



Indian Institute of Technology Bombay

Rules and Regulations Booklet for two year M.Sc. Programmes - **2018** (Applicable from 2018 Batch onwards)

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PREFACE

The Indian Institute of Technology, Bombay (IITB) is one of the Indian Institutes of Technology in the country, set up with the objective of making available facilities for higher education, research and training in various fields of Science and Technology. The Institute is now recognized as a leader in science and engineering education not only in India, but world-wide. It has established a firm foundation for education and research with a high-quality faculty base and having a vision to be the fountain head of new ideas and innovations in technology and science. The mission is to create an ambiance for annually admitted candidates.

This booklet gives comprehensive information on the existing Rules and Regulations.

1. INTRODUCTION

The two-year M.Sc. programme consists of courses in basic sciences. The programme broadly consists of core and elective courses spread over four semesters with a research project component in some of the streams. In general, the first two-three semesters deal with both fundamental and applied aspects of the respective subject where-as the third-fourth semester gives more emphasis on elective courses giving advanced knowledge of the subject and thus preparing students for a career in research and/or industry. M.Sc. students get an opportunity to work independently on a project, wherein they investigate natural and abstract problems and produce mathematical, computational and/or experimental results. At various stages of the programme, students are initiated into research methodologies, library reference work, use of scientific equipment / instruments, learning of modern computational techniques, writing of technical and scientific reports and effective communication. Apart from the minimum credit requirements for the award of the degree, opportunities exist for supplementing the learning experience by crediting/auditing additional courses.

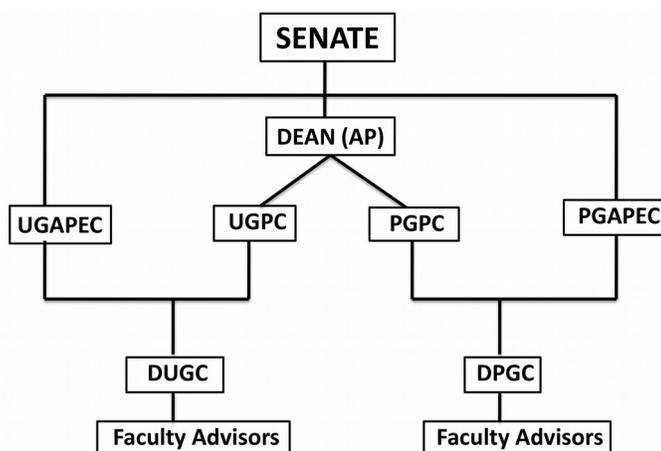
Syllabus of various programmes are given in the courses of study Bulletin (CSB) available on the Institute website : <http://asc.iitb.ac.in/>

1.1 Organizational Structure for Academic Administration

The academic programmes of the Institute are governed by rules and regulations approved by the Senate from time to time. The senate is a statutory and supreme body that governs all the academic matters of the Institute, and the rulings of Senate Chairman (the Director) are final in this regard. A definite time schedule is set by the senate for various academic activities, through an academic calendar issued in the beginning of each academic year.

The senate continuously assesses the academic programmes and makes appropriate revisions / modifications / improvements as and when required through the Post-Graduate Programmes Committee (PGPC) for postgraduate programmes. The Dean of Academic Programmes (Dean, AP) is the convener of this committee. Similarly, performance of each student is monitored by the Senate through Post-Graduate Performance Evaluation Committee (PGAPEC).

On joining the Institute, a student or a group of students is/are assigned a Faculty Advisor from his/her Department. Students are expected to consult the Faculty Advisor on any matter relating to their academic performance and the courses they may take in various semesters / summer terms.



Organizational structure for academic matters

1.2 Academic Calendar

The academic activities of the Institute are regulated by academic calendar approved by the senate, and released at the beginning of each academic year. It is mandatory for students to strictly adhere to the academic calendar for completion of academic activities. Academic calendar can be seen at the Academic Office homepage on Institute website (<http://www.iitb.ac.in/acad/index.html>).

2. CURRICULUM / PROGRAMME OF STUDY

2.1 Curriculum

Every department has a prescribed course structure. It prescribes all the courses / labs / other requirements for the degree and sets out the nominal sequence semester-wise. It also gives the syllabus and a list of text / reference books for each course. Courses of 4XX or higher level in M.Sc. curriculum will be treated as PG level courses.

2.2 Course Credit Structure

In general a certain quantum of academic work measured in terms of credits is laid down as the requirements for a two-year M.Sc. degree. A student earns credits by registering and satisfactorily clearing courses/other academic activities every semester. The amount of credit associated with a course is dependent upon the number of hours of instruction per week in that course. Similarly, the credit associated with any of the other activities is dependent upon the quantum of work expected to be put in for each of the other activity per week.

2.2.1. Seminars

Some departments may prescribe Seminar as a requirement. The Seminar is a course wherein under the guidance of a faculty member a student is expected to do an in-depth study in a specialized area by doing survey of published technical literature, understanding different aspects of the problem and arriving at a status report. While doing a seminar, the student is expected to critically analyze works of various authors/researchers, learn the investigation methodologies; study concepts, techniques and

the results presented in these papers, and present a seminar report. It is mandatory to give a seminar presentation before a panel constituted for the purpose. Seminars typically carry 3 credits.

2.2.2. M.Sc. Projects (MSP I and MSP II):

Some departments prescribe a project as one of the requirements for the M.Sc. degree. The project is normally done in the third and fourth semesters. Some departments offer it as a choice to students who satisfy the academic criteria laid down by the DPGC. A student doing MSP under the guidance of a faculty member is required to do some innovative work with the application of knowledge gained while undergoing various courses in the earlier years. The student is expected to do a survey of literature in the subject, work out a project plan and carry it out through experimentation and/or modeling / computation. Through the project work the student has to exhibit skills for both analysis and synthesis. The respective departments prescribe the exact credit structure of MSPs.

2.3 Minimum Credit Requirements :

Depending on the discipline, the minimum credit required for award of a two-year **degree** is between 140 and 160 (Ref.Prof.Mukhopadhyay Committee report).

3. REGISTRATION

- a) Along with the credit courses, a student is normally allowed to take a maximum of Two Audit courses per semester, with the consent of the Project Guide/Faculty Advisor, as appropriate.
- b) Any student who concurrently registers for any postgraduate degree at another organization shall be automatically de-registered at the Institute.

3.1 Semester-wise registration

Registration is required to be done every semester on the basis of the program for each discipline as given in the Courses of Study bulletin and as per the advice given by the Faculty Adviser. The student is expected to discuss with the Faculty Adviser, about the academic performance during the previous semester and then decide the number and nature of the courses to register during the ensuing semester within the framework of the guidelines as approved by the Senate. The Faculty Adviser may advise a student to drop one or more courses/activities based on his/her academic performance (Sec 4.1-4.3) . In fact the Faculty Adviser may even advise a reduced-load, taking the program over a longer period for students with unsatisfactory performance at the end of the first semester/year.

3.2 Procedure for Registration

The Institute generally has an online registration system and the registration is normally done on the first two days of each semester and the summer term. The registration schedule is announced in the Academic Calendar.

3.2.1 Online Registration

On-line registration process involves filling up of an online Course Registration Form (CRF) stating the courses and project / seminar etc., that the student proposes to complete during that semester as per the prescribed curriculum. This should be done in consultation with the Faculty Advisor, who finally approves the registration. Unless this procedure is completed, registration will not be considered valid.

3.2.2 Late Registration

Only for valid reasons, late registration may be permitted till the date specified in the Academic Calendar, on payment of a late registration fee.

3.2.3 Registration for the first semester

A student is required to register for all the courses listed in the curriculum during the registration process for the first semester.

3.2.4 Registration for second and subsequent semesters

A student may add one more course to acquire more credits (than standard curricula) or to clear backlog courses. Faculty Advisers after careful scrutiny may advise reduced load depending upon previous performance. Every student, however, is required to register for a minimum of 18 credits in any semester.

3.3 Registration for M.Sc. Projects (MSPs)

Registration for M.Sc. Projects (MSPs), is similar to that for any other course. The topics for the project work will normally be assigned towards the end of the second semester by the Project Coordinator of the Department and the work is done during the 4th/3rd & 4th semester. At the end of the first stage, the student is required to submit a preliminary report of his work by a prescribed date (*as per the academic calendar*) to the Co-ordinator and present it to a Panel of Examiners. Registration for second stage is subject to satisfactory completion of the first stage.

3.4 Course Adjustment/Dropping of courses

The Academic Calendar sets a date, normally two weeks after the commencement of the semester, for Course Adjustment. Students are permitted to make adjustments in academic load by addition or deletion of one or more courses, projects etc, before this date, provided the total credits do not fall below 18 credits, by such adjustments. Course adjustment has to be done in consultation with the Faculty Adviser. A student in the second or any of the subsequent semester from the Faculty Adviser, provided the minimum credit requirements (*18 credits*) is fulfilled. The last date for such drop is given in the Academic Calendar. Course/s dropped by a student may be taken during a subsequent semester or during the summer term (*if offered*).

3.5 Dropping of a Semester:

1. In all cases of health problems, medical certificate issued by IIT Bombay Hospital is essential. If the medical certificate is issued by other hospitals/private practitioners, the certificates should be duly authenticated by the CMO, IIT Bombay Hospital.
2. In all other cases, requests for dropping the semester should be accompanied by supporting documents as required.
3. A student is not permitted to drop a semester after any of the following; (i) award of DX grade (ii) the end of classes for the semester, (iii) semester-end examination and (iv) award of grades.
4. If a student drops the semester after the commencement of the semester, the fees paid will not be refunded and/or adjusted in the subsequent semester. Prescribed continuation fee is required to be paid for semester drop.
5. A continuous break from studies exceeding one year is not permitted.

3.6 Registration for Additional Courses

After the first semester, a student with an excellent academic standing may enhance her/his learning experience by registering for one additional course per semester, over and above.

3.7 Summer course registration

A Student can register for courses during summer up to a maximum 18 credits on payment of registration fee at prescribed rates. For details refer 4.5.

3.8 Grade Improvement

1.A student in a PG Programme, where minimum CPI for coursework is 6.0, will be eligible for repeating a course for grade improvement if he/ she has a CPI less than 6.0 and has been permitted by PGAPEC to continue in the Programme on Academic Probation.

2.For Grade improvement, a student has to re-register in the course in a subsequent semester if the course is offered. The grade obtained in the re-registered course will supersede the earlier grade and the same will be reflected in the Semester Grade Card and in the Final Transcript.

3.The student can avail this option only for TWO courses in the entire programme and only ONCE for a specific course.

4. SPECIAL FEATURES IN REGISTRATION

The curriculum has special features that a student must be aware of while registering for courses. These include departmental core and elective courses and non-departmental courses. Registration for courses depend on the academic standing of the student, as explained in this section. The registration for backlog courses and audit courses are also explained in this section.

4.1 Clearing backlogs

Students can clear their backlogs by either taking summer courses (Sec.4.5) or by taking the failed course in a regular semester at the earliest opportunity. The Faculty Advisors and DPGCs would exercise special care and assist the students in this regard.

4.2 Re-examination

A student will be permitted to take re-examination for FF grades in a given semester provided the number of FR grades not exceed TWO. The re- examination is assigned weightage and is conducted as per a declared schedule after the semester-end examination.

4.3 Audit course

A student who wants an exposure to a course, without the rigors of obtaining a good grade, may audit a course. The minimum requirement is normally 80% attendance. The word "Audit" would be specially mentioned in the remarks column of the student's course registration form. Students are not permitted to audit courses in their first semester. Subsequently, they can audit a maximum of one course per semester.

The grade awarded is 'AU' which does not carry any grade points and therefore does not figure in SPI/CPI calculations. The course will not carry any credits. The course successfully completed in Audit mode will be reflected in the Transcript as Audit Course.

4.4 Course Substitution

In order to complete the degree requirements within the stipulated duration, a student who has obtained FR / DX grades or has dropped courses due to valid reasons, may be advised to substitute courses, by the Faculty advisor. An elective course may be substituted by another elective course. Course substitution is not permitted for Core Courses.

4.5 Summer Course(s)

An academic entity may offer a summer course to enable the students to clear their backlog courses and/or regular credit courses, subject to strict adherence to the following guidelines.

- i. The course instructor(s) should be willing to offer the course. The course is offered on approval of the DPGC and the Dean of Academic Programs.
- ii. The course is offered with adequate rigor and in the same manner as a regular semester course is offered.
- iii. The duration of the course is eight weeks. The registration, examination and assessment and grading etc. are done in the same way as is done for regular semester courses. The total number of contact hours for the courses remains the same as that during the regular semesters, and therefore, the courses run at accelerated pace - *for example 6 hours of instructions per week is expected for a 3-0-0 course*. The Academic Calendar in this matter is strictly followed.
- iv. 80 % attendance is compulsory, without which the instructor will assign a DX grade.
- v. Minimum 5 students should register for a particular summer course to be offered.
- vi. A student is permitted to register up to 18 credits during any one summer term.
- vii. Courses offered in a summer term will be treated as equivalent to a regular semester courses for all accounting purposes.
- viii. Students with DX grade in core course are not allowed to register for Summer course.

5. EXAMINATION / ASSESSMENT

Semester-wise assessment of performance of every registered student is done through various modes of examinations. These include quizzes, class tests, home assignments, group assignments, viva-voce, Mid-Semester Examination and Semester-End Examination. **The Instructor will announce the modes of evaluation and distribution of weightage for each of the assessments at the beginning of the course.** Various modes of assessment for theory and laboratory courses along with the recommended relative weightage of various components are given in this section. Drastic departure from the recommended modes of assessments and weightage requires prior approval of the Dean of Academic Programs.

5.1 Attendance

Attendance in the class is compulsory and is monitored. The Institute expects 100% attendance. However, due to ill health or other emergencies, absence up to 20% may be considered on case-to-case basis on production of documentary proof. The attendance requirement is applicable to summer courses also.

5.2 Modes of Evaluation for Theory Courses

1. Relative weightage for in-semester evaluations is typically between 50 and 60 per cent. This consists of one mid-semester test of two hours duration, of about 25-30 per cent weightage, and is held as per the schedule fixed in the Academic Calendar. Two quizzes *or one quiz and one test* along with assignments and viva-voce makes up the rest of the in-semester assessment. The Instructor may also set aside up to a maximum of 10 per cent of the in-semester marks for active participation in the class and the initiatives shown by the students. Make-up for any absence from in-semester evaluations like mid-sem / tests / quizzes is at the discretion of the Instructor for genuine reasons.

2. The semester – end examination is held as per the Academic Calendar with relative weightage of 40 to 50 per cent. It is normally of 3 hours duration and covers the full syllabus of the course. **The semester-end examination is mandatory. The instructor awards an “II” grade for those students for not appearing for the Semester-end examination, if they have sufficient attendance and satisfactory**

in-semester performance. Such students are eligible for a Semester-end re-examination only on medical grounds or other valid reasons (Sec. 5.8), AND on production of medical certificate issued / authenticated by CMO, IIT Bombay Hospital, or other supporting documents, as the case requires. The application must be submitted to the Academic Office before the last date for registration for such re-examination announced in the Academic Calendar. (See also Sec. 5.7(V)).

5.3 Modes of Evaluation for Laboratory Courses

The assessment in a laboratory course is based on turn-to-turn supervision of the student's work, her/his performance in viva-voce examinations and group discussions, the quality of their work as prescribed through laboratory journals and a semester-end test that contains an experiment or a written examination. In-semester work will normally carry 75% and the semester-end test 25% weightage respectively. It is obligatory to maintain a laboratory journal as prescribed by the course instructor. Final examination for laboratory courses is normally held a week before the final theory examinations. In case of absence from Semester-end examination, the same rule as those for theory courses are applicable.

5.4 Modes of Evaluation for Seminars

Seminars are evaluated based on a written report, and an oral presentation before a panel of examiners appointed by the DPGC/Department. The supervisor/co-supervisor (if there is one), is/are part of the panel. Grades carrying grade points are awarded as in the case of theory and laboratory courses based on the quality of the report and performance in the presentation.

5.5 Modes of Evaluation for Projects

As described in section 2, the requirements of M.Sc.project (MSP) vary from department to department. Some departments may have it as department requirement for the degree whereas some others may make it optional. M.Sc. project work is normally done in two stages, each spread over a semester. At the end of the first stage, the student is required to submit a preliminary report of his work by a prescribed due date to the coordinator and present it to a Panel of Examiners. The second stage of the work is continued in the following semester. Project may be offered as one unit as MSP, or two independent units as MSP-I and MSP-II. Departments may prescribe a minimum performance in MSP-I (which may be higher than the pass grade 'DD') for being eligible for MSP-II. MSP-I and MSP-II are separately graded, at the end of the respective semesters. These projects are supervised, and need regular interaction (at least once a week) with the supervisor.

Student is required to submit a project report and defend it in front of a panel of examiners. The dates for submission of reports, the dates for presentations, and details of mode of assessment are decided by the individual departments. Submission of the MSP report cannot be postponed beyond the date specified in the calendar. If the project cannot be completed due to ill health or other bonafide reasons, the course can be dropped in consultation with the Faculty Advisor, the project coordinator and the guide on or before the last date for dropping of courses. A re-registration for the same is required in the following semester in which it should be completed.

When a student is unable to submit the report for assessment by the prescribed date due to valid reasons, it is necessary to ***make a specific request to the PGAPEC for extension, through the project guide and DPGC, stating (i) the reasons for delay, (ii) the expected date of submission (iii) pay the institute fee for the next semester and (iv) formally register for that semester if not done so in the normal course.***

When the student neither drops the project in time nor submits the project report for assessment by the due date nor request an extension from the PGAPEC, the 'II' grade is awarded at the time of finalization of grades for all the other students. Further, if such late reports are not submitted within a reasonable period of time (by the end of the Summer Semester), the 'II' grade is automatically converted to 'FR'. Students who obtain FR in the final (second stage) assessment is required to re-register for the second stage in the subsequent semester.

5.6 Non-credit requirements

Non-credit requirements are assessed as Pass (PP)/ Not Pass (NP) subject to the fulfillment of the minimum requirements of these activities and a minimum of 80% attendance. The award of degree is subject to successful completion of these activities.

5.7 Grading

i. The Indian Institute of Technology Bombay follows the grading system. Based on the combined performance in all assessments, the student is awarded a letter grade in every course taken as per the curriculum. These letter grades not only indicate a qualitative assessment of the student's performance but also carry a quantitative (numeric) equivalent called the Grade Point. The letter grades and their equivalent grade point are given below:

Letter Grade	Grade Point
AP	10
AA	10
AB	9
BB	8
BC	7
CC	6
CD	5
DD	4
FF	0 (Fail- Re-examination)
FR	0 (Fail- Repeat the course)
DX	0 (Attendance below 80%- Repeat the course)
PP	Pass
NP	Not Pass
AU	Audit
II ^(a)	Incomplete
DR ^(b)	Dropped
W	Withdrawn

(a) - Placeholder, awarded on medical grounds; gets converted to an appropriate grade after Semester end re- examination

(b) - Placeholder indicating that the course has been dropped and it has to be cleared in subsequent semesters.

- i. A student passes the course if he/she gets any grade in the range of AP to DD (AU in the case of an audit course), but fails if he/she gets the grade FF, FR or DX. II and DR are placeholders. II is awarded temporarily on medical grounds and gets converted to an appropriate grade after the Semester end re-examination. On the other hand, DR indicates that the course has been dropped and it has to be cleared in subsequent semesters.
- ii. The grade AP indicates exceptional performance and is awarded only in the Course/(s) in which the number of registered students is more than 50. It should not exceed 2 % of the total

strength of the particular theory or lab course. The grade AP is not awarded for projects / seminars.

- iii. FF grade will be awarded in case/(s) where the students' performance in the examinations is not satisfactory (falls below the DD grade). Student is eligible for re-examination, which is conducted as per the Academic Calendar. A student taking the re-examination after FF grade may get (1) DD grade if she/he passes the re-examination or (2) FR grade if she/he fails in the re-examination or fails to appear for re-examination.
- iv. FR grade will be awarded in case/(s) where, in the opinion of the instructor (panel of examiners in the case of projects), the student has inadequate academic exposure to the course / has very poor performance in the in-semester and/or semester-end examinations.
- v. The grade DX in a course is awarded if (i) a student does not maintain the minimum 80% attendance in the Lecture/Tutorial classes, or (ii) severely incomplete in semester evaluation record due to non-medical reasons (for example when a student has missed all tests and midsem), (iii) incomplete assignment submissions etc. The DX grade will be declared one week before semester-end examination and intimated to the academic office immediately thereafter. **A student with DX grade in a given course is not permitted to take the semester-end examination. The DX grade is treated as FR for the purpose of CPI calculation, and requires re-registration for the course.**
- vi. "II" is awarded in a lecture/laboratory course if a student has satisfactory in-semester performance and has fulfilled the attendance requirement, but has not appeared for the semester-end examination due to medical reasons. Such students are eligible for a make up for the Semester-end examination only on medical grounds / valid reasons AND on production of medical certificate issued / authenticated by CMO, IIT Bombay Hospital or other supporting documents as required. The application must be submitted to the Academic Office, for consideration by PGAPEC, before the last date for registration for such make-up examination announced in the Academic Calendar. (See Sec.3.5 and 3.6 for full details). For a student resent in the semester-end re-examination, the instructor will award a regular performance grade (AP-FR) depending on the overall performance in the course including the re-examination. If a student fails to appear for the re-examination too, the instructor will award II grade again. If the absence is due to medical / valid reasons, the student must submit supporting documents as mentioned above, within seven days of the scheduled date of the re-examination, to the Academic Office. PGAPEC will examine such cases and convert the II grade into a dropped course status (DR) in bonafide cases. In all other cases the II grade will be converted to FR grade. In any case the II grade will not be continued beyond the commencement of the subsequent semester.
- vii. There are, however, a few other academic requirements for the Programmes. The following two grades viz., PP (*Pass*) and NP (*Not pass*), will be awarded for non-credit courses. No grade points are associated with these grades and performance in these courses is not taken into account in the calculation of the performance indices (SPI, CPI). However, the award of the degree is subject to obtaining a PP (*Pass*) grade in all such courses, as part of course curriculum.
- Viii. **AU** grades are awarded for those who have audited a course, in accordance with prescribed procedure..

5.8 Valid reasons for semester-end re-examination

Following may be considered as valid reasons for semester – end make-up examination:

1. Serious illness / personal accident in the case of the student.
2. Serious illness / accident / death of parent / guardian.

3. Logistic problems such as non-availability of resources / lab-facilities / availability of examiner /(s) for project / seminars etc. Students claiming semester-end re-examination (evaluation in the case of projects) on the above valid reasons are required to make suitable application to the PGAPEC before the prescribed last date for registration for such re-examination announced in the Academic Calendar, through proper channel along with proper medical certificate issued / authenticated by CMO, IIT Bombay Hospital. In the event of death and / or serious illness / accident of parent or guardian, the application should be supported by adequate evidence of the same / appropriate documents. Decision of the Convener, PGAPEC is final in these matters.

5.9 Academic Malpractice

Academic malpractices are severely dealt with. The details pertaining to Academic malpractices are available at: <http://www.iitb.ac.in/newacadhome/punishments201521July.pdf>

5.10 SPI/CPI

5.10.1 Semester Performance Index (SPI)

The performance of a student in a semester is indicated by a number called Semester Performance Index, SPI. The SPI is the weighted average of the grade points obtained in all the courses registered by the student during the semester. For example, if a student passes five courses (Theory/labs./Projects/Seminar etc.) in a semester with credits C1, C2, C3, C4 and C5 and her/his grade points in these courses are g1, g2, g3, g4 and g5 respectively, then her/his SPI is equal to:

$$\text{SPI} = \frac{C1g1 + C2 g2 + C3 g3 + C4 g4 + C5 g5}{C1 + C2 + C3 + C4 + C5}$$

The SPI is calculated to two decimal places. The SPI for any semester will take into consideration the FR grades awarded in that semester. For example if a student has failed in course 4, the SPI will then be computed as:

$$\text{SPI} = \frac{C1g1 + C2 g2 + C3 g3 + C4*ZERO+C5 g5}{C1 + C2 + C3 + C4 + C5}$$

The courses, which do not form the minimum requirement of the degrees is not considered for calculation of the SPI. Such additional courses undertaken and the grades earned by the student will be shown separately.

5.10.2 Cumulative Performance Index (CPI)

An up to date assessment of the overall performance of a student from the time s/he entered the Institute is obtained by calculating a number called the Cumulative Performance Index, CPI, in a manner similar to the calculation of SPI. The CPI therefore considers all the courses registered by the student, towards the minimum requirement of the degree s/he has enrolled for, since s/he entered the Institute. The CPI is calculated at the end of every semester to two decimal places and is indicated in semester grade reports.

The CPI will reflect the failed status in case of FR/DX grade(s), till the course(s) is/are cleared. When the course(s) is/are cleared by obtaining a pass grade on subsequent registration(s) the CPI will only reflect the new grade and not the fail grades earned earlier.

Example : Up to semester *r* a student has registered for *n* courses, among which s/he has a FR grade in course *i*. The semester grade report at the end of semester *r* therefore will contain a CPI calculated as:

$$\text{CPI} = \frac{C_1g_1 + C_2 g_2 + C_3 g_3 + \dots + C_i \cdot \text{ZERO} + \dots + C_n g_n}{C_1 + C_2 + C_3 + \dots + C_i + \dots + C_n}$$

Even if a student has failed in a course more than once, the course will figure only once in the numerator as well as the denominator. At the end of semester *r+1* s/he has registered for four more courses including the backlog course *i* and has cleared all the courses including the backlog course, the CPI at the end of this semester is calculated as

$$\text{CPI} = \frac{C_1g_1 + C_2 g_2 + C_3 g_3 + \dots + C_i g_i + \dots + C_n g_n}{C_1 + C_2 + C_3 + \dots + C_i + \dots + C_n}$$

The courses which do not form the minimum requirement of the degrees is not considered for calculation of the basic CPI. These courses are shown separately, and a separate CPI will be calculated for these courses. There will also be a combined CPI calculated which considers all the credits earned by the student.

5.10.3 Transcript : Consolidated Statement of Academic Performance

Transcript is the consolidated statement of the Academic Performance of a student for all the semesters since joining the programme and is given to a student on successful completion of the programme along with the degree certificate. For those students who have taken multiple attempts to clear a course, the transcript given on successful completion of the programme will contain all the earned grades (AP-FR, PP / NP, W); The transcript will show only the year wise overall CPI based on all the courses passed by the student. Additional courses will be shown separately, indicating also the minor / honors, if any, earned by the student. Additional copies of the transcript can be obtained if needed, on request and upon payment of applicable fee. Students who have not yet completed the programme can obtain an **Interim Transcript**, if needed, on request and upon payment of applicable fee. The Interim Transcript includes failed courses, which have not been cleared at the time of issue.

5.11 Disclosing the Evaluated Answer scripts after Semester-end Examination.

A course instructor will allow students to see the evaluated answer scripts as per the Academic calendar.

5.12 Answer Script Retention period

Evaluated answer scripts are preserved by the Instructor/ Departmental Office for a minimum period of **one semester**.

5.13 Re-totaling of marks

Sufficient precaution is taken while evaluation of answer scripts. There is no provision of re-evaluation of evaluated answer scripts. However there is a provision for requesting a re-totaling of marks in the evaluated answer scripts on payment of **Rs. 200/-** per course. Such requests will be processed by the

Academic Office. **Once grades are published, changes if any is allowed in case of totaling and tabulation errors only.** A request for re-totaling must be made by the student to Academic Office using the prescribed form, which is sent to the instructor for further action. Student must not contact the instructor directly.

6. PERFORMANCE REQUIREMENTS

6.1 Award of degree

On successful completion of the prescribed requirements for a programme, the Master of Science degree will be conferred on a student in the annual convocation of the Institute. The degree certificate indicates the relevant science discipline. For example: 'Master of Science in Chemistry'. Along with the degree certificate, the student is given a transcript, giving semester-wise details of all academic accomplishments. The additional courses taken is mentioned in the transcript. An overall CPI for all the academic work done by the student will be given.

For conferment of degree, student has to fulfill the following requirements:

- a) The student should have taken and passed all the courses prescribed for the degree under the general institutional and departmental requirements.
- b) The student should have satisfactorily fulfilled other academic requirements like practical training, work visits, seminar and projects, as specified for the discipline
- c) The student should have paid all the Institute dues and filled convocation form & paid fees.
- d) The student should have no case of indiscipline pending against him/her. The transcript and the final degree certificate will not mention any class whatsoever; only the CPI/s will be given in the transcript.
- e) The Institute does not award any class or division. However, notionally, the C.P.I. may be multiplied by a factor of 10 to obtain a numerical percentage.

6.2 Discontinuation of Programme

1. The student will be required to discontinue the programme if at the end of any semester there are two or more FR grades.
2. At the end of semester, a student must maintain a CPI of 6.0 (computed with FR, if any, but after re-examination grade if re-examination is permitted). Otherwise, the student will be required to discontinue the programme.

6.3 Academic Probation

Academic Probation to the students having lower SPI/CPI than the minimum required for continuation of their studies .

7. MISCELLANEOUS

7.1 Helping weaker students

The students with backlogs are required to register in consultation with Faculty Advisor. This will require them to meet and discuss their performance with the Faculty Advisor. Such students should continuously seek help from the Faculty Advisor, the student counselor, the student mentors, and the DPGC concerned and keep their parents/guardians informed about their performance. It is expected that the parents/guardians, especially in the case of students with backlogs, stay in constant touch with the Faculty Advisors and if necessary, the student counselor, and keep themselves abreast of their wards' progress.

7.2 Faculty Advisor

The Faculty Advisor is the person whom the parents/guardians should contact for performance related issues of their ward. The role of the Faculty Advisor is outlined below:

1. Guide the students about the rules and regulations governing the courses of study for a particular degree.
2. Advise the students for registering courses as per curriculum given or otherwise within the scope of the rules and regulations set by the Senate from time to time. For this purpose the Faculty Advisor has to discuss with the student his/her academic performance during the previous semesters and then decide the number and nature of the courses for which s/he can register during the semester as per the curriculum.
3. Faculty Advisor has to approve the registration of the students. For this purpose s/he has been provided an online interface.
4. Advise students to overload/drop one or more courses/activities based on her/his academic performance as per the prescribed rules.
5. At the end of the first semester/year, the Faculty Advisor may even advise a reduced load programme for a poorly performing student. This reduced load programme may spread over several semesters subject to minimum load for the semester and completion of the degree programme within the prescribed maximum period. Such reduced load programme is to be prepared by the Faculty Advisor in consultation with the Student; her/his parent and recommend the same through the DPGC to the PGAPEC for consideration and approval before the commencement of the semester.
6. Pay special attention to weak students and carefully monitor performance of students recommended for slow track option.
7. Advise students for Course Adjustment/Dropping of courses during the Semester within the stipulated time frame given in the Academic calendar.
8. Advise students seeking semester drop either during the ongoing semester or before the commencement of the semester. Faculty Advisor has to ensure strict compliance of rules and regulations laid down for this purpose. Recommend the cases to the appropriate authorities for consideration.
9. Make revised plan of study for weak/bright students based on their semester-wise performance.
10. Suggest modalities for course/credit requirements for the students recommended for exchange programme.
11. Guidance and liaison with parents of students for their performance.
12. To ensure that students are not permitted to re-register for courses, which they have already passed.
13. Appraise students that any academic activity (course / Lab./ seminar / project / non credit requirement etc) undergone without proper registration will not be counted towards the requirements of his/her degree.
14. Strictly warn students that if s/he fails to register during any semester without prior approval, his/her studentship is liable to be cancelled.
15. Keep the students updated about the Academic Administration of the Institute.

8. Glossary

Senate : The Senate is a statutory and supreme body that governs all academic matters of the Institute. The ruling of Chairman, Senate is final in regard to all academic matters.

DPGC : Departmental Post-Graduate Committee

PGPC : Post-Graduate Programmes Committee

PGAPEC : Post-Graduate Academic Performance Evaluation Committee

FA : Faculty Advisor

Semester : Two semesters in an academic year, approximately of 16 weeks duration each, the first semester from the last week of July to last week of November and the second semester from the first week of January to the last week of April.

Summer Term : Approximately of 8 weeks duration from the first week of May to the first week of July.

Course Credit : Weighted sum of the number of Lecture hours (L), Tutorial hours (T), and Practical hours (P) associated with the course.

Registration : Semester wise enrolment for courses as per the prescribed curriculum.

Semester Credits: Sum of credits of courses registered by the student in a semester.

Credits Earned : Sum of credits earned by passing a course registered during the semester.

Grade :Qualitative assessment of the student's performance in a course indicated by the letters, AP, AA, AB, BB, BC, CC, CD, DD, II, FF, FR, DX, PP or NP Grade. DX or FR indicates that the student has to repeat the course. W indicates course withdrawn.

Grade point : Number equivalent of the letter grades given by 10, 9, 8, 7,6, 5, 4, corresponding to AP and AA, AB, BB, BC, CC, CD, and DD, respectively. FR, DX carry zero grade points, PP, and NP do not carry any grade points. II is a placeholder, gets converted to an appropriate grade after semester end re-examination. DR is just a position holder.

Instructor : Member of faculty who teaches courses/labs.

Semester Grade Points : The sum of the products of credits and Grade Points for each course registered by a student in a semester.

SPI : Semester Performance Index which is obtained by dividing the Semester Grade Points by the Semester Credits.

Cumulative Credits : Sum of the Semester Credits for all the semesters taken together, wherein the credits of a course is not counted if an alternative course has been taken in lieu of it.

Cumulative Grade Points : Sum of the Semester Grade Points for all the semesters taken together, wherein the credits of a course is not counted if an alternative course has been taken in lieu of it.

CPI : Cumulative Performance Index which is obtained by dividing the Cumulative Grade Points by the Cumulative Credits.

Transcript : Consolidated statement of the Academic Performance of a student for all the semesters completed.

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