Rules and Procedures *for* **Postgraduate Programmes**
(Applicable from Academic Session 2020-21 onwards)

Punjab Engineering College
(Deemed to be University)
Chandigarh

1. Introduction

Punjab Engineering College, Deemed to be University, Chandigarh, is a premier institution in Northern India. The broad objectives of the M.Tech programmes are:

(1) to develop the engineering /technical manpower of the highest quality to cater to the needs of industry, R&D organizations and educational institutions.

(2) to develop advanced design capability among students.

(3) to develop a deep understanding of the area of specialization in the students.

(4) to develop innovative ability in the students to solve new problems, and a capacity to learn continually and interact with multidisciplinary groups.

(5) to develop among students a capacity for free and objective enquiry, awareness and sensitivity to the needs and aspirations of the society.

With these objectives in view, the programmes are designed to have courses of study & dissertation through which a student may develop his/her concepts and skills.

The admissions to the all M.Tech programmes are regulated through valid GATE (Graduate Aptitude Test in Engineering) scores. A few seats in each branch of engineering are available for sponsored candidates also. The intake in various branches is approved by the Senate.

The normal duration of M.Tech programme is 2-years (4-semesters). The Institute follows a credit based semester system for its academic programmes. This system allows greater freedom to the individual to tailor the programme to his/her specific needs/aspirations.

This manual contains minimal regulations and procedures to be followed by the students to meet the academic requirements of the programmes. Within this general framework, subject to the approval of the Senate, the various departments and programmes may impose such additional requirements as will serve their particular academic objectives.

1.1 M.Tech Programmes

The 2-year (4 semesters) M.Tech programmes are available in following disciplines:
1. Civil Engineering (Structural Engineering)
2. Civil Engineering (Transportation Engineering)
3. Civil Engineering (Water Resources Engineering)
4. Computer Science & Engineering
5. Civil Engineering (Environmental Engg.) – An Inter disciplinary Programme
6. Computer Science & Information Security – A self-supporting Programme
7. Electrical Engineering
8. Electronics Engineering
9. Electronics (VLSI Design)
10. Industrial Design – A self-supporting Programme
11. Industrial Materials & Metallurgy
12. Mechanical Engineering
13. Production and Industrial Engineering

1.2 Office of the Dean of Academic Affairs

The office of the Dean of Academic Affairs (DAA), called the Academic Section, is responsible for the implementation of the decisions taken on academic matters by the Senate and IAPC. It

(i) receives, processes and maintains all records relating to the undergraduate and post graduate programmes including curricula, courses offered, academic calendar, registration, leave, examinations, grades and award of degrees and prizes

(ii) disseminates information pertaining to all academic matters

(iii) issues necessary memoranda/orders

(iv) acts as a channel of communication between the students, instructors, departments and IAPC. It assists the IAPC and its subcommittees in their tasks.

1.3 Waiver Clause

The procedures and requirements set out in this manual, may be waived in special circumstances with the approval of Chairman, Senate.

2. Admissions
2.1 General Instructions

- A candidate must have obtained a BE/B. Tech. or an equivalent degree with at least 60 percent marks or an equivalent CGPA with 5% relaxation for SC/ST and Persons with Disability category candidates.

- In each programme 15 percent seats are reserved for the SC candidates and 7.5 percent seats are reserved for the ST candidates. The details of reservation of other categories & other information are supplied in Admission Brochure.

- The admission to all M.Tech programmes is regulated through Centralized Counseling of M.Tech. (CCMT) with valid GATE scores. The detailed procedure and other requirements for admission are specified in the Admission Brochure brought out every year.

- Sponsored candidates are also considered for admission to M.Tech programmes. They need not have a valid GATE score. Their admission will be based on the performance in test conducted by the respective departments.

- A sponsored candidate must have been in service of the sponsoring organization for at least two years at the time of admission. The sponsoring organization must specifically undertake to provide full salary to the candidate and to relieve him/her to pursue the programme for its full duration.

- Admission to any M.Tech programme requires that the applicant
  (i) be eligible
  (ii) go through the laid down admission procedure, and
  (iii) pay the prescribed fees.

- All admissions to the M.Tech programmes should be formally approved by the Senate.

2.2 Cancellation of Admission

All students admitted provisionally or otherwise, to any programme are required to submit their mark-sheets, provisional certificates, etc. of the qualifying examination and other documents at the time of counseling for admissions. The Senate/Chairman Senate can cancel the admission of any student who fails to submit the prescribed documents or to meet other stipulated requirement(s). The Senate/ Chairman Senate may also cancel the admission at any stage during the course, if it is found that the

student had supplied some false information or suppressed relevant information while seeking admission.

3. Assistantship

The students admitted to M.Tech programmes may get assistantships on the basis of valid GATE scores. The said assistantship shall be in accordance with the set procedure and guidelines. The students will have to perform duties and other tasks as specified in the guidelines. Assistantship will not be provided to candidates who are not GATE qualified.

4. Academic Session

The academic session normally begins in the fourth week of July every year and ends in the middle of May. It is divided into two parts:

First Semester: Normally from the fourth week of July to the last week of November

Second Semester: Normally from the second week of January to the third week of May

Each of the two semesters is of 15 weeks duration.

4.1 Academic Calendar

The exact dates of all the important events, such as registration, late registration, commencement of classes, examinations, vacation etc., are specified in the *Academic Calendar* of the Institute as approved by the Senate.

5. Curriculum

5.1 Structure of the M.Tech Programmes

Every M.Tech programme consists of courses in Mathematics, Research Methodology, programme core courses, programme elective courses, in the first and second semesters of the programme. The programme elective courses should be in the area which improves student's focus, preferably in the area of dissertation work. The third and fourth semesters are primarily meant for dissertation work, in which a student works on a chosen topic for investigation/study in consultation with the dissertation supervisor. This culminates into submission of dissertation report by the student. The institute allows PG students to do course work at other academic institutes. The credit transfer policy is given in **Annexure III.**

Salient feature of PG structure is as follow:-
1. Fractal credit system:- In fractal system, a semester is divided into six segments. Each segment is of 7 contact hours and 0.5 credits.
2. Compulsory course on IOT and Machine Learning, Soft Skill & Management (with fractal credits for Communication Skills, Management & Entrepreneurship and Professional Ethics) and Engineering Mathematics (with fractal credits of three elective courses from Engineering Mathematics basket).
3. 20% courses per semester can be offered in blended mode with MOOCs/ industry.
4. Mandatory Industrial visit during Summer Vacation.

5.2 Credit System

5.2.1 Credit Assignment

Each course has a certain number of credits assigned to it depending upon its lecture and laboratory contact hours in a week.
Lectures: One lecture hour per week per semester is assigned one credit

Laboratory: One Laboratory hours per week per semester is assigned half credit

5.2.2   Credit Requirements

Total minimum credits required for completion of M.Tech degree = 68
Through course work = 36 credits
Through Dissertation work= 32 credits

6   Academic Registration
6.1   General Instructions

1.   All students are required to register each semester for the courses/dissertation work to be pursued by them, as per the programme, on the dates specified in the Academic Calendar. A student must ensure that he/she has completed the pre-requisites, if any, for each course to be registered.
The sole responsibility for registration rests with the student concerned.

2.   The DAPC nominates Faculty Co-ordinators to advise students on selection of the courses of the concerned department. The student registering for the dissertation must have a dissertation supervisor assigned to him/her.

3.   The academic registration procedure involves:

   • filling of the online registration form mentioning the courses/dissertation work, duly approved, to be credited in the semester

   • payment of fees and clearance of all outstanding dues (if any), and

   • signing of the registration roll in the office of the Dean Academic Affairs.

   A student will not get credit for any course/dissertation work, for which he/she is not registered in any academic term.

4.   All the students who are not on authorized leave must continue to register in the following semester till they submit their dissertation.

5.   A new entrant (to the M.Tech programme) who is awaiting the results of the qualifying examination will be allowed to register "provisionally" on submission of a certificate from his/her institution certifying that he/she has appeared in the final qualifying examination (including all papers in theory, practical, project, oral etc.). The candidate will submit attested copies of documents as specified by the Academic Section.

6.   In very special cases of students who have completed all the experimental work and analysis related to the dissertation, and are on sanctioned leave, the IAPC on the specific recommendations of DAPC and HOD may allow submission of the dissertation without registration.

6.2 Late Registration

1.   If for any compelling reason like illness, etc. a student is unable to register by the date of normal registration, he/she can register by the last date of late registrations (which is about one month from the beginning of the semester and is specified in Academic Calendar) on payment of a late fee. However, if a student seeks prior permission to register late on valid grounds, he /she may be allowed to do so without payment of late registration fee by the Chairperson, IAPC.

2.   In exceptional cases, the IAPC on the recommendation of the DAPC and HOD may consider the registration beyond the last date of registration. In such cases, the student will be allowed to register for the dissertation only.

6.3 Semester Load Requirements

A semester load may vary from 14-18 credits. All theory courses carry credits from 0.5 to 3 credits. Thus, a student who has registered for a full semester load is expected to attend 6 courses i.e. streams and bridge courses/Audit courses/Mooc courses by respective departments if any. For a well-merited case, the IAPC may permit a student to register for a maximum of 18 credits or a minimum of 10 credits.

A student may, however, be permitted by DAPC to take up an overload of course(s) maximum of 4 credits to enrich his/ her knowledge or clear backlogs as per the approved guidelines.

6.4 Adding and Dropping of Courses

1. A student may add or drop course(s) by the last date(s) specified in the Academic Calendar which is normally two weeks from beginning of the semester with the permission of the IAPC.

2. PG students can add/ drop for a fractal courses for programs electives in mid of semester from the basket within a week of start of the course.

3. For this, he/she must fill up the appropriate form, get the endorsement of the Instructor and the Convenor, DAPC and submit the form to the Academic Section for approval.

4. A student may be required to drop a course at any stage if it is found that he/she does not meet the pre-requisites of the course, or if there is a clash in the student's time table preventing him/her from attending the course, or if he/she is found not entitled to register for that course for any other reason.

5. The HOD in consultation with the instructor and with the approval of IAPC may allow a student at his/her request to withdraw from one or more courses during the semester, if he/she has been sick for considerable time and has submitted a certificate to the satisfaction of the HOD, but the reduced load shall not be less than the minimum semester load, as specified in section 6.3.

6.5 Change of registration from Full-Time to Part-Time

A student admitted to full time programme may be allowed to change to part time programme on completion of the course work upon the recommendation through DAPC and with the approval of the Chairman, Senate. For part time candidates also, the thesis period is one year.

1. The student, who converts his/her mode of programme from full time to part time within 3 months of completion of his/her programme as regular student, will be allowed to submit his/ her dissertation as per rules and regulations governing the full-time programme.
2. The student, who converts his/her mode of programme from full time to part time before the period mentioned in point 1, the remaining period to submit his/ her dissertation will be doubled.
3. The maximum duration to complete the M.Tech. programme will be four year (8 Semester) in all cases.

6.6 Cancellation of Registration

Absence for a period of four or more weeks at a stretch during a semester shall result in automatic cancellation of the registration of a student from all the courses in that semester.

7. Teaching and Evaluation

7.1 Teaching

a) **Medium -** The medium of instruction and evaluation is English.

b) **Approval of Courses -** Each course along with its weightage in terms of credits is approved by the IAPC and Senate. Only approved courses may be offered during any semester.

c) **List of Courses -**The list of courses to be offered by a department is finalized before the beginning of the semester by the concerned Head, taking into consideration all the requirements. The list of all courses offered by the Institute in an academic term will be made available to the students before the date of registration for that term.

d) **Conduct of Courses-** Each course is conducted by the Instructor, assigned by the Head of Department. The Instructor is responsible for conducting the course, making the question paper, holding the examinations in his/her course, getting the answer scripts evaluated, awarding grades at the end of the semester and transmitting the grades to the Academic Section through the HOD within the prescribed time limit.
A teacher is expected to follow the approved curriculum. However, he/she can deviate from it in case it is felt that such deviation will improve the academic purpose of the course. In no case will this be treated as a ground for complaint by the students.

7.2 Evaluation

The evaluation of the students is a continuous process and is based on their performance in mid semester examination, end semester examination, quizzes/short tests, assignments, laboratory work (if any), make-up examinations (if applicable), etc. In general, there shall be no choice in test/examination papers. The Instructor is responsible for making the question paper, conducting the examination in his/her course, getting the answer scripts evaluated, and awarding the grades. The grades are forwarded through the Head of the Department who will ensure that proper standards have been used. Complete transparency will be maintained in evaluation system. The graded scripts of quizzes, tests, and mid-semester examinations will be returned to the students within a reasonable time. The answer scripts of the final examinations will be shown to the students after marking. All instructors will notify a time for such access within three days of the examination. A student may point out errors or omissions, if any, in marking in writing on the cover sheet of the answer script. The instructor will take these into account before submission of grades. The final grades earned by all students registered in a course will be submitted by the Instructor to the Academic Section through the Head of the Department within the prescribed time limit.

a) Schedule of Examinations

The end-semester examination and the mid-semester examinations will be held within the periods allocated in the Academic Calendar. In exceptional circumstances, the Dean, Academic Affairs may permit holding the examinations outside these periods.

b) Make-up Examination
If a student, for bonafide reasons such as illness, etc., fails to appear in the end-semester examination in one or more course(s), he/ she may make a request personally or through someone to IAPC for a make-up examination within two days of the date of the scheduled examination. Such a request must clearly specify the reasons for the failure to appear in the end-semester examination with a certificate from a Government Hospital/Institute Dispensary, in case the failure was due to illness. Only one make-up examination, for the end-semester examination, is allowed per course. For failures to appear in mid-semester examinations, etc., it is entirely up to the Instructor to ascertain the proficiency of the student by whatever means he/she considers appropriate if he/she is satisfied of the student's bonafides.

7.3 Grading System

The Institute shall continue to follow a continuous evaluation system with some freedom being given to the course Instructor in deciding the pattern of evaluation and weightages. A typical break-up for continuous evaluation of 3 credits courses is given below:

i.	Mid-term Examination	:	15 – 25 %
ii.	End-term Examination	:	40 – 50 %
iii.	Assignments, Quizzes (Minimum 3), Projects	:	30 – 40 %

For fractal course of credit less than 3, the evaluation break-up may include test/quizzes and end-term examination.

Evaluation of all components, i.e., mid-term examination, end term examination, assignments, quizzes etc. should be done in marks. The total marks thus obtained are to be converted to a letter grade. The conversion to letter grades may or may not be based on the relative performance of the students.

Structure of grading for academic performance:

The academic performance of a student shall be graded on a 10 point scale. The letter grades and their equivalent grade points are listed below:

Letter Grade	Performance	Grade Points
A^+	Outstanding	10
A	Excellent	9
B^+	Very Good	8
B	Good	7
C^+	Average	6
C	Below Average	5
D	Poor	4
F	Fail	-
I	Incomplete	-
N	Not Eligible	-

Explanation:

Grade 'F':   'F' grade denotes unsatisfactory performance in a course and indicates failure in the course.

Grade 'N':   A student who fails to fulfill the attendance requirement (clause 8.1) for a particular course shall not be eligible to appear in the end semester examination in that course and shall be awarded the grade 'N' for that course. He/she shall have to repeat the entire course.

Grade 'I':   For reasons acceptable to the Instructor, an 'I' (for Incomplete) grade may be assigned if a student fails to complete any of the required course work by the end of the semester. In all such cases, an Incomplete Contract, which is a formal agreement between the student and the instructor, is to be filled along with the grade report. An Incomplete Contract includes:

- The course work that remains to be completed.
- The date by which the specified work must be completed not later than one month of the close of relevant semester.
- The final grade to be substituted for the 'I' grade, if the specified work is not completed by the specified date.

The Incomplete Contract will be filled by the Instructor and submitted to the Academic Office when the Grade Sheet is submitted.

If the student completes the required work by the specified time, the instructor completes a grade change form indicating the final grade earned. The student should check with the instructor to ensure that a grade change form has been submitted.

If the student does not complete the required work by the specified time, the 'I' grade is automatically replaced with the final grade specified by the Instructor on the Incomplete Contract. If a

final grade is not specified, or if an Incomplete Contract is not filled, the 'I' grade automatically reverts to an F grade after one month.

Grading System for Large Classes (>30 students)

For large classes (>30 students) the grading should follow a normal distribution for the award of the grade in the course. The marks obtained out of 100 would be converted into grades following the guidelines given below:

The mean ($\overline{X}$) and the standard deviation (σ) of marks obtained by all the students in a course shall be calculated. The grades shall be awarded to a student depending upon the marks and the ranges as per table given below:

Award of Grade Using Statistical Method

Lower Range of Marks	Grade	Upper Range of Marks
$\overline{X} + 1.5\,\sigma <$	A^{+*}	------
$\overline{X} + 1.0\,\sigma <$	A	$\leq \overline{X} + 1.5\,\sigma$
$\overline{X} + 0.5\,\sigma <$	B^+	$\leq \overline{X} + 1.0\,\sigma$
$\overline{X} <$	B	$\leq \overline{X} + 0.5\,\sigma$
$\overline{X} - 0.5\,\sigma <$	C^+	$\leq \overline{X}$
$\overline{X} - 1.0\,\sigma <$	C	$\leq \overline{X} - 0.5\,\sigma$
$\overline{X} - 1.5\,\sigma <$	D	$\leq \overline{X} - 1.0\,\sigma$
	F*	$\leq \overline{X} - 1.5\,\sigma$

* The number of students securing A^+ grade should not be more than 10%. The same percentage limit would apply to F grade.

Note:
1. Marginal adjustment in lower and upper range of marks may be done to accommodate natural cut-offs.
2. No student having marks $\geq 35\%$ would be awarded 'F' grade.

Grading System for Small Classes ($\leq$ 30 students)

For small classes ($\leq$ 30 students) the grades shall be awarded on the basis of absolute marks as given in the table below:

Grade	Marks (M)
A^+	$M \geq 85$
A	$80 \leq M < 85$
B^+	$70 \leq M < 80$
B	$60 \leq M < 70$
C^+	$50 \leq M < 60$
C	$40 \leq M < 50$
D	$35 \leq M < 40$
F	< 35

Measure of student's overall academic performance

A student's overall academic performance within a given semester or in all the courses completed is measured by two grade point averages.

Semester Grade Point Average (SGPA): The performance of a student in a particular semester is measured by Semester Performance Index (SGPA), which is a weighted average of the grades secured in all the courses taken in a semester and scaled to a maximum of 10.

If the grade points associated with the letter grades awarded to a student are g_1, g_2, g_3, g_4 and g_5 in five courses and the corresponding credits are w_1, w_2, w_3, w_4 and w_5, respectively, the SGPA is given by

$$SGPA = \frac{w_1 g_1 + w_2 g_2 + w_3 g_3 + w_4 g_4 + w_5 g_5}{w_1 + w_2 + w_3 + w_4 + w_5}$$

For instance, suppose a student is registered for one 5-credit course, four 4-credit courses, and one 3-credit course during a semester, i.e. a total of 24 credits. If he secures A^+, A, B^+, C^+, C, and D grades, respectively, in these courses, his SGPA will be calculated as follows:

SGPA = (5x10 + 4x9 + 4x8 + 4x6 + 4x5 + 3x4) / 24 = 174 / 24 = 7.25

Cumulative Grade Point Average (CGPA) - The Cumulative Performance Index (CGPA) indicates the overall academic performance of a student in all the courses registered up to and including the latest completed semester. It is computed in the same manner as the SGPA, considering all the courses (say, *n*), and is given by

$$CGPA = \frac{\sum_i w_i g_i}{\sum_i w_i}$$

The grades of any and all repeated courses are included in the official transcripts. However, once a student repeats and passes a course in which he/ she had failed earlier, the earlier fail grade will not enter into the computation of CGPA. Incomplete grades are not included in computing the GPA until an appropriate letter grade is assigned. CGPA of 6.0 or higher is considered to be a 1st division (> 60% marks).

Re- Examination

Every student will be allowed to take end term exam again in a maximum of two courses in which he/ she scores an 'F' grade in a particular semester. If he/ she, on re-examination, scores sufficient marks to cross the cut-off for clearing a particular course (adopted during the regular evaluation for that course) then he/ she will be awarded a 'D' grade.

Grade Report – A copy of the Grade Report is issued to each student at the end of the semester. A duplicate copy, if needed, can be obtained on payment of the prescribed fee.

Withholding of Grades – The grades of a student may be withheld if he/she has not paid his/her dues, or if there is a case of indiscipline pending against him/her.

7.4 Dissertation/ Industry Project

1. The student shall have the option of doing the dissertation work in the institute or undertake an industry project. Prior approval of the DAPC of the department will be mandatory for undertaking industry project. The supervisor will be a special invitee if he/ she is not a member of DAPC.

2. The industry project should preferably be research-based.

3. The student who completes only 3rd semester as industry project, his/ her final evaluation of 3rd semester will be as per industry project rules. For 4th semester his/ her final evaluation will be done as per institute dissertation rules and guidelines.

4. Every M.Tech student shall have at least one but not more than two dissertation supervisors from amongst the faculty members of the Institute. A dissertation supervisor, with post graduate qualifications, from industry/research organization may be considered on recommendation by HOD & DAPC and approval by the Chairman, Senate but a co-supervisor should be from the Institute.

5. In case the supervisor proceeds on long leave, resigns, superannuates or otherwise ceases to be a faculty member of the Institute before the submission of the these, a new supervisor will be appointed by the department, if there is no other supervisor from within the Institute.

6. In case there has been a change/addition in the supervisor(s), the M.Tech dissertation will not be submitted earlier than three months after such change.

7. The M. Tech dissertation/ Industry Project will be examined by a committee to be appointed by the Chairperson Senate/ DAA, on the recommendation of the Supervisor and Head of the Department, following the guidelines set by the Senate. The Examination Board for M.Tech dissertation/ Industry Project evaluation at end of 3rd/ 4th Semester would consist of the following:-

   (i) Chairman DAPC or his/her nominee
   (ii) Faculty Co-ordinator programme, Convener
   (iii) Supervisor(s)
   (iv) One faculty from within the department
   (v) External examiner from reputed organization.

   In case of evaluation at the end of 3rd semester, the member at S.No. (v) may be dropped, if not available.

   For evaluation of 3rd semester, an external expert will be permitted to evaluate a maximum of 5 students working in the same domain.

   For evaluation of the end of the 4th semester, there shall be no limit on the number of dissertations one External Examiner can evaluate.

8. The Dissertation Supervisor will suggest, in a proforma, a panel of three experts to act as external examiner, preferably from IITs and NITs, in the area in which the student has completed his dissertation. The filled up proforma under the signature of Dissertation Supervisor & the Head of the Department will be submitted to the office of Dean Academic Affairs. E-mail addresses & contact numbers of the external examiners are to be included in the addresses. This will be put up to Chairman, Senate/ DAA who will appoint the Dissertation Examination Committee, tick-marking the names of examiners. The Dissertation Examination Committee so constituted will be notified to all concerned.

9. After Dissertation Examination Committee has been constituted, spiral-bound copies of the dissertation, one for each examiner of the Examination Committee have to be prepared. The dissertation, at the earliest, can be submitted one month before the end of the term in which student is completing the minimum dissertation credits. The Dissertation Examination should be scheduled at least seven days after the submission of the dissertation. Academic Office will arrange to send the copies of the dissertation to the examiners.

10. The consent of the external examiner for his/her availability & date of examination will be obtained by the respective department/ supervisors and dissertation will be dispatched by the Academic Office with intimation to all examiners, HOD & student.

11. The dissertation examination will be conducted in the department & the dissertation evaluation report, in a proforma available in the Academic Office, will be submitted by the dissertation supervisor through the Head of the Department.

12. The candidate shall appear before the examining committee for oral examination and presentation on the scheduled date. The oral examination cannot be scheduled earlier than one week after the submission of the dissertation. The examining committee shall award the final grade in terms of rule 7.5.

7.5 M.Tech dissertation/ Industry Project evaluation is given as under-

Report to be submitted by committee till that it is to be followed.

1) There shall be four evaluations of M.Tech. Dissertation/ Industry Project – one mid-term and one end term in the third semester (total 14 credits) and one mid-term and one end term in the fourth semester (total 18 credits). After evaluation all the parameters (in marks), a final grade for each semester will be submitted to the Academic Section. The work done at the end of 3rd semester shall be submitted in the form of a report. A Dissertation shall be submitted at the end of 4th semester.

2) The Examination Board for M.Tech thesis/ industry project evaluation at end of 3rd/ 4th Semester would consist of the following:-
   (i)   Chairman DAPC or his/her nominee
   (ii)   Faculty coordinator programme, Convener
   (iii) Supervisor(s)
   (iv)   One faculty from within the department
   (v)   External examiner from reputed organization.

In case of evaluation at the end of 3rd semester, the member at S.No. (v) may be dropped, if not available.
The weightages for the various components of evaluation would be distributed between the Supervisor and the Examination Board as follows:
   Supervisor(s)   -   50%
   Examination Board (except Supervisor) -   50%

While evaluating the dissertation/ Industry Project, each member of the Examination Board will independently award marks for various components of evaluation. The average of all the marks awarded for each component will be taken as the final marks scored by a student.

3) The grand total of marks obtained at the end of 3rd and 4th semester respectively shall be converted into grades as follows:-
M.Tech. students 2018 Batch onwards for Dissertation Evaluation only

Grade	**Points**	**Marks (M)**

A+	10	M≥85 %
A	9	80 % ≤M<85 %
B+	8	70 %≤M<80 %
B	7	60 %≤M<70 %
C+	6	50 %≤M<60 %
C	5	40 %≤M<50 %
D	4	35 %≤M<40 %
F		<35 %

4) **Guidelines for Industry Project:**
   i)   Joining Report of Student
   ii) The distribution of Marks for finalizing the grades for project semester

S. No.	Subject	Marks (140) 3rd Semester		Marks (180) 4th Semester		Remarks
		Mid Term	End Term	Mid Term	End Term	
1.	Credits by Industry	20	60	40	60	Proforma to be filled by Industry coordinator
2.	Evaluation by Deptt. including • Report • Presentation • Viva Voce	20	40	20	60	The students, who go for industry project to a place within a distance of 500 km from the institute, will be called to the department for all the four evaluations. The remaining students will be exempted from physical presence for mid-term evaluation which will be done through skype, email or phone and proforma to be filled by faculty coordinator to be displayed on notice board .
Total Marks		**140**		**180**		

5) In case the M.Tech Dissertation is graded F, the candidate may be allowed to resubmit the M.Tech Dissertation after nine months subject to maximum duration of the programme.

8.   Requirements
8.1   Attendance

All PG students are expected to attend 100% of the classes including lectures, tutorials and practicals, held in a course. In case the attendance of a student in a course is between 50-75%, his/her grade in that course would be lowered by one level; and in case attendance is below 50%, the grade would be lowered by two levels.

However, if a student has earned a pass grade otherwise, his/her grade would not be lowered beyond D due to shortage of attendance.

8.2   Minimum Residence and Maximum Duration

For regular students, the minimum residence and maximum duration requirements for M.Tech programmes are four (04) semesters and eight (08) semesters respectively.

8.3   Academic Requirement

1.   Minimum CGPA requirement for award of M.Tech degree is 5.5

2.   For moving to 2nd semester of the programme, a student must obtain a CGPA of at least 4.5 in the 1st semester.

3.   No student (whether regular or part-time) is allowed to move to 3rd semester of the programme until he/she completes the course work requirement of first two semesters with CGPA $\geq$ 5.5. A student, who fails to do so in two years of time, has to discontinue his/her programme. For fulfilling this condition, a student, during his/her second academic session in the institute, will be allowed to register for the courses of first and second semesters in which he/she has an F/N grade, and if required, to repeat courses in which he/she has a D grade, in order to complete the course work requirement of first two semesters and to secure a CGPA $\geq$ 5.5.

A student (during his/her second academic session in the institute) will be allowed to register even for courses to improve his/ her CGPA in 3rd semester of the programme to complete the CGPA requirement. Such a student will, however, be allowed to register for dissertation (dissertation) work only after completing the CGPA requirement.

A student who has secure a CGPA $\geq$ 5.5 and still has pending courses of 4 credits will be allowed to register for dissertation (dissertation) work along with the pending courses of 1st and 2nd semester with concern to respective course instructor.

4.   A student will not be allowed to continue the programme if he/she earns <35% marks or 'F' Grades for his/her dissertation work in two consecutive semesters.
5.   The DAPC will keep a watch on the progress of every student and whenever a student fails to meet the requirements; will put up the case to Senate that may terminate the programme of the student. If a student's programme is terminated, the Dean Academic Affairs will issue the letter of termination.

8.4   Additional Requirements

Departments may introduce additional specific requirements with the approval of the Senate during the professional curriculum.

8.5   Graduation Requirements
A student shall be deemed to have completed the requirements for graduation if he/she has

a)   met the attendance, residence and academic requirements given in Sections 8.1 to 8.3

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

c)   paid all dues to the Institute and the Hostels

d)   no case of indiscipline pending against him/her

e)   satisfied all the requirements specified by the Senate and Ordinances, and

f)   has submitted the dissertation and has been awarded pass grade by the examining committee.

9.   TERMINATION OF THE PROGRAMME

The M.Tech programme of a student may be terminated by the Senate if he/she

(a) is not meeting the academic requirements as given in Section 8, OR

(b) is absent without authorized leave for more than four weeks in a semester, OR

(c) involves himself/herself, in violation of the code of conduct, in ragging etc., and the appropriate committee of the Senate makes a recommendation to that effect, OR

(d) fails to complete the programme within the maximum duration prescribed.

9.1.   Appeal against Termination

A student whose programme is terminated on account of inadequate academic performance or otherwise, has the right to appeal to the Chairman Senate for reconsideration, within 15 days of the issue of the termination letter. While making the appeal against termination, he/she is expected to give reasons for his/her poor academic performance and/or to explain why his/her position merits reconsideration. The Senate shall take a final decision after considering all the available inputs. In no case shall a second appeal by the same student be entertained for this purpose, in case his/her first appeal is not upheld by the Senate.

10. DEGREES

(a) Award of Degrees

A student, who completes all the graduation requirements specified in Section 8.5, is recommended by the Senate to the Board of Governors (BOG) for the award of the appropriate degree in the ensuing convocation. The degree can be awarded only after the BOG accords its approval.

(b) Withdrawal of the Degree

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

11.   Leave Rules
11.1   General Instructions

1.   Students who are absent from the institute continuously for two weeks without permission from the Head of Department, may not be permitted to continue in the semester and may be

asked to drop the semester, unless satisfactory explanation of their absence, as given by them through the Head of Department, is duly accepted by the Chairman Senate.

2. If a student does not turn up after winter or summer vacations, his/her name will be sent to Chairman Senate for termination of the programme. If approved by the Senate, his/her name will be removed from the institute rolls with effect from the date on which he actually appeared in the last semester examination.

3. If a student does not appear in the end semester examination, then the concerned Head of Department will forward the name of the student for termination to the Chairman Senate.

4. Students who are in receipt of the GATE scholarship shall be entitled to a total leave of 30 days in a year without loss of scholarship. They are not entitled for vacation.

11.2 Semester Leave

Semester leave for up to a maximum of two semesters for the M.Tech students may be sanctioned for bonafide reasons. Except for medical reasons, such leave would not normally be sanctioned before a student has completed his/her course requirements and in no case before the student has spent two semesters in the programme. However, on medical considerations such leave may be sanctioned after his/her stay of one semester. Leave for more than one semester at a time will not be granted.

12. Permission to Proceed for Academic Work Outside the Institute

The M.Tech students can be permitted to proceed for academic activities outside the Institute to carry out fieldwork, library work, computational work, experimental work, and Laboratory work, and also to attend conferences, courses and to undertake other research work etc. as recommended by the HOD. Permission for a duration up to 15 days may sanctioned by Chairperson, IAPC on the recommendation of the HOD and more than 15 days by the Chairman, Senate on the recommendations of the HOD & Chairperson, IAPC.

13. Conduct and Discipline

13.1 Code of Conduct

Each student shall conduct himself/herself in a manner befitting his/her association with an Institute of national importance. He/she is expected not to indulge in any activity, which is likely to bring down the prestige of the Institute. He/she should also show due respect and courtesy to the teachers, administrators, officers and employees of the Institute, and good neighbourly behaviour to fellow students. Due attention and courtesy is to be paid to visitors to the Institute and residents of the Campus.

Lack of courtesy and decorum, unbecoming conduct (both within and outside the Institute), wilful damage and/or removal of Institute property or belongings of fellow students, disturbing others in their studies, adoption of unfair means during examinations, breach of rules and regulations of the Institute, noisy and unseemly behaviour and similar other undesirable activities shall constitute violation of the Code of Conduct for students.

Ragging in any form is strictly prohibited and is considered to be a serious offence (See UGC regulations on curbing the menace of Ragging in Annexure V.
13.2 Disciplinary Actions and Related Matters

Violation of the Code of Conduct shall invite disciplinary action which may include punishment such as reprimand, disciplinary probation, fine, debarring from examinations, withdrawal of scholarship

and/or placement services, withholding of grades and/or degrees, cancellation of registration and even expulsion from the Institute.

Use of Unfair Means in examination will invite punishments as given in Annexure IV.

The Instructor/Tutor shall have the power to take appropriate action against a student who misbehaves in his/her class.

The Warden of a Hostel has the power to reprimand, impose fine or take any other suitable measure against a resident who violates either the Code of Conduct or Rules and Regulations pertaining to the concerned Hostel.

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

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

The recommendation for any action other than expulsion may be approved by the Chairman Senate. In case, the recommended action is expulsion of a student from the Institute, the matter shall be referred to the Senate for its final decision.

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

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

14.   Amendments

Notwithstanding anything contained in this manual, the Senate of the Punjab Engineering College, (Deemed to be University), Chandigarh reserves the right to modify/amend without notice, the curricula, procedures, requirements, and rules pertaining to its M.Tech programmes.

Credit Transfer Policy for UG & PG Students:

The following guidelines for credit transfer will be followed:-

Policy:-

1. The institute shall accept transfer of credits earned by student from the following:-
   a. Such foreign university, the courses/ programmes of which are recognized as equivalent to those of Indian Universities by the Association of Indian Universities. However the institute should be ranked within top 10 percent institutes in its own country. In addition to this, the ranking should be comparable to the ranking of PEC. Final decision in this regard will be taken by Chairman Senate after the recommendations of respective department.
   b. Such foreign university with which the institute has signed an MOU.
   c. Any other University / educational institute that have been approved for the purpose of credit transfer by the Senate of the institute.
2. Request for acceptance of transfer of credits shall be:-
   a. Entertained only if received from such candidates who have been duly selected for admission in a UG/PG programme as per the rule governing admission in PEC.
   b. Supported by any other documents as may be prescribed by the Senate.
3. When a student (UG or PG) registers at another academic institution abroad with the expectation of credit transfer or research work through a pre-approved arrangement including MoU, the student should be considered as being on a Semester Exchange (SE). The SE period will be counted towards the total period permitted for the degree.
4. All grade-cards/transcripts and course syllabi of the foreign University, where the students are going for Semester Exchange, must be in English or translated from the original language into English and certified by a professional translator
5. Institute fee for the semester for which student is on Semester Exchange will be exempted.

Procedure:-

The credit equivalence for accepting credit transfer shall be determined as under:-
   a. Request for credit transfer will be made to respective department. Equivalent courses & credits will be decided by the DAPC of the concerned department.
   b. The recommendation of DAPC would be placed before the IAPC. Final approval in this regard will be given by Chairman Senate.

6.1.2   Scholarships

6.2   Postgraduate Programmes

6.2.1   M.Tech. Programmes

(a)   The students (of each category) admitted to M.Tech. Degree Programmes on the basis of GATE result, may get assistantship as per AICTE norms. Grant of assistantship is subject to the availability of funds and the fulfillment of conditions for such award. The candidates admitted without GATE score shall not be entitled to the above assistantship.

(b)   Every student must submit online application for grant of assistantship in the prescribed form as per AICTE schedule.

1.   Post Graduate Scholarship is entitled only to those students who are admitted in the course with a valid GATE/GPAT score at the time of admission. Any student who qualifies the GATE/GPAT exam after the date of admission shall not be eligible for grant of scholarship for the reasons whatsoever it may be.

2.   The grant of Post Graduate Scholarship is subject to the condition that the student does not receive any financial assistance in shape of scholarship/any emoluments, salary, stipend etc. from any other source during his/her course of study in the Institute.

3.   Foreign students, sponsored candidates and candidates admitted in PG programs through management quota are not eligible for the Scholarship.

4.   It will be obligatory for every post-graduate student to undertake 8 to 10 hours (per week) of work related to teaching and research activities as assigned to him/ her by the Institute. This could include tutorials, laboratory classes, development and maintenance of laboratories, assistance in research and development activities undertaken by faculty members, maintenance and operation of Computers and other central facilities, assistance in library, etc.

5.   The Scholarship will be granted to the student on a monthly basis subject to the satisfactory academic performance and adherence to University/Institute norms/rules and regulations as applicable time to time, certified by the Head of the Institute and obligatory work as per item (4) above.

6.   PG Scholarship is not admissible to passed out students taking 2nd time admission on the basis of re-qualifying GATE/GPAT exam who have already availed the scholarship from AICTE or any other Centrally funded Institution like– IIT's, NIT's and IIIT's etc.

7.   The Scholarship is tenable for 24 months or for the duration of the course i.e. from the date of commencement of classes till the date of completion of the classes whichever is lower and is not extendable under any circumstances.

8.   The rates of PG Scholarship is subject to change as per the notification issued by Department of Higher Resource Development (MHRD), New Delhi from time to time with the approval of the Executive Committee of the Council.

9. The student shall be required to give an undertaking to the effect that he / she would not leave the course midway. In case any student leaves the course in midway he/she will be required to refund the total PG Scholarship drawn at the time of leaving the course.

10. The Scholarship may be discontinued at any time for any kind of misconduct by the student, like involving in the act of ragging, misbehavior etc.

11. Students are eligible of following leave:
    Casual leave   :   15 days in a academic year.
    Medical leave   :   Maximum of one month (30 days) in academic year
    Maternity leave   :   As per the Govt of India instructions time to time.

12. The mode and procedure of payment of Scholarship to the students shall be governed by the policy decision of the AICTE as may be notified from time to time on its web-portal or through advertisement in leading English/Hindi newspapers.

13. Any belated claim preferred after one year of the completion of the program shall not be entertained.

14. The AICTE may impose any other conditions as deemed necessary from time to time and the decision of the AICTE shall be final and binding upon the recipients i.e. University/Institute/College/Student who are under the ambit of the AICTE for receipt of PG Scholarship.