B.TECH. - REGULAR FOUR YEAR DEGREE PROGRAM
(For batches admitted from the academic year 2020-21)
&
B.TECH. - LATERAL ENTRY SCHEME
(For batches admitted from the academic year 2021-22)

PREAMBLE

Institution is gearing up for several initiatives towards academic excellence, quality improvement and administrative reforms. In view of this priority and in-keeping with the Institute Vision and Mission process was already initiated towards introduction of semester system, grading system and credit system.

The above initiatives acquired further strength with University Grants Commission (UGC) guidelines, informing all the Universities/ Autonomous Colleges regarding UGCs new initiatives, on speedy and substantive academic and administrative reforms regarding higher education. Given this background St.Peter's Engineering College has framed this REGULATION-2020 and in short, it will be referred to as SR20.

Academic Programmes of the Institute are governed by rules and regulations approved by the Governing Body. The academic rules and regulations are applicable to the students admitted into four year undergraduate programmes offered by the college leading to Bachelor of Technology (B.Tech) degree from the academic year 2020-21 onwards and lateral entry students admitted from the academic year 2021-2022 onwards.

INSTITUTE VISION

VISION: To promote quality education accessible to all sections of the Society without any discrimination of caste, creed, color, gender and religion and help students to discover their true potential.

INSTITUTE MISSION

IM1: To provide and equip stakeholders with knowledge and skills, social values and ethics, scientific attitude and orientations for lifelong learning.

IM2: To create an environment conducive to inhabitating their total involvement and participation

IM3: Provide infrastructure to arm the students with the competence to be at the forefront of cutting-edge technology and entrepreneurship in highly competitive global market.

INSTITUTE QUALITY POLICY: St. Peter's Engineering College strives to establish a system of quality assurance to continuously address, monitor and evaluate the quality of education offered to students, thus promoting effective teaching-learning processes for the benefits of our students and making our institution a centre of excellence for engineering and technological studies.

1. UNDER GRADUATE PROGRAMS OFFERED (E&T)

St.Peter's Engineering College, an autonomous college affiliated to JNTUH, offers 4 Year (8 Semesters) Bachelor of Technology (B.Tech.) Degree Programme, under Choice Based Credit System (CBCS) with effect from the Academic Year 2020 - 21 onwards, in the following Branches of Engineering:

(i) B.Tech. - Civil Engineering

(ii) B.Tech. - Electrical and Electronics Engineering

(iii) B.Tech. - Mechanical Engineering

(iv) B.Tech. - Electronics and Communication Engineering

(v) B.Tech - Computer Science and Engineering

(vi) B.Tech - Information Technology

(vii) B.Tech - Computer Science and Engineering [Artificial Intelligence & Machine Learning]

2. ADMISSION CRITERIA AND MEDIUM OF INSTRUCTION

2.1 Admission into first year of four year B.Tech. (Regular) Degree Programme:

2.1.1 Eligibility: A candidate seeking admission into the first year of four year B. Tech. Degree Programme should have:

i) Passed either Intermediate Public Examination (IPE) conducted by the Board of Intermediate Education,

Telangana, with Mathematics, Physics and Chemistry as optional subjects or any equivalent examination with Mathematics, Physics and Chemistry as optional subjects recognized by Board of Intermediate Education, Telangana.

ii) Secured a rank in the TSEAMCET examination conducted by TSCHE for allotment of a seat by the Convener, TSEAMCET.

2.1.2 Admission Procedure: Admissions are made into the first year of four year B.Tech. Degree Programme as per the stipulations of the TSCHE.

(i) Category A: 70% of the seats are filled through TSEAMCET counseling.

(ii) Category B: 30% of the seats are filled by the Management.

2.2 Admission into the second year of four year B. Tech. (Regular) Degree Programme Under Lateral Entry Scheme.

2.2.1 Eligibility: A candidate seeking admission under Lateral Entry Scheme (LES) into the II year I Semester B. Tech. Regular Degree Programme should have passed the qualifying examination (B.Sc. Mathematics or Diploma in concerned course) and have secured a rank at Engineering Common Entrance Test TSECET (FDH). Admissions are made in accordance with the instructions received from the Convener, TSECET and Government of Telangana State.

2.2.2 Admission Procedure: Admissions are made into the II year of four year B.Tech. (Regular) Degree Programme through Convener, TSECET (FDH) against the sanctioned intake in each Programme of study as lateral entry student.

2.3 Branch Transfers: There shall be no Branch transfers after the completion of Admission Process.

2.4 Medium of Instruction: The Medium of Instruction and Examinations for the entire B.Tech. programme will be in English only.

3. B.Tech. PROGRAMME STRUCTURE

3.1 Admitted under Four year B. Tech. (Regular) degree Programme:

A student after securing admission shall complete the B.Tech. Programme in a minimum period of four academic years (8 semesters), and a maximum period of eight academic years (16 semesters) starting from the date of commencement of first year first semester, failing which the student shall forfeit their seat in B.Tech course. Each student shall secure 160 credits (with SGPA $\geq$ 5 (each Semester) and CGPA $\geq$ 5) required for the completion of the under graduate programme and award of the B.Tech. Degree.

3.2 Admitted under Lateral Entry Scheme (LES) into B. Tech. degree Programme:

3.2.1 The LES students after securing admission shall pursue a course of study for not less than three academic years (6 Semesters) and not more than six academic years (12 Semesters), failing which the students shall forfeit their seat in B.Tech programme.

3.2.2 The student shall register for 122 credits and secure 122 credits with CGPA 5 from II year to IV year B.Tech. programme (LES) for the award of B.Tech. degree.

3.3 UGC / AICTE specified definitions / descriptions are adopted appropriately for various terms and abbreviations used in these Academic Regulations / Norms, which are listed below:

3.3.1 Semester Scheme: Each B.Tech. (Regular) Programme is of 4 Academic Years (8 Semesters) and B.Tech. (LES) Programme is of 3 Academic Years (6 Semesters)), with the academic year being divided into two semesters of 22 weeks ($\geq$ 90 Instructional days per semester), each Semester having - 'Continuous Internal Evaluation (CIE)' and 'Semester End Examination (SEE)', Choice Based Credit System (CBCS) and Credit Based Semester System (CBSS) as indicated by UGC and Curriculum / Course Structure as suggested by AICTE.

3.3.2 Credit Courses:

All Subjects / Courses are to be registered by a student in a Semester to earn Credits. Credits shall be assigned to each Subject / Course in a L: T: P: C (Lecture Periods: Tutorial Periods: Practical Periods: Credits) Structure based on the following general pattern:

(i) One Credit - for One hour /Week / Semester for Theory / Lecture (L) Courses; or Tutorials

(ii) One Credit - for Two hours / Week / Semester for Laboratory / Practical (P) Courses

All Mandatory Courses, Industrial Visit, Guest Lecture, Tutorials, etc., will not carry any Credits.

(iii) All Value Added Courses in each semester carry 1 credit for two hours/week/semester except in I & II Semester of I B.Tech.

Mandatory Courses

Course Code	Course Name
AS20-00MC01	Environmental sciences
AS20-00MC02	Gender sensitization
AS20-00MC03	Constitution of India
AS20-00MC04	Professional ethics
AS20-00MC05	Artificial intelligence
AS20-00MC06	Cyber security

3.3.3 Subject / Course Classification and Nomenclature:

SPEC has followed almost all the guidelines specified by AICTE / UGC / JNTUH for the classification of all subjects / courses offered at B.Tech. Programme and are mentioned below.

Department of Computer Science & Engineering

S. No.	Broad Course Classification	Course Group / Category	Course Description	Range of Credits
1	Foundation Courses (FnC)	BS – Basic Sciences	Includes - Mathematics, Physics and Chemistry Subjects	10%-15%
2		ES – Engg. Sciences	Includes fundamental engineering subjects.	15%-20%
3		HS – Humanities And Social Sciences	Includes subjects related Humanities, Social Sciences and Management.	5%-10%
4	Core Courses (CoC)	PC – Professional Core	Includes core subjects related to the Parent Discipline/ Department/ Branch of Engg.	30%-40%
5	Elective Courses (ElC)	PE – Professional Electives	Includes Elective subjects related to the Parent Discipline / Department /Branch of Engg.	5%-15%
6		OE – Open Electives	Elective subjects which include inter-disciplinary subjects or subjects in an area outside the Parent Discipline/ Department /Branch of Engg.	5%-10%
7	Core Courses	Project Work	B.Tech. Project or UG Project or UG Major Project.	5%-15%
8		Industrial Training / Mini- Project	Industrial Training/ Internship/ UG Mini-Project/ Mini-Project.	
9		Value Added Courses	Technical Training based on core contents related to Parent Discipline/ Department/ Branch of Engg.	
10	Mandatory Courses (MC)	Mandatory Courses (MC)	Mandatory Courses (non-credit)	-
Total Credits for UGP (B. Tech.) Programme				160 (100%)

4. COURSE REGISTRATION

4.1 A 'faculty advisor or counsellor' shall be assigned to a group of 15 students, who advises the student about the B.Tech. programme, its course structure and curriculum, choice / option for subjects / courses, based on his/her competence, progress, pre-requisites and interest.

The academic section of the college invites 'registration forms' from students before the beginning of the semester through online submission, ensuring 'date and time stamping'. The online registration requests for any 'current semester' shall be completed before the commencement of SEEs (Semester End Examinations) of the 'preceding semester'.

4.2 A student can apply for online registration, only after obtaining the 'written approval' from his faculty advisor or counsellor, which should be submitted to the college academic section through the Head of the Department. A copy of it shall be retained with Head of the Department, faculty advisor and the student.

4.3 Subject / course options exercised through online registration are final and cannot be changed or inter- changed; further, alternate choices will not be considered. However, if the subject / course that has already been listed for registration by Head of the Department in a semester could not be offered due to any unforeseen or unexpected reasons, then the student shall be allowed to have alternate choice - either for a new subject (subject to offering of such a subject), or for another existing subject (subject to availability of seats), which may be considered. Such alternate arrangements will be made by Head of the Department, with due notification and time-framed schedule, within the first week from the commencement of class-work for that semester.

4.4 Open electives: Students have to choose one open elective wherever offered from the list of open electives given for their stream. However, student cannot opt for an open elective subject offered by their own (parent) department, if it is already listed under any category of the subjects offered by parent department in any semester.

4.5 Professional electives: Students have to choose professional elective wherever offered from the list of professional electives given. However, students may opt for professional elective subjects offered in the related area.

4.6 Mandatory Courses (Non-Credit): All mandatory courses where ever offered require prior registration.

4.7 Value Added Courses: Students have to choose one value added course in each semester (2-1 to 3-2) wherever offered from the list of value added courses given for their stream. In 4-1 a value added course is common to all the departments and is mandatory.

5. SUBJECTS / COURSES TO BE OFFERED

A subject/course may be offered to the students, if only a minimum 1/3 of students register to the course.

i) More than one faculty member may offer the same subject (lab / practical's may be included with the corresponding theory subject in the same semester) in any semester. However, selection choice for students will be based on 'first come first serve basis and CGPA criterion' (i.e. the first focus shall be on early on-line entry from the student for registration in that semester, and the second focus, if needed, will be on CGPA of the student).

ii) If more entries for registration of a subject come into picture, then the concerned Head of the Department shall take necessary decision, whether or not to offer such a subject / course for two (or multiple) sections.

6. ATTENDANCE REQUIREMENTS

6.1 A student shall be eligible to appear for the semester end examinations, if the student acquires a minimum 75% of attendance in aggregate (excluding the days of midterm examinations) for all the subjects / courses (excluding attendance in mandatory courses) in that semester.

6.2 Condoning of shortage of attendance in aggregate up to 10% (65% and above, and below 75%) in each semester may be

granted by the college academic committee on genuine and valid grounds, based on the student's representation with supporting evidence. A stipulated fee shall be payable towards condoning of shortage of attendance. Shortage of attendance below 65% in aggregate shall in no case be condoned.

6.3 Students whose shortage of attendance is not condoned in any semester are not eligible to take the end examinations of that semester. They get detained and their registration for that semester shall stand cancelled. They will not be promoted to the next semester. They may seek re-registration for all those subjects registered in that semester in which student was detained, by seeking re-admission into that semester as and when offered; in case the there are any professional electives and / or open electives, the same may also be re-registered, if offered. However, if those electives are not offered in later semesters, then alternate electives may be chosen from the same set of elective subjects offered under that category.

6.4 A student fulfilling the attendance requirement in the present semester shall not be eligible for readmission into the same class.

7. ACADEMIC REQUIREMENTS

The following academic requirements have to be satisfied, in addition to the attendance requirements mentioned in item no. 6.

7.1 A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/ course, if the student secures not less than 35% marks in the semester end examination (SEE), and a minimum of 40% of marks in the sum total of the Continuous Internal Evaluation (CIE) and Semester End Examination (SEE) taken together; in terms of letter grades, this implies securing C grade or above in that subject / course.

7.2 A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to industry oriented mini-project, if the student secures not less than 40% of the total marks.

The student would be treated as failed, if student
- (i) If the student does not submit a report on his industry oriented mini-project before the evaluation committee as per the schedule,

- (ii) secures less than 40% of marks in industry oriented mini-project evaluations.

Student may reappear once for each of the above evaluations, when they are scheduled again; if he fails in such 'one re-appearance' evaluation also, student has to reappear for the same in the next subsequent semester, as and when it is scheduled.

7.3 Promotion Rules

7.3.1 Four year B.Tech. (Regular):

Sl. No.	Promotions	Conditions to be fulfilled
1.	First year first semester to first year second semester	Regular course of study of first year first semester
2.	First year second semester to second year first semester	(i) Regular course of study of first year second semester.
		(ii) Must have secured at least 19 credits out of 38 credits i.e., 50% credits up to first year second semester from all the relevant regular and supplementary examinations, whether the student takes those examinations or not.
3.	Second year first semester to second year second semester	Regular course of study of second year first semester.
4.	Second year second semester to third year first semester	(i) Regular course of study of second year second semester.

Sl. No.	Promotions	Conditions to be fulfilled
		(ii) Must have secured at least 47 credits out of 79 credits i.e., 60% credits up to second year second semester from all the relevant regular and supplementary examinations, whether the student takes those examinations or not.
5.	Third year first semester to third year second semester	Regular course of study of third year first semester.
6.	Third year second semester to fourth year first semester	(i) Regular course of study of third year second semester.
		(ii) Must have secured at least 72 credits out of 120 credits i.e., 60% credits up to third year second semester from all the relevant regular and supplementary examinations, whether the student takes those examinations or not.
7.	Fourth year first semester to fourth year second semester	Regular course of study of fourth year first semester.

7.3.2 Four year B.Tech. (LES):

S. No.	Promotion	Conditions to be fulfilled
1.	Second year first semester to second year second semester	Regular course of study of second year first semester.
2.	Second year second semester to third year first semester	(i) Regular course of study of second year second semester.

S. No.	Promotion	Conditions to be fulfilled
		(ii) Must have secured at least 25 credits out of 41 credits i.e., 60% credits up to second year second semester from all the relevant regular and supplementary examinations, whether the student takes those examinations or not.
3.	Third year first semester to third year second semester	Regular course of study of third year first semester.
4.	Third year second semester to fourth year first semester	(i) Regular course of study of third year second semester.
		(ii) Must have secured at least 49 credits out of 82 credits i.e., 60% credits up to third year second semester from all the relevant regular and supplementary examinations, whether the student takes those examinations or not.
5.	Fourth year first semester to fourth year second semester	Regular course of study of fourth year first semester.

7.4 A student has to register for all subjects covering 160 credits (122 credits in case of LES) as specified and listed (with the relevant course / subject classifications as mentioned) in the course structure, fulfill all the attendance and academic requirements for 160 credits (122 credits in case of LES) securing a minimum of 'C' grade or above in each subject, and 'earn all 160 credits (122 credits in case of LES) securing SGPA $\geq$ 5.0 (in each semester), and CGPA (at the end of each

successive semester) $\geq$ 5.0, to successfully complete the under graduate programme.

7.5 A student eligible to appear in the semester end examination for any subject / course, but absent from it or failed (thereby failing to secure 'C' grade or above) may reappear for that subject / course in the supplementary examination as and when conducted. In such cases, internal marks (CIE) assessed earlier for that subject / course will be carried over, and added to the marks to be obtained in the SEE supplementary examination for evaluating performance in that subject.

7.6 A student detained in a semester due to shortage of attendance may be re-admitted when the same semester is offered in the next academic year for fulfillment of academic requirements. The academic regulations under which the student has been readmitted shall be applicable. However, no grade allotments or SGPA / CGPA calculations will be done for the entire semester in which student has been detained.

7.7 A student detained due to lack of credits, shall be promoted to the next academic year only after acquiring the required academic credits. The academic regulations under which the student has been readmitted shall be applicable.

8. EVALUATION - DISTRIBUTION AND WEIGHTAGE OF MARKS

8.1 The performance of a student in each semester shall be evaluated subject-wise / course-wise (irrespective of credits assigned) with a maximum of 100 marks. These evaluations shall be based on 30 marks allotted for CIE (Continuous Internal Evaluation) and 70 marks for SEE (Semester End Examination), and a letter grade corresponding to the percentage of marks obtained shall be given.

8.2 Evaluation of Theory Subjects / Courses

A) **Continuous Internal Evaluation:** For each theory subject, during the semester, there shall be 2 mid-term examinations of 30 marks each. Each mid-term examination consists of Descriptive paper for 25 marks and assignment for 5 marks

and the average of the two mid-term examinations marks shall be taken as the final marks.

I. The first mid-term examination shall be conducted for the first 50% of the syllabus, and the second mid-term examination shall be conducted for the remaining 50% of the syllabus. Each Internal Examination is conducted for 30 marks.

II. The Descriptive paper shall be conducted for duration of 1 hour and 30 Minutes. Each descriptive paper consists of three compulsory questions (May contain Sub Questions carrying 2/3/5/10 marks) each with internal choice covering the prescribed syllabus.

1. Unit 1(10 Marks)

2. Unit 2(10 Marks)

3. Unit 3(5 Marks)

   Total = 25 Marks

III. First assignment(One video from each(1,2,3)Units) should be submitted before the commencement of the first mid-term examinations, and the second assignment(One video from each(3,4,5)Units) should be submitted before the commencement of the second mid-term examinations. Five Marks for each Assignment.

Assignment 1(Videos Submission)

Unit 1 - 2 Marks, Unit 2 - 2 Marks, Unit 3 - 1 Mark.

Assignment 2(Videos Submission)

Unit 3 - 1 Mark, Unit 4 - 2 Marks, Unit 5 - 2 Marks.

The marks secured by the student in I and II Internal examinations are considered and the AVERAGE of the two Internal examinations shall be taken as the final marks secured by the student towards Continuous Internal Evaluation in the theory subject. If he/she is absent for any test, he/she will be awarded zero marks for that test.

B) Semester End Examinations:

The duration of SEE is 3 hours. The details of the question paper pattern are as follows:

- The end semester examinations will be conducted for 70 marks consisting of two parts viz.

i) Part- A for 20 marks, ii) Part - B for 50 marks.

- Part-A is compulsory question which consists of ten questions (two from each unit) carry 2 marks each.

- Part-B consists of five questions carrying 10 marks each. One question from each unit (may contain sub-questions) with internal choice.

8.3 Evaluation of Practical Subjects / Courses: In any semester, a student has to complete all the experiments / exercises in each laboratory course and get the record certified by the concerned Head of the Department to be eligible for Semester End Examination. For practical subjects, there shall be a Continuous Internal Evaluation (CIE) during the Semester for 30 internal marks and 70 marks for Semester End Examination (SEE). The semester end examination shall be conducted with an external examiner and the laboratory teacher. The external examiner shall be appointed from the clusters of colleges which are decided by the examination branch of the Parent Institution.

C) Continuous Internal Evaluation (CIE): Out of the 30 marks, 15 marks are allocated for day- to-day work evaluation and 10 Marks for Lab Examination and 5 marks for Viva voce which will be conducted by the faculty (Subject Experts Nominated by HoD) for a duration of two hours and the best of the two mid-term examinations is taken into account.

ABSENCE IN LABORATORY INTERNAL EXAMINATIONS:

If any student is absent in both the laboratory internal examinations on health grounds for any valid reasons approved by the college academic committee, only one test shall be conducted on all experiments and the marks secured out of 30 marks shall be

divided by two, which shall be awarded against the said laboratory Internal Evaluation.

D) Semester End Examination (SEE): The SEE for practical subject / course shall be conducted at the end of the semester with a duration of 3 hours by one internal and one external examiner appointed by the Head of the Institution as per the recommendation of the concerned Head of the Department.

8.4 Evaluation of Design / Drawing Subjects / Courses: For the subjects such as Engineering Graphics, Machine Drawing and estimation, the distribution shall be 30 marks for CIE (15 marks for day-to-day work and 15 marks for internal examination) and 70 marks for SEE. There shall be two internal examinations in a semester and the average of the two shall be considered for the award of marks for internal examinations. For subjects like Engineering Graphics/Engineering Drawing, the SEE shall consist of five questions. For each question there will be an "either" "or" choice, which means that there will be two questions from each unit and the student should answer either of the two questions. There shall be no Part - A, and Part - B system.

8.5 Evaluation of Major Project: Out of a total of 100 marks for the major project work, 30 marks shall be for Internal Evaluation and 70 marks for the End Semester evaluation. The End Semester evaluation (viva-voce) shall be conducted by committee. The committee consists of an external examiner, Head of the Department, the supervisor of project and a senior faculty member of the department. The topics for industry oriented mini project, and project work shall be different from each other. The evaluation of project work shall be conducted at the end of the IV year II Semester. The Departments have to evolve rubrics for evaluation of Project work. The marks may be distributed among various components like selection of topic, problem statement, literature review, methodology, oral and written presentation of the work done and performance in viva-voce examination.

8.6 Evaluation of Mandatory Non-Credit Courses: For Non Credit subjects the distribution shall be 100 marks for the Semester

End- Examination (SEE). The Semester End Examination will be conducted for 100 marks. The question paper consists of 8 questions where each question should contain a/b or a/b/c or a/b/c/d from different units. Out of 8 questions any 5 questions should be answered carrying 20 marks each. A Student must secure minimum 40 marks to pass.

For non credit courses, 'Satisfactory' or "Not Satisfactory" is indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA.

8.7 Evaluation of Value Added Courses: Students have to submit a project by the end of the semester, which will be evaluated by the Project Review Committee consisting of Head of the Department, a Senior Faculty of the department and concerned faculty of that Course and the Project will be evaluated for 75 marks in which 50 marks are allotted by evaluating the submitted project and 25 marks is considered as internal review marks. Remaining 25 marks are obtained by conducting Quiz (Multiple Choice Questions) during the Internal I & II Examinations and the average is considered.

8.8 MOOCs/SWAYAM Courses: Meeting with the global requirements, to inculcate the habit of self learning and in compliance with UGC guidelines, MOOC (Massive Open Online Course) courses have been introduced as electives. The proposed MOOCs courses would be additional choices in all the elective groups subject to the availability during the respective semesters and respective departments will declare the list of the courses at the beginning of the semester. Course content for the selected MOOCs courses shall be drawn from respective MOOCs links or shall be supplied by the department. Evaluation of the Course shall be done by the provider. Student has to submit the certificate of MOOCs given from the provider.

If a student fails in the MOOCs Examination conducted by Provider then the student may be allowed to write Supplementary Examination in the subsequent semester wherein the evaluation and Assessment will be done by the Parent Institution.

There shall be one Mid Sessional Examination (30 marks) obtained from the Assignment of the NPTEL/SWAYAM Course ,semester end evaluation (Descriptive exam for 70 marks) shall be done along with the other regular courses by the parent Institution. Three credits will be awarded upon successful completion of each MOOCs course. Students who are interested to do MOOCs courses need to register at their department office by the start of the semester against the courses that are announced by the department.

9. GRADING PROCEDURE

9.1 Marks will be awarded to indicate the performance of each student in each theory subject, lab/practical's, design/drawing practice, industry oriented mini-project and major project. Based on the percentage of marks obtained in Continuous Internal Evaluation plus Semester End Examination, both taken together, as specified in item 8 above, a corresponding letter grade shall be given.

9.2 As a measure of the student's performance, a 10-point Absolute Grading System using the following letter grades (UGC Guidelines) and corresponding percentage of marks shall be followed

% of Marks Secured (Class Intervals)	Letter Grade (UGC Guidelines)	Grade Points
90% and above (= 90% , = 100%)	O (Outstanding)	10
Below 90% but not less than 80% (= 80% , < 90%)	A^+ (Excellent)	9
Below 80% but not less than 70% (= 70% , < 80%)	A (Very Good)	8
Below 70% but not less than 60% (= 60% , < 70%)	B^+ (Good)	7
Below 60% but not less than 50% (= 50% , < 60%)	B (above Average)	6
Below 50% but not less than 40% (= 40% , < 50%)	C (Average)	5
Below 40% (< 40%)	F (Fail)	0
Absent	Ab	0

9.3 A student obtaining 'F' grade in any subject shall be considered 'failed' and will be required to reappear as 'supplementary student' in the end semester examination (SEE), as and when offered. In such cases, his internal marks (CIE marks) in those subject(s) will remain same as those he obtained earlier.

9.4 A letter grade does not imply any specific % of marks.In general; a student shall not be permitted to repeat any subject/course (s) only for the sake of 'grade improvement' or 'SGPA/CGPA improvement'. However, he has to repeat all the subjects/ courses pertaining to that semester if he is detained.

9.5 A student earns grade point (GP) in each subject/course, on the basis of the letter grade obtained by him in that subject/ course (excluding mandatory non-credit courses). Then the corresponding 'credit points' (CP) are computed by multiplying the grade point with credits for that particular subject/course.

Credit Points (CP) = Grade Point (GP) x Credits

9.6 The student passes the subject/course only when he gets GP ≥ 5 (C grade or above).

9.7 The Semester Grade Point Average (SGPA) is calculated by dividing the sum of credit points (>CP) secured from all subjects / courses registered in a semester, by the total number of credits registered during that semester. SGPA is rounded off to two decimal places. SGPA is thus computed as

SGPA = $\{ \sum_{i=1}^{N} Ci\ Gi \} / \{ \sum_{i=1}^{N} Ci \}$ .... For each semester, where 'i' is the subject indicator index (takes into account all subjects in a semester), 'N' is the no. of subjects 'registered' for the semester (as specifically required and listed under the course structure of the parent department), C_i is the no. of credits allotted to that ith Subject, and G_i represents the grade points (G_p) corresponding to the letter grade awarded for that i^{th} subject.

9.8 The Cumulative Grade Point Average (CGPA) is a measure of the overall cumulative performance of a student over all semesters considered for registration. The CGPA is the ratio of the total credit points secured by a student in all registered

courses in all Semesters, and the total number of credits registered in all the semesters. CGPA is rounded off to two decimal places. CGPA is thus computed from the I year second semester onwards, at the end of each semester, as per the formula.

$$\text{CGPA} = \{\textstyle\sum_{j=1}^{N} C_j\, G_j\} / \{\textstyle\sum_{j=1}^{N} C_j\} \dots\dots\dots \quad \text{for all} \quad S$$

Semesters registered where 'N' is the total no. of subjects (as specifically required and listed under the course structure of the parent department) the student has 'registered' from the 1st semester onwards upto and inclusive of the semester S (obviously M > N), 'j' is the subject indicator index (takes into account all subjects from 1 to S semesters), C_j is the no. of credits allotted to the jth subject, and G_j represents the grade points (GP) corresponding to the letter grade awarded for that jth subject. After registration and completion of I year I semester however, the SGPA of that semester itself may be taken as the CGPA, as there are no cumulative effects.

Illustration of calculation of SGPA

Course/ Subject	Credits	Letter Grade	Grade Point	Credits Points
Course 1	3	A	8	3 X 8 = 24
Course 2	3	B+	7	3 X 7 = 21
Course 3	3	B	6	3 X 6 = 18
Course 4	3	A	8	3 X 8 = 24
Course 5	3.5	C	5	3.5 X 5 = 17.5
Course 6	1.5	A	8	1.5 X 8 = 12
Course 7	1.5	O	10	1.5 X 10 =15
Course 8	2	O	10	2 X 10 = 20
	20.5			154.5

SGPA = 154.5/20.5 = 7.53

Illustration of calculation of CGPA

Semester	Credits	SGPA	Credits * SGPA
Semester 1	20.5	7.24	20.5 X 7.24 = 148.42
Semester 2	17.5	6.48	17.5 X 6.48 = 113.4
Semester 3	20.5	7.43	20.5 X 7.43 = 152.315
Semester 4	20.5	8.21	20.5 X 8.21 = 168.305
Semester 5	20.5	7.65	20.5 X 7.65 = 156.825
Semester 6	20.5	6.42	20.5 X 6.42 =131.61
Semester 7	21	7.75	21 X 7.75 = 162.75
Semester 8	19	8.25	19 X 8.25 = 156.75
Total Credits	160	Total Credit Points	1190.375

CGPA = 1190.375/160 = 7.43

9.9 For merit ranking or comparison purposes or any other listing, only the 'rounded off' values of the CGPAs will be used.

9.10 For calculations listed in Item 9.6-9.10, performance in failed subjects/courses (securing F grade) will also be taken into account, and the credits of such subjects/courses will also be included in the multiplications and summations. However, mandatory courses will not be taken into consideration.

10 PASSING STANDARDS

10.1 A student shall be declared 'successful' or 'passed' in a semester, if the student secures a GP $\geq$ 5 ('C' grade or above) in every subject/course in that semester (i.e. when student gets an SGPA $\geq$ 5.00 at the end of that particular semester); and a student shall be declared 'successful' or 'passed' in the entire under graduate programme, only when he/she gets a CGPA $\geq$ 5.00 for the award of the degree as required.

10.2 A Student shall be declared 'successful' or 'passed' in any non-credit subject/ course, if he secures a ' Certificate' for that mandatory course.

After the completion of each semester, a grade card or grade sheet (or transcript) shall be issued to all the registered students of that semester, indicating the letter

grades and credits earned. it will show the details of the courses registered (course code, title, no. of credits, grade earned etc.), credits earned, SGPA, and CGPA.

11 DECLARATION OF RESULTS

11.1 Computation of SGPA and CGPA are done using the procedure listed in 9.6- 9.9.

11.2 For Final percentage of marks equivalent to the computed final CGPA, the following formula may be used:

Percentage of Marks = (final CGPA - 0.5) x 10

12 AWARD OF DEGREE

12.1 After a student has satisfied the requirement prescribed for the completion of the program and is eligible for the award of B. Tech. degree he shall be placed in one of the following four classes based on CGPA:

Class Awarded	Grade to be Secured	Remarks
First Class with Distinction	= 8 CGPA	From the aggregate marks secured from 160 Credits for Regular Students and 144 Credits for Lateral Entry Students.
First Class	= 6.5 to < 8 CGPA	
Second Class	= 5.5 to < 6.5 CGPA	
Pass Class	= 5.00 to < 5.5 CGPA	
FAIL	CGPA < 5	

12.2 First class with distinction will be awarded to those students who clear all the subjects in single attempt during his / her regular course of study by fulfilling the following conditions:

(i) Should have passed all the subjects/courses in 'first appearance' within the first 4 academic years (or 8 sequential semesters) for B.Tech. (Regular) and first 3 academic years (or 6 sequential semesters) for B.Tech. (LES) from the date of commencement of first year first semester for B.Tech. (Regular) and II year I semester for B.Tech. (LES).

(ii) Should have secured a CGPA 8.00, at the end of each of the 8 sequential semesters (6 sequential semesters for LES), starting

from I year I semester (starting from II year I semester for LES) onwards.

(iii) Should not have been detained or prevented from writing the end semester examinations in any semester due to shortage of attendance or any other reason, shall be placed in 'first class with distinction'.

12.3 Award of Medals: Students fulfilling the conditions listed under item 12.2 alone will be eligible for award of 'College Ranks' and 'Medals'.

12.4 Graduation Day: The College shall have its own Annual Graduation Day for the award of Degrees issued by the University.

12.5 Transcripts: After successful completion of prerequisite credits for the award of degree a transcript containing performance of all academic years will be issued as a final record. Duplicate transcripts will also be issued if required after the payment of requisite fee and also as per norms in vogue.

13 WITH HOLDING OF RESULTS

If the student has not paid the fee to college at any stage, or has dues pending against his/her name due to any reason what so ever, or if any case of indiscipline is pending against him/her, the result of the student may be withheld, and he/she will not be allowed to go into the next higher semester.

14 SUPPLEMENTARY EXAMINATIONS

Supplementary examinations for odd semester subjects will be conducted along with even semester regular examinations and vice versa.

15. TRANSITORY REGULATIONS

A. For students detained due to shortage of attendance:

1. A Student who has been detained in I year of R18 Regulations due to lack of attendance, shall be permitted to join I year I semester of SR20 Regulations and he is required to complete

the study of B.Tech. programme within the stipulated period of eight academic years from the date of first admission in I Year.

2. A student, who has been detained in any semester of II, III and IV years of R18 regulations for want of attendance, shall be permitted to join the corresponding semester of SR20 regulations and is required to complete the study of B.Tech. within the stipulated period of eight academic years from the date of first admission in I Year. The SR20 Academic Regulations under which a student has been readmitted shall be applicable to that student from that semester.

See rule (C) for further Transitory Regulations.

B. For students detained due to shortage of credits:

A student of R18 Regulations, who has been detained due to lack of credits, shall be promoted to the next semester of SR20 Regulations only after acquiring the required credits as per the corresponding regulations of his/her first admission. The student is required to complete the study of B.Tech. within the stipulated period of eight academic years from the year of first admission. The SR20 Academic Regulations are applicable to a student from the year of readmission o n ward s .

See rule (C) for further Transitory Regulations.

C. For readmitted students in R18 Regulations:

1. A student who has failed in any subject under any regulation has to pass those subjects in the same regulations.

2. The maximum credits that a student acquires for the award of degree, shall be the sum of the total number of credits secured in all the regulations of his/her study including SR20 Regulations. The performance evaluation of the student will be done after the exemption of two subjects if total credits acquired are $\geq$ 206, three subjects if total credits acquired are > 206 (see R16 Regulations for exemption details).

3. If a student readmitted to SR20 Regulations, has any subject with 80% of syllabus common with his/her previous

regulations, that particular subject in R18 Regulations will be substituted by another subject to be suggested by the SPEC Academic Council.

Note: If a student readmitted to SR20 Regulations, has not studied any subjects/topics in his/her earlier regulations of study which is prerequisite for further subjects in SR20 Regulations, the Principal shall conduct remedial classes to cover those subjects/topics for the benefit of the students.

D. **Promotion Rule:** Where the credits allotted to a semester/year under the regulations studied in are different from that under SR20 regulations for the corresponding semester/year, the promotion rules of SR20 vide section 7.3 shall be applied after normalization. Normalization is done by scaling down or up the number of credits of a semester/year under the previous regulations to equal the number of credits of the corresponding semester/year under SR20 regulations and revising the secured credits also in the same proportion.

16 STUDENT TRANSFERS

There shall be no transfers from other colleges / streams.

17 RULES OF DISCIPLINE

17.1 Any attempt by any student to influence the teachers, Examiners, faculty and staff of controller of Examination for undue favours in the exams, and bribing them either for marks or attendance will be treated as malpractice cases and the student can be debarred from the college.

17.2 When the student absents himself, he is treated as to have appeared and obtained zero marks in that subject(s) and grading is done accordingly.

17.3 When the performance of the student in any subject(s) is cancelled as a punishment for indiscipline, he is awarded zero marks in that subject(s).

17.4 When the student's answer book is confiscated for any kind of attempted or suspected malpractice the decision of the Examiner is final.

18.   MALPRACTICE

18.1 Malpractice Prevention Committee: A malpractice prevention committee shall be constituted to examine and punish the student who does malpractice / behaves indiscipline in examinations.

The committee shall consist of:

a)   Controller of Examinations - Chairman

b)   Addl. Controller of Examinations.- Convener

c)   Subject Expert - Member

d)   Head of the Department of which the student belongs to - Member

e)   The Invigilator concerned - Member

The committee shall conduct the meeting after taking explanation of the student and punishment will be awarded by following the malpractice rules meticulously.

Any action on the part of candidate at the examination like trying to get undue advantage in the performance at examinations or trying to help another, or derive the same through unfair means is punishable according to the provisions contained hereunder. The involvement of the staff who are in charge of conducting examinations, valuing examination papers and preparing / keeping records of documents relating to the examinations, in such acts (inclusive of providing incorrect or misleading information) that infringe upon the course of natural justice to one and all concerned at the examination shall be viewed seriously and will be recommended for appropriate punishment after thorough enquiry and submit the report to Head of the Institution.

18.2 Malpractice Rules: Disciplinary Action for Improper Conduct in Examinations

S. No.	Nature of Malpractices / Improper Conduct	Punishment
1(a)	Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, Cell phones, pager, palm computers or any other form of material concerned with or related to the subject of the examination (theory or practical) in which he is appearing but has not made use of (material shall include any marks on the body of the candidate which can be used as an aid in the subject of the examination)	Expulsion from the examination hall and cancellation of the performance in that subject only.
1(b)	Gives assistance or guidance or receives it from any other candidate orally or by any other body language methods or communicates through cell phones with any candidate or persons in or outside the exam hall in respect of any matter.	Expulsion from the examination hall and cancellation of the performance in that subject only of all the candidates involved. In case of an outsider, he will be handed over to the police and a case is registered against him.
2	Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the subject of the examination (theory or practical) in which the candidate is appearing.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining

S. No.	Nature of Malpractices / Improper Conduct	Punishment
2		examinations of the subjects of that Semester/year. The Hall Ticket of the candidate is to be cancelled and sent to the Principal.
3	Impersonates any other candidate in connection with the examination.	The candidate who has impersonated shall be expelled from the examination hall. The candidate is also debarred and forfeits the seat. The performance of the original candidate who has been impersonated, shall be cancelled in all the subjects of the examination (including practical's and project work) already appeared and shall not be allowed to appear for examinations of the remaining subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. If the imposter is an outsider, he will be handed over to the police and a case is registered against him.

S. No.	Nature of Malpractices / Improper Conduct	Punishment
4	Smuggles in the Answer book or additional sheet or takes out or arranges to send out the question paper during the examination or answer book or additional sheet, during or after the examination.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the candidate is subject to the Academic regulations in connection with forfeiture of seat.
5	Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks.	Cancellation of the performance in that subject.
6	Refuses to obey the orders of the Controller of examinations / any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walk out or instigates others to walk out, or threatens the addl. Controller of examinations	In case of students of the college, they shall be expelled from examination halls and cancellation of their performance in that subject and all other subjects the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of

S. No.	Nature of Malpractices / Improper Conduct	Punishment
	or any person on duty in or outside the examination hall of any injury to his person or to any of his relations whether by words, either spoken or written or by signs or by visible representation, assaults the addl. Controller of examinations, or any person on duty in or outside the examination hall or any of his relations, or indulges in any other act of misconduct or mischief which result in damage to or destruction of property in the examination hall or any part of the College campus or engages in any other act which in the opinion of the officer on duty amounts to use of unfair means or misconduct or has the tendency to disrupt the orderly conduct of the examination.	the subjects of that semester/year. The candidates also are debarred and forfeit their seats. In case of outsiders, they will be handed over to the police and a police case is registered against them.
7	Leaves the exam hall taking away answer script or intentionally tears off the script or any part thereof inside or outside the examination hall.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the

S. No.	Nature of Malpractices / Improper Conduct	Punishment
7		remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
8	Possess any lethal weapon or firearm in the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat.
9	If the /a student of the college, who is not a candidate for the particular examination or any person not connected with the college indulges in any malpractice or improper conduct mentioned in clause 6 to 8.	Student of the colleges expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be

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S. No.	Nature of Malpractices / Improper Conduct	Punishment
9		examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester /year. The candidate is also debarred and forfeits the seat. Person(s) who do not belong to the College will be handed over to police and, a police case will be registered against them.
10	Comes in a drunken condition to the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year.
11	Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny.	Cancellation of the performance in that subject and all other subjects the candidate has appeared including practical examinations and project work of that semester/year examinations.

S. No.	Nature of Malpractices / Improper Conduct	Punishment
12	If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be reported to the principal for further action to award suitable punishment.	

19. SCOPE

i) The Academic Regulations should be read as a whole, for the purpose of any interpretation.

ii) The above mentioned rules and regulations are applicable in general to both B.Tech. (Regular) and B.Tech. (LES), unless and otherwise specific.

iii) In case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Chairman of the Academic Council is final.

20. REVISION AND AMENDMENTS TO REGULATIONS

The Academic Council may revise or amend the academic regulations, course structure or syllabi at any time, and the changes or amendments made shall be applicable to all students with effect from the dates notified by the Academic Council.