



ACADEMIC REGULATIONS

R20 REGULATIONS FOR B.Tech FOUR YEAR DEGREE COURSE *(Applicable for the branches admitted in 2020-21)*

VIDYA JYOTHI INSTITUTE OF TECHNOLOGY

An Autonomous Institution

(Accredited by NAAC, Approved by AICTE New Delhi & Permanently Affiliated to JNTUH)

Aziz Nagar Gate, C.B. Post, Hyderabad - 500 075, Telangana

Definitions of Key Words

Academic Year: An academic year is referred as the period consisting of two consecutive semesters with 16 -18 weeks each of 90 instructional days followed by semester examinations.

Course: A plan of study of a particular subject leading to an examination. All the courses need not carry the same weight. A course may be designed to comprise of lectures/ tutorials/ laboratory work/ field work/ outreach activities/ project work/viva/ seminars/ assignments/ presentations etc. or a combination of some of these.

Choice Based Credit System (CBCS): Choice Based Credit System (CBCS) is the programme in which the students have a choice to choose from the prescribed courses and the entire assessment is graded-based on a credit system.

Credit Point: It is the product of Grade Point and Number of Credits for a course.

Credit: A unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical work/ field work per week.

Cumulative Grade Point Average (CGPA): It is a measure of overall cumulative performance of a student of all the semesters. The CGPA is the ratio of total credit points secured by a student in various courses in all semesters and the sum of the total credits of all courses in all the semesters. It is expressed up to 2nd decimal place.

Grade Point: It is a numerical weight allotted to each letter Grade on a 10-point scale.

Letter Grade: It is an index of the performance of students in a said course. Grades are denoted by letters O, A+, A, B+, B, C, P and F.

Programme: An Educational Programme leading to the award of a Degree.

Semester: Each semester will consist of 16-18 weeks of academic work equivalent to 90 actual instructions days.

Semester Grade Point Average (SGPA): It is a measure of performance of the work done by the student in a semester. It is the ratio of total credit points secured by a student in various courses registered in a semester and the total course credits taken during that semester. It shall be expressed up to 2nd decimal place.

Transcript or Grade Card : Based on the grades earned, a grade certificate shall be issued to all the registered students after every semester. The grade card will display the course details (code, title, number of credits, grade secured) along with SGPA of that semester and CGPA earned till that semester.

Types of Courses: The Courses in under B. Tech, program may be of three kinds' viz., Core, Elective and Mandatory.

a) Core Course:-

There may be a Core Course in every semester and are to be compulsorily studied by a student and is essential requirement for a given Programme.

b) Elective Course:-

Elective Course is a course which can be chosen by the students from a pool of subjects. In general, the elective course is,

- Supportive to the discipline of study
- Providing an expanded scope of the course subjects
- Nurturing student's proficiency/skill.
- In case an elective is "Discipline centric" and is offered by the student's department itself, the elective is called **Professional elective**.
- On the other hand, if the elective is offered by the other departments or if the choice is given to the students to choose from other disciplines, the elective is called an "**Open Elective**."

c) Mandatory Courses (Non-Credit Courses)

AICTE considers that the Course work of certain subjects is essential and as such for the award of a B.Tech degree a pass in these subjects is made mandatory. Therefore, such types of courses are referred as **mandatory courses**. As the AICTE also feels that only a familiarity with the subject content of these courses is essential, only a pass in each of these courses is required. Therefore, these subjects are included in the curriculum as non-Credit courses.



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ACADEMIC REGULATIONS FOR B.TECH.

(As per AICTE Model Curriculum)

WITH EFFECT FROM ACADEMIC YEAR 2020-21 (R20)

- 1 **Under-Graduate Degree Programme in Engineering, Vidya Jyothi Institute of Technology** offers a 4-year (8 semesters) **Bachelor of Technology (B.Tech.)** degree programme, under Choice Based Credit System (CBCS) in the following Branches of Engineering.

S. No	Branch*
I	Civil Engineering
II	Electrical and Electronics Engineering
III	Mechanical Engineering
IV	Electronics and Communication Engineering
V	Computer Science and Engineering
VI	Information technology
VII	Artificial Intelligence
VIII	Computer Science and Engineering(Data Science)

**Regulations applicable to any new courses introduced in later years*

2 ELIGIBILITY FOR ADMISSION

- 2.1 Admission to the Under Graduate (UG) courses merit rank obtained by graduate Programme shall be made either on the basis of the merit rank of the candidate in the entrance test conducted by the Telangana State Government (EAMCET) or on the basis of any other order of merit approved by the University, subject to reservations as prescribed by the Government from time to time. However admissions under Management/NRI Category shall be made on the relevant order issued by Government of Telangana from time to time.
- 2.2 The Government orders with regard to the admissions in vogue shall prevail.
- 2.3 The candidate should have passed the prescribed qualifying examination on the date of Admission.
- 2.4 The medium of instruction is **English**.

3 B.Tech PROGRAMME STRUCTURE

3.1 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 seat in B.Tech course. Each student shall secure 160 credits (with CGPA \geq 5) required for the completion of the Under Graduate Programme and the award of the B.Tech. Degree.

3.2 UGC/ AICTE specified definitions/ descriptions are adopted appropriately for various terms and abbreviations used in these academic regulations/ norms, which are listed below.

3.2.1 Semester Scheme

Each Under Graduate Programme is of 4 academic years (8 semesters) with the academic year divided into two semesters each, each Semester having - ‘Continuous Internal Evaluation (CIE)’ and ‘Semester End Examination (SEE)’ under Choice Based Credit System (CBCS) as indicated by UGC, and the Curriculum/ Course structure as suggested by AICTE are followed.

3.2.2 Credit Courses

All Subjects/Courses are to be registered by the student in a semester to earn credits which 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.

- One credit for one hour/ week/ semester for one theory/ lecture (L) courses or Tutorials (T); and,
- One credit for two hours/ week/ semester for laboratory/ practical (P) Courses.

Courses like Gender Sensitization, Environmental Science, Induction Program are mandatory courses. These courses will not carry any credits.

3.2.3 Subject/ Course Classification

The College has followed almost all the guidelines issued by AICTE/ UGC

All Subjects/Courses offered for the UG Programmes in Engineering (B.Tech.) are broadly classified as follows.

The groups of the subjects shall be as given in the table hereunder along with the credits suggested by AICTE.

S. No.	Subject Categories	No. of Credits
1	Humanities and Social Sciences (HS) Subjects: English, Management and the Courses dealing with Personality	12
2	Basic Sciences (BS) Subjects including Mathematics, Physics and Chemistry	25
3	Engineering Sciences (ES): Engg. Workshop, Drawing, Fundamentals of Computer Science and Courses dealing with the basics of Electrical/Electronics/Mechanical Engineering	24
4	Professional Core (PC) Subjects: Courses dealing with the concerned Engineering Branch	48
5	Professional Elective (PE) Subjects: The students opt electives offered by the Department	18
6	Open Elective (OE) Subjects: Courses offered by other branches representing technically important subjects from emerging areas.	18
7	Project Work, Seminar and/or Internship in Industry or elsewhere along with Mini project.	13
8	Mandatory Courses (MC)	Non-Credit
Total Number of credits		160

B. Tech Year wise distribution of credits

S. No.	Year	Semester	Regular Curriculum	
			Credits	Total Credits
1	1 st Year	I	18/20	38
		II	20/18	
2	2 nd Year	I	20	40
		II	20	
3	3 rd Year	I	21	42
		II	21	
4	4 th Year	I	22	40
		II	18	
Total No. of Credits				160

4. COURSE REGISTRATION/DROPPING

- 4.1 Each student has to compulsorily register for course work at the beginning of each semester as per the schedule mentioned in the academic calendar. It is absolutely necessary for the student to register for Courses in time.
- 4.2 A student would be allowed to register for an Additional Course only if the student satisfies the prerequisites.
- 4.3 Departments will notify at the time of registration about the minimum number of students to be enrolled for a particular Open Elective to be offered.
- 4.4 Any student may be barred from registering for any course for specific reasons like disciplinary reasons or any other activities carried out by a student, which is detrimental to the discipline of the college.
- 4.5 **Fast Track Curriculum Scheme: Fast Track Curriculum Scheme:** With a view to encourage the merit students to take up Internships as per the guidelines of AICTE. A student at the end of B. Tech III year I semester and having CGPA of ≥ 7.0 and having passed all the previous courses in one attempt with a minimum SGPA ≥ 5.0 is allowed to register for the additional theory courses. Such students can take one extra course in each semester i.e, 3rd Year-2 Semester and 4th Year-1st Semester and have only Seminar & Project work in 4th Year -2nd Semester. A subject/ Course may be offered to the students, only if a minimum of 30 students opt for it. The maximum strength of a section is limited to 70.
- 4.6 **Dropping of Courses:** Within four weeks after the commencement of the semester, the student may, in consultation with his / her faculty advisor, drop one or more courses without prejudice to the minimum number of credits. The dropped courses are not recorded in the Grade Card.
- 4.7 After Dropping, minimum credits registered shall be 20.
- 4.8 **Open Electives:** The students have to choose three Open Electives (OE-I, II & III) from the list of open electives given. However, the student cannot opt for an Open Elective Subject offered by his own (parent) department.
- 4.9 **Professional Electives:** The students have to choose four Professional Electives (PE-I to IV) from the list of Professional Electives given.

5. ELECTIVES COURSES TO BE OFFERED

- 5.1 **Open Elective:** An Elective Course may be offered to the students, only if a minimum of 30 students (1/3 of the sanctioned strength) opt for it.
- 5.2 More than one faculty member may offer the same subject (lab/ practical may be included with the corresponding theory subject in the same semester) in any semester. However, selection of 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).

5.3 If more entries for registration of a Subject come into picture, then the Director/Head of the Department concerned shall decide on whether or not to offer such a subject/ course for two (or multiple) sections.

6. ATTENDANCE REQUIREMENTS

6.1 A student is eligible to write the Semester End examinations only if the student acquires a minimum of 75% of attendance in class work aggregate of all the Subjects/ Courses in that Semester.

6.2 Shortage of attendance in aggregate up to 10% (65% and above, and below 75%) in each semester may be condoned by the college academic council on genuine medical grounds, based on the student's representation with supporting evidence. To be submitted by the student as and when such requirement arises but not at the end of semester.

6.3 A stipulated fee shall be payable towards condonation of attendance shortage.

6.4 Shortage of attendance below 65% in aggregate shall in no case be condoned.

6.5 Students, whose shortage of attendance is not condoned, are not eligible to write semester end examinations of that semester. Such students are detained and their registration for the examination stands cancelled.

6.6 A student detained due to shortage of attendance in a semester may seek re-admission into that semester, as and when offered, within four weeks from the date of the commencement of class work with the academic regulations of the batch into which he/she gets admitted. (if there are any Professional Electives and/ or Open Electives, the same may also be re-admission 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.)

6.7 A student will be promoted to the next semester if he/she satisfies the attendance requirement of the present semester.

6.8 For all Mandatory, Noncredit courses offered in a semester, a "Satisfactory Participation Certificate" shall be issued to the student, only after securing 75% attendance in such course. Letter Grade shall be allotted for these courses.

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 theory/ practical/ design/ drawing subject if student secures not less than 35% (26 marks out of 75 marks) in the semester end examination, and a minimum of 40% (40 marks out of 100 marks) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) 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/Summer Internship and Seminar, if the student secures not less than 40% marks (i.e. 40 out of 100 allotted marks) in each of them. The student is deemed to have failed, if student (i) does not submit a report on Industry Oriented Mini Project/ Summer Internship, or does not make a presentation of the same before the evaluation committee as per schedule, or (ii) does not present the seminar as required in the IV Year I Semester, or (iii) Secures less than 40% marks in Industry Oriented Mini Project/Summer Internship and Seminar Evaluations.

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

7.3 Promotion rules

S. No.	Promotion	Conditions to be fulfilled
1	First year first semester to first year second semester	Regular course of study of first year First semester and shall satisfy attendance requirements.
2	First year second semester to second year first semester	Regular course of study of first year second semester and shall satisfy attendance requirements. (i) 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 and shall satisfy attendance requirements.

4	Second year second semester to third year first semester	Regular course of study of second Year second semester and shall satisfy attendance requirements. (i) Must have secured at least 46 credits out of 78 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 and shall satisfy attendance requirements.
6	Third year second semester to fourth year first semester	Regular course of study of third Year second semester shall satisfy attendance requirements. (i) 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 and shall satisfy attendance requirements.

7.4 A Student (i) shall register for all Courses/Subjects covering 160 Credits as specified and listed in the course structure, (ii) fulfils all the attendance and academic requirements for 160 credits, (iii) earn all 160 credits by securing SGPA ≥ 5.0 (in each semester), and CGPA (at the end of each successive semester) ≥ 5.0 , (iv) passes all the mandatory courses, to successfully complete the under graduate programme. The performance of the student in these 160 credits shall be taken into account for the calculation of 'the final CGPA (at the end of under graduate programme), and shall be indicated in the grade card of IV year II semester.

7.5 A student eligible to appear in the end semester examination for any subject/ course, but absent for 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 in

the same semester in the next academic year for fulfillment of academic requirements. The academic regulations under which a student has been readmitted shall be applicable. However, no grade allotments or SGPA/ CGPA calculations will be done for the entire semester in which the student has been detained.

- 7.7 When a Student is detained due to lack of Credits in any year, he may be readmitted after fulfillment of the Academic Requirements, with the Academic Regulations of the Batch into which he gets readmitted. If there are any Professional Electives/ 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.
- 7.8 A student detained due to lack of credits, shall be promoted to the next academic year only after acquiring the required credits. The academic regulations under which the student has been readmitted shall be applicable to him.
- 7.9 Student, who fails to earn 160 credits as indicated in the course structure within eight academic years from the year of his/her admission, shall forfeit the seat in B. Tech. course and admission stands cancelled.
- 7.10 A student with a final CGPA (at the end of the UGP) < 5.00 will not be eligible for the Award of the Degree.

8. EVALUATION - DISTRIBUTION AND WEIGHTAGE OF MARKS

- 8.1 The performance of a student in each Semester shall be evaluated Subject-wise (irrespective of Credits assigned) with a maximum of 100 marks for Theory or Practical's or Seminar or Drawing/ Design or Industry oriented Mini-Project or Minor Course, etc; however, the B.Tech. Project Work (Major Project) will be evaluated for 200 Marks. These evaluations shall be based on 25% CIE (Continuous Internal Evaluation) and 75% SEE (Semester End Examination), and a Letter Grade corresponding to the % marks obtained shall be given.
- 8.2 For theory subjects the distribution shall be 25 marks for Continuous Internal Evaluation (CIE) and 75 marks for the Semester End Examination (SEE).
- 8.3 For theory subjects, during the semester there shall be 2 midterm examinations. Each Mid Term Examination has 1 Assignment/Seminar and carries 5 marks. Each Mid Term Examination will be conducted for 20 marks and consists of Part-A (Short Answer Questions) for 6 marks and Part-B (Long Answer Questions) for 14 marks with duration of 90 Minutes. The Average marks secured by a student in I and II Midterm examination are considered and shall be taken as the final marks secured by the student towards Continuous Internal Evaluation in the theory subject.
- 8.4 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.
- 8.5 First Assignment should be submitted before the conduct of the first mid-term examinations, and the Second Assignment should be submitted before the conduct of the second mid-term

examinations. The Assignments shall be as specified by the concerned subject teacher.

- 8.6 In case a few students are absent due to health reasons or any other unavoidable circumstances, or if a student wish to improve his/her performance in the internal marks a third mid term examination will be conducted on payment of fees fixed by the examination branch. The test will be conducted on all the units of the subject.
- 8.7 In case of Students failed because of Poor Internal Examination Marks. Re-registration such courses are permitted only after completing the B.Tech Course Work subjected to the approval of College Academic Committee case by case based on the conditions presented by the students. Since the Students have satisfied the attendance requirements during their study of B.Tech Course work they need not attend the classes of reregistered courses.
- 8.8 The Semester End Examination will be conducted for 75 marks which consist of two parts viz. i). Part-A for 25 marks, ii). Part-B for 50 marks. Part-A is compulsory, which consists of ten questions (numbered from 1 to 10) two from each unit carrying 2 or 3 marks each. Part-B consists of five questions (numbered from 11 to 15) carrying 10 marks each. Each of these questions is from one unit and may contain sub-questions. For each question there will be an “either” “or” choice (i.e., there will be two questions from each unit and the student should answer any one question).
- 8.9 For Practical Subjects, there shall be a Continuous Internal Evaluation (CIE) during the Semester for 25 internal marks, and 75 marks are assigned for Lab./Practical End Semester Examination (SEE). Out of the 25 marks for internals, day-to-day work in the laboratory shall be evaluated for 15 marks; and for the remaining 10 marks test conducted by the concerned laboratory teacher.
- 8.10 The Practical End Semester Examination shall be conducted with an External Examiner and the laboratory teacher for 50 marks. The external examiner shall be appointed by the Director/principal/Dean Exams from the panel of examiners recommended by Chairman, Board of Studies in respective Branches.
- 8.11 For the subject having design and/ or drawing, (such as Engineering Graphics, Engineering Drawing, and Machine Drawing), the distribution shall be 25 marks for Internal Evaluation (15 marks for day-to-day work and 10 marks for internal tests) and 75 marks for Semester End Examination. There shall be two internal tests in a semester and average of two examinations shall be considered for the award of marks for internal examination.
- 8.12 There shall be an industry-oriented mini-Project, to be taken up during the vacation after III year II Semester examination. However, the mini project and its report shall be evaluated in the IV year I Semester at the time of practical exams. The industry oriented mini project shall be submitted in a report form and should be presented before the committee, which shall be evaluated for 50 marks. The committee consists of an External Examiner, Head of the department, the Supervisor of mini project and a Senior faculty member of the department. There shall be no internal marks

for industry oriented mini project.

8.13 There shall be a seminar presentation in IV-year II Semester. For the seminar, the student shall collect the information on a specialized topic and prepare a technical report, showing his understanding of the topic, and submit it to the department. It shall be evaluated by the departmental committee consisting of Head of the Department, Seminar Supervisor and a Senior Faculty member. The seminar report shall be evaluated for 50 marks. There shall be no SEE or external examination for the seminar.

If the student fails to present the Seminar as required in the IV year II Semester He may reappear for the seminar when they are scheduled again (within one month); if he fails in such 'one reappearance' evaluation also, he has to reappear for the same in the next subsequent Semester, as and when it is scheduled.

8.14 There shall be a Comprehensive Viva-Voce in IV year II semester. The Comprehensive Viva-Voce will be conducted by a committee consisting of Head of the Department and two Senior Faculty members of the department and is evaluated for 100 marks. The Comprehensive Viva-Voce is intended to assess the students understanding of the subjects student studied during the B.Tech course. There will be no External Examiner for the Comprehensive Viva-Voce.

Distribution of Marks Internal Valuation/External Valuation

Subject	Internal Valuation Marks	External Valuation Marks	Total Marks
Theory_ Engineering Drawing	25	75	100
Mini Project	0	50	50
Seminar	50	0	50
Major Project	50	150	200
Comprehensive Viva-Voce	100	0	100

8.15 Out of a total of 200 marks for the major project work, 50 marks shall be for Internal Evaluation and 150 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, seminar 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 internal evaluation of the project work shall be on the basis of two seminars given by each student on the topic of his/her project to the respective supervisor.

8.16 The Laboratory marks and the sessional marks awarded by the faculty are subject to scrutiny by the Institution whenever/wherever necessary. In such cases, the sessional and laboratory marks awarded by the teacher will be referred to the College Academic Committee. The Committee will study case by case and recommend if any changes if it feels required. The recommendations of the Committee are final and binding. The laboratory records and internal test papers shall be

preserved as per the University rules and produced before the Committees of the University as and when asked for.

8.17 Candidates shall be permitted to apply for recounting/revaluation of SEE scripts within 2 weeks from the date of release of results, with a payment of prescribed fee.

8.18 No marks or letter grades shall be allotted for Mandatory/Non-Credit Courses. Only Pass/Fail shall be indicated in Grade Card.

9 GRADING PROCEDURE

9.1 Grades will be awarded to indicate the performance of students in each theory subject, laboratory/practicals, seminar, Industry Oriented Mini Project, and project Stage – I & II. Based on the percentage of marks obtained (Continuous Internal Evaluation plus Semester End Examination, both taken together) as specified item 7 and 8 of 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 and corresponding percentage of marks shall be followed.

Letter Grade	Performance	Grade Points	% of marks Secured (Class Intervals)
O	Outstanding	10	Greater than or equal to 90%
A+	Excellent	9	80% and less than 90%
A	Very Good	8	70% and less than 80%
B+	Good	7	60% and less than 70%
B	Average	6	50% and less than 60%
C	Pass	5	40% and less than 50%
F	Fail	0	Below 40%
AB	Absent	0	Absent

9.3 A Student who has obtained an 'F' grade in any subject shall be considered 'failed' and is required to reappear as a 'supplementary student' in the Semester End Examination as and when conducted. In such cases, Internal Marks in those subjects will remain the same as those obtained earlier.

9.4 To a Student who has not appeared for a semester end examination in any subject, 'Ab' grade will be allocated in that subject, and he is deemed to have 'failed'. A Student will be required to reappear as a 'Supplementary Student' in the Semester End Examination, as and when conducted. In this case also, the internal marks in those subjects will remain the same as those obtained earlier.

9.5 A letter grade does not indicate any specific percentage of marks secured by the student, but it indicates only the range of percentage of marks.

9.6 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 Subject/Courses pertaining to that Semester when he is detained due to shortage of attendance.

9.7 A student earns grade point (GP) in each subject/ course, on the basis of the letter grade secured in that subject/ course. 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 For a subject/course

9.8 The Student passes the Subject/ Course only when he gets $GP \geq 5$ (P Grade or above).

9.9 The Semester Grade Point Average (SGPA) is calculated by dividing the sum of credit points ($\sum CP$) 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

$$SGPA = \frac{\sum_{i=1}^N C_i G_i}{\sum_{i=1}^N C_i} \text{ -----for each semester}$$

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 the i^{th} subject, and G_i represents the grade points (GP) corresponding to the letter grade awarded for that i^{th} subject.

9.10 The Cumulative Grade Point Average (CGPA) is a measure of the overall cumulative performance of a student in 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 II semester onwards at the end of each semester as per the formula

$$CGPA = \frac{\sum_{j=1}^M C_j G_j}{\sum_{j=1}^M C_j} \text{ --- ... for all S semesters}$$

**registered (i.e., up to and inclusive of S semesters,
S \geq 2),**

where ‘M’ is the **total** no. of subjects (as specifically required and listed under the course structure of the parent department) the student has ‘**registered**’ i.e., from the 1st semester onwards up to and inclusive of the 8th semester, ‘j’ is the subject indicator index (takes into account all subjects from 1 to 8 semesters), C_j is the no. of credits allotted to the j^{th} subject, and G_j represents the grade points (GP) corresponding to the letter grade awarded for that j^{th} subject. After registration and completion of I year I semester, the SGPA of that semester itself may be taken as the CGPA, as there are no cumulative effects.

Illustration of calculation of SGPA:

Course	Credits	Letter Grade	Grade Points	Credit Points
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Course 1	4	A	8	4 x 8 = 32
Course 2	4	O	10	4 x 10 = 40
Course 3	4	C	5	4 x 5 = 20
Course 4	3	B	6	3 x 6 = 18
Course 5	3	A+	9	3 x 9 = 27
Course 6	3	C	5	3 x 5 = 15
	21			152

$$\text{SGPA} = 152/21 = 7.24$$

9.11 Illustrative Example:

An illustrative example given in below Table indicates the use of the above two equations in calculating SGPA and CGPA, both of which facilitate the declaration of academic performance of a student, at the end of a semester and at the end of successive semesters respectively. Both of them shall be normally calculated up to the second decimal position, so that the CGPA, in particular, can be made use of in awarding a rank for a the student's performance in a class or college. If two students get the same CGPA, the tie should be resolved by considering the number of times a student has obtained higher SGPA; But, if it is not resolved even at this stage, the number of times a student has obtained higher grades like O, A, B etc shall be taken into account in rank ordering of the students in a class.

Year and Semester	Course No.	Credits	Grade	Grade Points	Credit Points
I Year I Semester	XX101	5	A	8	40
I Year I Semester	XX102	4	F	0	00
I Year I Semester	XX103	3	A+	9	27
I Year I Semester	XX104	4	F	0	00
I Year I Semester	XX105	5	C	5	25
I Year I Semester	XX106	5	P	4	20
Total		26(18*)			112
SGPA = 112/26 = 4.31		CGPA = 4.31			
I Year II Semester	XX107	5	B+	7	35
I Year II Semester	XX108	4	A	8	32
I Year II Semester	XX109	3	C	5	15
I Year II Semester	XX110	5	P	4	20
I Year II Semester	XX111	4	A+	9	36
I Year II Semester	XX112	2	F	0	00
I Year II Semester	Xx113	2	A	8	16
Total		25(23*)			154
SGPA = 154/25 = 6.16		CGPA = 266/51 = 5.22			

*Total No. of credits excluding those with 'F'; this is particularly important to keep track of the number of credits earned by a student up to any semester.

The above illustrated calculation process of CGPA will be followed for each subsequent semester until 8th semester. The CGPA obtained at the end of 8th semester will become the final CGPA secured for entire B.Tech. Programme.

9.12 For merit ranking or comparison purposes or any other listing, only the 'rounded off' values of the

CGPAs will be used.

9.13 For calculations listed in regulations 9.7 to 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. After passing the failed subject(s) newly secured letter grades will be taken into account for calculation of SGPA and CGPA. However, mandatory courses will not be taken into consideration.

SGPA and CGPA of a semester will be mentioned in the semester Memorandum of Grades if all subjects of that semester are passed in first attempt. Otherwise the SGPA and CGPA shall be mentioned only on the Memorandum of Grades in which sitting he passed his last exam in that semester.

10. EARNING OF CREDITS

A student shall be considered to have completed a Course successfully and earned the credits if he/she secures an acceptable letter grade in the range 'O' to 'P'. Letter grade 'F' in any Course implies failure of the student in that Course and no credits earned.

11. PASSING STANDARDS

11.1 A student shall be declared successful or 'passed' in a Semester, only when he gets a SGPA \geq 5.00 (at the end of that particular Semester).

11.2 In the case of the student reappearing the examination such cases, his Internal Marks (CIE Marks) in those Subject(s) will remain same as those obtained earlier. In these considerations, the newly secured Letter Grades will be recorded and taken into account for calculation of SGPA and CGPA, only if there is an improvement.

11.3 A Student shall be declared successful or 'passed' in any Non-Credit Subject/ Course, if he secures a minimum of P grade.

11.4 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.

12. DECLARATION OF RESULTS

12.1 Computation of SGPA and CGPA are done using the procedure listed in 9.7 to 9.10.

12.2 For final percentage of marks equivalent to the computed final CGPA, the following formula may be used.

$$\% \text{ of Marks} = (\text{final CGPA} - 0.5) \times 10$$

13. AWARD OF DEGREE

13.1 A student who registers for all the specified subjects/ courses as listed in the course structure and secures the required number of 160 credits (with CGPA ≥ 5.0), within 8 academic years from the date of commencement of the first academic year, shall be declared to have **‘qualified’** for the award of B.Tech. degree in the chosen branch of Engineering selected at the time of admission.

13.2 A student who qualifies for the award of the degree as listed in item 12.1 shall be placed in the following classes.

CGPA	Class Awarded	From the CGPA secured from 160 credits
≥ 8.00	First Class with Distinction	
$\geq 6.50 - < 8.00$	First Class	
$\geq 5.50 - < 6.50$	Second Class	
$\geq 5.00 - < 5.50$	Pass Class	

13.3 The marks obtained in Internal Evaluation (CIE) and Semester End Examination (SEE) will be shown in the memorandum of marks.

13.4 For the purpose of awarding first Class with Distinction (CGPA ≥ 8.0), the student must obtain the minimum required CGPA within 4 academic years or within 3 academic years in case of Lateral Entry candidates by clearing all the courses.

13.5 Candidates with disciplinary action pending/ prevented from writing the end semester examinations due to reason in any semester are not eligible for the award of First Class with Distinction. Such candidate’s even if the CGPA ≥ 8.0 shall be placed in first class.

13.6 For the purpose of awarding First, Second and Pass Class, CGPA obtained in the examinations appeared within the maximum period allowed for the completion of course shall be considered as per the regulations.

13.7 A student with final CGPA (at the end of the UGP) < 5.00 will not be eligible for the award of the Degree.

14. CONSOLIDATED GRADE CARD

A consolidated grade card containing credits & grades obtained by the candidates will be issued after completion of the four years B. Tech Program.

15. WITHHOLDING OF RESULTS

If the student has not paid the fees to the College at any stage, or has dues pending due to any reason whatsoever, or if any case of indiscipline is pending, the result of the student may be withheld, and the student will not be allowed to go into the next higher semester. The award or issue of the degree may also be withheld in such cases and the matter will be referred to College Academic Committee for final decision.

16. TRANSITORY REGULATIONS

- 16.1 Discontinued, detained for attendance, detained for want of credits, or failed students are eligible for readmission as and when the course is offered during the subsequent academic year as per the college admission procedures.
- 16.2 Students on transfer from a non- autonomous or from an autonomous college shall complete all the courses of the concerned programme not covered in the earlier organization. However, he/she should take the remaining courses in the programme along with the other students.
- 16.3 There shall be no branch transfers after the cut-off date of admissions made in the B.Tech. I year.

17. STUDENT TRANSFERS/TRANSILATORY REGULATIONS (PAGE NO 21 /19 POINT)

- 17.1 Discontinued, detained for attendance, detained for want of credits, or failed students are eligible for readmission as and when the course is offered during the subsequent academic year as per the college admission procedures.
- 17.2 Students on transfer from a non- autonomous or from an autonomous college shall complete all the courses of the concerned programme not covered in the earlier organization. However, he/she should take the remaining courses in the programme along with the other students.
- 17.3 There shall be no branch transfers after the cut-off date of admissions made in the B.Tech. I year.

18. TRANSCRIPTS

After successful completion of the total programme of study, 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.

19. SUPPLEMENTARY EXAMINATIONS

In addition to the Regular end semester examinations, Supplementary Examinations for the previous semesters will be conducted along with End Semester Examinations. A student can appear for any number of supplementary examinations till he/she clears all courses which he/she could not clear in the first attempt. However, the maximum stipulated period cannot be relaxed under any circumstances.

20. GRADUATION CEREMONY

- 20.1 The College shall have its own annual Graduation Ceremony for the award of degrees to students completing the prescribed academic requirements in each case, in consultation with the University and by following the provisions in the Statute.
- 20.2 The College shall institute Prizes and Awards to meritorious students, for being given away annually at the Graduation Ceremony.

21. TERMINATION OF THE PROGRAM

The admission of a student to the program may be terminated and the student may be asked to leave the Institute in the following circumstances:

- 21.1 The student fails to satisfy the requirements of the program within the maximum period stipulated for that program.
- 21.2 The student fails to satisfy the norms of discipline specified by the institute from time to time.

22. NON-CREDIT COURSES (Mandatory Courses)

- 22.1 Requirement of 75% attendance as per the college regulations is compulsory of completing the mandatory courses.
- 22.2 Specified number of Mandatory Courses among the designated ones is compulsory requirement for all the students for the award of B.Tech.Degree.
- 22.3 Although these courses do not carry any credits, performance in these subjects is evaluated following the procedure adopted for other subjects with the same marks. However, their performance will be indicated in the student's memo of marks as Satisfactory/ Unsatisfactory.

MALPRACTICES RULES DISCIPLINARY ACTION FOR/IMPROPER CONDUCT IN EXAMINATIONS

	Nature of Malpractices/Improper conduct	Punishment
	If the student:	
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 student is appearing but has not made use of (material shall include any marks on the body of the student 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.
(b)	Gives assistance or guidance or receives it from any other student orally or by any other body language methods or communicates through cell phones with any student 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 students 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 student is Appearing.	Expulsion from the examination hall and cancellation of the performance in that subject only.
3.	Impersonates any other student in Connection with the examination.	The student who has impersonated shall be Expelled from examination hall. The student is also debarred and forfeits the seat. The performance of the original student who has been impersonated, shall be cancelled in all the subjects of the examination (including practicals and project work) already appeared and shall not be allowed to appear for examinations of the remaining subjects of that Semester/ year. The student is also debarred for two consecutive semesters from class work and All Examinations. The continuation of the course by the student 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.

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 student 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 student is also debarred for two consecutive semesters from class work and All Examinations. The continuation of the course by the student 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 chief superintendent/assistant superintendent / 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 officer-in charge 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 officer-in- charge, 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.	<ol style="list-style-type: none"> 1.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 student(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the subjects of that Semester/ year. 2.The students 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.	<ol style="list-style-type: none"> 1.Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the student 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. 2.The student is also debarred for two consecutive semesters from class work and All University examinations. The continuation of the course by the student is subject to the academic regulations in connection with Forfeiture of seat.

8.	Possesses any lethal weapon or firearm in the examination hall.	<p>1. Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the student 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.</p> <p>2. The student is also debarred and forfeits the seat. Police case will be registered.</p>
9.	If student of the college, who is not a student 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.	<p>Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the student 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 student is also debarred and Forfeits the seat.</p> <p>Person(s) who do not belong to the college will be handed over to the police and, a police case Will be registered against them.</p>
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 student has already appeared for 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 student has appeared for including practical examinations and project work of that semester/year Examinations.
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 a suitable Punishment.	

Malpractices identified by squad or special invigilators : Punishment to the students as per the above guidelines

General

24.1 Wherever the words “he”, “him”, “his”, occur in the regulations, they include “she”, “her”, “hers”.

24.2 Where the words “Subject” or “Subjects”, occur in these regulations, they also imply “Course” or “Courses”.

24.3 The academic regulation should be read as a whole for the purpose of interpretation.

24.4 In case of any doubt or ambiguity in the interpretation of the above rules, the decision of the

Academic Council is final.

24.5 The Institution may change 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 date notified by the Institution.

ACADEMIC REGULATIONS FOR B. TECH LATERAL ENTRY STUDENTS

Applicable for the students admitted into II-year B. Tech. (Lateral Entry Scheme) from the Academic Year 2020-21.

1. Eligibility for award of B. Tech. Degree (LES)

- 1.1 The LES candidates shall pursue a course of study for not less than three academic years and not more than six academic years.
- 1.2 The candidate shall register for 122 credits and secure 122 credits by securing a minimum CGPA of ≥ 5 of B.Tech. II to IV year for the award of B.Tech. Degree.
- 1.3 The student(s), who fail to fulfil the requirement for the award of the degree in six Academic years from the year of admission, shall forfeit their seat(s). The attendance regulations of B. Tech. (Regular) shall be applicable to B.Tech. (LES).

2. Promotion Rule

- 2.1 A student shall be promoted from B.Tech., II Year to III Year if he/she gets at least a minimum of 24 out of 40 credits, up to II year II semester, from all the examinations, whether or not the candidate takes the examinations.
- 2.2 A student shall be promoted from III year to IV year if he/she gets a minimum of 49 out of 82 credits, up to III year II semester, from all the examinations, whether or not the candidate takes the examinations.
- 2.3 A student shall register and put up minimum attendance in all 122 credits and earn all 122 credits to be eligible for the award of B.Tech degree.
- 2.4 A student, who fails to earn 122 credits as indicated in the course structure within six academic years, shall forfeit his/her admission in B.Tech. Course.

3. Award of Class

A student, who satisfies all the requirements prescribed for the completion of the B.Tech. program, is eligible for the award of the said degree, in any one of the following four classes:

CGPA	Class Awarded	From the CGPA secured from 122 credits
>8.00	First Class with Distinction	
$\geq 6.50 - <8.00$	First Class	
$\geq 5.50 - <6.50$	Second Class	
$\geq 5.00 - <5.50$	Pass Class	

4. All the other regulations as applicable to B. Tech. 4-year degree course (Regular) will hold good for B.Tech. (Lateral Entry Scheme).
5. The malpractice rules and procedures for evaluating the SGPA and CGPA mentioned under points 9 - 24, are also applicable to the 5Lateral Entry students.

