VELALAR COLLEGE OF ENGINEERING AND TECHNOLOGY

(AUTONOMOUS)

ERODE – 638012

(Affiliated to Anna University, Chennai)

REGULATIONS 2022

Choice Based Credit System

Undergraduate Programmes

(B.E. / B.Tech.)

(Including Amendments)

VELALAR COLLEGE OF ENGINEERING AND TECHNOLOGY, ERODE
(An Autonomous Institution Affiliated to Anna University, Chennai)

UG REGULATIONS 2022- CHOICE BASED CREDIT SYSTEM
Common to All B.E./ B.Tech. Degree Programmes

These regulations are applicable to students admitted into B.E. / B.Tech. Degree Programmes from the academic year 2022 – 23 and are subjected to amendments as may be decided by the Academic Council of the College from time to time.

1. DEFINITIONS

In these Regulations, unless otherwise specified:

1.1. **"University"** means ANNA UNIVERSITY, Chennai.
1.2. "**College**" means VELALARCOLLEGEOF ENGINEERING AND TECHNOLOGY.
1.3. "**Programme**" means an UG Degree Programme like B.E.(Biomedical Engineering), B.E.(Civil Engineering), etc.
1.4. "**Course**" means a theory or practical course that is normally studied in a semester, like Mathematics, Physics and Chemistry Laboratory etc.
1.5. "**Credit**" means a numerical value allocated to each course to describe the student's contact hours required per week.
1.6. **"Grade"** means the letter grade (O, A+, A, B+, B and C) based on the marks obtained by a student in a particular course and the range of marks.
1.7. "**Grade point**" means a numerical value (0 to 10) allocated to each letter Grade.
1.8. **"GPA"** means Grade Point Average and **"CGPA"** means Cumulative Grade Point Average as in clause 16.9.
1.9. "**Principal**" means Principal of the College and also the Chairperson, Academic Council of the College.
1.10. "**Controller of Examinations**" means the authorized person who is responsible for examinations of the College.
1.11. **"Head of the Department"** means the concerned Head of the Department of the programme.

2. CONDITIONS FOR ADMISSION

2.1 First Semester Admission

Thecandidates seeking admission to the first semester of the eight semester Degree of Bachelor of Engineering (B.E) / Bachelor of Technology (B.Tech) programme should have passed the Higher Secondary Examination (10 + 2) in the academic stream with Mathematics, Physics and Chemistry as three of the four subjects of study under Part-III subjects of the study conducted by the Government of Tamil Nadu or any examination of any other University or authority accepted by the Syndicate of Anna University as equivalent thereto.

<p style="text-align:center">(OR)</p>

Should have passed the Higher Secondary Examination of Vocational stream (Vocational groups in Engineering / Technology) as prescribed by the Government of Tamil Nadu.

2.2 Lateral Entry Admission

The candidates who hold a Diploma in Engineering / Technology awarded by the State Board of Technical Education, Tamilnadu or its equivalent are eligible to apply for Lateral entry admission to the third semester of B.E. / B.Tech. in relevant branches of study.

<div align="center">(OR)</div>

The candidates who hold a B.Sc. degree (10+2+3 stream) with mathematics as one of the subjects at the B.Sc. level from a recognised University are eligible to apply for Lateral entry admission to the third semester of B.E. / B.Tech. Such Students shall undergo two additional Engineering courses in the third and fourth semesters as prescribed by the College.

In addition to the clauses (2.1) and (2.2), the candidates seeking admission should satisfy other eligibility conditions prescribed by the Anna University and Directorate of Technical Education.

3. PROGRAMMES OF STUDY

The following UG programmes of study, approved by Anna University and All India Council for Technical Education, New Delhi, are offered by the College.

Degree	Programme	Programme Code
B. E.	Biomedical Engineering	BM
	Civil Engineering	CE
	Computer Science and Engineering	CS
	Computer Science and Engineering (AI and ML)	AM
	Electrical and Electronics Engineering	EE
	Electronics and Communication Engineering	EC
	Mechanical Engineering,	ME
	Medical Electronics	MD
B.Tech.	Artificial Intelligence and Data Science	AD
	Information Technology	IT

4. STRUCTURE OF THE PROGRAMMES

4.1 Categorization of Courses

Every Programme shall have a curriculum with syllabi comprising of both theory and practical courses in each semester that have been approved by the respective Board of Studies and Academic Council of the College. The courses are categorized as follows:

4.1.1. Humanities, Social Sciences and Management (HS) courses include English, Communication skills, Value Education, Professional Ethics and Human Values, Environmental Science etc.

4.1.2. Basic Sciences (BS) courses include Mathematics, Physics, Chemistry, Material Science, Physical Sciences etc.

4.1.3. Engineering Sciences (ES) courses include, Engineering Drawing, Basics of Electrical, Electronics, Civil and Mechanical Engineering, Programming, Engineering practices etc.

4.1.4. Professional Core (PC) courses include the core courses relevant to the chosen programme.

4.1.5. Professional Elective (PE) courses include the elective courses relevant to the chosen programme.

4.1.6. Open Electives (OE) : A student has to choose Open Elective courses from the open electives offered by any B.E. / B.Tech. programme other than his/her own programme. The open elective courses on offer are subject to availability of faculty members, time table slot, class rooms and minimum class strength specified from time to time.

4.1.7. Employability Enhancement (**EC**) Courses include Project Work, Inplant Training, Hospital Training, internship, Seminar, Professional Practices, Case Study, etc.

4.1.8. Mandatory Courses (MC) include the courses that are to be completed by every student; these are courses useful for a student's career. These courses will not be included in the CGPA calculation and in the classification of the Degree. Only a PASS is indicated in the Statement of Grades.

4.1.9. Value Added Courses (VC) (One Credit courses): One credit courses are offered by a Department with the prior approval from respective Board of Studies.

If the total credits thus earned is three or more, then one professional elective course may be exempted. A student may be permitted to take up Value Added Courses from other departments with approval from both the Heads of the Departments.

4.1.10. Online Courses (OC): Students may be allowed to take upto 40 percent of the total courses being offered in a particular programme in a semester, through the online credit courses, through SWAYAM platform. SWAYAM courses shall have the credit equivalence such that a 12 weeks' course is considered equivalent to 3 credits. A student is permitted to transfer credits from SWAYAM courses in lieu of electives listed in the curriculum. The credit points earned and transferred shall be taken for the calculation of CGPA and the Classification of the Degree. The courses shall have prior approval by the Chairperson of the concerned Board of Studies. The courses taken for credit transfer will be mentioned in the Grade Statement. The equivalent Grades for the range of marks obtained in SWAYAM courses, are approved by the competent authorities.

4.1.11. Audit Courses (AC): The student may optionally study audit courses prescribed by the College and they will be mentioned in the Grade Statement. However, they will not be considered for computation of CGPA.

4.1.12. Self-study (SC) courses: The Department may offer a   course which has not been prescribed in the regular curriculum as a self-study course. The syllabus for a self-study course should have been approved by the Chairperson of the concerned BoS. The Students shall study such courses on their own under the guidance of a member of the faculty with no formal lectures need be delivered. Evaluation of such courses shall be similar to that of a course in the curriculum. They will be mentioned in the Grade Statement. However, they will not be considered for computation of CGPA.

4.2 Personality and Character Development

Upon admission into the 1st or 2nd year B.E./B.Tech. Programme, every student shall enroll in ANY ONE of the following personality and character development programmes and attend the activities for a minimum of 40 hours. .

- National Cadet Corps (NCC)
- National Service Scheme (NSS)
- Youth Red Cross (YRC)
- Rotaract Club
- Mathematics Colloquium
- Science Club
- English Literary Association
- Toast Masters' Club
- Green Club
- Fine Arts Club
- VISCOM Club
- Heritage Club

Fees shall not be charged for any of the above activities.. Every student shall put in a minimum of 75% attendance in the events of the club. The NCC or club events shall be completed during the first two year of the programme. However, for valid reasons, the Principal may permit a student to complete this requirement before the completion of Programme.

4.3. Credit Assignment

Each course is assigned a certain number of credits in the curriculum. A student has to earn a minimum of credits specified in the concerned curriculum of the programme for the award of Degree.

Course Category	No. of Credits(C)	Minimum contact hours per week		
		L	T	P
Theory	3	3	0	0
Theory with Tutorial	4	3	1	0
Theory with practical combined	4	3	0	2
Practical	1	0	0	2

4.4. Advancement of Courses

A student, who has passed all the courses up to 5th semester is permitted, with the approval of the HoD, to take up two additional theory courses in advance; that is , one in 6th semester and another one in 7th semester , in lieu of the two Professional Elective courses listed for 8th semester.

4.5. Internship

A student has to undergo full time Internship in an industry or organisation during the 8th semester for a duration of 12 weeks. After completion, the student has to submit a report based on the internship experience. The format of the report shall be the same as that

prescribed for the 8th semester project of that programme and should have a certificate signed by a competent person from the organisation along with an attendance certificate.

4.6. Industrial Visit

Every student is expected to go for at least one Industrial Visit every year starting from the second year of the Programme.

4.7. Flexibility to Drop a course

4.7.1 A student has to earn the minimum total number of credits specified in the curriculum of the respective Programme in order to become eligible to obtain the degree.

4.7.2 During the 3rd to 7th semesters, a student has the option of dropping of ONE course, with prior approval from HoD and the Principal. Such a dropped course can be taken up in a subsequent semester when offered by the programme. However backlogged dropped courses registered in the current semester cannot be again dropped. Dropping of courses is only an option given to a student. Only one course can be dropped and it can be subsequently added only once in the entire duration of the programme.

4.8. The blend of different courses shall be so designed such that at the end of the programme, a student would have been trained not only in his / her relevant professional field but also would have developed to become a socially conscious human being

4.9 The medium of instruction, examinations and project report shall be English except in certain specified courses.

5. DURATION OF THE PROGRAMME

5.1. A student is normally expected to complete the B.E. / B.Tech. Degree Programme in 8 consecutive semesters, (6 consecutive semesters in case of lateral entry Students) but in any case not more than 14 semesters. (Not more than 12 semesters in the case of lateral entry students).

5.2. The total period for completion of the programme, reckoned from the semester to which the student was admitted, shall not exceed the maximum period specified in clause 5.1. irrespective of the period of Authorised Break of Study (vide clause 21) in order that the student becomes eligible for the award of the degree.

5.3. However, a student who has not completed the programme even after the prescribed period as above, may be permitted to appear for examinations, after getting approval from the competent authorities, in equivalent courses in the regulations in effect at that time.

6. FACULTY ADVISOR

To help the students in planning their courses of study and for general advice on the academic programme, the Head of the Department will nominate a teacher of the Department who shall function as Faculty Advisor for the students throughout their period of study. The Faculty Advisor shall advise the students in registering of courses, monitor their attendance and progress and counsel them periodically. If necessary, the Faculty Advisor may also discuss

with or inform the parents about the progress / performance of the student concerned.

The responsibilities for the faculty advisor are:
- To inform the students about the various facilities and activities available to enhance the student's curricular and co-curricular activities.
- To guide the student enrollment and registration of the courses.
- To monitor the academic and general performance of the students including attendance and to counsel them accordingly and
- Any other requirement which may arise from time to time.

7. CLASS COMMITTEE

Each class shall have a "Class Committee" comprising of all teachers teaching that class and some student representatives. One of the teachers shall be nominated as Chairperson. The first meeting of the Committee shall be held within fifteen days from the date of commencement of the semester. The nature and weightage of the continuous assessments shall be informed in the first meeting, within the framework of the Regulations. Two or three subsequent meetings in a semester may be held at suitable intervals. During these meetings, the student members shall meaningfully interact and express their opinions and suggestions representing all the students to improve the effectiveness of the teaching-learning process. It is the responsibility of the student representatives to convey the proceedings of these meetings to the class.

8. FACULTY ATTENDANCE AND ASSESSMENT RECORD

Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD' which consists of attendance marked in each theory or Laboratory class, the assessment marks and the record of class work (topics covered), separately for each course . This should be submitted to the Head of the Department periodically (at least three times in a semester) for monitoring the syllabus coverage and the records of assessment marks and attendance. The Head of the Department will affix the signature and date after due verification. At the end of the semester, the record should be verified by the Head of the Department who shall keep this document in safe custody (for five years). The records of attendance and assessment of both current and previous semesters should be available for inspection.

9. ATTENDANCE REQUIREMENTS

9.1. Each semester shall normally consist of 75 working days or 525 periods of 50 minutes duration. The Head of the Department shall ensure that every teacher imparts instructions as per the number of contact hours specified in the syllabus and teaches the full content of the specified syllabus for the course being taught. The Department may conduct additional classes for improvement, special coaching, conduct of model tests etc., over and above the specified number of periods.

9.2. The attendance is calculated by,

$$Atendance\ \% = \frac{Total\ periods\ atteneded\ in\ the\ semester}{(No.\ of\ periods\ per\ week\ \times 15)\ for\ all\ the\ courses\ in\ the\ semester}$$

10. REQUIREMENTS FOR COMPLETION OF A SEMESTER

A Student shall be deemed to have completed the requirements of a semester only if the student has satisfied the requirements as below and has registered for the examinations by paying the prescribed fee.

10.1. Ideally, every student is expected to attend all classes and secure 100% attendance. However, a student shall secure not less than 75% as given in clause 9.2.

10.2. A student, who could not satisfy the attendance requirements as per clause 10.1 but has secured 65% - 75% attendance, due to medical reasons or an authorized outside activity, may be permitted to appear for the examinations after the approval of the Principal. The relevant certificates, with the approval of the HoD and Principal, are to be submitted to the Office of the CoE.

10.3. Students who **secure less than 65% attendance** are not permitted to write the current semester examinations and not permitted to move to the next semester. They are required to repeat the incomplete semester in the corresponding period of the next academic year and as per the norms and regulations at that time. **However they are permitted to register and write the arrear examinations, if any.**

10.4. Student's progress, performance and conduct are satisfactory.

11. REGISTRATION FOR THE SEMESTER EXAMINATIONS

11.1. The Semester Examinations will ordinarily follow after the last working day of the semester as per the Academic Assessment Schedule notified from time to time.

11.2. Registration for the semester examinations is mandatory for the courses of the current semester and for ALL the arrear courses, failing which the student will not be permitted to move on to the next semester.

11.3. The courses that a student has to register for examinations in a particular semester include,

a) Courses of the current semester.
b) All the arrear courses (if any)
c) Courses dropped in the previous semesters (if any) and
d) Courses advanced to Semesters 6 or 7 from 8th Semester (as per clause 4.6).

11.4. When a student is deputed for a University / National / International Sports / NSS / NCC event during Semester Examinations, examinations may be conducted for such students on return after participating in the event within a reasonable period of time. Such appearance shall be considered as first appearance.

11.5. A student who has already appeared and passed the examination for a course is not entitled to reappear in the same course for improvement of letter grades**.**

12. SYSTEM OF EXAMINATION

All B.E./B.Tech. programmes consist of end semester examinations in all Theory and Laboratory Courses, Project Work, etc. as mentioned in the curriculum. Appearance in examinations is mandatory for all the courses.

Performance in each course is evaluated based on (1) Continuous Assessments (CA) throughout the semester and (2) Semester Examination (SE) at the end of the semester. All the courses are evaluated for the specified maximum marks with the apportionment of marks for CA and SE components as below:

Sl. No.	Category of Course	Maximum Marks	Apportionment of	
			CA Marks	SE Marks
1.	Theory Courses	100	40	60
2.	Theory and practical combined courses	100	50	50
3.	Practical Courses	100	60	40
4.	Project Work / Mini Project Work	100	40	60
5.	Inplant Training / Hospital Training	100	100	-
6.	Internship	100	100	-
7.	All other courses	100	100	-

13. PROCEDURE FOR AWARDING MARKS FOR CONTINUOUS ASSESSMENT

For all theory, practical courses, theory courses with practical combined and project work the continuous assessment shall be awarded as per the procedure given below:

13.1. **Theory Courses**

Two assessments each carrying 100 marks shall be conducted during the semester by the Department concerned. The total marks obtained in all assessments put together out of 200, shall be proportionately reduced for 40 marks and rounded to the nearest integer (This also implies equal weightage to the two assessments).

Assessment 1 (100 Marks)		Assessment 2 (100 Marks)		Total Continuous Assessment
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	
40	60	40	60	200*

*The weighted average shall be converted into 40 marks for Continuous Assessment

13.2 Practical courses

The maximum marks for Continuous Assessment shall be 60 marks in case of practical courses. Every practical exercise / experiment shall be evaluated based on conduct of experiment / exercise and records to be maintained. There shall be at least one test. The criteria for arriving at the Continuous Assessment marks of 60 is as follows: 75 marks shall be awarded for successful completion of all the prescribed experiments done in the Laboratory and 25 marks for the test. The total mark shall be converted into a maximum of 60 marks and rounded to the nearest integer.

Continuous Assessment (100 Marks)*	
Evaluation of Laboratory Observation, Record	Test
75	25

*The total marks shall be converted into 60 marks for Continuous Assessment.

13.3 Theory Courses With Practical Combined

If there is a theory course with practical component, there shall be two assessments: the first assessment (maximum mark is 100) will be similar to assessment of theory course and the second assessment (maximum mark is 100) will be similar to assessment of laboratory course respectively. The weightage of first assessment shall be 40 % and the second assessment be 60 %. The weighted average of these two assessments shall be converted into 50 marks and rounded to the nearest integer   .

Assessment I (Theory Component)		Assessment II (Laboratory Component)		Total Assessment
Individual Assignment/Case Study/Seminar / Mini Project	Written Test	Evaluation of Laboratory Observation, Record, Model Lab.	Test	
40	60	75	25	100

 *The total marks shall be converted into 50 marks for Continuous Assessment.

13.4 Project Work /Mini Project Work

13.4.1. Project work / Mini Project work is allotted to a single student or to a group of students not exceeding 4 per group.

13.4.2. Project / Mini Project Work shall be carried out under the supervision of a "qualified teacher" in the Department concerned. In this context "qualified teacher" means the faculty member possessing (i) PG degree or (ii) Ph.D. degree.

13.4.3. The Project/ Mini Project Work carried out in an industry/academic/research institution during internship shall be jointly supervised by a supervisor of the department and an expert as a joint supervisor from the organization and the student shall be instructed to meet the supervisor periodically and to attend the review committee meetings for evaluating the progress. The review meetings, if necessary, may also be arranged in online mode with prior approval from the Principal and suitable record of the meetings shall be maintained.

13.4.4. The HOD shall constitute a review committee for Project/ Mini Project Work. The review committee consists of the supervisor, an expert from the Department and project coordinator from the Department. If the project coordinator/expert member happens to be the supervisor, then an additional member shall be nominated. In the case of Industrial Project, the review committee shall have the supervisor, an expert from the industry and the project coordinator from the Department.

13.4.5. There shall be three reviews during the semester by the review committee. The student shall make presentation on the progress made by him / her before the committee. The total marks obtained in the three reviews shall be reduced for 40 marks and rounded to the nearest integer.

13.4.6. The project report shall carry a maximum of 20 marks. The project report shall be submitted as per the approved guidelines. Same marks shall be awarded to every student within the project group for the project report. The viva-voce examination shall carry 40 marks. Marks are awarded to each student of the project group based on the individual performance in the viva-voce examination.

Review	Review	Review	End Semester Examinations				
I	II	III	Project Report		Viva-Voce Examination		
			Internal	External	Internal	External	Supervisor
10	15	15	10	10	10	20	10

13.4.7. If a student fails to submit the project report on or before the specified submission date or the student has submitted the project report but did not appear for the viva-voce examination, it will be considered as fail in the Project Work and the student shall re-register for the same in the subsequent semester.

13.4.8. If the student fails to secure 50% of the semester examination marks in the project work, he / she has to repeat the project work during the next semester. A fresh viva voce examination may be conducted at the end of the next semester.

13.4.9. A copy of the approved project report, after the successful completion of viva- voce examination, shall be kept in the department library.

13.5. **Internship**

The Internship carries 100 marks and shall be evaluated as below. After completion, the student shall submit a report on the internship undergone and a certificate from the organization concerned. The evaluation will be made based on this report and a Viva-Voce Examination. A copy of the certificate (issued by the Organization) submitted by the student shall be attached to the mark list and sent to Controller of Examinations by the Head of the Department The marks are awarded as per the scheme below.

Project Report	Presentation	Vivavoce	Total
40	30	30	100

13.6. **Value Added Courses (One Credit Courses)**

The Value added course (one credit) shall carry 100 marks. Two Assessments shall be conducted during the semester by the Department concerned.

13.7. SWAYAM Online Courses

The credits earned from approved SWAYAM online courses by a student may be taken into account for the total credits to be earned and CGPA calculation. Mapping of Marks scored in NPTEL course and Credits earned is

Letter Grade	Marks obtained in a SWAYAM Course
O	90 - 100
A+	80 - 89
A	70 - 79
B+	60 - 69
B	50 - 59
C	40 - 49

13.8. Self study courses

A student may be permitted to study a course on his own without attending a class with the approval of the HOD. The member of faculty approved by the Head of the Department shall be responsible for periodic monitoring and evaluation of the course. The course shall be evaluated through Continuous Assessment and Semester Examination. The evaluation methodology shall be the same as that of a theory course.

13.9. Mandatory Courses

Courses on peripheral subjects in a programme, wherein familiarity is considered mandatory, are included as mandatory courses in the curriculum. A student has to obtain PASS in all Mandatory Courses to qualify for the degree.

14. SEMESTER EXAMINATIONS

14.1. For theory courses and practical courses, written end semester examinations will be conducted for a duration of 3 hours and a maximum mark of 100.

14.2. For project viva-voce examinations, the presentation, demonstration (if any) and the viva voce, examinations will be conducted for duration of 3 hours.

14.3. Photocopy and Revaluation

A student can apply for the photocopy of his/her semester examination answer paper in a theory course, as per the guidelines of the COE, on payment of a photocopy fee through proper application through the HOD. If needed, the student can register for the revaluation through proper application to the Controller of Examinations by paying the revaluation fees. The Controller of Examinations will arrange for the revaluation and the results will be intimated to the concerned student through the Head of the Department. Photocopy and Revaluation is permitted only for theory courses.

14.4. **Review**

A student not satisfied with the revaluation result can apply for Review of his/ her answer paper in a theory course, within the prescribed date on payment of a prescribed fee through proper application to the Controller of Examinations through the HoD. Students who applied for Revaluation only are eligible to apply for Review. COE will arrange for the revaluation of the answer paper by an expert team comprising of 3 examiners. If the student gets a passing Grade or higher grade, the Review fee paid by the student will be refunded after deducting a processing fee.

15. PASSING REQUIREMENTS

15.1 A student who secures a minimum of 50% of marks (continuous assessment and semester examination put together) AND a minimum of 45% of the marks in the semester examination is declared to have successfully passed that course.

15.2 The continuous assessment marks obtained by the student in the first attempt in the course shall be retained and considered valid for subsequent two attempts. However, from the fourth attempt onwards the marks scored in the semester examinations alone shall be considered. The student should secure a minimum 50% marks in the semester examinations to get a PASS. In this case, the grade awarded shall be the lowest passing grade irrespective of the marks obtained in the examination.

16. AWARD OF LETTER GRADES

16.1. The following letter grades and grade points are awarded based on the marks obtained by a student in an examination either by **RELATIVE GRADING SYSTEM or by FIXED GRADING SYSTEM.**

Letter Grade	Grade Points
O (Outstanding)	**10**
A + (Excellent)	**9**
A (Very Good)	**8**
B + (Good)	**7**
B (Average)	**6**
C (Satisfactory)	**5**
U (Re-appearance)	**0**
SA (Shortage of Attendance)	**0**
W (Withdrawal)	

16.2. The Relative Grading System is applied to **THEORY COURSES and THEORY AND PRACTICAL COMBINED COURSES,** if the number of students, who passed in an examination is **equal to or more than 30**. In this case, the total marks (CA + SE) obtained by all passed students, as per clause 15.1, are fed into a Relative Grading Software, in the form of an .exe file,(downloaded from the Anna University website).After processing, this software determines the range of marks for each grade and assigns letter grades for the individual marks. Accordingly the mark range for each grade for each course may vary.

16.3. For **ALL PRACTICAL COURSES** and for **THEORY COURSES IN WHICH THE NUMBER OF PASSED STUDENTS IS LESS THAN 30,** Fixed Grading system is followed. The grades are awarded as per the mark ranges given in the table below:

O	A+	A	B+	B	C	RA or U
91 - 100	81– 90	71 - 80	61 - 70	56 - 60	50 – 55	< 50

16.4 A student is deemed to have passed and acquired the corresponding credits in a particular course if he/she obtains any one of the following grades: "O", "A+", "A", "B+","B" or "C".

16.5   If the grade RA or U is given in any Theory or Laboratory Course, the student as to reappear for the end semester examination that will be conducted in the subsequent semester and fulfil the norms specified in clause 15 to earn a pass in that course.

16.6   If the grade RA or U is given to an EEC course (except Project Work), which are evaluated only through continuous assessment, the student shall reregister for the course again in the subsequent semester, fulfil the norms to earn pass in the course. However, attendance requirement need not be satisfied.

16.7   The co-curricular activities such as National Cadet Corps (NCC)/ National Service Scheme (NSS) / NSO / YRC / Science club / Literary Club/ Fine Arts Club, etc. will appear in the Grade Statement on successful completion of the same. Successful completion of any one of the activities listed in clause 4.2 is compulsory for the award of degree.

16.8   The grades O, A+, A, B+, B, C obtained for the one/two credit course (not part of the curriculum) shall figure in the Grade Statement under the title 'Value Added Courses'.

16.9   For the students who completed the Audit Courses satisfying the attendance requirement, the title of the Audit Course will be mentioned in the Grade Statement. If the attendance requirement is not satisfied, it will not be shown in the Grade Statement.

16.10   The Grade Point Average (GPA) in a semester and the Cumulative Grade Point Average (CGPA for all the previously passed courses) are calculated using the formula:

$$GPA\,or\,CGPA = \frac{\sum_{i=1}^{n}[C_i \times (GP)_i]}{\sum_{i=1}^{n} C_i}$$

where, C_i is the Credit assigned to a Course, GP_i is the grade point obtained in that course and n is total number of courses. The GPA and CGPA are computed only for the passed courses. The GPA and CGPA indicate the academic performance of a student at the end of a semester and at the end of successive semesters respectively.

16.11   After the results are published, a Statement of Grades, containing grades obtained in each course, GPA and CGPA is issued, If the Statement of Grades is lost by a student, he / she may apply for a duplicate copy of Statement of Grades, by paying a prescribed fee and satisfying other procedural requirements. The statement will carry DUPLICATE marking.

17. ELIGIBILITY FOR THE AWARD OF DEGREE

A student shall be declared to be eligible for the award of the B.E./B.Tech. degree provided the Student has

17.1 Successfully gained the required number of total credits within the stipulated time as specified in the curriculum corresponding to the student's programme.

17.2 Successfully completed the course requirements, appeared for the semester examinations and passed all the courses within the period as prescribed in clause 5.

17.3 Successfully completed any one of the activities listed in clause 4.2 .

17.4 No disciplinary action pending against him / her.

17.5 Approval of the award of degree by the Syndicate of the University.

18. ENROLLMENT FOR B.E. / B. Tech. (HONOURS) / MINOR DEGREE (OPTIONAL)

- A student can also optionally register for additional courses (totaling 18 credits) and become eligible for the award of B.E. / B. Tech. (Honours) or Minor Degree.

18.1 **B.E / B.Tech. (HONOURS)**

(i) The students should have taken additional courses from a specified group of Professional Electives verticals of the same programme and earned a minimum of 18 credits.

(ii) Should have passed all the courses prescribed in the curriculum and additional courses in the first attempt.

(iii) Should have earned a minimum of 7.50 CGPA taking into account of all the courses prescribed in the curriculum and additional courses.

18.2. **B.E./B.Tech. MINOR WITH SPECIALISATION IN ANOTHER DISCIPLINE**

(i) The student should have earned additionally a minimum of 18 credits in any one of the Minor degree vertical courses prescribed in the curriculum.

18.3. For these 18 credits students can optionally enroll and study a maximum of 6 credits in online mode from SWAYAM-NPTEL platform as approval by the Chairperson of the concerned Board of Studies.

18.4. The students, who are opting for either HONS or MINOR degree, will be permitted to register for the additional courses from Semester V onwards provided the student has earned a minimum CGPA of 7.50 and cleared all the courses in the first attempt, at the end of semester III.

18.5. If a student decides not to opt for Honours, after completing certain number of additional courses, such additional courses studied shall be considered instead of the Professional Elective courses which are part of the curriculum. If the student has studied more number of such courses than the number of Professional Elective courses required as per the curriculum, the courses with higher grades shall be considered for the calculation of CGPA. Remaining courses shall be printed in the grade sheet however, they will not be considered for calculation of CGPA and the same shall be indicated in a foot note appropriately. If the student has failed in the additional courses or faced shortage of attendance, they will not be printed in the grade sheet and will not be considered for CGPA calculation and classification of degree.

18.6. If a student decides not to opt for Minor, after completing certain number of courses, the additional courses studied shall be considered instead of Open Elective courses which are part of the curriculum. If the student has studied more number of such courses than the number of open electives required as per the curriculum, the courses with higher grades shall be considered for calculation of CGPA. Remaining courses shall be printed in the grade sheet, however, they will not be considered for calculation of CGPA and the same shall be indicated in a foot note appropriately. If the student has failed in the additional courses or faced shortage of attendance, they will not be printed in the grade sheet and will not be considered for CGPA calculation and classification of degree.

19. CLASSIFICATION OF THE DEGREE AWARDED

19.1 First Class with Distinction
A student who satisfies the following conditions shall be declared to have passed the examination in First class with Distinction:

Degree	Duration of programme	Duration permitted	Additional credits	CGPA	Pass in	Break of study	Prevention to write end semester examination	Withdrawal from writing end semester examination
B.E. / B.Tech. (Regular)	4 years	5 years	–	8.50	First attempt	One year authorised break of study included in the Duration permitted	Not permitted	Will not be considered as an attempt
B.E. / B.Tech. (Lateral Entry)	3 years	4 years	–	8.50	First attempt	One year authorised break of study included in the Duration permitted	Not permitted	Will not be considered as an attempt
B.E./ B.Tech. (Hons)	3/4 years (Lateral entry, Regular respectively)	4/5 years (Lateral entry, Regular respectively)	18 credits from verticals of the same programme	8.50	First attempt	One year authorised break of study included in the Duration permitted	Not permitted	Will not be considered as an attempt
B.E./ B.Tech. Minor	3/4 years (Lateral entry, Regular respectively)	4/5 years (Lateral entry, Regular respectively)	18 credits from any one vertical of the other programme	8.50	First attempt	One year authorised break of study included in the Duration permitted	Not permitted	Will not be considered as an attempt

19.1.1. Should have passed the examination in all the courses of all the eight semesters (6 semesters in the case of Lateral Entry) in the student's First Appearance within five years (Four years in the case of Lateral Entry). Withdrawal from examination will not be considered as an appearance.

19.1.2. Should have secured a CGPA of not less than 8.50.

19.1.3. One year authorized break of study (if availed of) is included in the five years (four years in the case of lateral entry) for award of First class with Distinction.

19.1.4. Should not have been prevented from writing end semester examination in any of the courses of the Curriculum making up the total credit requirement.

19.1.5. A student who satisfies norms given in clause 18 becomes eligible for classification of the degree with B.E./B.Tech. (Honours) and B.E./B.Tech. minor.

19.2 First class

A student who satisfies the following conditions shall be declared to have passed the examination in First class:

Degree	Duration of programme	Duration permitted	Additional credits	CGPA	Pass in	Break of study	Prevention to write end semester examination	Withdrawal from writing end semester examination
B.E. / B.Tech. (Regular)	4 years	5 years	_	6.50	_	One year authorised break of study included in the Duration permitted	Included in the Duration permitted	_
B.E. / B.Tech. (Lateral Entry)	3 years	4 years	_	6.50	_	One year authorised break of study included in the Duration permitted	Included in the Duration permitted	_
B.E./ B.Tech. (Hons)	3/4 years (Lateral entry, Regular respectively)	4/5 years (Lateral entry, Regular respectively)	18 credits from verticals of the same programme	7.50	First attempt	One year authorised break of study included in the Duration permitted	Not permitted	Will not be considered as an attempt
B.E./ B.Tech. Minor	3/4 years (Lateral entry, Regular respectively)	4/5 years (Lateral entry, Regular respectively)	18 credits from any one vertical of the other programme	6.50	_	One year authorised break of study included in the Duration permitted	Included in the Duration permitted	_

19.2.1 Should have passed the examination in all the courses of all eight semesters (6 semesters in the case of Lateral Entry) within five years.

19.2.2 One year authorized break of study (if availed of) or prevention from writing the End Semester examination due to lack of attendance (if applicable) is included in the duration of five years (four years in the case of lateral entry) for award of First class.

19.2.3 Should have secured a CGPA of not less than 6.50.

19.2.4 A student who satisfies norms given in clause 18 becomes eligible for classification of the degree with B.E./B.Tech. (Honours) and B.E./B.Tech. minor.

19.3 Second Class

Students who are not covered in clauses 19.1 and 19.2 and who qualify for the award of the degree shall be declared to have passed the examination in Second Class.

19.4 A student who is absent in the End Semester Examination in a course / project work after having registered for the same shall be considered to have appeared in that examination (except approved withdrawal from end semester examinations) for the purpose of classification.

19.5 Student who earned an additional 18 credits as per Clause 18 but does not satisfy the conditions mentioned in 19.1 or 19.2 shall not be awarded B.E./B.Tech. (Honours). In such case if the student becomes eligible for First Class, while computing CGPA with the Professional Elective / Open Elective courses with higher grades the student shall be awarded B.E. / B.Tech. in First Class only.

19. PROVISION FOR WITHDRAWAL FROM EXAMINATIONS

20.1. A student may, for valid reasons, be granted permission to withdraw from any or all current semester examinations. Application for withdrawal is permitted ONLY ONCE in the entire duration of the programme.

20.2. The withdrawal application is valid only if the student is otherwise eligible to write the examination and is submitted to the Principal after duly recommended by the Head of the Department, prior to the last examination of that semester.

20.3. The withdrawal shall not be considered as an appearance for deciding the classification for First Class with Distinction.

20.4. A final semester student who has withdrawn may be permitted to appear for immediate examinations to be conducted within a reasonable time .

20.5. The final semester student who has withdrawn from appearing for project viva- voce for genuine reasons shall be permitted to appear for immediate viva-voce examination within a reasonable time with proper application approved by the Principal submitted to the Controller of Examinations.

21. AUTHORIZEDBREAK OF STUDY FROM A PROGRAMME

20.1. A student is permitted to avail an Authorised Break of Study under valid reasons (such as accident, hospitalization, prolonged ill health, etc) and to rejoin the programme in a later semester. The student shall apply in advance to the Principal, through the Head of the Department, stating the reasons, in the beginning of the semester.

20.2. A student is permitted to avail the authorised break of study, for a maximum period of one year, ONLY ONCE during the entire period of study.

20.3. The student permitted to rejoin the programme after break shall be governed by the rules and regulations in force at the time of rejoining.

20.4. The total period of completion of the programme, reckoned from the commencement of the semester to which the student was admitted, shall not exceed the maximum period specified in clause 5 including of the period of break of study in order to qualify for the award of the degree.

22. REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

Notwithstanding anything contained in this Regulation, the Academic Council of the College, reserves the right to modify/amend, the provisions of these Regulations, Curriculum, Syllabus, procedures, requirements, and rules pertaining to its undergraduate programmes.

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