsoring organization must specifically undertake to provide full salary to the candidate.

b. Applications of candidates sponsored by organizations under MoU between the Institute and under QIP programme shall be eligible for admission.

c. The employer must undertake to relieve the candidate, to stay in the campus for the specified period to enable the candidate to complete the programme.

d. The admission procedure consists of (i) shortlisting through GATE / NET /Appropriate National Level Examination and / or written examination conducted by the department, and (ii) interview.

e. For Bachelors' degree holders from IIT system having a CGPA of 8.0 and above, the requirement of GATE / NET is waived off and would be given direct admission to M.Tech. programmes.

2.2.4. Admission of students of other Institutions (casual / non-degree students) under MoU for carrying out research or for study

a. A student of any other Indian / foreign Institute / University and, if sponsored, may be allowed to study at IIT(ISM), Dhanbad for one or more semesters or one or more courses of the Institute or for carrying out a part of the dissertation so as to fulfill the academic requirements of the parent Institute / University. In all such cases, the earned credits at the Institute shall be transferred to the parent Institution. For such study / research, the student has to pay the requisite academic fee / hostel fee to the Institute and other charges, as may be specified at the time of joining the Institute.

b. Such a student must be sponsored by the parent Institute / University and s/he must submit an application to the Dean (Academic) for seeking admission to the institute. All such applications will be vetted by a committee comprising of the DA, concerned Head of the Department (HOD) and the Convener, DPGC. The recommendation of the Committee shall be considered by the SPGC and their recommendations may be considered by the Chairman, Senate for approval.

c. The strength of non-degree students in any programme should not be more than 5% of the sanctioned strength of the programme. Such students shall be governed by the Institute code of conduct for students, and all other academic / research regulations in force.

2.3. Reservation of Seats
Reservation policy will be applicable as per Government of India norms.

CHAPTER 3
ACADEMIC SESSION

3.1. Academic Session / Year

Academic session of the Institute is also called the Academic Year and spans a period, generally from July to May of the following year as specified in the Academic Calendar.

3.2. Duration

Each academic session comprises of two regular Semesters, Monsoon (July to December) and Winter (January to May) – and a Summer semester (mid-May to mid-July). The exact duration of each semester is specified in the Academic Calendar. The total hours of instruction for a course in the Summer Semester is exactly similar to that in the regular semester. Each week comprises of five working days, from Monday to Friday. If for some reason, a day(s) is lost, it may be compensated by using any other day of the week, preferably Saturday(s). Classes are normally avoided on Sundays and holidays.

3.3 Academic Calendar

Admissions to M.Sc. / M.Sc.(Tech) / M.Tech. / M.B.A programmes are, generally, made in the month of April-June. The admission schedule is laid down in the Academic Calendar of the Institute. The academic section issues notification regarding admissions to various PG programmes.

The Academic Calendar approved by the Senate is a date-wise schedule for all academic activities including registration, late registration, last date of document submission, first and the last day of classes, examinations, make-up examination, deadline for final grade submission, result declaration, mid-semester recess, vacation period etc. No deviation from the Calendar is allowed except for some unforeseen and unavoidable reasons. In all such cases, the approval of the Chairman, Senate is necessary and the same is to be reported in the subsequent Senate meeting.

CHAPTER 4

CURRICULUM

4.1. Program curriculum

The curriculum for a programme consists of the following components:

a. Department Core (DC): Courses which are compulsory for students in their parent discipline.

b. Department Elective (DE): Elective courses offered by departments for their own students.

c. Open Elective (OE): An open elective course is any course offered by the Institute including DC and DE courses.

4.2. Credits

The following formula is to be used to calculate the credits of a course: $C = 3L + 2T + P$, where, C is the number of credits, L is the number of lecture hours, T is the number of tutorial hours, and P is the number of laboratory / practical hours per week in a course.

The normal semester load may vary between 36-54 credits.

4.3. Course Template

The approved template for all PG programmes [M.Sc., M.Sc.(Tech), M.Tech. and MBA] are appended in Annexure III.

The course numbering system: Policies and procedures are included in Annexure IV.

CHAPTER 5

REGISTRATION

Each admitted student must register herself / himself in person before the commencement of each regular semester / summer semester on the date specified in the Academic Calendar of the Institute. The students who are admitted to the first year of different academic programmes and awaiting the final result of the qualifying examination are allowed to register provisionally, provided that they submit a certificate from the last Institution to the effect that they have appeared in the final of the qualifying examinations (both theory and practical). Such students must submit all the documents showing that they have passed the qualifying examination on or before the last date specified in the Academic Calendar. The admission of such students, who have not submitted the required documents by the due date, shall be cancelled by the Chairman, Senate on the recommendation of SPGC and Dean (Academic).

The students are required to complete the following parts of the registration:
   i.   Academic registration, and
   ii.   Administrative registration.

The admission/ continuation of a student in the programme shall be terminated by the Senate, if the student has not completed the registration process.

5.1. Academic Registration

The registration process is defined below:

5.1.1. Pre-registration

Each student is required to pre-register online through Management Information System (MIS) for the next semester on or before the last date specified in the Academic Calendar for this purpose. A student is required to give a list of preferences for courses such as Departmental Elective (DE) and Open Elective (OE). The electives will be allotted as per declared guidelines.

A student may select the number of courses and the course load under the regulations, while ensuring that all the pre-requisites have been completed and there is no time-table conflict amongst the courses. One or more courses with a time-table clash will be rejected from the registration form of the student, either during registration or if found at a later stage. When all

the courses planned to be taken by the students in the next semester are finalized, the same is to be verified at the time of physical registration.

If a student is unable to complete the academic pre-registration by the due date or her / his pre-registration is cancelled, the student should submit an application to the Dean (Academic) through the Convener, DPGC for permission to do final registration manually at the specified time within a period of one month from the last date of academic pre-registration, but before the physical registration.

5.1.2. Physical registration

The registration is done during the time slot specified in the Academic Calendar. Completion of registration requires the fulfilment of the following criteria:

a) Approval of pre-registration of courses.
b) Payment of semester fee, hostel fee and other fees as may be prescribed, and clear all outstanding dues, if any.
c) Signing the registration roll in person in the office of Dean of Students Welfare (DSW).

5.1.3. Late registration

A student is expected to complete the registration process by the due date as specified in the Academic Calendar. In exceptional circumstances, a student may be allowed to complete the process by the last date of the late registration as specified in the Academic Calendar by paying the late registration fee. The late registration fee may be waived off, if the student has taken prior permission for late registration. If the student could not take prior permission for late registration, because of exigencies such as accident, illness, bereavement in the family, the Dean (Academic) may waive-off the late registration fee. Such waive-off shall not be a general rule, but will be invoked on a case-to-case basis.

5.2. Academic Registration for Summer Semester

The rules for summer semester are given below:

a) Only theory papers and thesis unit (maximum 9 credits) can be offered depending upon the needs of the students and availability of the Instructors for offering the course in the department.
b) The credit shall remain the same as for regular course.
c) Each student needs to register for the summer semester as per the Academic Calendar.

d) The maximum number of courses that can be registered in the summer semester will be limited to two full courses. One modular course will be half of a full course. One thesis unit is equivalent to one course.

e) Number of classes has to be the same as in the regular semester.

f) Classes will be conducted regularly irrespective of the number of registered students.

g) The attendance requirement will be the same as that of the regular semesters.

h) The tuition fee and semester fee for summer semester will be 50% of the tuition fee and semester fee of a regular semester.

5.3 Cancellation of Semester Registration

Registration of a student in all the courses in a semester (including summer semester) shall be cancelled, if a student remains absent from all academic activities for more than 20 working days during a semester, with or without permission. In such case, the student shall have a forced semester-drop.

5.4 Cancellation of Registration in a Course

Registration of a student in a course may be cancelled at any stage, if it is found that s/he does not meet the pre-requisites of the course, or if there is a clash in the student's time-table of even one lecture, or if it is found that s/he is not eligible to register for that course for any other reason.

A student will be de-registered from the course, if s/he fails to attain 75% attendance in the course.

5.5 Attendance record

Attendance records of all students for each course will be maintained. The Course Coordinator/Instructor taking the class is required to upload the attendance at the end of each week on MIS. Each student is expected to check/keep a record of her/his attendance through MIS. In case of any discrepancy, the student should approach the Instructor/Head of Department immediately for rectification.

As per notification IIT(ISM)/DAC/207 date 31.10.19 (approval of 11th Senate), 75% attendance is compulsory for all the students for award of grades in the semester examinations. If any student has a shortage of attendance, s/he will be allowed to appear provisionally in the examination but the answer scripts of such students will be evaluated by the course instructor only if the request for waiver is approved by the Chairman, Senate. If the instructor evaluates the answer script of such students, they will be awarded "F" grade if Chairman, Senate rejects the request for the waiver request. The student can submit application for the waiver along with

supporting documents to the office of the Director up to 8PM on the last working day before the semester examination.

5.6 Academic Advising

a) An M. Tech. student will be advised in the selection of courses by the thesis supervisor, appointed by the DPGC of the concerned department. A student registering for thesis credits must have a thesis supervisor assigned to her / him. Thesis / Dissertation supervisor would be allotted only after the results of the first semester on choice cum merit basis (*i.e*. Semester Grade Point Average). The selection of the elective courses will be done in consultation with the thesis supervisor.

b) Students of PG Programs other than M. Tech. will be advised in the selection of courses by the registration adviser appointed by the DPGC of the concerned department. A student registering for thesis credits must have a thesis supervisor assigned to her / him.

c) A student may be permitted to repeat or substitute courses in which s/he has obtained D or F grades (refer Table 1 of Section 6.8.5). Permission to repeat / substitute a course will be governed by the guidelines laid down by the Institute.

CHAPTER 6
TEACHING AND EVALUATION

6.1. Medium of Instruction

The medium of instruction in the Institute is English. The answers written in languages other than English language need not be taken cognizance of and the part written in language other than English may not be graded.

6.2. Offering a New Course

A new course can be introduced by a faculty member by submitting a proposal to the Convener, DPGC in the prescribed format. The proposal shall be considered by the DPGC at the earliest possible, but not before seven days of the notice for the meeting of the DPGC. The proposal should be circulated to all faculty members for their comments at least seven days before the DPGC meeting. If the DPGC accepts the proposal or suggests some changes / modification to the course, and the proposer of the course resubmits the modified proposal by addressing the suggestion, then the modified proposal shall be submitted to the SPGC for its consideration. The new course can be offered only when it has been recommended by the SPGC and approved by the Senate.

6.3. Courses to be offered in a given Semester

The list of courses to be offered by a department under an academic programme in the subsequent academic year is to be finalized before the pre-registration period in the winter semester of current academic year by the Head of the Department through the Departmental Advisory Committee (DAC). All the requirements of the programme templates are considered before deciding the courses to be offered in regular semester.

6.4. Conduct of Courses

Each course is preferably conducted by a single Instructor with the assistance of Teaching Assistants (TAs). The Instructor is responsible for instruction, giving home assignments, holding quizzes and examinations, evaluating the performance of the students, and awarding and submitting the grades. In certain cases, faculty from other departments may have to provide tutors for tutorial, laboratory work, grading etc.

Course coordinators who are conducting the courses with a large number of students in multiple sections will be assisted by the Instructors and the TAs. The coordinator is responsible for planning the course, giving home assignments, holding quizzes and examinations, evaluating the performance of the students, and awarding and submitting the grades. Tutorial classes should not be converted to lecture classes.

6.4.1. Duration of classes

Duration of a class is normally fifty (50) minutes. However, depending on the requirement, the duration of the class may be of 75 minutes.

6.5. Minimum Number of Students in an Elective Course

Normally, a minimum of ten students is required to run an elective course. The approval of the Chairman, Senate should be taken for running the courses with less than ten students. The maximum numbers of students in an elective course may be one hundred or more depending on the need.

6.6. Attendance in Class

All students are required to attend every lecture, tutorial and practical classes. However, relaxation up to 25% can be given in case of illness, family calamities, participation in placement activities, participating / organizing cultural / technical festivals, sports, and other competition, etc. Any student with less than 75% attendance will not be allowed to appear in the end-semester examination and shall get "F" (refer Table 1 of Section 6.8.5) grade in the course.

Attendance records of all the students for each course will be maintained. The Course Coordinator / Instructor taking the class is required to upload the attendance at the end of each week on the MIS. Each student is expected to check / keep a record of her / his attendance through the MIS. In case of any discrepancy, the student should approach the Instructor / HOD immediately for rectification. Minimum attendance requirement may be waived off by the Chairman, Senate on the recommendation of the Dean (Academic) under exceptional circumstances.

6.7. Evaluation and Performance Feedback

The evaluation of the performance of a student in a course is a continuous process. The performance in a course is evaluated through a mid-semester examination, an end-semester examination, quizzes / short-tests announced or surprise ones, assignments, laboratory work (if applicable) etc. The Course Coordinator / Instructor may take an open-book or closed-book examination in a given course.

The Course Coordinator / Instructor must upload the course plan in the MIS before the first lecture / practical and inform the same to the students during the first lecture / practical. The course plan consists of (i) prescribed text / reference books, (ii) weightage of each component of evaluation *e.g.*, examination, quiz, assignments, attendance (optional) etc. which are used to determine the final grade in the course and (iii) other useful information, if any.

6.8. Examinations

The arrangement for mid-semester and end-semester examinations are made by the Examination Section during the period as specified in the Academic Calendar. No deviation is allowed in the examination schedule and venue, without the specific written permission of the Dean (Academic).

6.8.1. Conducting open book/open notes examination

The Senate in its 10th meeting held on 20.08.2019 has approved the proposal for open book examination with following conditions:

a) Use of Laptops, mobile phones, programmable calculator and other such digital media will not be permitted for such examinations.
b) Open book/note examination will be at the discretion of instructors.

The examination duration will remain unchanged for open book examination.

6.8.2. Guidelines for setting of question papers, weightage of various components in final grade

(a) The question paper may comprise of different difficulty levels, such as 50% of average level, 30% of moderate level and remaining 20% of high difficulty level. At least 30-40% numerical problems may be given in Engineering, Science and Management courses, wherever possible.

(b) The grade may have the following percentage of weightage.

i.   70-80% in mid-semester and end-semester examination. The proportion in mid-semester and end-semester will be 4:6.

ii.   Remaining 20-30% weightage may be based on quizzes, attendance, case studies, assignment etc.

(c) The instructor must specify the division of marks in the first class of the semester for (a) and (b) and upload the same in the MIS.

(d) The questions of mid-semester and end-semester normally cover the syllabus proportionately, *i.e.* the end-semester question paper must include at least 60 percentage covered after mid-semester and the remaining 40% equally divided between the portions before and after mid-semester examination.

6.8.3. Results of examinations and quizzes

The final grades of all the students in a course must be submitted within seven days from the date of the examination of the course or as notified by Dean (Academic) from time to time. Answer books for quizzes must be shown to the students within seven working days from the date of the quiz / tests. Answer books for mid-semester and end-semester examinations must be shown to the students at a mutually convenient time on or before date specified in the Academic Calendar. Solutions to examinations / quizzes with stepwise marking for each question must be uploaded in MIS before showing the answer books to the students. Students are responsible to be present to see the answer books, assignments etc. at the time specified by the Course Coordinator / Instructor. The written comments of the students may be considered before assigning the final grades.

The end-semester answer books shall be sent to Examination section by the Course Coordinator / Instructor and shall be preserved for one year from the date of examination by the examination section.

6.8.4. Make-up end-semester examination

If a student, for reasons such as medical reasons / family calamity or any other valid reasons fails to appear in the end-semester examination in one or more course(s), then s/he may submit an application to the Dean (Academic) for a make-up examination. The application must be submitted within the deadline specified in the academic calendar stating the reasons for the failure to appear in the examination along with the supporting documents. In case of an illness, a certificate from the Medical Officer of the Institute's Health Center must be submitted. The Dean (Academic) may consider the application and take a decision on a case-to-case basis.

6.8.5. Make-up options for mid-semester examination

In case of absence during mid-semester examination due to medical reasons / family calamity or any other valid reasons, one of the following two options can be exercised by the Course Coordinator / Instructor after obtaining approval from the Dean (Academic).

a) The mid-semester marks may be allowed based on the performance in the end-semester examination proportionately. In such cases, the weightage for end-semester examination may be the combined weightage of mid-semester and end-semester examinations.

b) Conduct a make-up of mid-semester examination within two weeks from the date of completion of the mid-semester examination period.

6.8.6. Letter grades and weightage

At the end of the semester, students are awarded a letter grade in each course by the concerned Course Coordinator / Instructor taking into consideration their performance in various examinations, quizzes, assignments, laboratory work (if any), etc., and their regularity of attendance in classes (if applicable). The grades will be assigned on total marks earned in a course.

There are ten letter grades: The letter grades, their descriptions, and the numerical equivalents on a 10-point scale (called grade points) are presented in Table 1.

Table 1 Grading pattern vis-à-vis grade point

Grade	Grade Point	Description
A+	10	Outstanding
A	9	Excellent
B+	8	Very Good
B	7	Good
C+	6	Above Average
C	5	Average
D	4	Pass
F	0	Fail
S	0	Satisfactory
X	0	Unsatisfactory
I	0	Incomplete

In certain courses (such as seminars, physical education, etc.), Satisfactory (S) / Unsatisfactory (X) grade is awarded. Grade 'X' implies that the student has failed in the course. The grades such as S / X is not used while calculating semester grade point average (SGPA) / CGPA. Relative grading will be used to award grades (see Annexure V). The modalities for awarding the grade will be notified from time to time. Unified grading will be done for courses with the same course code without any distinction of the programmes.

In case a student is unable to appear in the regular end-semester examination and is allowed for the make-up examination, s/he shall be awarded 'I' grade. In this case, "I" grade will be converted to a letter grade depending on the performance in the make-up examination.

If a student's make-up end-semester examination of a course is evaluated after the regular grades of the same course has been submitted, then the student should be assigned a grade based on the cut-off marks for the regular grades and will be considered supernumerary.

6.8.6. Absence in end-semester examination

To clear a course, the student must appear in the end-semester examination. If a student is absent in the end-semester examination and does not appear for the make-up examination, s/he will be awarded "F" grade in the course irrespective of their performance in mid-semester and other internal evaluation.

6.9. Thesis and Thesis Examination

6.9.1. Appointment of thesis supervisors for M.Sc. / M.Sc.(Tech) / M.Tech. / MBA

(a) A student shall not have more than two supervisors at any given time.

(b) Thesis supervisor(s) of a student will be assigned amongst the faculty members of IIT(ISM), Dhanbad as per the modalities decided by the respective departments.

(c) In exceptional cases, a student can have a co-supervisor from outside the Institute where the student has carried part of the dissertation work on the recommendation of the DPGC and approval of the Dean (Academic). However, such permission must be obtained before the commencement of the dissertation work.

(d) The appointment or change of supervisor(s) will be communicated to the Dean (Academic) by the DPGC. No change / addition of supervisor(s) is allowed after the thesis has been submitted.

(e) In case there has been a change / addition in the supervisor(s), the thesis will not be submitted earlier than three months from the date of such change.

(f) If a student's supervisor proceeds on leave for more than three months at a stretch, in such case, the DPGC may appoint a supervisor or a co-supervisor in consultation with the supervisor and the student. In such cases, the number of supervisors may be more than two, if an external supervisor already exists. If a student's supervisor proceeds on leave for more than three months, the DPGC may appoint a programme coordinator to take care of various formalities.

(g) If all research work and related analysis are complete except writing of the thesis, and the supervisor proposes to go on leave, the DPGC may appoint a programme coordinator to take care of the formalities, such as providing the list of examiners, conducting the oral examination, etc.

(h) In case a supervisor resigns / retires or otherwise ceases to be a faculty member of the Institute, the DPGC may appoint a new supervisor or co-supervisor.

6.9.2. Thesis / Project oral examination committee
   a. The thesis / project will be examined by an oral examination committee formed by the HOD in consultation with the DPGC and approved by the Dean (Academic).
   b. The committee shall consist of four members comprising of thesis Supervisor, two faculty members preferably of the same specialization from the department and one member from the sister department. One of the three departmental members will be nominated as the Chairman of the Committee.
   c. The grading for oral examination will be S / X.
   d. The oral examination will be primarily based on dissertation work carried out by the student.
   e. If the student gets 'X' grade in the oral examination, then s/he may be given a chance to appear again after one month. Maximum two chances will be given to clear the oral

examination. Even after two attempts, if s/he fails to clear the oral examination with 'S' grade, the registration may be terminated.

f. The student can have the oral examination from third week of March to the last day of class as per academic calendar.

g. Thesis supervisor will ensure that all the suggestion have been incorporated in the dissertation as suggested by the oral examination committee.

6.10. Semester Grade Point Average (SGPA) Calculation

The following formula may be used for calculating the SGPA:

$$SGPA = \frac{TCP}{TC} = \frac{G_1 C_1 + G_2 C_2 + G_1 C_3 + \cdots}{C_1 + C_2 + C_3 + \cdots}$$

where, G_1, G_2, etc. stand for the grade point obtained in the specified courses and C_1, C_2, etc. stand for the credits of the respective courses. Here, TCP stands for total credit points and TC stand for total credits. The SGPA will be calculated up to 2 places of decimal.

The S and X grades shall not be considered in the calculation of SGPA. Whenever, a student is allowed to repeat or substitute a course, the new letter grade awarded in the course shall be substituted in place of the old letter grade. The new letter grade shall be used in the calculation of SGPA.

6.11. Cumulative Grade Point Average (CGPA) Calculation

The CGPA indicates the cumulative academic performance of a student. It is computed in the same manner as the SGPA, except that all the courses registered up to and including the latest completed semester are considered in the calculation of CGPA, as indicated below.

The CGPA at the end of the second semester onwards until the programme is completed shall be calculated on the basis of the total credits for courses of each semester as indicated below:

$$CGPA = \frac{TCP_1 + TCP_2 + TCP_3 + \cdots}{TC_1 + TC_2 + TC_3 + \cdots} = \frac{\sum_{i=1}^{n} TCP_i}{\sum_{i=1}^{n} TC_i}$$

where i is the number of the semester. Along with the SGPA, the CGPA shall also be shown in the grade card / report of every semester of the programme.

Whenever a student is permitted to repeat or substitute a course, and a new letter grade is awarded the new letter grade will be substituted for the old letter grade and will be used in the computation of the SGPA. However, both grades shall be mentioned in the grade card.

6.12. Overall Grade Point Average (OGPA) Calculation

The graduating CGPA is called the OGPA. The OGPA multiplied by 10 will give the graduation marks in percentage.

6.13. Declaration of the Final Result

The grades earned by a student in a semester can be seen by a student through the MIS. A printed copy of the grade card shall be issued to each student after each semester. A duplicate copy, if required, can be obtained on payment of the prescribed fee.

6.14. Withholding of Grades

The grades of a student may be withheld, if s/he has not paid the dues, or if there is a case of misconduct / unfair means / indiscipline pending against her / him, or for any other appropriate reason as per the directives of the Senate.

6.15. Change of an already awarded Grade

A letter grade once awarded shall be final. However, upon a request of the Course Instructor routed through the Convener, DPGC and the HOD, the Chairman, Senate in consultation with the Dean (Academic) may allow the revision of grades. No request for a change of grade(s) shall be considered, if the request is made after six weeks of the declaration of the result.

6.16. Course Feedback

At the end of each semester, students will give feedback about the course and the Instructor through the MIS.

CHAPTER 7

ACADEMIC REQUIREMENT AND ELIGIBILITY FOR THE AWARD OF DEGREE

7.1. Minimum, Maximum Duration and Academic Requirements

Table 2 lists the minimum and maximum durations permitted in a programme and credit requirements for graduation in various programmes. "Course Work" includes only postgraduate course credits unless otherwise stated. To satisfy the "Minimum Duration" requirements, registration must be over consecutive semesters; exception will be made only if the student is on authorized leave. "Maximum Duration" is counted from the student's first registration date. CGPA will be calculated on the basis of all permitted courses taken by the student. For students with backlogs, the duration of stay in the institute may increase beyond the normal duration for M.Sc., M.Sc.(Tech), M.Tech. and MBA, subject to maximum permissible duration of the respective programme.

Table 2 Minimum and maximum duration vis-à-vis credit requirement

S. No.	Programme	Minimum Total Credits	Minimum Credit through Course Work	Minimum Credit through Research Work*	Minimum Duration (Semester)	Maximum Duration** (Semester)
1	2 Year M.Tech	172	118	54	4	6
2	2 Year M.Sc.	186	168	18	4	6
3	2 Year MBA	208	172	36	4	6
4	3 Year M.Sc. (Tech)	272	218	54	6	8

*Credit on the basis of research output / Seminar / Lab Assignment / Field work, etc.
** For foreign nationals, the minimum / maximum duration will be as per the terms and conditions decided by the sponsoring agency.

7.2. Credit through Research Work

(a) A PG student earns 9 credits for each thesis / project unit that s/he is registered in a semester. The grade 'S' or 'X' will be awarded for thesis / project credits.

(b) At the end of the semester, the thesis / project supervisors(s) will assess the student's progress towards the thesis / project work during the semester and will award grade 'S'

for each unit, if the work is satisfactory and grade 'X' for every unsatisfactory unit. Thus, a student who is registered for 36 credits can get one of the following five combination *viz.* SSSS, SSSX, SSXX, SXXX, XXXX. Possible grading combination for different thesis credits is illustrated in Table 3.

Table 3 Thesis credits and relative grading

Thesis Unit	Thesis Credits	Grading
4	36	4S, 3S1X, 2S2X,1S3X, 4X
3	27	3S, 2S1X, 1S2X,3X
2	18	2S, 1S1X, 2X
1	9	1S, 1X

The minimum and maximum duration allowed will include any semester(s) in which a student is registered at IIT (ISM), Dhanbad but may have spent that semester as a casual / non-degree student at some other Institution while still pursuing the said academic programme at IIT (ISM), Dhanbad.

A student, failing to complete the programme within the maximum duration specified, may be allowed by the Senate to continue studying in the programme under exceptional circumstances on a case-to-case basis.

7.3. Minimum Academic Requirement

In order to graduate, a student must clear all courses as per the respective programme template, satisfying the minimum credit requirement in each course category. In addition, the students must obtain a minimum OGPA of 5.0 and replace 'X' grades with 'S'.

In exceptional circumstances, the Senate may grant any other relaxation / restriction in the minimum academic requirements.

7.4. Graduation

A student is deemed to have completed the requirements for graduation, if s/he has:

a) fulfilled the minimum duration and other academic requirement,

b) satisfied additional requirements, if any, of the concerned department,

c) cleared all the dues, and

d) no case of misconduct / unfair means / indiscipline pending against her / him.

7.4.1 Graduation with distinction

A student graduating with OGPA of 9.0 or above is certified to have graduated with distinction in the given programme. The final grade card / report of the student shall record the "distinction".

7.5. Award of Degrees

A student, who has completed all the requirements for graduation as specified, shall be recommended by the Senate to the Board of Governors (BOG) for the award of the appropriate degree in the ensuing convocation. The degree can be awarded only if the BOG has accorded its approval.

7.6. Withdrawal of the Degree

Under exceptional circumstances, where gross violation of graduation requirements is detected at a later stage or the awardee of the degree has been convicted by a court of law for moral turpitude, the Senate having examined the case and being satisfied that the conditions exist for the withdrawal of the degree, may recommend to the BOG for withdrawal of the degree already awarded to the person.

7.7. Residence Outside IIT (ISM)

Students registered in PG courses may count for residence requirements, research or field work undertaken outside the Institute under the supervision of the Institute supervisor(s), if facilities for such work are not available at this Institute. Such cases must be recommended by the DPGC and approved by the Dean (Academic) / Chairman, Senate before the student proceeds to the place of assignment.

CHAPTER 8

DEFICIENT ACADEMIC PERFORMANCE

The DPGC shall review the academic performance of the students at the end of each regular semester. A deficient student may be placed on warning or academic probation or Termination. The criteria for placing students on Warning / Academic Probation / Termination depend on the SGPA / CGPA as described in the following sub-sections.

8.1. Academic Probation

A student on academic probation is required to adhere to the following conditions:

(i) that the student under academic probation should take one theory course less than the normal load.

(ii) that the student shall register with higher priority for those courses (or their substitute) in which grade F / X is obtained.

(iii) that the student shall not hold any post / position in the hostel, Students' Gymkhana or any other organizational body of the Institute.

(iv) that the student undertakes to abide by such conditions as may be / or are laid down by the SPGC / the Senate.

(v) that a student under warning will adhere to the conditions given in (iii) and (iv).

The parent / guardian of the student will be informed in writing about the academic warning / probation status of the student.

8.2. Criteria for warning

Students will be placed on warning if

(i) SGPA< 5.0 and CGPA $\geq$ 5.0, OR

(ii) SGPA > 5.0 and CGPA < 5.0, OR

(iii) Accumulate 1X in thesis unit.

8.3. Criteria for Academic Probation

Students will be placed on academic probation if

(i) SGPA< 5.0 and CGPA < 5.0, OR

(ii) Accumulate 2X in thesis unit.

8.4. Termination

Academic termination is applicable to those students who are placed under academic probation for two consecutive semesters. The parents / guardian of the student will be informed in writing about the academic warning / probation status of the student.

8.5. Appeal against Termination

A student may appeal to the Chairperson, Senate for reversing the termination order and reinstating her / him in the programme. In the case of termination due to inadequate and unsatisfactory academic performance, the student must clearly explain the reasons for the poor performance, including how those reasons will not adversely affect her / his performance in the future. The Senate shall take a final decision after considering the inputs from the DPGC and the SPGC.

A student may re-appeal, if her / his previous appeal was rejected. However, the re-appeal will be considered by the Senate only if it is admitted by the Chairman, Senate.

CHAPTER 9
FINANCIAL ASSISTANCE

9.1. Institute Assistantship shall be awarded to M.Tech students on a semester to semester basis for a maximum period of 24 months. The stipend for assistantship shall be paid at the approved rates. A student is expected to devote up to eight hours per week towards job(s) assigned to her / him by the departmental authority. The monthly payment or renewal of assistantship is contingent on the student's performance in the academic programme and in the discharge of assistantship duties.

9.2. Students passing an undergraduate degree from IIT system with CGPA of 8 (eight) or more would be eligible for assistantship without GATE.

9.3. M.Sc. / M.Sc.(Tech) / MBA students shall not be provided Institute Assistantship.

9.4. Some financial assistantships in the form of research assistantships may also be made available from sponsored research projects. Additional assistantships in the form of scholarships, fellowships, etc. may be available through other organizations, such as, the Council of Scientific and Industrial Research, Department of Atomic Energy, etc. Efforts shall be made for the availability of additional assistantships in the form of scholarships / fellowship by other research / industrial organizations.

9.5. Institute Assistantship and other financial support will commence only after submission of all "Proof of Eligibility" document.

CHAPTER 10
LEAVE RULES

Attendance requirement will be applicable as per the prevailing Institute norms. Leave is not a right. Approval must be taken before proceeding on leave, as per the Institute guidelines.

10.1. M.Tech. Leave rules

M. Tech students shall be granted leave on an application to the concerned HOD through the Supervisor*. Applications must be submitted well in advance of the date of commencement of the leave requested.

* In case of first semester, it will be through the HOD only.

a) An M. Tech. student may take a maximum of 30 days of personal leave (inclusive of medical) in an academic year (including winter break, mid-semester breaks and summer break) with a maximum permissible limit of 10 days of leave to be availed during a semester. However, this 10-day cap will not be enforced when semesters are not in progress and during the summer vacation. Leave not availed in the preceding academic year will not be carried over to the next academic year. Holidays / weekends prefixed / suffixed will not be counted as leave.

b) Absence without sanctioned leave or leave longer than that specified in Section 10.1 (a) will entail loss of financial assistantship for the period of absence, and may result in the termination of the student's programme on the recommendation of the DPGC/the SPGC and on approval of the Dean (Academic).

10.2. M.Sc. / M. Sc.(Tech) / MBA Leave rules

The students are entitled to avail the mid-semester break, winter and summer vacations as specified in the Academic Calendar without seeking any permission.

10.3. Temporary withdrawal / Semester Leave

i. A student may be allowed the leave of absence for entire semester (temporary withdrawal) for bonafide reasons. Such leave of absence shall ordinarily not exceed two semesters with or without break during the entire period of the academic programme.

ii. An application for temporary withdrawal should be made before the date of registration for the semester as mentioned in the Academic Calendar. However, under

exceptional circumstances, a student may apply for withdrawal at any time during the semester.

iii. Application for temporary withdrawal should be addressed to the Dean (Academic) routed through the Convener, DPGC. The application must be supported with all documents such as medical certificate (in original from the Institute Health Centre) in case of an illness.

10.4. Leave rules common to all PG programmes

a) A student may be granted maternity / paternity leave for a period as per the government guidelines. Leave up to 6 weeks may also be granted in case of miscarriage including medical termination of pregnancy. In all such cases, the claim should be supported by a proper medical certificate. Such leave can be combined with any other leave due and will not entail any loss of financial assistantship.

b) If a student falls ill while in the campus, medical certificate must be obtained from the Institute's medical officer. If s/he falls ill outside the campus while on sanctioned leave, medical certificate must be obtained from a registered medical practitioner, which should be endorsed by the Institute Health Centre.

c) A student who remains on authorized leave of absence due to ill health shall be required to submit a certificate from a Registered Medical Practitioner to the effect that s/he is sufficiently cured and is fit to resume his / her studies. The Institute may constitute a Medical Board to determine the fitness of the student before registration. The registration of the student shall be provisional till the Medical Board at IIT (ISM) Dhanbad certifies the fitness. If the Board recommends that the student is not yet fit to resume studies, then the registration may be cancelled.

d) Permission for station leave shall be obtained from the Dean (Academic) / the Associate Dean (Academic-PG) as per Institute norms.

e) Leave application form is available in the Institute website.

CHAPTER 11
SCHOLARSHIPS, AWARDS AND MEDALS

11.1. Scholarships

A number of Merit-cum-Means scholarships, free ships (*i.e*., tuition waiver), free basic messing and pocket allowance (for SC and ST categories), and endowment scholarships/fellowships are awarded to the PG students in accordance with the prescribed procedure laid down by the Senate. These scholarships / fellowships are administered by a designated committee. The details about these scholarships / fellowships can be found from the DSW office / webpage.

The scholarships, etc. are paid up to the month in which a student completes all the requirements of her / his programme.

11.2. Withdrawal of Scholarship

These scholarships, free-ships etc. are liable to be withdrawn, partially or wholly, in case of misconduct, deliberate concealment of material facts and / or giving false information.

A student leaving the Institute on her / his own accord without completing the programme of study may be required to refund the amount of scholarship, free ships etc. received during the academic session in which s/he leaves the Institute.

11.3. Awards and Medals

To promote and recognize academic excellence, constructive leadership and overall growth and development of students, the Senate awards a number of prizes and medals established by the Institute on its own or through endowments / grants made by donors, with the approval of the Board of Governors. Details of such awards and medals can be found at the Institute webpage. All matters related to awards and medals are handled by the Designated Committee.

CHAPTER 12
CONDUCT AND DISCIPLINE

The students of IIT (ISM) Dhanbad are selected from the pool of best talent available in the country. They come from different parts of the country and, therefore, their conduct and behaviour within and outside the Institute's campus should be exemplary and cosmopolitan in character.

12.1. Code of Conduct

12.1.1. Students must always carry their Identity Cards with them, especially when they move out of their hostels.

12.1.2. No student shall disobey any order issued by the Institute, HODs, Deans, Associate Deans, Chief Warden / Warden of hostels, and other functionaries of the Institute.

12.1.3. The students must behave with due decorum with their teachers, staffs and fellow students. Girl students must be shown due consideration in this respect.

12.1.4. Ragging of students (fresher's and others) is strictly prohibited both within and outside the campus. No student shall indulge in any form of ragging of the fresher students, causing mental or physical agony or inflict monetary loss, physical harm to them, harass them or indulge in any kind of obscenity, vulgarity or violence with them.

12.1.5. Students should not indulge in any type of unkind, indecent behaviour towards new entrants in the hostels, messes, clubs or any other place in the campus and outside.

12.1.6. Students have no right to deny mess, club and other facilities to other students. The use of any such facility can be withdrawn only by the appropriate authorities.

12.1.7. Students should not indulge in violence of any kind with fellow students, employees including teaching staff of the Institute, and outsiders within or outside the Institute campus. Students must not take the law in their own hands but must report any grievance to the teachers, HOD, Chief Wardens, Dean of Students' Welfare, Dean (Academic) or other Officers, as the case may be.

12.1.8. Students are not allowed to become members of outside societies or allowed to join discussions of a political nature or to take part in any political activity without prior permission of the Institute.

12.1.9. Students are not permitted to consume or take alcoholic drinks and harmful drugs like L.S.D., Charas, etc. within the Institute campus including their hostels or

outside in any restaurant / bar in Dhanbad or at any other place or on outside official visits such as training / tour / camp / field work, etc.

12.1.10. Students must not incur any debt or commit any irregularity in financial matters. The Institute, however, will in no way be responsible for such debts or irregularities.

12.1.11. No meeting of the students, other than those organized under the aegis of various recognized students activities, shall be called and held without the prior permission in writing from the DSW.

12.1.12. No meeting / function within the Institute campus at Dhanbad, to which any outsider is invited, shall be organized nor shall any outsider be allowed to address the students without the prior permission in writing from the DSW / HOD.

12.1.13. No theatrical performance, dance or show of any kind shall be allowed either within or outside the Institute campus in the name of any society of the students except with the prior permission in writing from the DSW / or any authorized functionary of the Institute, who may prescribe the terms and conditions for such performance.

12.1.14. No student shall

(a) by words spoken or written or by sign or visible representation or through internet or website or social media platforms, or SMS, Whatsapp, etc., offend or insult a fellow student or any teacher of the Institute or any employee or officer / functionary of the Institute. (Any form of ragging will also constitute an act of insult or offence on the person who is ragged).

(b) misappropriate, prefer false claim for financial assistance of any kind (indulge in financial irregularity of any kind), mutilate, disfigure or otherwise destroy or damage any property of the Institute including furniture, books, equipment, apparatus, building etc.

(c) use unfair means before, during or after any of the examinations and / or tests, quizzes, etc. or attempt to threaten the staff to get undue advantage or lift someone else's work(s) and insert it in her / his class work submissions, projects, dissertations, reports, etc. without proper acknowledgement, credit and reference.

(d) indulge in plagiarism or misconduct in use of printed / audio-video / video material of any kind in the Project, Dissertation, Class Work submission, reports, etc.

(e) Keep and / or drive engine driven vehicle (car, motor-cycle, scooter, etc.) for commuting inside the IIT(ISM) campus during her / his stay at IIT(ISM), Dhanbad. However, married students may be allowed to keep and use an engine driven vehicle

with the specific approval of the Dean of Students Welfare / or any other authorized functionary of the Institute.

12.1.15. Students must take care of and protect all Institute property. Any damage to Institute property due to improper use or negligence will have to be made good by the students concerned. Students must use the Institute furniture and fittings with due care and must not deface buildings, roads, furniture, fittings, etc. in any manner.

12.1.16. Students must handle with great care the laboratory equipment and any instrument and machinery that they have to use in the course of their work / project / practical / dissertation. Any damage or breakage of such equipment, instrument, apparatus, etc., due to improper use or negligent handling will have to be made good by the students concerned.

12.2. Disciplinary action and related matters

12.2.1. Any violation of the Code of Conduct shall invite disciplinary action which may include punishments such as reprimand, disciplinary probation, fine, debarring from examinations, withdrawal of scholarship and / or placement services, withholding of grades and/or degrees, cancellation of registration and even expulsion from the Institute. In certain cases, the student may be barred from applying for a change of branch / programme.

12.2.2. Students found involved in any form of ragging are liable to severe disciplinary action including their expulsion from the Institute, and besides, they shall be punishable under the provisions of the Indian Penal Code or any other law in force. Involvement of a student indulging in any unseemly behavior towards new entrants will render themselves liable to strict disciplinary action.

12.2.3. Indulgence in violence by any student or group of students will render them liable to strict disciplinary action, including expulsion from the Institute.

12.2.4. In case of damage to the property of the Institute (Department / hostel or any other place), not only the cost of the damaged Institute property will be recovered from the student(s) concerned, but disciplinary action shall also be taken against the students involved in the damage.

12.2.5. If students feel victimized by the conduct, academic or personal, of any other member of the Institute, they may register a complaint to the HOD or DSW / Dean (Academic) or any other concerned functionary of the Institute.

12.2.6. In case of any complaint related to sexual harassment, the matter must be reported without loss of time to HOD, Dean of Students Welfare, any other functionary of the Institute, who will take appropriate action in the matter through the Chairperson of the Internal Complaints Committee (ICC) of the institute.

12.2.7. The Course Coordinator / teacher of a course may debar a student from the examination in which s/he is found to be using unfair means. Besides, the Institute may take any other disciplinary action. The Course Coordinator / teacher may take appropriate action against a student who misbehaves in her / his class. In all such cases, the Course Coordinator / teacher shall inform the Dean (Academic) about the matter with all the relevant details.

12.2.8. The DSW / Chief Warden / Warden of a hostel may reprimand, impose fine or take any other suitable measure against a student residing in the hostel, who violates either the Code of Conduct or the regulations pertaining to the concerned hostel. The Chief Warden / Warden shall take prior approval of DSW before imposing any fine.

12.2.9. In major cases of indiscipline, the DSW shall constitute an enquiry committee and forward the recommendation of the committee to the Chairman, Senate for his approval.

12.3. Standing Disciplinary rules for students

The following Standing Disciplinary Action may be applicable depending on the gravity of misconduct:

(a) Warning Letter

(b) Letter indicating Disciplinary action will be communicated to parents / concerned supervisor / HODs.

(c) Enhanced Attendance requirement up to 90%.

(d) Engaged in Community / Academic Support / Administrative support service for two hours per day up to forty hours per month.

(e) Restriction in participation in activities of Students clubs / Gymkhana / Festival etc.

(f) Restriction in Campus Placement activities.

(g) Disciplinary Probation for 6 months to entire period at stay at IIT(ISM).

(h) Suspended sentence (Disciplinary action is awarded, however, the action will be enforced only after any other incident of indiscipline is reported).

(i)   De- registered from a number of course ranging from one to full semester load.

(j)   Deduction of Fellowship based on report of indiscipline.

(k)   Expulsion from the institute.

Any other action not covered above may be taken with the approval of the Chairman, Senate.

Note: Ragging / Teasing / Molestation / Consumption of Alcohol / violence / Demeaning Institute's Reputation would be taken very seriously and strict disciplinary action would be taken which may lead to expulsion from the Institute.

The procedures and requirements stated in this manual, other than those in Chapters 2 and 5 may be waived in special circumstances by the Chairman Senate on the recommendation of the DPGC and the SPGC. All such exceptions shall be reported to the Senate.

Table A.1 Different PG Programmes of the Institute

S. No.	Department	Program
M.Tech.		
1	Applied Geology	Engineering Geology
2	Applied Geology and Applied Geophysics	Geoexploration
3	Applied Geophysics	Earthquake Science & Engineering
4	Chemistry	Pharmaceutical Science and Engineering
5	Mathematics & Computing	Data Analytics
6	Chemical Engineering	Chemical Engineering
7	Civil Engineering	Geotechnical Engineering
		Structural Engineering
8	Computer Science and Engineering	Computer Science and Engineering
		Information Security
9	Electrical Engineering	Power Electronics and Electrical Drives
		Power System Engineering
10	Electronics Engineering	Communication and Signal Processing
		Optoelectronics and Optical
		Communication Engineering
		RF & Microwave Engineering
		VLSI Design
11	Environmental Science & Engineering	Environmental Science & Engineering
12	Fuel and Mineral Engineering	Fuel Engineering
		Mineral Engineering
13	Management Studies	Industrial Engineering & Management
14	Mechanical Engineering	Machine Design
		Manufacturing Engineering
		Maintenance Engineering & Tribology
		Thermal Engineering
15	Mining Engineering	Geomatics
		Opencast Mining
		Mining Engineering
		Tunnelling & Underground Space Technology
16	Mining Machinery Engineering	Mining Machinery Engineering
17	Petroleum Engineering	Petroleum Engineering
MBA		
18	Management Studies	MBA
19	Management Studies jointly with M&C and CSE	Business Analytics
M.Sc.		
20	Chemistry	Chemistry
21	Mathematics & Computing	Mathematics & Computing
22	Physics	Physics
M.Sc.(Tech)		
23	Applied Geology	Applied Geology
24	Applied Geophysics	Applied Geophysics

Standing Committees of the Senate for the Smooth Governance and Implementation of the Regulations for the Postgraduate Academic and Research programmes of the Indian Institute of Technology (Indian School of Mines), Dhanbad

1 Senate Post Graduate Committee (SPGC)
1.1 Functions of SPGC

(i)   To consider and recommend the introduction of new courses of study / programme at the Post Graduate level;

(ii)   To suggest modification, phasing out or substitution of a PG course already approved by the senate. This includes the change in the course title, course content, course load (L T P), course credit, etc.

(iii)   To approve the admission of PG students through Common Offer Acceptance Portal, JAM, etc.;

(iv)   To admit the qualified candidates to different PG degrees;

(v)   To approve the format of Master's and Ph.D. Dissertation;

(vi)   To formulate the procedure for the constitution of the panel of Examiners for the evaluation/ examination of Master's and Ph.D. Dissertation, revision / modification of the Dissertation, etc.;

(vii)   To formulate the procedure for oral examination of the students in Seminar, etc.

(viii) All other such matters connected with PG Academics as may be thought fit either by the SPGC on its own or referred to it by the Senate / Chairman, Senate.

1.2. Constitution of SPGC
The SPGC shall consist of the following:

(i)   A Convener, to be appointed by the Senate from amongst its own members; Associate Dean (PG) Vice Chairperson

(ii)   All convenors of DPGCs, ex-officio members;

(iii)   Two members of the Senate, to be appointed by the Senate;

(iii)   Four members from the student community of the Institute- Two of whom shall be from Ph.D. programme and the other two from the M.Tech. and other Master's programmes of the Institute. All such members shall be nominated from amongst and by the members of the Student's Senate in the Post Graduate programmes.

(iv)   JR / DR / AR, Secretary

1.3. The tenure of the Senate members of the SPGC shall be two years with effect from the date of nomination. In case of any vacancy, any other member of the Senate shall be nominated for the remainder term of the vacancy.

1.4. The tenure of the Student nominees shall normally be one year with effect from the date of nomination. In case of any vacancy, any other member of the Senate (in the PG programme) shall be nominated by the Students Senate for the remainder term of the

vacancy. A nominee shall cease to continue as a member upon the expiry of one year or upon the termination of her / his registration, whichever is earlier.

1.5. The SPGC shall be fully responsible to the Senate which has the statutory jurisdiction on all academic matters, including those which have been dealt with by the SPGC, subject to the conditions imposed by the Act / Statutes.

2. Departmental Post Graduate Committee (DPGC)

2.1. There shall be a DPGC in each department conducting a postgraduate programme. For interdisciplinary PG programme involving more than one department, a DPGC shall also be set up. This committee shall be responsible for all matters connected with the PG programme(s) of the department or of an interdisciplinary programme.

2.2. The DPGC shall comprise the following:
(i) A Convener, (other than the HOD) to be nominated by the HOD in consultation with the faculty members of the department.
(ii) HOD- Ex-officio
(iii) Not less than four, but not more than eight faculty members, to be nominated by the faculty members in a departmental advisory committee (DAC) meeting.
(iv) Two student members, one of whom from the Ph.D. and the other from the M.Tech or other Master's programme of the department. The student members shall be nominated by the PG students of the department.
(v) For interdisciplinary PG programmes, the DPGC shall be formed by the Heads of the Department which are participating in the programme, in consultation with the faculty members of the participating departments. The student nominees on the committee shall be from amongst the PG students of the interdisciplinary programmes to be nominated by the PG student members of the Students Senate.

2.3. The term of membership of the faculty members, including the Convener, shall be two years with effect from the date of their nomination. About 50% of the faculty members of the DPGC shall vacate their membership and their vacancies shall be filled by new faculty members. In the first year of the constitution of DPGC, the list of members ceasing to continue as members shall be decided by draw of lots. The term of the student members shall be one year from the date of their nomination or until they cease to be students of the Institute, whichever is less. In case of vacancy in the membership, another person may be nominated for the remainder of the term of the vacancy and the manner of such nomination shall be the same as before.

2.4. The student members of the DPGC shall abstain from the meeting of the DPGC, when the matter pertaining to academic evaluation of one or more students is under consideration. This, however, does not preclude them from giving their opinion to the Convener of the DPGC apriori, before the meeting of the committee.

2.5. The DPGC shall be responsible to the DAC and the SPGC for its functions. The ambit of the committee shall cover all academic matters pertaining to the PG / Ph.D. programmes of the Department. The DPGC shall consider and give its opinion to the DAC / SPGC on such matters as may be referred to it.

2.6. The DPGC shall also deal with the academic matters raised by a PG student(s) and / or a faculty member(s).

Templates for the PG programmes of the Institute are presented below.

NOTE: *The Departments can add some more Practicals in various Semesters with total weekly contact hours capped at 23. Total Credits per Semester will also be capped at 54.*

Template for 2-Year M. Tech. Programme

Course No.	Course Name	L	T	P	C
	Semester - 1				
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	DC Course (Mathematical / Numerical methods / modelling / simulation use of Python / MATLAB / Mathematica etc. related to the department offered by respective department)	3	0	0	9
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	DC Practical 1	0	0	3	3
	DC Practical 2	0	0	2	2*
	Total	**15**	**0**	**5**	**50**

Course No.	Course Name	L	T	P	C
	Semester - 2				
	DC / DE Course	3	0	0	9
	DC / DE Course	3	0	0	9
	DE Course	3	0	0	9
	DE / OE Course	3	0	0	9
	DE / OE Course	3	0	0	9
	DC Practical 3	0	0	3	3
	DC Practical 4	0	0	2	2*
	Total	**15**	**0**	**5**	**50**

Course No.	Course Name	L	T	P	C
	Semester - 3				
	Thesis Unit 1	0	0	0	9
	Thesis Unit 2	0	0	0	9
	Thesis Unit 3	0	0	0	9
	Thesis Unit 4	0	0	0	9
	Total	**0**	**0**	**0**	**36**

Course No.	Course Name	L	T	P	C
	Semester - 4				
	DE / OE Course	0	0	0	9
	DE / OE Course	0	0	0	9
	Thesis Unit 5	0	0	0	9
	Thesis Unit 6	0	0	0	9
	Total	**0**	**0**	**0**	**36**

Template for 3-Year M. Sc. (Tech.) Programme

Course No.	Course Name	L	T	P	C
	Semester - 1				
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	DC Course (Mathematical / Numerical Course to be taught by the Department)	3	0	0	9
	DC Practical 1	0	0	3	3
	DC Practical 2	0	0	2	2
	Total	**15**	**0**	**5**	**50**

Course No.	Course Name	L	T	P	C
	Semester - 2				
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	DC Practical 3	0	0	3	3
	DC Practical 4	0	0	2	2
	Mapping Training*	**0**	**0**	**0**	**S / X**
	Total	**15**	**0**	**5**	**50**

*" Mapping Training" of two weeks duration, during winter vacation after I Semester, with credit counted in II Semester.

Course No.	Course Name	L	T	P	C
	Semester - 3				
	DC Course	**L**	**T**	**P**	**C**
	DC Course	3	0	0	9
	DC / DE Course	3	0	0	9
	DE Course	3	0	0	9
	OE Course	3	0	0	9
	DC Practical 5	3	0	0	9
	DC Practical 6	0	0	3	3
	Total	0	0	2	2
		15	**0**	**5**	**50**

Course No.	Course Name	L	T	P	C
	Semester - 4				
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	DE Course	3	0	0	9
	DE Course	3	0	0	9
	OE Course	3	0	0	9
	DC Practical 7	0	0	3	3
	DC Practical 8	0	0	2	2
	Mapping Training**	0	0	0	2
	Total	**15**	**0**	**5**	**52**

*** "Mapping Training" of two weeks duration, during winter vacation after III Semester, with credit counted in IV Semester.*

Course No.	Course Name	L	T	P	C
	Semester - 5				
	Thesis Unit 1	0	0	0	9
	Thesis Unit 2	0	0	0	9
	Thesis Unit 3	0	0	0	9
	Thesis Unit 4	0	0	0	9
	Total	**0**	**0**	**0**	**36**

****Student may opt for four (9 credit each) Thesis Unit / Internship (in India / Abroad) instead of regular DE / OE courses in the V Semester. One or two Practical may further be added, if the Department feels absolute necessity for them*

Course No.	Course Name	L	T	P	C
	Semester - 6				
	DE / OE Course	3	0	0	9
	DE / OE Course	3	0	0	9
	Thesis Unit 5	0	0	0	9
	Thesis Unit 6	0	0	0	9
	Summer Training / Internship	0	0	0	S / X
	Total	**6**	**0**	**0**	**36**

Template for 2 Year M.Sc. Programme

Course No.	Course Name	L	T	P	C
	Semester - 1				
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	DC Course (Mathematical / Numerical Methods Course to be taught by the Department)	3	0	0	9
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	DC Practical 1	0	0	3	3
	DC Practical 2	0	0	2	2
	Total	**15**	**0**	**5**	**50**

Course No.	Course Name	L	T	P	C
	Semester - 2				
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	OE Course	3	0	0	9
	DC Practical 3	0	0	3	3
	DC Practical 4	0	0	2	2
	Total	**15/12**	**0**	**5**	**50**

Course No.	Course Name	L	T	P	C
	Semester - 3				
	DC / DE Course	3	0	0	9
	DC / DE Course	3	0	0	9
	DC / DE Course	3	0	0	9
	DE Course	3	0	0	9
	DC Course	3	0	0	9
	DC Practical 5	0	0	3	3
	DC Practical 6	0	0	2	2*
	Total	**15/12**	**0**	**5**	**50**

Course No.	Course Name	L	T	P	C
	Semester - 4				
	DE / OE Course	3	0	0	9
	DE / OE Course	3	0	0	9
	Thesis Unit 1	0	0	0	9
	Thesis Unit 2	0	0	0	9
	Total	**6**	**0**	**0**	**36**

Template for 2- Year MBA Programme

Note: *The Departments can add some more Practical / Seminar hours in a Semester with total weekly contact hours capped at 23.*

Course No.	Course Name	L	T	P	C
	Semester - 1				
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	DC course (Mathematical / Numerical) Methods Course to be taught by the Department)	3	0	0	9
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	DC Practical 1	0	0	3	3
	DC Practical 2*	0	0	2	2*
	Total	**15**	**0**	**5**	**50**

Course No.	Course Name	L	T	P	C
	Semester - 2				
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	DC Course	3	0	0	9
	D Practical 3	0	0	3	3
	D Practical 4*	0	0	2	2*
	Total	**15**	**0**	**5**	**50**

Course No.	Course Name	L	T	P	C
	Semester - 3				
	DE Course	3	0	0	9
	DE Course	3	0	0	9
	Specialisation Elective 1	3	0	0	9
	Specialisation Elective 1	3	0	0	9
	Thesis / Project Unit 1	0	0	0	9
	Thesis / Project Unit-2	0	0	0	9
	Total	11	0	0	54

Course No.	Course Name	L	T	P	C
	Semester - 4				
	DE / OE Course	3	0	0	9
	DE / OE Course	3	0	0	9
	Specialisation Elective 3	3	0	0	9
	Specialisation Elective 4	3	0	0	9
	Thesis / Project Unit 3	0	0	0	9
	Thesis / Project Unit 4	0	0	0	9
	Total	11	0	0	54

Course Numbering System: Policies and Procedures

A Course Code (or course number) shall consist of **6 characters** containing **3 Alphabets** and **3 Numbers** as given below:

Course Code =ABC LXX

'AB': represents two-letter alphabetical code that reflects "Department" as per Table-1.

'**C**': represents single letter alphabetical code for "Type of Course" as per Table–2

'**L**': represents one-digit numeric code that indicates general level of difficulty of a course as defined in Table-3.

'**XX**': represents two-digit numeric code that represents a **sequential number** that reflect the serial number of "Type of course listed as Code-C (Table-2)" from first year to last year in the course structure and syllabus.

Table-1 [AB]: List of two-letter alphabetical codes for individual Departments

Serial No.	Departments	Department Code
1	Applied Geology	GL
2	Applied Geophysics	GP
3	Chemical Engineering	CH
4	Chemistry	CY
5	Civil Engineering	CE
6	Computer Science & Engineering	CS
7	Electrical Engineering	EE
8	Electronics Engineering	EC
9	Environmental Science and Engineering	ES
10	Fuel, Mineral and Metallurgical Engineering	FM
11	Humanities and Social Science	HS
12	Management Studies	MS
13	Mathematics and Computing	MC
14	Mechanical Engineering	ME
15	Mining Engineering	MN
16	Mining Machinery Engineering	MM
17	Petroleum Engineering	PE
18	Physics	PH
19	Physical Education /Co-curricular activities/ NSS/ NCC	CC

Table-2 [C]: List of single-letter alphabetical code for describing the nature of Course

Serial No.	Type of Course	Code for Course Type
1	Institute Core	I
2	Department Core	C
3	Department Elective	D
4	Open Elective	O
5	Engineering Science Option (ESO) Elective	E
6	S / X course (Seminar, Field work, Summer / Winter Training, Co-curricular Activities)	S

Note: *Practical, Viva-voce etc. comes under Dept. Core*

Table-3[L]: Represents one-digit numeric code that indicates its general level of difficulty for an Undergraduate (UG), postgraduate (PG) or a Ph.D. level course.

S.No	Course level no.	Course levels details
1	0	For Preparatory level / Summer / Winter Training, Internship, and Co-curricular Activities etc.
2	1	Basic UG level: All introductory theory / practical courses for UG students, offered for first year students as Institute Core Course.
3	2	a) Institute core courses in 2nd Year UG b) All Engineering Science Option (ESO) offered in 2nd year UG c) All department core courses offered to 2nd year UG.
4	3	a) All Department Core courses offered to 3rd year UG. b) All Department elective courses offered to 3rd year UG
5	4	a) All Department Core courses offered to 4th year UG. b) All Department elective courses offered to 4th year UG
6	5	PG & Ph.D. level a) All *Dept. core courses* offered to Ph.D. & PG programs b) All *open elective* courses offered to Ph.D. & PG programs c) All Department *electives* offered to Ph.D. & PG programs
7	6	Advanced / basic level Online Course / Self Study Course or Open Course or MOOC (massive open online course).

Note:
- *Codes 1 to 4 are reserved for UG courses. Thus, 100-199, 200-299, 300-399 and 400 -499 series courses are UG courses.*
- *For integrated M.Tech., the first 4 years will be considered as UG and 5th year will be treated as PG course.*
- *Codes 5 is reserved for PG and Ph.D. courses. Thus, 500-599 series courses are PG and Ph.D. courses.*
- *Code 6 is reserved for online courses. Thus, 600-699 series courses are online courses.*

Grading System

The course having 'F' grade will be considered as '0' (Zero) credit for SGPA and CGPA/OGPA calculation. Once the student clears the backlog course, CGPA/OGPA will be re-calculated based on the passing grade. The attendance defaulter in a course will be awarded '999' in the field of total marks by the instructor.

The Senate in its 11th Meeting modified the modalities for grading.

1. If the student strength is more than 50, Table A.1 may be followed.

2. If the student strength is less than or equal to 50, Table A.2 may be followed.

3. However, if the number of students is too less ($\leq$ 15), it may be left on the decision of the course instructor. However, here too the grading should be based on the average class marks, rather than absolute grading. For class strength $\leq$ 15, the minimum passing marks should also be based on class average and not on absolute marks as in the earlier system.

4. For the non-theory sessional courses, grading will be made free template of any template mentioned above, like point 3.

<table>
<tr><td colspan="2">**Table A.1**</td><td colspan="2">**Table A.2**</td></tr>
<tr><td colspan="2">For class strength > 50</td><td colspan="2">For class strength $\leq$ 50</td></tr>
<tr><td>Grades</td><td>% of students</td><td>Grades</td><td>% of students</td></tr>
<tr><td>A+, A</td><td>Top $(20\pm5)\%$</td><td>A+, A, B+</td><td>Top $(45\pm5)\%$</td></tr>
<tr><td>B+, B</td><td>Next $(40\pm5)\%$</td><td>B, C+, C</td><td>Next $(45\pm5)\%$</td></tr>
<tr><td>C+, C</td><td>Next $(30\pm5)\%$</td><td>D, F</td><td>Next $(10\pm5)\%$</td></tr>
<tr><td>D, F</td><td>Next $(10\pm5)\%$</td><td></td><td></td></tr>
</table>

The above grading system will be effective from Monsoon Semester 2019-20.