RULES AND REGULATIONS

for

B.Tech. (Hons.),
Dual Degree,
Interdisciplinary Dual Degree,
B. Arch. (Hons.),
Integrated M. Sc. Degrees,
2 Year M.Sc. of Joint - M.Sc. - Ph.D.
6 Year Dual Degree M.Sc. - M.Tech.

Indian Institute of Technology Kharagpur



भारतीय प्रौधोगिकी संस्थान खड़गपुर

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PREFACE

The Indian Institute of Technology at Kharagpur is the first of the sixteen Institutes established in the IIT system. Established in 1951, IIT Kharagpur stands tall for its excellence in Academics and Research with top class faculty. With 19 Academic Departments, 7 Centers & 8 Schools of Excellence, the Institute offers 15 B.Tech.(Hons.) Programs, 38 Dual Degree Programs, 2 Interdisciplinary Dual Degree Programs, 6 Integrated M.Sc. Programs and 5 Two Year M.Sc. degree programs of Joint M.Sc.-Ph.D.

The Undergraduate courses at IIT Kharagpur are known for their academic depth and professional learning flexibility, imbibed with options to earn minor or extra credits. Having an apt mix of basic sciences, engineering sciences, professional core of the major discipline, humanities courses, management subjects, project work, open electives and industrial training, the courses give a professional edge to the students. The system stimulates broad spectrum learning. Extra Academic activity is a non credit component of the curriculum that not only helps the students in character and personality building but also in understanding the needs of the society and contributing in an effective way to meet these social challenges.

IIT Kharagpur follows a credit based semester system. There are two Semesters in an academic year (Autumn: July - November; and Spring: January - April) during which all courses specified for various degree programs are offered. There is one additional term of seven week duration during summer, for the theory subjects of the first year to offer additional training to students who do not clear these subjects. The Institute has recently launched an International Summer /Winter Term Program which is open to all students. The students get an opportunity to seek knowledge and experience from International faculty in various multidisciplinary subjects.

IIT Kharagpur is a very student friendly place and all efforts are made to ensure that the students are provided the best opportunities that are needed to create outstanding pool of human resources to meet the global challenges in all spheres.

The students are required to follow certain procedures and meet specified academic requirements each semester. This booklet gives comprehensive information on the existing Rules and Regulations for B.Tech.(Hons.), Dual Degree and M.Sc. Programs.

We urge the students to make best use of the world class infrastructure and facilities available at IIT Kharagpur and wish all of them all the very best for a successful career.

Dean (UGS)

1. Academic Administration

The Senate is a statutory and supreme body that governs all academic matters of the Institute, and the rulings of Senate Chairman (Director of The Institute) are final in regard to all academic issues. 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 Programs and makes appropriate revisions/ modifications/improvements as and when required through three Institute level Senate subcommittees: The <u>Under-Graduate Program Evaluation Committee</u> (UGPEC) for undergraduate programs, the Post-Graduate Program Evaluation Committee (PGPEC) for post-graduate programs, and the Research Program Evaluation Committee (RPEC) for research programs. Administrative back-up and support for all academic activities is provided by the Academic Section and the ERP system of the Institute. On joining the Institute, students of each discipline are assigned to a Faculty Advisor from their Department. Faculty Advisors assist the students on matters relating to their academic performance and the courses they may take in various semesters.

Dean (Undergraduate Studies) and **Dean (Students' Affairs)** are the two Chief Academic Authorities for the Undergraduate (UG) Programs. All the UG Academic matters come under the purview of Dean (Undergraduate Studies). Matters pertaining to conduct, discipline and welfare of the students are overseen by the Dean (Students' Affairs).

2. Academic Programs

The following Undergraduate Programs are Offered by the Institute:

- (i) 4-year courses in Engineering / Technology leading to the award of **B.Tech**. (Hons.) Degree. (Table 2.1)
- (ii) 5-year Integrated courses in Engineering / Technology leading to **Dual B.Tech**. (Hons.) and M.Tech. Degrees. (Table 2.2)
- (iii) 5-year Integrated courses in Engineering / Technology leading to Interdisciplinary Dual B.Tech. (Hons.) and M.Tech. Degrees. (Table 2.3)
- (iv) 5-year course in Architecture leading to the award of **B.Arch**. (Hons.) degree.
- (v) 5-year Integrated courses in Science subjects leading to the award of both **B.Sc.** and **M.Sc.** Degrees. (**Table 2.4**)
- (vi) 2 Year M.Sc. courses of Joint M.Sc.-Ph.D. Degrees in Science subjects leading to the award of M.Sc. Degrees. (Table 2.5)

TABLE - 2.1 4-year courses in Engineering/Technology leading to the award of **B.Tech. (Hons.)** Degree

SI.	Courses
1.	Aerospace Engineering
2.	Agricultural and Food Engineering
3.	Biotechnology and Biochemical Engineering
4.	Chemical Engineering
5.	Civil Engineering
6.	Computer Science and Engineering
7.	Electrical Engineering
8.	Electronics and Electrical Communication Engineering
9.	Instrumentation Engineering
10.	Industrial Engineering
11.	Manufacturing Science and Engineering
12.	Mechanical Engineering
13.	Mining Engineering
14.	Metallurgical and Materials Engineering
15.	Ocean Engineering and Naval Architecture

TABLE - 2.2 5-year Integrated courses in Engineering/Technology leading to **Dual B.Tech.** (Hons.) and M.Tech. Degrees

SI.	Courses	
1.	B.Tech.(Hons.) & M.Tech. in Aerospace Engineering	
2.	B. Tech.(Hons.) in Agricultural and Food Engineering & M. Tech. in Food	
	Process Engineering	
3.	B. Tech.(Hons.) in Agricultural and Food Engineering & M. Tech. in Land and	
	Water Resources Engineering	
4.	B. Tech.(Hons.) in Agricultural and Food Engineering & M.Tech. in Farm	
	Machinery and Power	
5.	B. Tech.(Hons.) in Agricultural and Food Engineering & M.Tech. in	
	Aquacultural Engineering	
6.	B. Tech.(Hons.) in Agricultural and Food Engineering & M.Tech. in Agricultural	
	Systems and Management	
7.	B. Tech.(Hons.) in Agricultural and Food Engineering & M.Tech. in Agricultural	
	Biotechnology	
8.	B.Tech. (Hons.) & M.Tech. in Biotechnology and Biochemical Engineering	
9.	B.Tech. (Hons.) & M.Tech. in Chemical Engineering	
10.	B.Tech. (Hons.) in Civil Engineering & M.Tech. in Structural Engineering	
11.	B.Tech. (Hons.) in Civil Engineering & M.Tech. in Transportation Engineering	
12.	B.Tech. (Hons.) in Civil Engineering & M.Tech. in Geotechnical Engineering	
13.	B.Tech. (Hons.) in Civil Engineering & M.Tech. in Hydraulic and Water	
	Resources Engineering	

14.		
17.	B.Tech. (Hons.) in Civil Engineering & M.Tech. in Environmental Engineering and Management	
15.	B.Tech. (Hons.) & M.Tech. in Computer Science and Engineering	
16.	B.Tech. (Hons.) in Electrical Engineering & M.Tech. in Control System Engineering	
17.	B.Tech. (Hons.) in Electrical Engineering & M.Tech. in Machine Drives and Power Electronics	
18.	B.Tech. (Hons.) in Electrical Engineering & M.Tech. in Power and Energy Systems	
19.	B.Tech. (Hons.) in Electrical Engineering & M.Tech. in Instrumentation and Signal Processing	
20.	B.Tech. (Hons.) in Electronics & Electrical Communication Engineering & M.Tech. in Microelectronics and VLSI Design	
21.	B.Tech. (Hons.) in Electronics & Electrical Communication Engineering & M.Tech. in RF and Microwave Engineering	
22.	B.Tech. (Hons.) in Electronics & Electrical Communication Engineering & M.Tech. in Telecommunication System Engineering	
23.	B.Tech. (Hons.) in Electronics & Electrical Communication Engineering & M.Tech. in Visual Information and Embedded Systems	
24.	B.Tech. (Hons.) in Electronics & Electrical Communication Engineering & M.Tech. in Fibre Optics and Light Wave Engineering	
25.	B.Tech. (Hons.) in Instrumentation Engineering & M.Tech. in Instrumentation and Signal Processing	
26.	B.Tech. (Hons.) in Instrumentation Engineering & M.Tech. in Control System Engineering	
27.	B.Tech. (Hons.) in Industrial Engineering & M.Tech. in Industrial Engineering and Management	
28.	B.Tech. (Hons.) in Manufacturing Science and Engineering & M.Tech. in Industrial Engineering and Management	
29.	B.Tech. (Hons.) in Mechanical Engineering & M.Tech. in Manufacturing Science and Engineering	
30.	B.Tech. (Hons.) in Mechanical Engineering & M.Tech. in Thermal Science and Engineering	
31.	B.Tech. (Hons.) in Mechanical Engineering & M.Tech. in Mechanical Systems Design	
32.	B.Tech. (Hons.) & M.Tech. in Mining Engineering	
33.	B.Tech. (Hons.) in Mining Engineering & M.Tech. in Safety Engineering	
34.	B.Tech. (Hons.) in Metallurgical and Materials Engineering & M.Tech. in Metallurgical Engineering	
35.	B.Tech. (Hons.) & M.Tech. in Ocean Engineering and Naval Architecture.	
36.	B.Tech. (Hons.) in Engineering Product Design and Manufacturing & M.Tech. in Design and Quality Engineering with Mechanical Engineering Vertical	

37.	B.Tech. (Hons.) in Engineering Product Design and Manufacturing & M.Tech. in
	Design and Quality Engineering with Industrial Electronics Vertical
38.	B.Tech. (Hons.) in Chemical Engineering and M.Tech. in Petroleum Engineering
39.	B.Tech. (Hons.) in Mechanical Engineering and M.Tech. in Petroleum
	Engineering
40.	B.Tech. (Hons.) in Mining Engineering and M.Tech. in Petroleum Engineering

TABLE - 2.3 5-year Integrated courses in Engineering/Technology leading to Interdisciplinary Dual B.Tech. (Hons.) and M.Tech. Degrees

SI.	Courses
1.	B.Tech.(Hons.) in any Engineering Discipline and M.Tech. in Financial
	Engineering
2.	B.Tech.(Hons.) in any Engineering Discipline and M.Tech. in Engineering
	Entrepreneurship

TABLE - 2.4 5-year Integrated courses in Science subjects leading to the award of both **B.Sc. and M.Sc.** Degrees

SI.	Courses
1.	Chemistry
2.	Exploration Geophysics
3.	Applied Geology
4.	Economics
5.	Mathematics and Computing
6.	Physics

TABLE - 2.5 2 Year M.Sc. of Joint M.Sc.-Ph.D. Degrees

SI.	Courses
1.	Chemistry
2.	Geophysics
3.	Geology
4.	Mathematics
5.	Physics

TABLE - 2.6 6-year Integrated courses in Science/Technology leading to **Dual M.Sc.** and **M.Tech.** Degrees (Senate Approval, Item 314.H.I.C.6)

SI.	Courses
1.	M.Sc. in Applied Geology and M.Tech. in Petroleum Engineering
2.	M.Sc. in Exploration Geophysics and M.Tech. in Petroleum Engineering

3. Scope of the Regulations

3.1 The provisions of this Regulation is applicable to all Programs and disciplines listed above and will also be applicable to new Under-Graduate(UG) disciplines that are introduced from time to time.

3.2 The Board of Governors **(BOG)** may, on the recommendation of the Senate change any or all parts of this Regulation at any time considered appropriate by the Senate.

4. Academic Calendar

- 4.1 The academic session is divided into two semesters each of approximately 20 weeks duration: an **Autumn Semester** (July-November) and a **Spring Semester** (January-April).
- 4.2 The Senate-approved schedule of academic activities for a session, inclusive of dates for registration, mid-semester and end-semester examinations, intersemester breaks etc., shall be laid down in the Academic Calendar for the session and published on Institute Web Site. The Academic Calendar shall strive to provide for a total of about 90 working days in each semester.

5. Admission

- 5.1 Admission to all courses (except the 2 Year M.Sc. of the Joint M.Sc.-Ph.D. programs) will be made in the Autumn Semester of each session, at the First Year level, through a Joint Entrance Examination (**JEE Advanced**) conducted by one of the IITs every year by rotation under the supervision of a Joint Admission Board, which comprises of representatives from all the IITs.
- 5.3 Admission to 2 Year M.Sc. courses of the Joint M.Sc.-Ph.D. Program will be made in the Autumn Semester of each session, at the First Year level, through a Joint Admission Test (**JAM**) conducted by one of the IITs every year by rotation under the supervision of a Joint Admission Committee, which comprises of representatives from all the IITs.
- 5.4 In special cases the Institute may admit students to a course on transfer from other IITs. Such admission may be made at any level considered appropriate except at first year level.
- 5.5 Provisions of this Regulation do not prevent the Institute from allowing students enrolled in a university in India or abroad to attend specified subjects in one or more semesters without leading to any degree on certain terms and conditions.
- 5.6 All students admitted to any of the courses including those accepted under Section 5.4 above shall be required to pay at the time of joining and also in subsequent semesters prevalent tuition and other fees as prescribed by the Institute till they are on roll.
- 5.7 The Institute reserves the right to cancel the admission of any student, and ask him/her to discontinue his/her studies at any stage of his/her career on grounds of unsatisfactory academic performance, irregular attendance in classes or indiscipline.
- 5.8 Candidate admitted through JEE Advanced to B.Tech.(Hons.)/Dual Degree/Integrated M.Sc. programs (other than B.Arch.(Hons.) students) will be eligible for Branch Change and Switch Over to Interdisciplinary Dual Degree Programs, the rules for which are mentioned in the subsequent sections.

6. Residence

The Institute is essentially a residential one and unless otherwise exempted/permitted, every student shall be required to reside in, and be a boarder of a Hall of Residence, to which they are assigned. Following are the detailed rules governing residence requirements of students:

- 6.1 The mess of each Hall of Residence shall function as a single integrated unit and shall not, under any circumstances be sub-divided into any kind of groups or sub-groups.
- 6.2 Under special circumstances, the Director/Dean of Students' Affairs may permit a student to reside with his Parent/Guardian in the Institute Campus or within a reasonable distance from the Institute. Such a student shall, however, be attached to a Hall of Residence and will be required to pay seat rent according to rules, and Hall establishment charges fixed by the Hall Management Committee (HMC) and the Warden of the Hall. However, this permission may be withdrawn at the discretion of the Institute, at any time considered appropriate without assigning any reason.
- 6.3 No married accommodation shall be provided to any student of the undergraduate courses.
- 6.4 No student shall come into or give up the assigned accommodation in any Hall of residence without the prior permission of the Chairman, HMC.
- 6.5 A student shall reside in a room allotted to him/her and may shift to any other room only under the direction/permission of the Warden.
- 6.6 Students shall be required to make their rooms available whenever required for inspection, repairs, maintenance or disinfecting and shall vacate the rooms when leaving for the vacations/holidays.
- 6.7 Students shall be responsible for the proper care of the furniture; fan and other fittings in the rooms allotted to them and shall generally assist the Warden in ensuring proper use, care and security of those provided in the Halls for common use of all students.
- 6.8 Students will be responsible for the safe keeping of their own property. In the event of loss of any personal property of a student due to theft, fire or any other cause, the Institute shall accept **no responsibility** and shall not be liable for payment of any compensation.
- 6.9 Engaging personal attendants, keeping pets and use of appliances like electric heater, refrigerators etc. by a student in the Hall of Residence are prohibited.
- 6.10 All students must abide by the rules and regulations of the Hall of Residence as may be framed from time to time.

7. Attendance

7.1 Attendance in all classes (lectures, tutorials, laboratories, workshops, Extra Academic Activity including its related camps and other publicized activities etc.) is compulsory. A student may be **debarred** from appearing at an examination on the ground of unsatisfactory attendance.

- 7.2 The teacher concerned may condone absence from classes for a very short period due to unavoidable reasons provided he/she is satisfied with the explanation.
 - 7.2.1 If the period of absence is for a **short duration** (of not more than two weeks) application for leave shall have to be submitted to the Head of the Department concerned stating fully the reasons for the leave requested for along with supporting document(s). The Head of the Department will grant such leave.
 - 7.2.2 Absence for a period not exceeding two weeks in a semester due to sickness or any other unavoidable reason for which prior application could not be made may be condoned by the Head of the Department provided he is satisfied with the explanation.
- 7.3 If the period of absence is likely to **exceed two weeks**, a prior application for grant of leave will have to be submitted through the Head of the Department to the Dean (Undergraduate Studies), with the supporting documents. The decision to grant or condone such leave shall be taken by the Dean (Undergraduate Studies) after considering the recommendation of the Head of the Department.
- 7.4 It will be the responsibility of the student to get his absence from classes condoned by the appropriate authority.
- 7.5 Absence from classes without prior permission will be considered as an act of indiscipline. Such cases will be dealt with in accordance with <u>Section 5.7</u>.
- 7.6 A student must intimate his/her absence to the Warden of the Hall in which he/she is residing, before availing of any leave. Failing to do so will be construed as breach of discipline and will be dealt with as per provisions in Section 8.5
- 7.7 Before proceeding on medical leave the B.C.Roy Technology hospital should be informed and before rejoining the institute, the student should obtain a fitness certificate from the B.C.Roy Technology hospital (Senate approval, Item 316.C.I.C.1).
- 7.8 Medical leave of a maximum period of one month during the semester is allowed. Beyond one month the rejoining will be considered on a case to case basis (Senate approval, Item 316.C.I.C.1).

8. Conduct and Discipline

- 8.1 Students shall conduct themselves within and outside the precincts of the Institute in a manner befitting the students of an institution of national importance.
- 8.2 Students shall show due respect to the teachers of the Institute, the Wardens of the Halls of Residence, the Sports Officers of the Gymkhana and the Officers of the National Cadet Corps; proper courtesy and consideration should be extended to the employees of the Institute and of the Halls of Residence. They shall also pay due attention and courtesy to visitors.
- 8.3 Students are required to develop a friendly relationship with fellow students. In particular, they are expected to show kindness and consideration to the new students admitted to the Institute every year. Law bans ragging in any form to anybody acts of ragging will be considered as gross indiscipline and will be severely dealt with.

- 8.4 The following acts of omission and/or commission shall constitute gross violation of the code of conduct and are liable to invoke disciplinary measures:
 - Ragging.
 - Furnishing false statement of any kind in the form of application for admission or for award of scholarship etc.
 - Displaying lack of courtesy and decorum; resorting to indecent behavior anywhere within or outside the campus.
 - Willfully damaging or stealthily removing any property/belongings of the Institute, Hall or fellow students.
 - Possession, consumption or distribution of alcoholic drinks or any kind of hallucinogenic drugs.
 - Adoption of unfair means in the examinations.
 - Organizing or participating in any group activity in company with others in or outside the campus without prior permission of the Dean of Students' Affairs.
 - Mutilation or unauthorized possession of library books.
 - Resorting to noisy and unseemly behavior, disturbing studies of fellow students.
 - Misuse of Internet/e-mail facilities or tempering/hacking with servers anywhere in the Halls of Residence/Departments etc.
 - Not intimating his/her absence to the Warden of the Hall before availing any leave.

Commensurate with the gravity of the offence, the **punishment** may be **reprimand**, **fine**, and **expulsion** from the Hall, **debarment** from an examination, rustication for a specified period or even **outright expulsion** from the Institute.

- 8.5 For an offence committed (a) in a Hall of Residence, (b) in the Department or a classroom and (c) elsewhere, the Warden, the Head of the Department and the Dean of Students' Affairs, respectively, shall have the authority to reprimand or impose fine or take any other suitable measure.
 - All cases involving punishment other than reprimand shall be reported to the Chairman of the **Standing Institute Disciplinary Committee**.
- 8.6 (a) All major acts of indiscipline, which may have serious repercussion on the general body of students, and/or which may warrant a uniform and more formalized nature of investigation, shall be handled by the **Standing Institute Disciplinary Committee** appointed by Senate. The Standing Disciplinary Committee consists of the following ex-officio and other members:
 - (i) Dean of Students' Affairs Chairman
 - (ii) Chairman, Hall Management Committee Member
 - (iii) Warden of the Hall of Residence of which the student concerned is a boarder **Member**

- (iv) One Faculty nominated by the Senate, by rotation for two years Member
- (v) Student Vice-President, Technology Students' Gymkhana Member
- (vi) One of the student representatives in the Senate, to be nominated by the Dean Students' Affairs, for one year **Member**
- (vii) The Deputy Registrar (Academic) Member Secretary

In addition, the Chairman may invite any other person(s) to be associated with the proceedings of a particular case, if his/her/their participation is considered necessary in disposing of the matter.

- **(b)** Recommendation of the committee, which will include the suggested punishment in cases of guilt proven, will be forwarded to the Chairman Senate for necessary action.
- 8.7 Cases of adoption of unfair means in an examination shall be dealt with by the **Committee on Prevention of Examination Malpractices** consisting of the following members:
 - (i) Professor-in-Charge of Examination Chairman
 - (ii) Head of the Department to which the reported student belongs Member
 - (iii) The Invigilator reporting the case- Member
 - (iv) The Invigilator-in-Charge of the Examination Hall concerned- Member
 - (v) The Paper-setter concerned **Member**
 - (vi) Two members of faculty nominated by the Undergraduate Program & Evaluation Committee for a term of two years **Members**
 - (vii) The Assistant Registrar (UGS) Secretary

The Committee shall recommend appropriate measures in each case to the Chairman of the Senate for awarding the punishment

9. Change of Branch (At the end of First Year)

9.1 Change of the branch is a privilege and not a right. Only those students admitted to **B.Tech.(Hons.) / Dual Degree / Integrated M.Sc. Programs** through JEE(Advanced) are eligible to be considered for a change of branch after the Second (Spring) Semester as per the following rules:

To be eligible for consideration for a change of branch the following conditions must be satisfied:

- 9.1.1 He/she must have completed all the credits prescribed in the first two semesters of the course, in his/her first attempt, without having had to pass any course requirement in the re-examination, supplementary examination and/or summer quarter.
- 9.1.2 He/she must have obtained a **Cumulative Grade Point Average** (CGPA) not lower than **8.5** at the end of the Second (Spring) Semester.
- 9.1.3 He/she must not have been punished for any offence by the Standing Institute Disciplinary Committee or the Committee on Prevention of Examination Malpractices at any time prior to the notification for the change of branch.

- 9.2 Application for a change of branch must be made by intending eligible students when the notification is made during the Spring Semester of the academic year. The students have to accordingly (i) apply online and (ii) **submit signed hardcopy** to Academic Section by the specified deadline.
 - 9.2.1 Students admitted to **4-Year B.Tech.(Hons.)** and **5-Year Integrated M.Sc.** programs are eligible for consideration for a change of branch to any Engineering or a Science discipline.
 - 9.2.2 Students admitted to a **5-Year Dual Degree Program** are **eligible** for a **change** to another **5-Year Dual Degree Program** only.
- 9.3 Students may enlist up to **TEN (10)** choices of branch, in order of preference, to which they wish to change over. It will not be permissible to alter the choices after the application has been submitted.
- 9.4 Change of branch shall be made strictly on the basis of *inter se* merit of the applicants. For this purpose the CGPA obtained at the end of the Second (Spring) Semester shall be considered. Ties will be broken by the JEE Advanced rank of the applicants.

9.5

- (a) In making the **change of branch**, those applicants shall be first considered who have secured a rank within **top 1%** (one percent), rounded to the nearest integer, amongst all the first year students in terms of the CGPA scored at the end of the Second (Spring) Semester. Change of branch requested for by such applicants shall be made **without any constraint on the number of seats**.
- (b) The remaining applicants may be allowed a change of branch, strictly in order of *inter se* merit, subject to the limitation that the actual number of students in the Third (Autumn) Semester, in the branch to which the transfer is to be made, does not exceed 110% of the sanctioned yearly intake for that branch.

The sanctioned yearly intake of a particular branch shall be the number sanctioned by the Senate as the intake for that branch for the particular year of entry of the applicants. To compute the total number of students in the first year, sum of the sanctioned yearly intake of all the branches will be taken. For the purpose of calculating the actual number of students in a particular branch, the number of students joining the branch is to be considered.

- 9.6 The academic section will notify the students and display on the notice boards about the changes of the branch at least 7 (seven) days before the assigned date(s) of the registration of the third (Autumn) semester. However, all changes of branch made in accordance with the above rules will be effective from the Third (Autumn) Semester of the applicants concerned. No changes of branch shall be permitted thereafter.
- 9.7 All changes of branch will be final and binding on the applicants. No student will be permitted, under any circumstances, to refuse the change of branch offered.
- 9.8 Notwithstanding the provisions of foregoing paragraphs, the Senate may under

very special circumstances, permit the transfer of a student from one branch to another in deviation of the above mentioned rules. In each such case the special reasons for which the transfer is permitted must be recorded in the Senate resolution. Such transfers, if any, will be over and above the regular transfers, and their number will not be counted in the computation of 'Actual Number of Students' in a given branch.

10. Switch Over to Interdisciplinary Dual Degree

Students admitted to the **4-year B. Tech.(Hons.) / 5-year Dual Degree** Program through JEE(Advanced) are eligible for Switch Over to the Dual Degree Programs of **Engineering Entrepreneurship/Financial Engineering**.

- 10.1 Such students must have completed all the prescribed course work for the first two Semesters in first attempt with a **minimum CGPA of 6.00**.
- 10.2 Application for a Switch Over must be made by intending eligible students when the notification is made during the Spring Semester of the academic year. The students have to accordingly (i) apply online and (ii) **submit signed hardcopy** to Academic Section by the specified deadline.

An option for Interdisciplinary Dual Degree Programs does not prevent a student to opt for Change of Branch. In such case Change of Branch allotted to a student would prevail over the option of Interdisciplinary Dual Degree Program.

11. Allocation of Verticals for QEDM

- 11.1 Students admitted to the Dual Degree Program in Engineering Product Design and Manufacturing must exercise their options for Industrial electronics or Mechanical Engineering verticals at the end of first year. This will be notified in the Spring Semester of each academic year. The students have to accordingly (i) apply online and (ii) submit signed hardcopy to Academic Section by the specified deadline
- 11.2 Vertical assignment will be strictly in accordance with choice and CGPA for GE, OBC, SC and ST categories.

12. B.Tech.(Hons.) to Dual Degree Switch Over

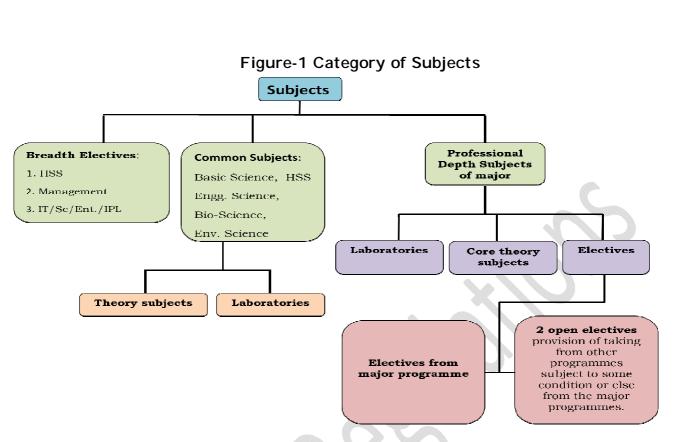
- 12.1 Third year B.Tech.(Hons.) students will have the option to switch over from 4-year B.Tech.(Hons.) to an existing 5-year Dual Degree course (one-way and not the reverse) in the same department, including a choice of specialization, offered at 2-year M.Tech. level in the Department maintaining proportionate distribution of seats.
- 12.2 The student must have completed all the curricular requirements upto sixth semester and must not have any backlog subjects with a **minimum CGPA of 6.00**.
- 12.3 The notification for Switch Over will be issued during the Spring Semester of each academic year. The students have to accordingly (i) apply online and (ii) submit signed hardcopy to Academic Section by the specified deadline.

13. Options for Dual Degree Specialization

- 13.1 Third year Dual Degree students of Agricultural and Food Engineering, Civil Engineering, Electrical Engineering, Electronics & Electrical Communication Engineering and Mechanical Engineering must exercise their choice of particular M.Tech. specialization.
- 13.2 Such dual degree students will be allowed to choose any post-graduate specialization approved by the department without any constraint. Alternately if a department fixes the number of seats in each post-graduate specialization with the approval of the senate the allotment of the seats will be made on the basis of choice and CGPA at the end of the 3rd year including the Supplementary/ Summer Quarter results as the case may be.
- 13.3 Specialization allotment will be made only for those students who are promoted to the next level.
- 13.4 The notification for choice of specialization will be issued during the Spring Semester of each academic year. The students have to accordingly (i) apply online and (ii) **submit signed hardcopy** to Academic Section by the specified deadline.

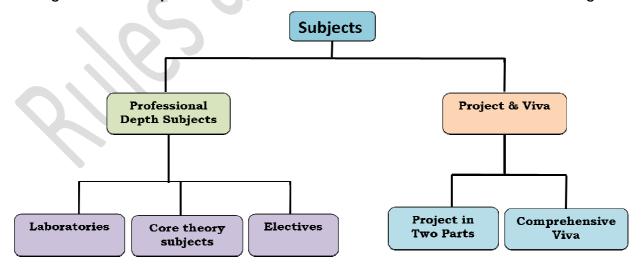
14. Course Curricula

- 14.1 Course Structure
 - ❖ The general course structure for all Programs (B.Tech.(Hons.) / B.Arch.(Hons.) / 5 year M.Sc./Dual Degree) comprises of the following components:
 - ➤ Common Curricula for First Year (Except B.Arch. (Hons.)).
 - ➤ Theory and Laboratory /Design/Sessional subjects with regular class room contact. The various categories as shown in Figure 1.
 - ➤ Four Non Credit components of Extra Academic Activity (Two in case of B.Arch.(Hons.)) from 1st to 4th semester.
 - Industrial Training.
 - Comprehensive Viva Voce.
 - ➤ Project in Two parts for B.Tech.(Hons.)/B.Arch.(Hons.)/5 Year M.Sc. Programs.
 - > Project in Four Parts, 2 each corresponding to the B.Tech.(Hons.) and M.Tech.
 - > Field Trips for Mining Engineering, Geology and Exploration Geophysics programs.



- ❖ Students of Interdisciplinary **Dual Degree will forgo the three Breadth courses** and two open electives in place of the corresponding subjects of Financial Engineering or Engineering Entrepreneurship.
- ❖ For Dual Degree Students, 2 M.Tech. level core/elective subjects will replace the open electives.
- ❖ The curricular components of the **2 Year M.Sc. of Joint M.Sc. -Ph.D. Program** structure is shown in the Figure 2.

Figure 2.: Components of the 2 Year M.Sc. of Joint M.Sc.-Ph.D. Program



- > The students of Geology and Geophysics have field-trips as a part of their curriculum.
- 14.2 Except Extra Academic Activity each component of the curriculum has <u>credits</u> attached to it.
- 14.3 The detailed Senate approved curricula **for various Disciplines** along with the syllabus for each subject for all the programs are available on the Institute Website.
- 14.4 The curricula to be followed in the first two semesters by students of **B.Tech.(Hons.)** /5 year M.Sc./Dual Degree programs shall be common.
- 14.5 **Subjects**: All subjects prescribed in the curriculum except Extra Academic Activity have **credits** assigned to them. Subjects are broadly classified into two categories:
 - 14.5.1 Theory, Laboratory, Sessional and Design based courses having a regular class room/laboratory contact. These Subjects have a lecture-tutorial-experiment/design component (L-T-P) to indicate the contact hours per week. Their L-T-P pattern may be (L-T-0,L-0-0,0-0-P and in some cases L-T-P)
 - 14.5.2 Comprehensive Viva Voce, Project, Field Trips and Industrial Training/Office Training which do not have regular class room contact.
- 14.6 Teaching of subjects would be reckoned in terms of credits.
- 14.7 **Subject pre-requisite**: A subject may have one or more subjects listed as its **pre-requisite**. A student who has qualified in all the subjects in the pre-requisite would be allowed to register in the subject. The teacher concerned would have the prerogative to waive the prerequisite for a student if he/she is satisfied through a test that the student otherwise have gained sufficient proficiency to take up the subject.
- 14.8 **Extra Academic Activity**: Every student must register and complete the Extra Academic Activity (EAA) requirements as laid down in the curriculum.
 - ➤ EAA is classified into 4 main groups such as National Cadet Corps (NCC) National Service Scheme (NSS), National Sports Organization (NSO) and Health and Fitness (HF).
 - Further NCC is classified into Electrical & Mechanical Engineering (EME) Wing and Air Wing (ARW).
 - NSS classified into 15 units.
 - NSO classified into different sports such as athletics, badminton, basketball, cricket, football, hockey, swimming, tennis, table tennis, volleyball.
 - Health & Fitness classified into 10 units.
 - All the above EAA is being coordinated by Program Coordinator and the individual modules by Program officers.
 - > Student exercise their choice of EAA components at the time of admission.
 - Allocation of the EAA component is made centrally based on their choices and availability.
 - > Clearing EAA is mandatory for the award of the degree.

14.9 Modalities for administering the open elective slots ❖ Open elective I

In the slot of open elective I, only the following category of students can opt for a subjects from other departments:

The students must have registered for a minor/ Micro-Specialization and the subject opted from other departments must be one of the subjects of his / her requirement for the minor/ Micro-Specialization.

The students who do not fall in the above category (who have not registered for a minor/ Micro-Specialization) have to opt for subjects only from the list of his / her parent department in this slot.

❖ Open elective II

In the slot of open elective II, the following category of students can opt for a subject from other departments:

The students must have a CGPA \geq 8.0.

The students registered for a minor/Micro-Specialization may utilize this slot in opting for a subject of his / her requirement for the minor, or for a subject from other departments (available in the slot) as he / she desires.

The students having a CGPA < 8.0 have to opt for the subjects only from the list of his / her parent department in this slot.

- 14.10 **Program Duration**: The normal duration of programs leading to the degrees to be awarded under these Regulations are as follows:
 - (i) B.Tech. (Hons.) 4 years
 - (ii) Dual Degree 5 years
 - (iii) Interdisciplinary Dual Degree 5 years
 - (iv) B.Arch. (Hons.) 5 years
 - (v) Integrated M.Sc. 5 years
 - (vi) 2 Year M.Sc. of Joint M.Sc.-Ph.D. Program 2 Years
- 14.11 Maximum Time Limit: The total time to earn the degree (inclusive of the period of Withdrawal, if any) is limited to 8 years, for 4-year B.Tech.(Hons.) and 10 years for 5-year Integrated M.Sc., 5-year B.Arch. (Hons.), and 5-year Dual Degree students, 4-years for the 2 Year M.Sc. of the Joint M.Sc.- Ph.D. Program.
- 14.12 Conferment of Degrees for Dual Degree/5 Year M.Sc. Program: On successful completion, a student would be conferred the B.Tech.(Hons.) and the M.Tech. degrees in the case of the Dual Degree; B.Tech. (Hons.) in the parent engineering discipline and M.Tech. in Financial Engineering or Engineering Entrepreneurship for Interdisciplinary Dual Degree Programs. Both B.Sc. and the M.Sc. degrees will be awarded in the case of the Integrated M.Sc. degree together on successful completion of all ten semesters of study.

15. Co-ordinated Courses

A Co-ordination Committee would be constituted for each subject taught by more than one teacher of one or more Departments/Centers. Each committee would consist of all the teachers who are involved with the teaching of the subject during the semester. One of its members would be nominated by the Head of that Department, under whose name the subject is being offered, to act as its Chairman.

- 15.1 **Tenure:** The semester in which the subject is being offered.
- 15.2 **Functions**:
 - 15.2.1 To lay down the course plan for the subject.
 - 15.2.2 To coordinate instructions and progress of teaching in the subject and to ensure that the full syllabus is covered.
 - 15.2.3 To review periodically the performance of students who have registered in the subject.
 - 15.2.4 To forward the results of the examinations and the final grades obtained by each student taking the subject to the concerned Head of the Department.
 - 15.2.5 To moderate the question papers on the subject and ensure that the syllabus is well covered by the question papers.
- 15.3 **Frequency of Meetings:** Each Co-ordination Committee shall meet at least four times during the semester.

16. Industrial Training and Field work

- 16.1 The curricula for all B.Tech.(Hons.) programs would include compulsory industrial training for **8** weeks carrying 2 credits, to be carried out in the summer vacation at end of the sixth semester,
- 16.2 The curricula for all Dual Degree and 5-year M.Sc. programs would include compulsory industrial training for **8** weeks carrying 2 credits, to be carried out in the summer vacation at end of the eighth semester.
- 16.3 The allotment of training programs of all the students by Career Development Centre will be frozen by a suitable and fixed deadline each year. No further change will be entertained under any circumstances.
- 16.4 A student after being selected in an organization by Career Development Centre cannot opt out of his training from that organization under any circumstances.
- 16.5 Any arrangement of training in industry or academia (within or outside the country) has to be routed through Career Development Centre via the Professor-in-Charge of training of the respective department.
- 16.6 **Evaluation of Summer Training.** The performance of the student in the Summer Training will be evaluated based on his submission of a certificate from the organization of his training followed by a combined viva-voce/presentation and report examination.
- 16.7 The curricula of Mining Engineering would suitably include the additional requirements of industrial training and field work equitably distributed at the third and the fourth year levels.
- 16.8 The curriculum of B.Arch.(Hons.) course shall include a six month field training

to be carried out in the eighth semester.

16.9 Summer Internship of ongoing 4th year Dual Degree students.

A 4th year Dual Degree student (students admitted prior to Academic year 2013-2014) will be allowed to pursue a Summer Internship Program provided the Supervisor of his M.Tech. thesis work certifies that the program is strongly connected to his thesis work. The students undergoing such program will not get the M.Tech. scholarship during their period of internship outside.

From the session 2016-2017 onwards, the curricula for Dual Degree courses and all 5-year M.Sc. programs would include compulsory industrial training for 8 weeks carrying 2 credits, to be carried out in the summer vacation at end of the eighth semester (in place of sixth semester).

17. Additional credits

From the THIRD semester onwards the curriculum offers scope for a student to opt for Additional subjects apart from the regular curriculum requirement under the following conditions:

- 17.1 If a student has a Cumulative Grade Point Average (CGPA) equal to or greater than 7.50 without any backlog, he/she would be allowed to take *additional subjects* within and/or outside his/her own discipline to earn additional credits of up to 33% of his/her requirement for major. A student would be allowed to register in an additional subject only if he/she satisfies the pre-requisite, there is no clash in the timetable and the class size permits.
- 17.2 Once a student has registered in an additional subject, the grade obtained (including F-grade) in that subject would invariably be recorded in his/her grade card. The credit contribution of these additional subjects to the computation of CGPA, however, would be considered as nil.
- 17.3 The GPA of the additional subjects is separately calculated and indicated in the grade card.
- 17.4 A student can drop an additional subject following the proper procedure within 3(three) weeks from the commencement of the semester; otherwise the subject will remain registered and the subject will be mandatorily reflected on the Grade Card even with F grade.
- 17.5 There is no scope for supplementary examination in an additional subject.

18. Micro-Credits

- 18.1 Micro-Credit courses are one credit courses having duration of 3-14 days offered during the semester or during evening or free slots available during weekdays or even weekends that are not declared holidays in some special cases when students are available.
- 18.2 The subject will be counted for total credit requirement for completion of degree in special cases *subject to recommendation of the Head and approval of Dean (UGS) with due reasons recorded.*
- 18.3 The subject and grade will be mentioned in transcript / grade card and will be used to compute CGPA *for additional subjects and will be shown as ACGPA*. Failures will be marked by F grade. There_will be no supplementary examination for such subjects. The F grade will be changed only if the subject

is offered again and the student is allowed to register and clear the subject. However, in case the micro-credit is accepted as a subject contributing to the curricular requirement, it will be accounted for in the CGPA calculations.

18.4 A student is normally not expected to take more than 2 such courses in a semester. The subject may also be a part of minor and micro-specialization.

19. Minor in a Discipline

- 19.1 A department would offer a **MINOR** in a discipline in which it offers a major.
- 19.2 The department would enlist a set of subjects from its curriculum and prescribe a requirement for minor taking six subjects or more (18-24 contact-hours plus 3-9 hours of laboratory) from this set. The subjects would be a combination of mostly core and some electives.
- 19.3 Students aspiring for a Minor in a discipline must register for the same in the beginning of the 5th semester. Only those students, who have a CGPA of 7.5 or above, without any Backlog, will be permitted to register for a Minor. An SGPA or CGPA in excess of 8.0 has to be maintained in the subsequent semesters without any Backlog in order to keep the Minor registration active. Should both the SGPA and CGPA fall below 8.0 at any point after registering for the minor; the Minor registration will cease to be active.
- 19.4 A student registered for Minor in a discipline must register and pass in all subjects that constitute the requirement for a minor and score a minimum grade point average of 6.00 to be awarded a Minor in that discipline.
- 19.5 A student may cover these six subjects as either a depth subject, elective subject or a breadth subject or as additional credits. However, he/she has to take at least three subjects as additional credits to earn a minor.
- 19.6 Students enrolled in Dual Degree, Integrated M.Sc. and B.Arch. (Hons.) are permitted to pursue minor in other discipline up to their 10th Semester, while the students of B.Tech.(Hons.) should complete the minor requirements by 8th semester.

20. Micro - Specialization

The Institute proposes to offer Micro-Specializations to UG students from the Spring Semester of the current Academic Session (2014-2015). The salient features are as follows:

- 20.1 Each Micro-Specialization has a defined structure in terms of three sequential components:
 - 20.1.1 **Component-I** One Foundation Course (2-4 credits) that constitutes a Mandatory Requirement and also a Pre-Requisite for subsequent Components.
 - 20.1.2 **Component-II** One/Two subjects (3-4 credits each) from a Specified list of subjects.
 - 20.1.3 **Component-III** Project/Design/Term Paper (4 credits) OR one subject (4 credits) from a Specified list.
- 20.2 A Student would be required to complete 3-4 subjects (10-14 credits) from the specified list in order to earn a Micro-Specialization.

- 20.3 The subjects can be taken through the Breadth/Open Elective component of the curriculum or as Additional Subjects. If specified in the Micro-Specialization curriculum, the subject can also be taken as Micro-Credit/s.
- 20.4 A student has to register for a Micro-Specialization. The Registration can be done in the beginning of any Semester beyond first year.
- 20.5 In order to register for a Micro-Specialization the student must have completed all curricular requirements upto the previous semester and have a CGPA ≥ 7.0. Thereafter the student must maintain a CGPA or SGPA ≥ 7.5 without any Backlog in the subsequent semesters to keep the Micro-Specialization registration active.
- 20.6 GPA for the subjects contributing to the Micro-Specialization will be separately calculated. A minimum GPA of 6.00 is essential to earn the Micro-Specialization.

21. Admission to Ph.D. for Joint M.Sc. - Ph.D. Program

Students admitted to the 2 year M.Sc. of the Joint M.Sc.-Ph.D. program can either leave with the M.Sc. degree after the fourth semester or join the Ph.D. program if he/she satisfies the following rules:

- 21.1 The student must have secured a minimum CGPA of 8 at the end of the fourth semester. The students must express, in writing, his (or her) willingness to continue with Ph.D.
- 21.2 Successful Joint M.SC.-Ph.D. student will be awarded two degrees (M.Sc. and Ph.D.) simultaneously. Hence a student shifting to the Ph.D. program will not be listed as a recipient M.Sc. degree in the following convocation. However, each such student will be the given final grade card of the 4-semester M.Sc. degree. If, after joining, a student exits the Ph.D. program, then the degree of M.Sc. will be awarded in the next convocation. In that case the student will be given provisional certificate at the time of discontinuing the program and the student will be admitted to the Degree in the next convocation.
- 21.3 All regulations for the Ph.D. program with regard to admission, enrollment, comprehensive examination, registration, and award of degree, etc. are applicable to these students.
- 21.4 Joint M.Sc.-Ph.D. student admitted to the Ph.D. program will be treated as Institute Research student and will receive assistantship as per the MHRD norms prevailing at the time admission to the Ph.D. program.
- 21.5 A scholarship of Rs.5,000/- (Rs.Five thousand only) per month for the first two years of M.Sc. program will be paid to the students who join the Ph.D. program. The final amount will be released after the Ph.D. registration.

22. Semester Registration

- 22.1 From the second semester onwards only those students will be permitted to register who have:
 - 22.1.1 Cleared all Institute and Hall dues of the previous semesters,
 - 22.1.2 Paid all required prescribed fees for the current semester, and
 - 22.1.3 Not been debarred from registering for a specified period on disciplinary or any other ground.

- 22.2 Eligible Students will be presented with a broad time window, as specified in the Academic Calendar to Pay the Semester Registration Fee and finalize his/her subject Registration by suitable choice of Electives/Additional or Backlog subjects for each Semester.
- 22.3 It is mandatory for the student to be present in the Institute and report to their faculty advisors on or before the day from which the classes commence (as notified in the Academic Calendar).
- 22.4 Guidelines for registration of UG students (except fresh 1st year)
 - 22.4.1 A Student who has cleared all curricular requirements up-to the previous semester will register for all subjects of the current semester in accordance with the curriculum.
 - 22.4.2 All backlog subjects of the corresponding semester have to be registered first.
 - 22.4.3 Students having only one backlog subject in a semester may register for the prescribed credit of the semester in addition to the backlog subject.
 - 22.4.4 For students having more than one backlog subject in a semester the registered credit in the semester inclusive of backlog subjects must not exceed **28**.
 - 22.4.5 For students repeating a year, the registered credit in a semester must not exceed **16**. He/She may register for subjects of P grade along with backlog subjects, with total registered credit not exceeding **16**.
 - 22.4.6 The credits of Industrial Training, field Trips (GG and MI students), comprehensive viva voce and EAA should be excluded while calculating the 28 or 16 credit limits per semester for backlog/year repeating students.
 - 22.4.7 In registration for a subject, prerequisite must be taken care of.
 - 22.4.8 Students may be allowed to take Departmental elective subjects instead of professional breadth electives.
 - 22.4.9 Registration in the subjects of same slots will not be allowed.
 - 22.4.10 Subject to availability, a student, irrespective of his/her level or discipline of study may be allowed to take a subject including an M.Tech. subject as an Elective, Breadth or Additional Subject Students who have a Backlog in a Breadth or an Elective may register in another Breadth or Elective. The Elective must be in the same group of Electives offered in the Semester concerned.
 - 22.4.11 Final year students may be allowed to take prescribed credit and, in addition, maximum two backlog subjects in a semester provided he has a CGPA of 6.00 and above so that he/she can clear all requirements of the degree if otherwise there is no time clash.
 - 22.4.12 Academically Weak Students:

Such students will be **divided into two categories based on their Notional CGPA** (calculated on the basis on **Total Credit Taken**)

- **A.** A student having CGPA < 6.0
- **B.** A student who has more than two backlogs/unregistered subjects (regardless of CGPA).

The faculty advisors will set up a meeting date every month and it will be mandatory on the part of the students to attend these meetings. During the meeting the problems of student will be discussed and measures to improve their Academic Performance suggested. A report of these meetings must be recorded on ERP for each student.

The **Academic Registration on ERP** for all weak students shall be done *through* **faculty advisor only**.

- 22.4.13 Restriction limits on Registration for Academically Weak Students
 Students will be divided into two categories based on their
 Notional CGPA (calculated on the basis on Total Credit Taken)
 - > Category 1: Students with CGPA >=6.0
 - > Category 2: Students with CGPA < 6.0

Registration limits will depend on the students' category and the following limits will be imposed based on the *number of subjects*:

Category 1: No restriction on the number of subjects. The student, however, must register for the Backlog/Unregistered subjects first. A student may register for a maximum of 28 credits. In case of final year, where the normal credit loading itself is around 28 credits due to the Project component, a student may be allowed two backlogs over and above the prescribed credit limit of the semester.

Category 2: A student may register following **any of the limits** listed below:

- 1) 4 theory subjects and 2 labs (including design/sessionals)
- 2) 5 theory subjects
- 3) 3 theory subjects, 1 laboratory and 1 project
- 4) 4 theory subjects and 1 project

The student must **register** for the **Backlog/Unregistered** subjects **first**. Students, in this category, will be allowed to **register only for one Project at a time**. The number of subject includes improvement subjects.

- 22.4.14 Special Case of Architecture (B.Arch.(Hons.) Program)
 - Students having backlogs in 6th semester shall not be prevented from being promoted to 5th year (due to their off-campus one-semester internship in 8th semester). The students, however, must register for the 6th semester backlog subjects first in their 10th semester. The 'restriction limits for registration', specified above, shall be applicable for such students also.
- 22.4 Students who have cleared all the curricular requirements upto the previous semester and obtained CGPA lower than 6.00 may be allowed, on the recommendation of the Head of the Department and the approval of the Dean (Undergraduate Studies), to re-register in one or more subjects in which he/she received 'P' grade(s), so as to improve his/her CGPA to 6.00 or above, provided that the subject(s) is/are otherwise being offered in that semester and there is no clash in the time table. The grade will be revised and recorded only if there is an

- improvement.
- 22.5 A student who has been debarred from appearing at an examination either (i) as per recommendation of the subject teacher for unsatisfactory attendance or (ii) by the Institute as a measure of disciplinary action or (iii) for adopting malpractice at an examination, and consequently awarded a grade 'X', may reregister for the subject(s) after the term of the debarment expires, provided that other provisions of this regulations do not prevent him.
- 22.6 With the concurrence of the Faculty Adviser a student may be allowed to change his/her registration of subjects within one week from the day of registration.
- 22.7 If eligible a student may be allowed to register in additional subjects, with the concurrence of the Faculty Adviser, within one week from the day of registration.
- 22.8 Interdisciplinary Dual Degree in Financial Engineering
 Students who are facing time table clash with a Departmental Subject for taking
 Economics (HS20001) in Autumn Semester may register for the same in Spring
 Semester of 2nd year Dual Degree program.

23. De-registration

- 23.1 The student can be de-registered in a subject of a semester by the concerned teacher on the ground of poor attendance.
- 23.2 If a student does not have a minimum of 80% attendance in a subject, he/she can be de-registered from the subject at the discretion of the subject teacher.
- 23.3 Only one-time de-registration is permissible and no revocation of the deregistered subject is admissible, expect on genuine medical grounds.
- 23.4 Email Warning should be given to the students by the subject teacher prior to de-registration.
- 23.5 The de-registration process shall commence after the Mid-semester Examination. However, in case of projects (BTP and MTP for Dual Degree), comprehensive viva voce and Summer Training/Internship, there is no scope for de-registration by the concerned teachers.
- 23.6 The de-registration will stop two weeks before the commencement of the End Semester Examination (Senate Approval, Item 316.H.I.C.6).

24. Grading System

24.1 As a measure of students' performance a 7-scale grading system using the following letter grades and corresponding grade points per credit, as shown in Table 24.1 will be followed:

Table 24.1

Performance	Letter Grade	Grade point Per Credit
Excellent	EX	10
Very good	Α	9
Good	В	8
Fair	С	7
Average	D	6
Pass	Р	5
Fail	F	0

In addition, there shall be one grading symbol **X** used to indicate that the student is **Deregistered/Debarred** in that particular subject.

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

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

where 'n' is the number of subjects registered and cleared for the semester, ' \mathcal{C}_i '

is the number of Credits allotted to a particular subject, and ' g_i ' is the gradepoints carried by the letter corresponding to the grade awarded to the student for the subject. SGPA will be rounded off to the second place of decimal and recorded as such. The SGPA would indicate the performance of the student in the semester to which it refers.

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

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

Where 'm' is the total number of subjects the student has **registered and** cleared from the first semester onwards up to and including the semester \mathbf{S}_{i} ' c_{i} '

is the number of Credits allotted to a particular subject ' s_i ' and ' g_i ' is the grade-point carried by the letter corresponding to the grade awarded to the student for the subject ' s_i '. CGPA will be rounded off to the second place of decimal and recorded as such.

The CGPA would indicate the cumulative performance of the student from the first semester up to the end of the semester to which it refers.

The CGPA, SGPA and the grades obtained in all the subjects in a semester will be communicated to every student at the end of every semester.

For determining the *inter se* merit ranking of a group of students, only the rounded off values of the CGPAs will be used.

- From the batch of 2014-2015 onwards the calculation of SGPA and CGPA will be based on all the **subjects registered**.
- 24.3 When a student gets the grade 'F' in any subject during a semester, the SGPA and the CGPA from that semester onwards will be tentatively calculated, taking only 'zero point' for each such 'F' grade. After the 'F' grade(s) has/have been

- substituted by better grades during a subsequent semester, the SGPA and the CGPA of all the semesters, starting from the earliest semester in which the 'F' grade has been updated, will be recomputed and recorded to take this change of grade into account.
- 24.4 Conversion of CGPA into percentage Marks: In case of a specific query by students/employers regarding conversion of CGPA into percentage marks, the following formula will be adopted for **notional conversion of CGPA** into percentage marks. Formula: % Marks = CGPA*10

25. Assessment of Performance

There will be continuous assessment of a student's performance throughout the semester and grades will be awarded by the subject teacher/co-ordination committee formed for this purpose.

- 25.1 In general there shall be no rigid marks-to-grade linkage. Difficulty levels of the examinations, tests, assignments, viva-voce and other factors that contribute to the final marks are to be considered by the teacher/co-ordination committee of a subject while converting marks into letter grades.
- 25.2 (a) The grades **F** and **EX** are to be considered as bench mark grades.
 - (b) The range of cut-off marks below which a student would be assigned an 'F' grade is 30-35 for the theory component and 35-40 for the laboratory component, the exact cut-off marks is to be decided by the teacher/co-ordination committee.
 - (c) The exceptionally brilliant performance is to be assigned an 'EX' grade. Even the best student of any class needs to be good enough to be awarded the 'EX' grade.
 - (d)For subjects which have a laboratory component (P-component) along with the theory, to secure any grade higher than 'F' a student has to achieve individually more than the cut-off marks in both the theory component and the laboratory component. Separate marks, each out of 100 (hundred), in the theory component (L- & T- components) and the laboratory component are to be ascertained first. A composite mark for the subject out of 100 is then to be computed by taking appropriate contribution of theory component and the laboratory component as shown in **Table 25.1**:

Table: 25.1

L-T-P	Credit	Theory (L-T component)	Laboratory (P-component)
4-0-6	8	50	50
3-0-6	7	40	60
4-0-3	6	70	30
3-1-3	6	70	30
1-0-8	6	20	80
3-1-2	5	80	20
3-0-3	5	60	40
3-0-2	4	75	25
2-0-3	4	50	50
1-0-5	4	25	75
2-0-2	3	70	30
1-0-3	3	30	70
1-0-2	2	50	50

> Once the numeric mark is obtained, the same is to be converted to letter grade following the guidelines given in **Table : 25.2**.

Table: 25.2

Marks Range (m)	Grade
m >= 90	EX
80 <= m < 90	А
70 <= m < 80	В
60 <= m < 70	С
50 <= m < 60	D
40 <= m < 50	Р
m < 40	F 🔷

- 25.3 Large Class Assessment: In the case of a relatively large class and/or classes where the performance level depicts more or less a normal distribution:
 - (a) The average performance (around mean value of marks) is to be assigned 'C' grade. However, if by teacher's/co-ordination committee's perception the general level of the class is considered to be appreciably high, the average performance may be assigned 'B' grade.
 - (b) All other marks to grade conversion are to be done relatively with respect to the average performance in between (but excluding) the F and EX grades, which have already been assigned, by choosing appropriate boundary marks between grades.
 - (c) Normally, in a reasonably large class of students distribution of grades is expected to be as follows:

Table: 25.3

Grade	Distribution
EX	<= 10%
А	10 – 20 %
B, C, D	20 – 35 %
Р	10 – 25 %
F	< = 5 %

- 25.3.1 In the case where a student appears in the supplementary examination or attends summer quarter, the conversion from marks to grade would be done applying the same norm as was framed for the original class.
- 25.3.2 For classes where excessive bunching occurs resulting in almost all the marks tending to cluster into same category, conversion from marks to grade may be done using the Table 23.2, where 'm' stands for the marks obtained. However, the teacher may, on his/her perception of the difficulty level of assessment process undertaken, alter the boundary (cut-off) marks by +/- 5 marks.
- 25.3.3 For subject in which the theory component is greater than 1 (one), the subcomponents and the respective weights assigned to these are given below.

Table: 25.4

Subcomponent	Weight
Teacher's Assessment	20%
Mid-Semester Examination	30%
End-Semester Examination	50%

- 25.3.4 For assigning marks in Teacher's Assessment (T.A.) performance in home assignments, class-tests, tutorials, viva-voce, attendance etc., are to be considered. At least two class tests are to be conducted for a subject. The weights of different sub-components of T.A. are to be announced by the teacher at the beginning of the Semester.
- 25.3.5 For subjects in which the theory component is 1 (one), there would be no Mid-Semester or End-Semester Examinations. The marks of the theory component would be decided by performance in class-tests, home assignments, tutorials (if any), viva-voce, attendance etc. At least two class tests are to be conducted for the theory component of such a subject. The weights of different subcomponents are to be announced by the teacher at the beginning of the Semester.
- 25.3.6 For assigning marks in the laboratory component (P-component) the relevant sub-components that are to be considered are day-to-day work, regularity, tests (at least two must be conducted), assignments, vivavoce etc. Percentage weights of the different sub-components in deciding the final marks are to be announced at the beginning of the Semester.
- 25.4 The eight-week industrial training undergone by the students in the summer vacation after the sixth semester would be assessed within five weeks after the commencement of the seventh semester. The students are required to submit a written report on the training received and give a seminar, on the basis of which a grade would be awarded. The students are also required to submit to the Head of the Department a completion certificate in the prescribed form from the competent authority of the organization where the training was received, without which he/she would not be assessed.

26. Assessment of Project Work

26.1 Performance in the various activities involved in the project would be assessed individually at the end of each semester in which it is being carried out as per the curriculum. The student is required to submit a written report at the end of the semester. The Head of the Department would appoint a project evaluation board for the purpose of assessment. The project evaluation board of the tenth semester for Dual Degree/Integrated M.Sc. program would include an external expert to be appointed by the Dean (Postgraduate Studies) /Dean (Undergraduate Studies), from a panel recommended by the Head of the respective Department. The different components of evaluation and the weights assigned to these components are depicted below:

Table: 26.1

Subcomponent	Weight
Supervisor's assessment	40%
Project Report/Thesis (to be assessed by the board)	
Evaluation Board's assessment	40%

The student is required to give a seminar on the project work done. The evaluation board would conduct the viva-voce. Dates for conducting the seminar and the viva-voce, to be held within ten days after the end-semester examination, would be announced in the academic calendar.

26.2 The grades for projects of 7th, 8th semesters for B.Tech. and 9th, 10th semesters for Dual Degree/Integrated M.Sc. have to be submitted within the respective deadline of grade submission as per Academic Calendar. If a student cannot complete the project for any reason, by deadline, he/she will get an 'F' grade. The extension of project in a semester can be made with the prior approval by Dean UGS of the application made by the student through his/her Project Supervisor and Departmental Head.

The deadline for submission of the grades for the extension availed in projects allotted in Autumn Semester (7th and 9th Semesters) will be three days before the registration of the next Spring Semester, while the deadline for submission of the grades for the extension availed in the projects allotted in the Spring Semester (8th and 10th Semesters) will be June 30 of the concurrent year. In case of project extension, a student will be awarded one grade less than that actually obtained by him/her.

If a student cannot clear the project for the 7th semester, he/she can register the same along with 8th semester project. In such case, he/she will get one grade less than that actually obtained in the evaluation of project part I (7th semester component). The same policy will hold good for 9th and 10th semester projects for Dual Degree, 5-year Integrated M.Sc. students. A Dual Degree student can register for 9th semester project even if he/she cannot clear the 8th semester project.

Under no circumstances a student will be allowed to register for more than two projects in a semester.

26.3 The Head of the Department would constitute the Viva-Voce Board(s) for conducting the comprehensive viva-voce examination as per the requirement of the curriculum. The Board would decide the relative weights of the different aspects of the viva-voce and decide the grades to be awarded to the students. The dates of the viva-voce, to be conducted within ten days after the previous end-semester examination, would be announced in the academic calendar.

27. Examinations

- 27.1 Mid-Semester and the End-Semester Examinations in respect of the theory component of the subjects are conducted on the dates specified as per academic calendar.
- 27.2 Examination for some subjects are held centrally while for the others it held in

the departments.

- 27.2.1 A student will be issued an Admit Card for appearing in an examination, only if he/she has:
 - 27.2.1.1 Paid all Institute and Hall dues of the semester.
 - 27.2.1.2 Not been debarred from appearing in the examination as a result of disciplinary proceedings.
- 27.2.2 A student may be debarred from appearing at the Mid-Semester or End-Semester Examination on the report of a teacher/ chairman, co-ordination committee, if his/her:
 - 27.2.2.1 Attendance at lecture/tutorial/laboratory classes has not been satisfactory during the period, and/or,
 - 27.2.2.2 Performance in the assignment works during the semester has not been satisfactory.
- 27.3 Attendance in class tests and mid-semester examination:
 - 27.3.1 Class tests, mid-semester examinations, assignments, tutorials, vivavoce, laboratory assignments, etc., are the constituent components of continuous assessment process, and a student must fulfill all these requirements as prescribed by the teacher/co-ordination committee of the subject. If due to any compelling reason (such as his/her illness, calamity in the family, etc.) a student fails to meet any of the requirements within/on the scheduled date and time, the teacher/co-ordination committee in consultation with the concerned Head of the Department may take such steps (including conduction of compensatory tests/examinations) as are deemed fit.

Attendance in end-semester examination:

- 27.3.3.1 Appearing in the end-semester examination in the theory component of a subject is compulsory for a student. If a student fails to appear in the end-semester examination he/she will be assigned an 'F' grade in the subject and will not be permitted to register in the summer quarter or appear at the supplementary examination for the subject as stipulated.
- 27.3.3.2 However, if a student misses the end-semester examination due to a compelling reason like serious illness of himself/herself or a calamity in the family, he/she may appeal to the Dean, Students' Affair, through his/her Head of the Department for permitting himself/herself to register in the summer quarter or appear at the supplementary examination(s), as the case may apply. A subcommittee of the Undergraduate Program & Evaluation Committee (UGPEC) consisting of the following members may, after examining the documents and being convinced about the merit of the case, recommend permitting him/her to register in the summer quarter and/or appearing in the supplementary examination(s) with full credit condoning his/her absence:

- > The Dean of Students' Affairs Chairman
- > The Dean of Undergraduate Studies.
- ➤ The Head of B. C. Roy Technology Hospital
- ➤ One Medical Officer of the B. C. Roy Technology Hospital (preferably the In-Charge of the indoor patients during the concerned period)
- > The Deputy Registrar (Academic) Secretary
- 27.4 Students will be permitted to appear in the examinations in only those subjects for which they have registered at the beginning of the semester and have not been debarred.
- 27.5 The final grades awarded to the students in a subject must be submitted by the teacher/chairman, co-ordination committee, within seven days from the date of holding the examination to the concerned Head of the Department for onward transmission to the Assistant Registrar (UGS).
- 27.6 The evaluation of performance in the Extra Academic Activities (EAA) will be done by the respective program officers.
- 27.7 For the benefit of and as a process of learning by the students, the scripts after correction of all class tests, mid-semester examinations, assignments etc., would be shown to the students within 4 weeks from the date of tests/examinations. The scripts of the end-semester examinations are to be shown within 15 days from the date of commencement of the next semester.
- 27.8 With a view to assist the students, who failed in one or more subjects in the autumn and/or spring semester in a year, a Summer Quarter will be conducted during the immediately following summer vacation for making up their deficiency and improve the performance.

 The regulations for running the Summer Quarter are given in Section 29.
- 27.9 In order to provide an additional opportunity to the students who failed (obtained 'F' grade) in one or more subjects, due to not being able to score higher than the cut-off marks in the theory components, in either the autumn and/or the spring semester in a year, Supplementary Examinations equivalent to the end-semester examination arranged centrally by the Academic Section, will be conducted in the month of July (before commencement of the next session) every year. Regulations relating to the Supplementary Examination are given in Section-28.

28. Supplementary Examination

- 28.1 A student will be eligible to appear in the supplementary examination in a subject if he/she actually appeared at the last end-semester examination in that subject and obtained the grade 'F'.
- 28.2 However if a student has been absent in the End Semester examination (a) due to medical reasons, that are duly certified by B C Roy Technology Hospital or (b) due to a calamity in the family his/her case will be considered for supplementary with full credit. In such cases the student must apply in writing to the Dean (Undergraduate Studies) through the Head of the Department.
- 28.3 All medical cases will be put up for consideration to the medical board. Only upon certification by the medical board the student will be granted full credit.
- 28.4 A student will not be allowed to appear in more than 5 (five) subjects in the

- supplementary examinations and Summer Quarter put together.
- 28.5 Intending students must submit their application, countersigned by the teacher(s) of the subject(s) or the Head of the Department concerned, along with the necessary fees to the Academic Section by the date as announced by a notification.
- 28.6 The supplementary examinations shall be held on such dates as laid down in the Academic Calendar for the year or as notified separately.
- 28.7 The grade in the subject scored by the student appearing in the supplementary examination will be recomputed by substituting the marks of the end-semester in the total marks scored by that scored in the supplementary examination. Unless granted full credit by virtue of Section 28.2 a student is entitled only to one grade lower than the actual grade thus scored, except that the performance grade 'P' remains unaltered, as elucidated in the table below:

Table: 28.1

Grade Obtained	Grade to be Awarded
F	F
Р	P
D	P
С	D
В	C
A	В
EX	Α

- 28.8 The final grades awarded to the students must be sent to the Academic section on or date specified in the academic calendar.
- With effect from the academic year 2016-2017, only the students of first year and final year will be eligible to appear in the supplementary examination in a subject if he/she actually appeared and obtained Grade 'F'. However, if a student has been absent in the End Semester examination (a) due to medical reason, duly certified by B.C. Roy Technology Hospital or (b) due to a calamity in the family, he/she will be considered for the supplementary examination with full credit. In such cases, the student must apply in writing with relevant documents to the Dean (Undergraduate Studies) through the Head of the Department before a given deadline.
- 28.10 With effect from the academic year 2016-17, a **student other than first year** and **final year** who has been absent in the End Semester examination (a) due to **medical reasons**, duly certified by B C Roy Technology Hospital or (b) due to a **calamity** in the family will be **eligible for re-examination** to make up the end semester examination with full credit. In such cases, the student must apply in writing with relevant documents to the Dean (Undergraduate Studies) through the Head of the Department before a given deadline.
- 28.11 For all other cases (other than those described in the above sub-sections 28.9 & 28.10) the supplementary examination will no longer be available to students.
- 28.12 Students intending to appear for the Supplementary Examination must apply online through ERP. The requirement of the concerned teacher/HOD giving