

Manual of PROCEDURES & REQUIREMENTS for MSc 2-Year & MSc-PhD (Dual Degree) Programmes

This manual is applicable for students admitted in these programmes from Y23 and onward batches.

(Updated version upto 16 April 2025)



INDIAN INSTITUTE OF TECHNOLOGY KANPUR

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Chapter 1

Introduction

The objectives of the Master of Science 2-Year and Master of Science-Doctor of Philosophy (Dual Degree) programmes at IIT Kanpur are:

- To provide the highest level of education in technology and science, and to produce competent, creative, and imaginative engineers and scientists
- To promote a spirit of free and objective enquiry, and development of knowledge in different disciplines
- To produce highly skilled technologists and scientists with well-honed managerial and entrepreneurial skills having team spirit and leadership qualities
- To increase student participation in nation building through technology development that is sensitive to local needs

This manual sets out the procedures and requirements of the MSc 2-Year and MSc-PhD (Dual Degree) Programmes of study that fall under the purview of the Senate Post-Graduate Committee (SPGC), which include Ph.D, M.Tech, MSR, DIIT, M. Des, and MBA. Following are the committees and administrative units in the institute that are directly concerned with the above programmes:

Departmental Postgraduate Committee (DPGC): Each academic department constitutes this committee which consists of a Convener nominated by the Head of the department (in consultation with the faculty of the department), Head of the department, four to eight members of the faculty, and two student representatives. The student representatives are nominated by the postgraduate students of the department for a one-year period. The tenure of faculty members is two years, with half of them retiring each year (as decided by the procedure adopted by the department). The DPGC:

- Advises the students about their curriculum
- Advises them about academic opportunities
- Monitors the progress of academically weak students
- Handles any problem faced by students in their academic programmes

Senate Postgraduate Committee (SPGC): This is a standing committee formed by the Senate to look after all the issues regarding institute-wide PG programmes. It makes recommendations to the senate on all academic issues including policy matters and specific problem instances related to PG students and PG programmes. Its constituents are the conveners of various DPGCs, PPGCs (Programme Post Graduate Conveners) where applicable, last SPGC chairperson (exofficio), one Senate nominee, and four student representatives nominated by Student Senate. The chairperson is elected by the constituent members. The SPGC constitutes a subcommittee, namely, Academic Performance Evaluation Committee (APEC). The chairperson of this subcommittee is nominated by the SPGC chairperson, and s/he, in turn, constitute a five-member committee from the faculty members of the SPGC in consultation with SPGC chairperson. The APEC evaluates the academic performance of MSc 2-Year and MSc-PhD (Dual Degree) (MSc Part) students at the end of each semester and makes recommendations regarding their further Programme of studies and action to be taken in the case of academically deficient students. This subcommittee make the recommendations to the SPGC. SPGC forwards the recommendations of the APEC to the Senate. Once the APEC report is approved by the Senate, SPGC chairperson forwards the same to the Academic Counselling & Guidance (ACG) Centre for continuous monitoring and provide academic counselling to the students. ACG counsellors will work in coordination with, and at the advice of respective DPGCs.

Chapter 2

Programmes of Study

2.1 Programmes for New Students

2.1.1 Admission through JAM:

IIT Kanpur offer admission in following academic programmes through JAM:

- i. Master of Science 2-Year programme in CHEMISTRY, MATHEMATICS, PHYSICS and STATISTICS
- ii. Master of Science-Doctor of Philosophy (MSPD Dual Degree): This programme is currently offered only in PHYSICS

2.1.2 Admission through GATE/JAM:

IIT Kanpur offer admission in following academic programmes through GATE/JAM:

- i. Master of Science 2-Year programme in ECONOMICS

Chapter 3

Admission Procedure and Rules

3.1 For New Students

3.1.1 MSc 2-Year and MSPD Programmes

(For departments detailed at 2.1.1 above)

- i. Admission is done once a year in the month of July through the Joint Admission Test (JAM) for MS conducted on an all India level. The minimum academic qualification for admission is a BSc degree (or equivalent) from a recognized university. The procedures and other requirements for admission are specified in the JAM Information Brochure brought out every year.

3.1.2 MSc 2-Year

(For departments detailed at 2.1.2 above)

- i) Students from both Economics and non-Economics backgrounds are admitted into this program. The minimum eligibility criterion is first class in the applicant's undergraduate degree. Applicants who satisfy this criterion will have to first take the GATE or JAM examination either in Economics (GATE-HSS (Economics) or JAM-Economics) or in any other discipline. The initial shortlisting of students will be done based on their GATE/JAM scores. Candidates who meet a percentile-based cut-off, will be invited to appear for a written examination to be conducted by the Department of Economic Sciences. The procedures and other requirements for admission are specified on the webpage of the Department of Economic Sciences.

3.1.2 Reservation

Admission against Reserved Seats: Details of the reservation of seats among various categories as approved by the Board of Governors subject to the current policy formulated from time to time by the Government of India may be found with the GATE/JAM office. The admission process for the reserved seats is as stated below:

- 1) SC and ST Candidates' reserved seats are filled on the basis of GATE/JAM qualifying norms specified for them.
- 2) Other Backward classes (OBC) candidates' (Not belonging to creamy layer) reserved seats are filled on the basis of GATE/JAM qualifying norms specified for them.
- 3) PwD (Person with Disability) Candidates' reserved seats are filled on the basis of GATE/JAM qualifying norms specified for them. In case these reserved seats remain vacant, other candidates in their respective categories are offered admission.

3.2 Validity of Admission and Its Cancellation

Admission to any postgraduate programme requires that the applicant fulfill all three of the following conditions:

- i. Be eligible
- ii. Go through the laid down admission procedure
- iii. Pay the prescribed fees

All admissions to postgraduate programmes should be formally approved by the Senate.

All students admitted provisionally or otherwise to any programme shall submit copies of their mark sheets, provisional certificates, etc. of the qualifying examination and other documents by the last date specified for the purpose in the Academic Calendar. The Senate can cancel the admission of any student who fails to submit the prescribed documents by the specified date or to meet other stipulated requirement(s). The Senate may also cancel admission at any later time if it is found that the student had supplied false information or suppressed relevant information while seeking admission.

Chapter 4

Academic Session

4.1 Dates

The academic session normally runs from the end of July in one year to the middle of July in the next year. It is divided into three parts:

Semester I: From the fourth week of July to the last week of November

Semester II: From the last week of December to the last week of April

Summer Term (not a regular semester): From the middle of May to the middle of July

4.2 Duration

Each of the two regular semesters consists of about eighteen weeks including one week of mid-semester recess. About ten working days of each semester are used for the end-semester examination and one week period during the semester is utilized for the mid-semester examination. The first day of classes in a regular semester and the first day of the end-semester examination should normally be a Monday. The equivalent of fourteen weeks is devoted to teaching which excludes all holidays and days spent on both the examinations, in each semester. The Summer Term consists of eight teaching weeks, not including holidays and examinations days.

4.3 Academic Calendar

The dates of all academic activities including those of registration, late registration, last date of document submission, first and the last days of classes, add-drop of courses, examinations, make-up examination, deadline for final grade submission, conversion of I grade, mid-semester recess, and vacation are published in the Academic Calendar every year by the DoAA office. The Academic Calendar is available on the DoAA website.

Chapter 5

List of Courses

The entire curriculum is divided into several parts:

Open electives (OE): These are elective courses that students may take from any department/programme in the Institute. The only condition is that they should not do more than one course on the same topic and at the same level of coverage. They are meant to widen the student's knowledge beyond the parent discipline.

Departmental compulsory courses (DC): This is the compulsory set of courses for students in their parent discipline.

Departmental elective (DE): These are elective courses that students have to take from within their parent discipline.

The details of the postgraduate courses may be found in the course templates available on the DoAA website.

5.1 MSc 2-Year Programme

This programme requires students to take a set of compulsory courses designed to lay a strong foundation in the discipline. In addition, a few elective courses are to be credited to develop and pursue an area of specialization. In some departments there is a project or a thesis, while in other departments projects may be replaced by elective courses. In some programmes, seminars are also included in the curriculum. The templates of MSc 2-Year programme are available on the DoAA website.

5.2 MSPD Dual Degree Programme

Students are required to take a set of compulsory courses designed to lay a strong foundation in the discipline. In addition, some elective courses are to be credited to develop and pursue an area of specialization. The students are initiated into research methodology quite early. The programme is aimed to provide young motivated individuals with rigorous training, desired level of understanding and scientific maturity and solid base at an early stage to enable them to pursue a research career. The templates of MSPD Dual Degree programme are available on the DoAA website.

5.3 List of Courses

Details of various courses for postgraduate programmes being offered by various departments are contained in the COURSES OF STUDY bulletin, published periodically by the Institute, and available on the DoAA website.

Chapter 6

Registration

Each admitted student is required to register before the commencement of each semester/summer to study during that period in the Institute. New students who await the final result of the qualifying examination are allowed to register provisionally on submission of a certificate from their last institution stating that they have appeared in the final examinations (both theory and practical). Such students are required to submit documents of having passed the qualifying examination by the last date given in the Academic Calendar, failing which their admission shall be cancelled.

There are two parts to the registration process: academic registration and administrative registration. The responsibility for completing both parts of this process rests with the students. If a student fails to complete the registration process within the specified time, then her/his programme shall be terminated by the Senate.

6.1 Academic Registration

This involves the selection of courses consistent with the specific credit requirements detailed in the programme template and subject to some rules described below. Within these rules, students have flexibility of choice regarding which courses to do within a specific semester. The academic registration process gets completed after the DPGC convener approves the registration form. A registration is considered valid only if there is no time-table conflict between the courses for which the student has registered.

6.1.1 Pre-Registration

Every student must pre-register for the next semester at the time specified in the Academic Calendar for this purpose within the current semester. Pre-registration is done entirely online. Students may directly register for compulsory core courses at the time specified in the template. For core courses in semesters other than those specified in the template as well as all other courses, students must make an online request to the concerned course instructor. If the instructor accepts the request, students may add the course to their registration form. Otherwise, they must make a request for other course(s). Students may select the number of courses permitted by course load rules, while ensuring that all pre-requisites have been completed and there is no timetable clash amongst the courses. Courses with a timetable clash will be dropped automatically from students' online registration form. When all the courses they plan to do in the next semester have been accepted by the concerned instructors, students need to submit the online registration form for the approval of the DPGC.

If due to an unavoidable reason, a student is unable to do academic pre-registration during the specified period, the student can do it on the day of registration as specified in the academic calendar. Such students will be imposed a fine of Rs.1000/- (subject to change without notice) for not doing the pre-registration. However, Chairperson, SPGC can waive this fine on bona fide reasons.

6.1.2 Final Registration

Academic pre-registration is compulsory for all students. However, if there is a problem with a student's pre-registration, the student can register online for the courses on the day of final registration as specified in the academic calendar. Students may use this option only under the following circumstances:

- i. Their pre-registration has been cancelled.

- ii. They did not do pre-registration in the previous semester. In such cases, the students will be imposed a fine of Rs.1000/- (subject to change without notice) for not doing the pre-registration. However, Chairperson, SPGC can waive this fine on bona fide reasons.

Students who were allowed to take semester leave on medical grounds in the previous semester, must appear before the Institute's Medical Board and get a medical fitness certificate for completing registration in the current semester. Failure to do will result in cancellation of registration.

6.1.3 Add-Drop of Courses

Students may add or drop courses using the online registration system during the period specified for this purpose in the Academic Calendar. Each add/drop request needs to be accepted by the concerned course instructor. Once an add/drop request has been accepted, students need to change their online registration form accordingly and submit it to the DPGC for final approval.

Students may also request to drop course(s) up to about four weeks prior to the last date of classes (exact date is specified in Academic Calendar) with the following conditions:

- a) Dropping of course(s) should not result in the net registration becoming less than the specified minimum number of credits for a semester.
- b) The request to drop course(s) must be approved by the Instructor-in-charge of the course and the Convener, DPGC.

Adding of courses is not permitted in the summer term. However, students may drop a course up to two weeks prior to the last day of classes (exact date is specified in Academic Calendar).

6.1.4 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 preventing her/him from attending the course or if it is found that s/he is not eligible to register for that course for any other reason.

An instructor of a course may also recommend cancellation of registration of any student in that course for reasons such as absence from classes without proper authorization. The instructor may recommend such de-registration of students up to four weeks prior to the last day of classes. The instructor should send de-registration recommendations to the SPGC Chairperson. The same information should also be sent to the concerned DPGC. The SPGC Chairperson's decision in each case shall be conveyed to the instructor and the student at least two weeks prior to the last day of classes.

6.1.5 Academic Load in Regular Semesters

Each course carries a weightage in terms of credits indicating the approximate number of contact hours (lectures and tutorials and/or laboratory hours) as well as self-study hours per week required for the course. Credit calculation for a course is done by the following formula: $C=3L+2T+P+A$, where C is the number of credits, L is the number of lecture hours, T is the number of tutorial hours, P is the number of laboratory hours, and A is the additional number of hours needed for assignments and projects, as decided at the time of approval of the course.

Normal academic load, in a regular semester, is fifty credits per semester. Students may register for up to 30 percent less or 30 percent more credits than the normal load. That is, students may register for 35-65 credits under consultation with the DPGC.

A student register for a maximum of 27 credits and minimum of 9 credits in the summer term.

6.1.6 Academic Load in Summer Term

Students may register for a maximum of 27 credits in a summer term when advised by the DPGC. The summer term is not a regular semester and only academically deficient students (who have low CPI and/or less credits than advised by the template till that point in the programme) and such students who are short of only one or two courses to complete all graduation requirements may register during this period. For core courses, only students with failed backlog may be considered for summer registration. In case any vacancies are left in the courses being offered during the summer term once the requirements of the above categories of students are fulfilled. Other students may register for these courses to fulfill some of their graduation requirements in advance.

6.1.7 Cancellation of Registration

If a student is found to be absent from all academic activities for more than 20 working days (not necessarily contiguous) in a semester with or without sanction, then his/her registration from all the courses in that semester will be cancelled. The corresponding number of days of absence for a summer term is 10. In such cases, the result is a forced semester drop.

6.2 Administrative Registration

This involves two steps:

- i. Payment of fees and clearance of outstanding dues (if any)
- ii. Giving biometric attendance on the final registration day at the venue designated by the DOSA office

6.3 Late Registration

Students are expected to complete the registration process (both academic and administrative) by the date specified in the Academic Calendar. In exceptional circumstances they may be allowed to complete the process by the date of late registration after paying the late registration fee. This fee may be waived if prior permission for late registration is obtained. Besides, it may also be waived in a case of unexpected events, such as illness or family emergency, when it may not be possible to take prior permission.

Chapter 7

Teaching and Evaluation

7.1 Teaching

7.1.1 Medium of Instruction

The medium of instruction is English.

7.1.2 Offering a New Course

Any faculty member can offer a new course by submitting a new-course proposal in the format described in the proposal for new courses form available from the DoAA website. The proposal must be submitted to the concerned DPGC convener. The convener must circulate the proposal among the entire academic staff of the institute through email, requesting them to send any feedback to the course proposer and/or the DPGC convener. Three weeks after the proposal is circulated, the course proposer should make suitable amendments based on the feedback received. Finally the modified proposal, details of the feedback, and details of how they were addressed must be resubmitted to the DPGC convener. The convener must forward the same with the DPGC comments, if any, to the SPGC chairperson. A new course can be offered only if it has been approved by the SPGC before the pre-registration for the concerned semester begins.

7.1.3 Courses Offerings for a Given Semester

The list of courses to be offered by a department / programme in the next semester is finalized before the pre-registration period in the current semester by the Head in consultation with the faculty. For the summer term, this list is finalized before the registration date for the summer term. The courses to be offered are decided by taking into consideration all the requirements of the programme templates.

7.1.4 Duration of Courses

Courses may be for a full semester or half a semester. A full semester course typically has 40 lectures of 50 minutes each or any other combination of equivalent time. Half semester courses, also called modular courses, are taught in half of the above time.

7.1.5 Conduct of Courses

Each course is conducted by the Instructor-in-charge with the assistance of the required number of instructors, tutors, and teaching assistants. The Instructor-in-charge is responsible for conducting the course, holding the examinations, evaluating the performance of the students, awarding and submitting the grades on the grade portal.

7.1.6 Attendance in Class

If a student remains absent from a class without sanctioned leave, then the course instructor may recommend de-registration of the student from the course.

If a student is found to be absent from all academic activities for more than 20 working days (not necessarily contiguous) in a semester, with or without sanction, then his/her registration for all the courses in that semester will be cancelled resulting in a forced semester drop.

If a student is found to be absent from all academic activities in a semester without authorization for more than 30 working days contiguous or does not appear, without a compelling reason, for the end-semester examinations in all the courses in which she/he is registered, then her/his programme will be terminated.

7.1.7 Work-Week and Class Timings

The institute operates on a 5-day per week schedule. Classes are held Monday through Friday from 8am to 6:30pm. No classes are scheduled on a regular basis outside this time period. Lecture / tutorial classes are usually scheduled in 50 minute slots, with some 75 minute slots for PG-level courses. Lab classes are usually scheduled in 180 minute slots. No classes are usually held on Saturdays and Sundays, unless announced by DoAA as make up for some holiday.

Extra classes may be scheduled by an instructor in case the regular schedule does not allow for 40 hours of instruction (in a lecture course), and/or if an instructor has to miss a regularly scheduled class. In such cases, the instructor may schedule an extra class in consultation with the students registered in the course at a time mutually convenient to everyone. Extra classes to hold a quiz or a laboratory test should not be inconveniently scheduled for any concerned student.

7.2 Evaluation and Performance Feedback

The evaluation of students' performance in a course is a continuous process. Students' performance is evaluated through a mid-semester examination, an end-semester examination, quizzes (short-tests), assignments, laboratory work (if applicable), etc. The weightage of each component to determine the final grade in the course is decided by the course instructor who must inform the students about these weightages at the start of the semester.

7.2.1 Examinations

The mid-semester and end-semester examinations are scheduled by the Dean of Academic Affairs during the periods specified in the Academic Calendar.

A modular course has only one examination. It is held during the mid-semester examination period if the course is taught during the first half of the semester. Otherwise this exam is held during the end-semester examination period.

7.2.2 Quiz, evaluated assignments.

To ensure the principle of continuous evaluation, it is recommended that core course instructors conduct at least two quizzes/tests, one before the mid-semester examination and other between the mid-semester and the end-semester examination. In a core modular course, it is recommended to have at least one quiz since it has only one examination. Schedule and number of quizzes for other course will be decided by the instructor.

7.2.3 Make-up Examination

If a student, for bona fide reasons such as illness, etc., fails to appear in the end-semester examinations in one or more course(s), s/he may make a request to the SPGC Chairperson for a make-up examination within a day of the last scheduled examination. Such a request must be made on the prescribed form available on the DoAA site, giving reasons for the failure to appear in the examination along with documents supporting the given reason, duly forwarded by the DPGC. In case of illness, a certificate from the Medical officer of the Institute Health Center should be submitted.

If a student fails to appear in a mid-semester examination or quiz, or to submit an assignment etc., it is entirely up to the Instructor to decide whether or not to provide a make-up opportunity. This rule applies even if the student's inability to do the work at the scheduled time was a result of illness and/or sanctioned leave.

7.2.4 Results of Examinations and Quizzes

The final grades of all the students in a course must be submitted to the DoAA within 72 hours, 96 hours, and 120 hours after the examination for courses with class strength up to 50, between 51 and 150, and above 150 respectively. Instructors are required to show the graded answer books for all examinations/quizzes/assignments as soon as possible (within 14 days of the last date of exams for the mid-semester examination, and within the prescribed period as indicated above for the end-semester examination). It is the student's responsibility to be available at the time specified by the instructor for this purpose. Answer books of the final examination must be returned to the instructor after the students see them, and saved by the instructor for a minimum of six months.

7.2.5 Letter Grades and Weightages

At the end of the semester/summer term, students are awarded a letter grade in each course by the concerned Instructor-incharge taking into account their performance in various examinations, quizzes, assignments, laboratory work (if any), etc., besides regularity of attendance in classes. In some courses such as projects, seminars, physical education etc. Satisfactory (S) / Unsatisfactory (X) grade is awarded. Grade 'X' implies that the student has failed the course. S/X grades are not used for the calculation of CPI/SPI.

Each department has its own procedure for the award of grades in project courses.

There are ten letter grades: A*, A, B+, B, C+, C, D+, D, E and F. The letter grades, their descriptions, and the numerical equivalents on a 10-point scale (called Grade Points) are as follows:

Grade	Grade Point	Description
A*	10	Outstanding
A	10	Excellent
B+	9	Very Good
B	8	Good
C+	7	Fair
C	6	Satisfactory
D+	5	Marginal
D	4	Pass
E	0	Exposure
F	0	Fail
S	-	Satisfactory
W	-	Waiver
X	-	Unsatisfactory

A* grade is intended to recognize and encourage outstanding performance in a class. This grade is to be awarded sparingly.

E grade indicates that the student has failed the course but s/he may be allowed to register for a course for which this course is a pre-requisite, even before this course is repeated and passed. This facility of waiver of pre-requisite requirement is subject to the approval of the instructor of the course (of which this course is pre-requisite) and the concerned DPGC.

Two additional letters, namely, 'I' and 'W', which stand for Incomplete and Waiver respectively, may be given for a course. These are not grades.

Incomplete: A student may be awarded the letter I (Incomplete) in a course if s/he has missed, for a genuine reason, a minor part of the course requirement but has done satisfactorily in all other parts. An 'I' must, however, be converted by the Instructor-in-charge into an appropriate letter grade and communicated to the postgraduate office by the last date specified in the Academic Calendar. Any outstanding 'I' after this date shall be converted automatically into an F grade. In case of project courses 'I' may not be awarded for mere non-completion of project due to lack of facility etc.

Waiver: The letter 'W' is awarded when a student earns credits at another institution and the SPGC decides to waive similar credits from her/his programme of study at IIT Kanpur. The grade earned in lieu of which the waiver is granted is not to be used for computation of SPI/CPI.

7.2.6 Semester Performance Index

The Semester Performance Index (SPI) is a weighted average of the grade points earned by a student in all the courses credited in a semester. If the grade points associated with the awarded grades to a student are $g_1, g_2 \dots$ in a given semester and the corresponding course credits are c_1, c_2, \dots , then the SPI for that semester is calculated by multiplying the number of credits for each course with the grade point for that course, adding these up for all the courses registered in the semester, and then dividing this sum by the total course credits for the semester:

$$SPI = \frac{\sum_{i \in SEM} (c_i \times g_i)}{\sum_i (c_i)}$$

S and X grades shall not be considered in the computation of the SPI.

7.2.7 Cumulative Performance Index

The Cumulative Performance Index (CPI) indicates the overall academic performance of a student. It is computed in the same manner as the SPI, except that here we consider all the courses registered up to and including the latest completed semester/summer term.

$$CPI = \frac{\sum_{i \in ALL} (c_i \times g_i)}{\sum_i (c_i)}$$

Whenever a student is permitted to repeat or substitute a course, the new letter grade replaces the old letter grade in the computation of the CPI, but both grades are mentioned in the Grade Report.

7.2.8 Declaration of the Final Result

The grades earned by a student in a semester/summer term shall be communicated to her/him after ten days of the last date for submission of grades. A printed copy of the Grade Report will be issued to each student after each semester/summer term. A duplicate copy, if required, can be obtained on payment of the prescribed fee.

7.2.9 Withholding of Grades

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

7.2.10 Change of an already awarded grade

A letter grade once awarded shall not be changed unless the request is made by either the Instructor-in-charge or another Instructor/tutor of the course, and is approved by the Chairperson, Senate. Any such request for a change of grade must be made within six weeks of the start of the next semester on the prescribed form available from the DoAA website, with all relevant records and justifications.

Chapter 8

Academic Requirement and Degree Eligibility

8.1 Minimum and Maximum Duration

The minimum duration requirements and maximum duration allowed for MSc 2-Year and MSc-PhD (Dual Degree) programmes are as under:

Academic Programme	Minimum Duration (Semesters)	Maximum Duration ^{&}
MSc 2-Year	4	1.5 times of the normal duration
MSc-PhD (Dual Degree)	8	1.5 times of the normal duration

The minimum and maximum duration allowed will include any semester(s) in which a student is registered at IITK.

[&]A student will not be allowed to register beyond the maximum duration period with residential facility.

The Senate may grant relaxation in the prescribed minimum residence to a student in view of the work done by her/him in the Institute or elsewhere, to the extent considered appropriate according to the merit of the case.

8.2 Minimum Academic Requirement

In order to graduate, a student must clear all courses and credits as per the respective programme template, satisfying the minimum credit requirement in each course category.

8.3 Graduation

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

- Met the minimum duration and academic requirements outlined in Sections 8.1 and 8.2
- Satisfied additional requirements, if any, of the concerned department
- Paid all dues to the Institute and the Halls of Residence
- No case of indiscipline is pending against her/him

8.4 Award of Degrees

A student who completes all the graduation requirements specified in Section 8.3 is recommended by the Senate to the Board of Governors (BOG) for award of the appropriate degree in the ensuing convocation. The degree can be awarded only after the BOG accords its approval.

8.5 Withdrawal of the Degree

Under extremely exceptional circumstances, where gross violation of graduation requirements is detected at a later stage, the Senate may recommend to the Board of Governors withdrawal of a degree already awarded.

Chapter 9 Inadequate Academic Performance

9.1 Mechanism to Address Inadequate Performance

A student is expected to maintain at least a minimum level of performance at all times. The academic performance of each student under MSc 2-Year and MSc-PhD (Dual Degree) (MSc Part) programme is reviewed by the Academic Performance Evaluation Committee (APEC) at the end of each regular semester. A deficient student, i.e., student placed under Category C and D will be counselled by the ACG.

9.2 The criteria for categorization of students is as follows:

S. No.	Categorization	Condition
1	Category - A	$CAR \geq 50$
2	Category - B	$50 > CAR \geq 40$ and at least one backlog
3.	Category - C	$40 > CAR \geq 30$
4	Category - D	$30 > CAR$

$CAR = TC/N$

Where, TC = Total credits and N = Number of semesters student registered (This does not include the Summer Term)

9.3 Programme Termination

The institute follows a NO-TERMINATION policy on academic grounds which means a student will not be terminated due to inadequate academic performance. However, there are other compelling reasons where the academic programme of the student can be terminated, for example, unauthorized absence, not completing the registration process, S-SAC recommendation etc.

9.4 Appeal against termination

A student whose programme is terminated may appeal to the Chairperson, Senate, for re-reinstatement in the programme. The Senate shall take a final decision after considering all available inputs. A student may re-appeal even after a previous appeal has been rejected. However, the Senate may not entertain any re-appeal for review unless substantial additional information is brought to its notice.

Chapter 10

Rules Governing Change, Addition in the Programme

10.1 Admission and conversion Procedure

- A) **New Students:** Admission to the Programme is strictly through the Joint Admission Test for Masters (JAM), according to the All-India Rank (AIR) and the preference given by the candidate. All admission rules are identical to MSc (2-year) programme.
- B) **IITK MSc (2-year) Students:** Students admitted in the MSc (2-year) programme may apply for MSPD programme in departments where it is available, subject to fulfilment of eligibility criteria as mentioned below and availability of seats in the programme.
- (i) *Eligibility:* CPI of 7.0 or more and no backlogs at the time of applying.
- (ii) *Application Process:* Students may apply at the end of their third semester (but before the date of registration for the fourth semester). Students should include two letters of recommendation with the application. At least one of the letters should be from an instructor with whom the student has done a course at IIT Kanpur. Applications shall be considered by a selection committee, to be set up by the head of the department, and approved by the Chairperson, SPGC. The recommendations of the selection committee shall be approved by SPGC.

10.2 Academic Roadmap

1) From the perspective of whether MSc or PhD rules apply, the time spent in completing the MSPD's first 3 years of approved coursework is split into two parts:

A) *First two years of coursework:* During this period an MSPD student will be governed by the rules meant for MSc (2-year) students (except for the course template, see Chapter 16).

B) *Third year of coursework:* MSPD students migrate to the PhD part of the programme provided they have cleared all the courses of the first four semesters as per MSPD template with at least 6.0 CPI. Students who have converted from MSc (2-year) to MSPD are allowed to have PHY563 and PHY566 mapped to PHY501 and PHY502. Furthermore,

- (i) Till a student migrates to PhD part, they will be governed by MSc (2-year) rules (except for the course template). After migration, the student will be governed by the rules meant for the PhD students (except for the course template).
- (ii) When a student migrates late (after fifth or later semester), then the already done third-year-courses in the template should be counted towards their PhD coursework.

2) If a student completes the 3-year coursework but is still unable to migrate (CPI less than 6.0), then the student is allowed to either (a) exit the programme with an MSc (2-year) degree or (b) continue doing extra elective courses to improve the CPI to 6.0. The maximum duration in such cases is (1.5 times of normal duration) 9 semesters.

3) MSPD student will get an MSc (2-year) degree after successful completion of the full three-year-course-template of MSPD program.

10.3 Summer Term

Until MSPD students migrate to the PhD part of the programme, they are expected to spend a minimum period of 8 weeks during every summer term doing a project on campus with a faculty member of the Department of Physics, IIT Kanpur. A co-supervisor from within IITK or outside IITK is allowed. However, if they spend time outside IITK for the project, they will not get funding from two sources. A student who does not do such a project is not eligible to receive any assistantship during the summer term.

10.4 Financial Assistance

1) All MSPD students are eligible to get a financial assistantship of Rs.6000/- p.m. in the first semester. For subsequent semesters, they must have a minimum CPI of 6.5 to avail this assistantship. For a student with a CPI of less than 6.5, the assistantship will be discontinued until her CPI rises to 6.5 or above and shall be resumed in the following next semester, provided that they have not converted/migrated as PhD student in the meantime.

2) If an MSPD student has not converted/migrated as PhD student at the end of four semesters, due to reasons such as backlogs and semester drops, and the CPI is not less than 6.5, then the assistantship, which had earlier been withheld, may be awarded. The decision will be taken on case-to-case basis, depending on the merit.

3) Under no circumstances shall a student receive assistantship for more than a total of four semesters.

Chapter 11

Leave of Absence

11.1 Mid-Semester Recess and Vacation

Students are entitled to avail the mid-semester recess, winter and summer vacations as specified in the Academic Calendar without seeking any permission provided in their course template.

11.2 Medical/Short Leave

Leave of absence during the semester is discouraged for all registered students. However, for bona fide reasons, a student may apply for leave using the online registration system. The extent of this leave for medical reasons can be a maximum of ten working days. A maximum of five working days of leave may also be granted for any other valid reason. In no case may a student be granted leave of absence in excess of fifteen working days in a semester.

The leave of absence in the summer term shall correspondingly be five working days (medical) and three working days (others), i.e., eight working days total.

Process to apply for leave:

Students are required to apply for leave of absence online through the Pingala portal. They are required to upload the supporting document(s) substantiating the reasons for leave. For availing the Short Leave, the application must be submitted on the Pingala portal prior to availing the leave. It is desirable that student should inform the PG Office or the DPGC Convener or the Chairperson, SPGC as soon as possible in case of medical reasons.

11.3 Temporary Withdrawal/ Semester Leave

- i. A student may be allowed a leave of absence for a whole semester (temporary withdrawal) for bona fide 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 anytime during the semester.
- iii. Application for temporary withdrawal should be addressed to the Chairperson, SPGC, and routed through the DPGC convener. It should be submitted to the Postgraduate office with all supporting documents such as a medical certificate (in original) in case of an illness.
- iv. 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 her/his 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 Board certifies the fitness. In the event that the Board recommends that the student is not yet fit to resume studies, the registration may be cancelled.

11.4 Penalty for Unsanctioned or Excessive Leave

If a student is found to be absent from class without sanctioned leave, then the course instructor may recommend deregistration of the student from the course. The policy regarding unsanctioned leave leading to de-registration or any other consequence must be declared by the instructor at the beginning of the course. This rule applies to regular as well as modular courses and in regular semesters as well as in the summer term.

If a student is found to be absent from a majority of lectures, tutorials and laboratory sessions for more than 20 working days (not necessarily contiguous) in a semester, with or without sanction, then her/his registration for all the courses in that semester may be cancelled by Senate on the recommendation of SPGC resulting in a forced semester drop.

If a student is found to be absent from all academic activities in a semester without authorization for more than 30 working days contiguously or s/he does not appear, without a compelling reason, for the end-semester examinations in all the courses in which s/he is registered, then her/his programme will be terminated.

Chapter 12

Scholarships, Awards and Medals

12.1 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 postgraduate students according to the rules and procedures laid down by the Senate. These scholarships/fellowships are administered by the Senate Scholarships and Prizes Committee (SSPC). More details about these scholarships can be found from the Dean of Students' Affairs (DoSA) office and DoSA webpage.

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

Guidelines for scholarship to MSc-Phd (Dual Degree) students are detailed in point 10.1.5 above.

12.2 Withdrawal of Scholarship

These scholarships, 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, etc. received during the academic session in which s/he leaves the Institute.

12.3 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 the same can be found at the DoSA webpage. All matters related to awards and medals are handled by the Senate Scholarships and Prizes Committee (SSPC).

Chapter 13

Conduct and Discipline

13.1 Code of Conduct

Students are expected to conduct themselves with integrity and proper consideration for others at all times. Students are expected to exhibit proper respect for others in their personal behavior and interpersonal interactions, both within and outside the campus. The institute strictly prohibits ragging and sexual harassment; any instance of either should be reported immediately and will be dealt with as a serious offense.

In academic matters, absolute honesty is mandatory. The institute has a zero tolerance policy for any adoption of unfair means during examinations. In every other respect also, students are expected to do their academic work with integrity, with proper acknowledgement if material from other sources is included in their own work. Plagiarism, whether intended or not, is an act of academic dishonesty and penalized as such. If there is any doubt about what constitutes plagiarism, students should consult their instructors to ensure maintenance of academic honesty in their work. Any case of cheating will be dealt with strictly by the Institute.

Students are expected to respect Institute property and follow all institute rules and regulations at all times.

If students feel victimized by the conduct, academic or personal, of any other member of the Institute, they may register a complaint with the Ombudsperson for whom the contact information is available from the DoSA website. In case of any complaint related to sexual harassment, students should contact the Internal Complaints Committee (ICC) or Women's Cell (women_cell@iitk.ac.in).

13.2 Disciplinary Action and Related Matters

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 programme.

The Instructor-in-Charge of a course may debar a student from the examination in which s/he is detected to be using unfair means. The Instructor/Tutor may take appropriate action against a student who misbehaves in her/his class. In all such cases, the Instructor/Tutor shall inform the DoAA office of all concerned information for record.

The Warden-in-Charge of a Hall of Residence may reprimand, impose fine or take any other suitable measure against a resident who violates either the Code of Conduct or rules and regulations pertaining to the concerned Hall of Residence. In all such cases, the Warden-in-Charge shall inform the DoSA office of all the details for record.

Involvement of a student in ragging may lead to his/her expulsion from the Institute.

The Senate Student Affairs Committee (S-SAC) investigates alleged misdemeanors, complaints, etc. and recommends a suitable course of action. Violation of the Code of Conduct by an individual or of a group of students can be referred to this committee by a student, teacher or other functionary of the Institute. Further, in exceptional circumstances, the Chairperson, Senate, may appoint a special committee to investigate and/or recommend appropriate action for any act of gross indiscipline involving an individual or a number of students, which, in her/his view, may tarnish the image of the Institute.

The recommendations of S-SAC are submitted to Chairperson, Senate for approval. In cases when the expulsion of a student from the Institute has been recommended, the matter is sent to the Senate for the final decision.

A student, who feels aggrieved with the punishment awarded, may appeal to the Chairperson, Senate, stating clearly the case and explaining her/his position, and seeking reconsideration of the decision.

The Senate may not recommend a student who is found guilty of a major offense to the Board of Governors for the award of a degree/diploma/certificate even if s/he has satisfactorily completed all the academic requirements.

Chapter 14

A Quick Guide for Students

Important Information:

- 1) The Academic Calendar is available on the DoAA website. It contains all the important dates for the calendar year, such as pre-registration, last date for dropping of courses, exams, and vacations.
- 2) The course templates for MSc-2 Year and MS-PD programmes are available through the DoAA website.
- 3) All students have to do online academic pre-registration for courses to be taken next semester during the specified pre-registration period.
- 4) The minimum academic load for MSc 2-Year programme in a regular semester is 35 credits; the maximum is 65 credits.
- 5) During the summer term, eligible students may register for a maximum of 27 course credits.
- 6) Parent programme refers to the basic two year programme to which a student has been admitted. For any questions regarding this programme, consult the DPGC of the parent programme.
- 7) Students may apply for short leave online through Pingala system.
- 8) Information regarding financial aid and scholarships is available on the DoSA website.
- 9) Students may register a complaint with the Ombudsperson (contact information available through DoSA website) if s/he feels victimized by the conduct, academic or personal, of any member of the Institute. In case of any complaint related to sexual harassment, students should contact the Internal Complaints Committee (ICC) or Women's Cell (women_cell@iitk.ac.in).

Here are answers to some of the most frequently asked questions regarding PG programmes:

Q.1 Do I have to register for courses strictly as per the template?

Course templates are advisory in terms of when specific courses need to be done. However, for compulsory Institute core courses, there is no guarantee that the instructor will allow you to register if you are taking it at a time other than the one specified in the template. For Department Core and Department Electives, please consult your DPGC before shifting any slots. You will NOT be automatically entitled to any required course if you are not taking it in the scheduled semester. Also, you need to ensure that you complete any pre-requisites in time to do the succeeding courses.

Q.2 What happens if I do not do academic pre-registration?

You may do academic registration during Final Registration as specified in the Academic Calendar after paying a penalty fee for not doing academic pre-registration. In special circumstances this penalty fee may be waived by the SPGC if you apply for such a waiver within one month of the conclusion of the pre-registration period.

Q.3 When and how can I apply for branch change?

There is no provision for MSc 2 Year and MS-PD students to change their branch after admission.

Q.4 When and how can I apply for conversion of programme from MSc 2 Year to MS-PD?

MSPD Dual Degree: Students in the departments offering this programme may apply after the second or third semester if they have a CPI of 7.0 or above and student should not have backlog at the time applying. Details regarding the application process should be confirmed from the DPGC. For more information, please refer to chapter 10.

Q.5 How are grades determined in a course?

Each instructor will announce the course's grading policy in the FCH at the beginning of the semester.

Q.6 What is the passing grade, and what is the minimum CPI for graduation?

The passing grade is D. For both MSc 2 Year and MS-PD programmes, the only graduation requirement is successful completion of all the credit requirements specified in the template. There is no minimum CPI requirement for graduation.

Q.7 Can I repeat a course to improve my grade?

No, if you have passed a course with a D or a higher grade, you cannot repeat it. You are required to repeat a course if you receive an E/F/X grade in it, since these are failing grades.

Q.8 Can I drop a course if I am not performing well in it?

You may request a course drop until the last date specified for this in the Academic Calendar. However, a course drop request will be accepted only if it is approved by the course instructor-in-charge as well as the DPGC convener.

Q.9 Can I take courses in the summer term?

Summer courses are primarily for clearing backlogs to ensure timely graduation. If any seats are left over in the offered courses after admitting all students in the above categories, they may be given to students who are attempting to do courses in advance.

Q.10 Can I take leave during a semester?

In a semester, you may apply online for a maximum of 10 days of leave on bona fide medical reasons, and a maximum of 5 days for family emergencies. You are responsible for making up any missed work during this period; the instructor is not obliged to provide any make-up assignments, quizzes, exams, etc. for those missed while you are on leave. For end-semester examinations, a make-up exam will be provided for those with medical certificate issued by the Health Centre, IIT Kanpur or any other compelling reason for absence during the exam period.

Chapter 15

Waiver and Amendments

15.1 Waiver

The procedures and requirements set out in this manual, other than those in Chapters 3, 8, 9, and 10, may be relaxed or waived in special circumstances by SPGC. All such exceptions are reported to the Senate.

15.2 Amendments

Notwithstanding anything contained in this manual, the Senate of the Indian Institute of Technology Kanpur reserves the right to modify/amend without notice, the curricula, procedures, requirements, and rules pertaining to its undergraduate programmes.

Chapter 16

Course Templates

15.1 Template for Master of Science (M.Sc.-2yr) Programme

Students are advised to follow and complete all courses as per the departmental Course Template of their respective programme.

15.1.1 Chemistry

Course Template for M.Sc.-2yr in Chemistry:

Semester-1	Semester-2	Semester-3	Semester-4
CHM401A[9]	CHM402A[9]	CHM611A[9]	CHM700A[27]
CHM321A[9]	CHM322A[9]	CHM621A[9]	DE-3[9]
CHM345A[9]	CHM342A[9]	CHM631A[9]	DE-4[9]
CHM503A[6]	CHM443A[6]	CHM699A[18] / 2 x DE[9]	OE-2[9]
CHM423A[6]	DE-1[9]	DE-2[9]	
CHM521A[6]	OE-1[9]		
CHM361A[6]			
Total credits: 51	Total credits: 51	Total credits: 54	Total credits: 54

Credits Distribution:

Course type	Credit requirements
Department Compulsory (DC)	138
Department Elective (DE)	54
Open Elective (OE)	18
Total Credits	210

Course Mapping for equivalent courses in Old ARC and New ARC:

S. No.	Course number in the old M.Sc. template	Course number in the new M.Sc. template
1	CHM421A	CHM321A
2	CHM441A	CHM345A
3	CHM422A	CHM322A
4	CHM442A	CHM342A

15.1.1 Physics

Course Template for M.Sc.-2yr in Physics:

Semester-1	Semester-2	Semester-3	Semester-4	*Only 400/500/600 or above level DE/OE can be taken.
PHY401[11]	PHY412[11]	PHY623[11]	PHY611[11]	
PHY421[11]	PHY552[11]	PHY563[9]	PHY566[9]	
PHY431[11]	PHY626[11]	PHY565[9]/*DE-1[9/11]	PHY568[9]/*DE-3[9/11]	
PHY441[11]	PHY462[8]	*OE-1[9/11]	*OE-2[9/11]	
PHY461[8]	PHY617[12]	PHY612[11]	* DE-4[9/11]	
	PHY888[3]			
Total credits: 52	Total credits: 56	Total credits: 47-53	Total credits: 47-53	

Credits Distribution:

Course type	Credit requirements
Department Compulsory (DC)	158
Department Elective (DE)	27-33
Open Elective (OE)	18 - 22
Total Credits	203 - 213

15.1.1 Mathematics

Course Template for M.Sc.-2yr in Mathematics:

Semester-1	Semester-2	Semester-3	Semester-4
MTH201A[11]	MTH204A[11]	MTH403A[11]	OE-2[9]
MTH202A[11]	MTH424A[11]	DE-1[9]	OE-3[9]
MTH301A[11]	MTH308B[10]	OE-1[9]	OE-4[9]
MTH409A[9]	MTH305A[11]	DE-2[9]	DE-4[9]
MTH421A[11]	MTH304A[11]	MTH598A[9] / DE-3[9]	MTH599A[9] / DE-5[9]
ELC114[9]*			
Total credits: 62	Total credits: 54	Total credits: 47	Total credits: 45

Credits Distribution:

Course type	Credit requirements
Department Compulsory (DC)	118
Department Elective (DE)	45
English language Course (ELC)	9
Open Elective (OE)	36
Total Credits	208

15.1.1 Statistics

Course Template for M.Sc.-2yr in Statistics:

Semester-1	Semester-2	Semester-3	Semester-4
MSO205A[11]	MTH309A[11]	MTH441A[10]	MTH314A[10]
MTH432A[6]	MTH212A[6]	MTH515A[11]	MTH312A[5]
MTH434A[6]	MTH313A[6]	MTH516A[11]	DE-2[9]
MTH433A[11]	MTH418A[11]	MTH598A[9] / DE-1[9]	DE-3[9]
MTH208A[5]	MTH210A[10]	OE-1[9]	MTH599A[9] / DE-4[9]
MTH206A[6]	MTH209A[5]		OE-2[9]
MTH207A[6]			
ELC114 [9]*			
Total credits: 60	Total credits: 49	Total credits: 50	Total credits: 51

Credits Distribution:

Course type	Credit requirements
Department Compulsory (DC)	147
Department Elective (DE)	36
English language Course (ELC)	9
Open Elective (OE)	18
Total Credits	210

*ELC114 is equivalent to ELC112

15.2 Template for M.Sc.-PhD Programme in Physics

Semester-1	Semester-2	Semester-3	Semester-4	Semester-5	Semester-6
PHY401[11]	PHY412[11]	*OE-1[9/11]	PHY502[9]	PHY596/PHY696[9]	PHY597/PHY697[9]
PHY421[11]	PHY552[11]	PHY462[8]	*OE-2[9/11]	PHY598/PHY698[9]	PHY599/PHY699[9]
PHY431[11]	PHY626[11]	PHY501[9]	PHY611[11]	*PG-OE-1[9/11]	*PG-OE-2[9/11]
PHY441[11]	PHY461[8]	PHY623[11]	*DE-5[9/11]	*PG-DE-1[9/11]	*PG-DE-2[9/11]
PHY888[3]	PHY617[12]	PHY612[11]	PHY625[11]/PHY692[12]		
Total credits: 47	Total credits: 53	Total credits: 46	Total credits: 49-54	Total Credits: 36-40	Total Credits: 36-40

* Only 600 or above level DE/OE can be taken after migration to the PhD part of the program. Before that only 400 or above level DE/OE can be taken.

15.3 Template for M.Sc. Programme in Economic Sciences

Course Template for M.Sc.-2yr in Economic Sciences:

Semester-1	Semester-2	Semester-3	Semester-4
HSO201A[11]	ECO713A[9]	ECO351[9]	OE-2[9]
ECO701A[9]	ECO714A[9]	OE-1[9]	DE-4[9]
ECO612A[9]	ECO611A[6]	DE-1[9]	DE-5[9]
ECO671A[9]	ECO613A[6]	DE-2[9]	DE-6[9]
*ECO7xxA[3]	ECO702A[9]	DE-3/ Thesis ¹ [9]	DE -7/ Thesis ¹ [9]

	ECO251[9]		
Total credits: 41	Total credits: 48	Total credits: 45	Total credits: 45

*Course code for Professional Development & Technical Communication course to be filled in later.

¹The option to write an MS thesis be provided to students who maintain CPI levels above a certain threshold until the end of the second semester. The M.S. thesis will span over two semesters (3rd and 4th) and will be counted as one Departmental Elective (DE) course in each semester. A student will not be allowed to take the thesis credit for one semester only, neither can s/he take two thesis credits in the 4th semester.

Credits Distribution:

Course type	Credit requirements
Department Compulsory (DC)	98
Department Elective (DE)	63
Open Elective (OE)	18
Total Credits	179