

COIMBATORE INSTITUTE OF ENGINEERING AND TECHNOLOGY

(AUTONOMOUS)

COIMBATORE - 641109

REGULATIONS 2023

CHOICE BASED CREDIT SYSTEM

Common to all B.E. / B.Tech. Full Time Programmes

(For the students admitted to B.E. / B.Tech. Programmes from the Academic year 2023-24 onwards)

PRELIMINARY DEFINITIONS AND NOMENCLATURE

In this Regulation, unless the context otherwise specifies:

AY	Academic Year
CIA	Continuous Internal Assessment
CBCS	Choice Based Credit System
CoE	The authority of the Institution who is responsible for all activities of the Examinations of the Institution
Department Consultative Committee	The committee includes Head of the Department concerned, senior faculty member(s) of department from various levels, Faculty advisor of the students.
Head of the Institution	The Principal
PE	Professional Elective
Programme	A degree with a major specialization in an Engineering/ Technology discipline offered by the College.
Course	Course is any subject of study that may be classified as Theory only, Lab only, Lab embedded Theory, Project embedded Theory or Practical.
ESE	End Semester Examination
PC	Professional Core
OE	Open Elective
UG	Under Graduate
University	Anna University, Chennai, India
College	Coimbatore Institute of Engineering and Technology, Coimbatore, India

1. PREAMBLE

Coimbatore Institute of Engineering and Technology with a focused vision and mission of imparting quality technical education, both theory and practice is gearing up for several initiatives towards attaining academic excellence and quality improvement. In view of this, the Choice Based Credit System (CBCS) is being introduced from the Academic year 2019-20, to strengthen interdisciplinary and multidisciplinary approach with advances in learner-centric programmes and life-long learning opportunities with enriched and flexible curriculum. Students will have the option of choosing courses from a 'Group of courses' within each classification. Ample options are given to choose interdisciplinary courses from other programmes which will help the student to develop additional skills. CBCS offers flexibility for students to choose course of their interest from a wide choice of courses offered in addition to the enhancement of their skill levels. A faculty advisor facilitates a student in identifying the courses based on programme requirements, course prerequisites, student's ability and interest in various academic disciplines towards their academic progression.

The proposed academic structure under the Choice Based Credit System shall make all innovations possible preparing the students to face the professional challenges.

2. ADMISSION PROCEDURE

Students for all B.E. / B.Tech. degree programmes shall be admitted as per the regulations of Department of Technical Education, Government of Tamil Nadu and Anna University, Chennai.

PROGRAMMES OF STUDIES

All the degree programmes offered by the college are based on modular structure and their academic requirements are spelt out as number of course credits. Programmes are structured in such a way that a student will be able to complete the programme within the stipulated number of semesters. On the recommendations of the Head of the Department a student may be granted permission by the Chairperson, Academic Council to have a break in the programme, however the programme should be completed within the permitted number of semesters.

Degree	Stipulated number of semesters	Permitted number of semesters
B.E./B.Tech.	8	14
B.E./B.Tech. (Lateral)	6	12

The permitted number of semesters can be increased on a case to case basis subject to the approval of the Academic Council, Governing Body and affiliating university.

1. PROGRAMMES OFFERED

A student may be admitted to any one of the programmes of study approved by the University and offered at Coimbatore Institute of Engineering and Technology, Coimbatore.

Details of programmes currently offered by Coimbatore Institute of Engineering and Technology, Coimbatore are listed below:

1. B.E. Civil Engineering
2. B.E. Computer Science and Engineering
3. B.E. Computer Science and Engineering (Cyber Security)
4. B.E. Computer Science and Engineering (Artificial Intelligence and Machine Learning)
5. B.E. Electronics and Communication Engineering
6. B.E. Electronics Engineering (VLSI Design and Technology)
7. B.E. Electrical and Electronics Engineering
8. B.E. Mechanical Engineering
9. B.E. Mechatronics Engineering
10. B.Tech. Information Technology
11. B.Tech. Artificial Intelligence and Data Science

5. STRUCTURE OF THE PROGRAMMES

5.1 Credit Assignment

Each course is assigned certain number of credits based on the following

Contact period per week	Credits
1 Lecture Period	1
1 Tutorial Period	1
2 Practical Periods (Laboratory / Seminar / Project Work / etc.)	1

5.2 Categorization of Courses

Every B.E./B.Tech. programme will have a curriculum with syllabi consisting of theory and practical courses that shall be categorized as follows:

- Humanities and Social Science (HS)** courses include Technical English, Engineering Ethics and Human Values, Communication skills, Environmental Science and Engineering.
- Basic Science (BS)** courses include Mathematics, Physics, Chemistry, Biology, etc.
- Engineering Science (ES)** courses include Engineering Practices, Engineering Graphics, Basics of Electrical / Electronics / Computer / Mechanical Engineering, Instrumentation etc.
- Professional Core (PC)** courses include the core courses relevant to the

chosen specialization/branch.

- v. **Professional Elective (PE)** courses include the elective courses relevant to the chosen specialization/branch. Professional Elective courses are offered under verticals (specialization groups).
- vi. **Open Elective (OE)** courses include the courses relevant to the chosen specialization / programme which a student can choose from the curriculum of other B.E. / B. Tech. programmes and the courses offered by the Departments under the Faculty of Science and Humanities
- vii. **Employability Enhancement Courses (EEC)** include Project Work and/or Internship, Seminar, Professional Practices, Case Study and Industrial/Practical Training.
- viii. **Mandatory Courses (MC)** include courses in which credits are to be acquired as part of degree requirements and shall be awarded grades but shall not be part of either GPA (or) CGPA.

5.2.1 The minimum credits to be earned by the regular students should be 160 for the completion of the B.E./B.Tech. programme with the distribution of credits in different categories.

5.2.2 The minimum credits to be earned by the lateral entry students should be 110 for the completion of the programme with the distribution of minimum credits in different categories.

5.3 Number of Courses per Semester

Curriculum in a semester shall normally have a blend of courses not exceeding 10 courses including Theory / Embedded / Integrated / Laboratory courses. Each course may have credits assigned as per clause 5.1

5.4 Industrial Training / Internship

5.4.1 The students may undergo industrial training for a period as specified in the curriculum during the summer/winter vacation. In this case the training has to be undergone continuously for a period of at least two weeks in an organization.

5.4.2 The students may undergo internship at Industries/Research organization/Universities of repute (after due approval from the Department Consultative Committee) for the period prescribed in the curriculum, in lieu of industrial training.

5.4.3 If Industrial Training/Internship is not prescribed in the curriculum, the student may undergo Industrial Training/Internship optionally and the credits earned will be indicated in the Grade Sheet. However, the number of credits earned as listed below for Training/Internship shall not be considered for classification of the degree.

Duration of Training /	Credits
2 Weeks	1
4 Weeks	2
6 Weeks	3

5.5 Industrial Visit

Every student is required to go for at least one industrial visit every year starting from the second year of the programme. The Heads of Departments shall ensure that necessary arrangements are made in this regard.

5.6 Online Courses

5.6.1 Students may be permitted to earn credit of maximum two online courses (which are provided by Swayam with certificate) subject to a maximum of three credits per course with the approval of Departmental Consultative Committee.

5.6.2 One online course can be considered instead of one open or professional elective course. If a student opts for more than one online course (vide clause 5.6.1) he/she can substitute more number of open electives.

5.7 Personality and Character Development (No Credits)

Students will be encouraged to enroll in any one of the personality and character development programmes (NSS/Sports/YRC) and undergo training for about 40 hours and attend a camp of about seven days. The training shall include classes on hygiene and health awareness and also training in first-aid. Alternately, activities of science, literature and arts also help for personality and character development. So, students shall conduct and participate actively in Science club/Literary Forum/Fine Arts activities for 40 hours and participate in at least ONE event.

- **National Service Scheme (NSS)** will have social service activities in and around the College.
- **Sports** will have sports, Games, Drills and Physical exercises.
- **Youth Red Cross (YRC)** will have activities related to social services in and around the College. The training activities will be carried out during the weekends and the camp will normally be during the vacation.
- **Science Club** shall organize activities of popularization of science and scientific temper through activities related to astronomy, works of great scientists from India and abroad, observing National Science Day, etc.
- **Literary Club** like 'Tamil Mandram' shall be formed, which shall organize colourful literary events to propagate good humanist values, morals and ethics reflected in the literature.
- **Fine Arts Club** like music, painting and documentary films with social themes shall be encouraged.

5.8 Induction Programme

Induction Programme is mandatory for the students pursuing the undergraduate programme. The completion of the Induction Programme shall be printed in the Grade Sheet as "COMPLETED".

5.9 B.E./B.Tech. (Hons) Specialization in the same discipline, B.E./B.Tech. (Hons) and B.E./B.Tech. minor in other specialization.

5.9.1 (i) B.E/B.Tech. Honours (specialization in the same discipline):

- The student should have earned additionally a minimum of 18 credits from a specified group of Professional Electives of the same programme.
- Should have passed all the courses in the first attempt.

- Should have earned a minimum of 7.5 CGPA.

(ii) B.E./B.Tech. Honours

- The students should have taken additional courses from more than one vertical of the same programme and earned a minimum of 18 credits.
- Should have passed all the courses in the first attempt.
- Should have earned a minimum of 7.5 CGPA.

(iii) B.E./B.Tech. (minor in other specialization)

- The student should have earned additionally a minimum of 18 credits in any one of the verticals of other B.E/B.Tech programme

5.9.2 Out of these 18 credits students can earn a maximum of 6 credits in online mode (SWAYAM platform), as approved by Departmental Consultative Committee.

5.9.3 B.E./B.Tech. (Hons) Specialization in the same discipline, B.E./B.Tech. Honours and B.E./B.Tech. minor in other specialization degree will be optional for students.

5.9.4 For the categories 5.9.1 (i), (ii) and (iii), the students shall be permitted to register for the courses from the V semester onwards provided the student has earned a minimum CGPA 7.50 until III semester and has cleared all the courses in the first attempt.

5.9.5 For the category 5.9.1 (iii), the students will be permitted to register the course from semester V onwards provided the marks earned by the students until semester III is CGPA 7.50 and above.

5.9.6 If a student decides not to opt for Honours, after completing certain number of additional courses, the 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 mark sheet, however, they will not be considered for calculation of CGPA.

5.9.7 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 mark sheet, however they will not be considered for calculation of CGPA.

5.10 Medium of Instruction, Learning and Evaluation

The medium of instruction is English for all courses, examinations, seminar presentations and project / thesis/dissertation reports.

6. DURATION OF THE PROGRAMMES

6.1. A student is normally expected to complete the B.E./B.Tech. programme in 4 years (8 Semesters) for HSC candidates and 3 years (6 Semesters) for Lateral Entry candidates but in any case, not more than 7 years (14 Semesters) for HSC candidates and not more than 6 years (12 semesters) for Lateral Entry candidates.

- 6.2.** Each semester shall normally consist of 75 working days or 525 periods of 50 minutes each. The Head of the Department shall ensure that every teacher imparts instruction as per the number of periods specified in the syllabus covering the full content of the syllabus for the course being taught.
- 6.3.** The total duration for completion of the programme reckoned from the commencement of the first semester to which the student was admitted shall not exceed the maximum duration specified in clause 6.1 irrespective of the period of break of study (vide clause 19) or prevention (vide clause 8.4) in order that the student may be eligible for the award of the degree (vide clause 17).

7. COURSE ENROLLMENT AND REGISTRATION

- 7.1.** Each student, on admission, shall be assigned to a student-faculty advisor who shall advise and counsel the student about the details of the academic programme and the choice of courses considering the student's academic background and career objectives.
- 7.2.** The number of credits registered during a semester should not exceed 30 credits. (Excluding courses for which the student has done reappearance registration).
- 7.3.** Each student on admission shall register for all the courses prescribed in the curriculum in the student's first and second semesters of study without any choice.
- 7.4.** The enrollment for the courses of semesters III to VIII will commence 10 working days prior to the last working day of the preceding semester. The student shall enroll for the courses with the guidance of the student's faculty advisor.
- 7.5.** Every student shall enroll for the courses of the succeeding semester during the current semester. However, the student shall confirm the enrollment by registering for the courses within the first **five** working days after the commencement of the concerned semester.
- 7.5.1.** The student shall enroll for the courses with the guidance of the faculty advisor. If the student wishes, the student may drop or add courses (vide clause 7.8) within **five** working days after the commencement of the concerned semester and complete the registration process duly authorized by the faculty advisor.

7.6. Choice of Professional Electives Courses

The professional elective courses are listed in the Curriculum in Table format as verticals (specialization groups). A student can choose all the Professional Elective Courses either from one of the verticals or a combination of courses from all verticals in a semester.

For a professional elective course and open elective course, minimum number of students enrolment permitted shall be 5 or . However, the minimum number is not applicable for students enrolling B.E. / B. Tech. (Hons) and B.E. / B. Tech. Minor. For each professional elective course atleast two choices shall be offered.

- 7.7.** After registering for a course, a student shall attend the classes, satisfy the attendance requirements, earn continuous assessment marks and appear for the End Semester Examinations.

7.8. Flexibility to Add or Drop courses

- 7.8.1.** A student has to earn the total number of credits specified in the curriculum

of the respective programme of study in order to be eligible to obtain the degree. However, if the student wishes, he/she is permitted to earn more than the number of credits prescribed in the curriculum of the student's programme.

7.8.2. From III to VIII semesters, the student has the option of registering for additional courses or dropping existing courses. Total number of credits of such courses cannot exceed 6. However, the maximum number of credits the student can register in a particular semester cannot exceed 30 credits.

7.8.3. The student shall register for the project work in the VII/VIII semester only.

7.9 Reappearance Registration

7.9.1 If a student absents for examination or fails in a course (both theory and practical), it will be considered as an arrear. The student can retain the already earned Continuous Assessment marks for two subsequent appearances only and thereafter he/she will solely be assessed by the performance in the End Semester Examination only.

7.9.2 If the theory course, in which the student has failed, is an open elective, the student may register for the same or any other open elective course respectively in the subsequent semesters.

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

8 ATTENDANCE REQUIREMENTS FOR APPEARING FOR THE END SEMESTER EXAMINATION

A Candidate who has fulfilled the following conditions shall be deemed to have satisfied the requirements for completion of a semester.

8.1 Ideally every student is expected to attend all periods and earn 100% attendance. However, the student shall secure not less than **75% of overall attendance** taking into account the number of periods required for that programme as specified in the curriculum.

$$\text{Percentage of Attendance} = \frac{\text{Total no.of periods attended in all the courses per semester}}{\text{Total No.of periods taken together for all courses of the semester}} * 100$$

8.2 However, a candidate who secures overall attendance between **65% and 74%** in the current semester due to medical reasons (prolonged hospitalization / accident / specific illness)/ Participation in Sports events may be permitted to appear for the current end semester examination of that programme. In all such cases, the students should submit the required documents (Sports/Medical Certificate) on joining after the absence to the Head of the Department through the faculty advisor duly attested by Head of the Institution. The same shall be forwarded to the Controller of Examinations for record purposes.

8.3 A student shall normally be permitted to appear for End Semester Examination if the student has satisfied the attendance requirements (vide Clause 8.1 – 8.2) and has registered for examination in the courses which he/she has opted during the beginning of that semester by paying the prescribed fee.

8.4 Students who do not satisfy clause 8.1 and 8.2 and who secure **less than 65%**

overall attendance will not be permitted to write the End-Semester Examination and not permitted to move to the next semester. They are required to repeat the incomplete semester in the next academic year, as per the norms prescribed.

9 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 attach a certain number of students to a teacher of the department who shall function as Faculty Advisor for those 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 students concerned.

The responsibilities for the faculty advisor shall be:

- i. To inform the students about the various facilities and activities available.
- ii. To guide on enrollment and registration of the courses.
- iii. To authorize the final registration of the courses at the beginning of each semester.
- iv. To monitor the academic and general performance of the students including attendance and to counsel them accordingly.

10 CURRICULUM DEVELOPMENT CELL

Curriculum Development Cells are constituted for planning and updating of syllabus to be presented to the Board of Studies. Similarly, the Common Curriculum Development Cell is constituted for finalizing the subjects for both common and departmental core. Curriculum Development Cell is a standing internal committee with all the internal members of the Board of Studies and Academic Council and any other faculty co-opted / nominated by the Head of the Department.

11 VARIOUS COMMITTEES

11.1 Class Committee

- 11.1.1 A Class Committee consists of faculty members of all the courses offered to the concerned class student representatives from that class and a chairperson who is not teaching the class. It is like the 'Quality Circle' (more commonly used in industries) with the overall goal of improving the Teaching-Learning Process. The functions of the class committee include,
- i. Solving problems experienced by students in the classroom and in the laboratories
 - ii. Clarifying the regulations of the programme and the details of rules therein
 - iii. Informing the student representatives, the Academic schedule, including the dates of assessments and the syllabus coverage for each assessment
 - iv. Informing the student representatives, the details of regulations regarding the weightage used for each assessment. In the case of practical courses (laboratory / Project work / Internship Project / Seminar, etc.) the breakup of marks for each Experiment/ Exercise/ module of work, shall be clearly discussed in the class committee meeting and informed to the students.

- v. Analyzing the performance of the students of the class after each test and finding the ways and means of solving academic problems of the students, if any
 - vi. Identifying the weak students, if any, and arrange to provide some additional help or guidance or coaching to such weak students.
- 11.1.2 The Class committee for a class is normally constituted by the Head of the parent department. The class committee for open elective courses will be constituted by the Head of the department which offers the course. (A class is one in which group of student's study course/s of a particular semester.)
- 11.1.3 The class committee shall be constituted before commencement of every continuous internal assessment test.
- 11.1.4 At least 8 student representatives (proportionate to the strength of boys and girls) shall be included in the Class committee. Two students having CGPA above average, two students having average CGPA, two students having CGPA less than average and two lateral entry students may be nominated as the class committee members.
- 11.1.5 The chairperson of the class committee may invite the Faculty advisor(s) and the Head of the Department to the meeting of the class committee.
- 11.1.6 The Head of the Institution may participate in any class committee of the institution.
- 11.1.7 The chairperson is required to prepare the minutes of every meeting, submit the same to the Head of the Institution within two days of the meeting and arrange to circulate among the concerned students and Teachers. If there are some points in the minutes requiring action by the management, the same shall be brought to the notice of the management by the head of the Institution.
- 11.1.8 During these meetings the student members, representing the entire class, shall meaningfully interact and express the opinions and suggestions of the class students to improve the effectiveness of the teaching-learning process

11.2 Common Course Committee

Each common theory course offered to more than one discipline or group, shall have a "Course Committee" comprising all the teachers teaching the common course with one of them nominated as Course Coordinator by the Head of the Department / Head of the Institution depending upon whether all the teachers teaching the common course belong to a single department or to several departments. The "Common Course Committee" shall meet to ensure uniform evaluation of continuous assessments after arriving at a common scheme of evaluation for the assessments (vide clause 12). Wherever feasible, the common course committee shall prepare a common question paper for the continuous assessment tests also. The question paper for the continuous assessment examination is common and shall be set by the Course Coordinator in consultation with all the teachers.

11.3 Overall Monitoring Committee

In addition, there shall be an overall monitoring committee for each semester of a programme which comprises of (i) the Course Coordinators / Course teachers (as applicable), and (ii) the Head of the Department. This overall monitoring

committee shall meet periodically to discuss academic related matters, progress and status of the students of the semester concerned. The overall monitoring committee can invite the Faculty Advisors or students for any of the committee meetings if necessary.

12 ASSESSMENT PROCEDURES FOR AWARDING MARKS

All B.E./B.Tech. Programmes consist of Theory Courses, Laboratory Courses and Employability Enhancement Courses. Employability Enhancement Courses include Project Work, Seminar, Professional Practices, Case Study and Industrial/Practical Training. Appearance in End Semester Examination is mandatory for all courses including Theory, Laboratory and Project work. Performance in each course of study shall be evaluated based on

- i. Continuous Assessments throughout the semester
- ii. End Semester Examination at the end of the semester.

Each course shall be evaluated for a maximum of 100 marks as shown below:

S. No	Category of course	Continuous Assessments Marks	End Semester Examinations Marks
1	Theory Courses	40	60
2	Laboratory	60	40
3	Embedded Course	50	50
4	Project Work	60	40
5	All other EEC	100	-

Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD' for every semester which consists of attendance marked in each theory / Laboratory/EEC class, the assessment marks and the record of class work (topics covered), separately for each course handled by the teacher. This should be submitted to the Head of the Department periodically (at least three times in a semester) for checking the syllabus coverage and the records of assessment marks and attendance. The Head of the Department will affix his/her 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. The records of attendance and assessment of both current and previous semesters should be available for inspection.

12.1 Assessment for Theory Courses

For Theory Courses out of 100 marks, the maximum marks for Continuous Assessment is fixed as 40 and the End Semester Examination carries 60 marks, as given above. A minimum of two assessments each carrying 100 marks shall be conducted during the semester by the Department / College 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).

Continuous Internal Assessment I (100 Marks)		Continuous Internal Assessment II (100 Marks)		Total Internal Assessment
Individual Assignment / Case Study / Seminar / Mini Project / any other experiential Learning	Written Test	Individual Assignment / Case Study / Seminar / Mini Project / any other experiential Learning	Written Test	
40	60	40	60	200*

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

A minimum of two internal assessments will be conducted as a part of continuous assessment. Each internal assessment is to be conducted for 100 marks and will have to be distributed in two parts viz., Individual Assignment/Case study/Seminar/Mini project / any other experimental learning and Test with each having a weightage of 40% and 60% respectively. The tests shall be in written mode. The total internal assessment marks of 200 shall be converted into a maximum of 40 marks and rounded to the nearest integer. The End Semester Examination for theory courses will be of three hours duration. Appearance in the End Semester Examination is mandatory requirement for passing the courses having ESE component.

12.2 Assessment for Laboratory Courses

For Laboratory Courses out of 100 marks, the maximum marks for Continuous Assessment is fixed at 60 and the End Semester Examination carries 40 marks. 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 Internal Assessment marks of 60 are 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 Internal Assessment (100 Marks)*	
Evaluation of Laboratory Observation, Record	Test
75	25

* Internal assessment marks shall be converted into 60 marks

The End Semester Examinations for Laboratory courses will be three hours of duration each.

12.3 Assessment for theory with laboratory components (Embedded Courses)

The assessment for the embedded courses shall be as that of the theory (vide clause 12.1) and the assessment for the embedded lab shall be as that of the lab (vide clause 12.2) and the cumulative mark will be calculated based on the theory and laboratory components. Weightage of internal assessment and end semester examination marks will be 50% each. The distribution of marks for the theory and laboratory components in the internal assessments and end semester examination for different types of courses are provided in the table.

L	T	P	C	Continuous Internal		End Semester Examination
				Assessment 1	Assessment 2	
1	0	4	3	Laboratory (25%)	Theory (25%)	Laboratory only (50%)
1	0	2	2	Laboratory (25%)	Theory (25%)	Laboratory only (50%)
2	0	2	3	Theory (25%)	Laboratory (25%)	Theory (25%) Laboratory (25%)
3	0	2	4	Theory (25%)	Laboratory (25%)	Theory (35%) Laboratory (15%)
2	0	4	4	Theory (25%)	Laboratory (25%)	Theory (15%) Laboratory (35%)

The procedure for the conduct of internal assessments and End Semester Examination for theory and

laboratory components shall be as per the clause 12.1 and 12.2 respectively.

12.5 Assessment for Project Work

For Project work out of 100 marks, the maximum marks for Continuous Assessment is fixed at 60 and the End Semester Examination (project report evaluation and viva-voce examination) carries 40 marks. Project work may be assigned to a single student or to a group of students not exceeding 4 in a group. There shall be three assessments (each 100 marks) during the semester by a review committee. The student shall make presentation on the progress made before the committee. The Head of the Department shall constitute a review committee for each programme. There shall be a minimum of three members in the review committee. The project Guide will be one of the members of the Review Committee. The total marks obtained in the three Reviews shall be 60 marks. The student(s) is expected to submit the project report on or before the last working day of the semester. The End Semester Examination for project work shall consist of evaluation of the final project report submitted by the student or students of the project group by an external examiner followed by a viva-voce examination conducted separately for each student by a committee consisting of an external examiner, the guide and an internal examiner. The Head of the Department with the approval of the Head of the Institution shall appoint Internal Examiners for the End Semester Examination. The Continuous Assessment and End Semester Examinations marks for Project Work and the Viva-Voce Examination will be distributed as indicated below.

Continuous Assessment (60 Marks)			End Semester Examination (40 Marks)			
Review I	Review II	Review III	Report Evaluation	Viva – Voce Examination		
			External Examiner	Internal Examiner	External Examiner	Supervisor
20	20	20	10	10	10	10

In the case of industrial projects, the marks allotted for supervisor will be

shared equally by the supervisor from the department and coordinator from industry.

- 12.4.1** If the project report is not submitted on or before the specified deadline then the student(s) is deemed to have failed in the Project Work. The failed student(s) shall register for the same in the subsequent semester and repeat the project work.

12.5 Assessment for Online Course

Students may be permitted to earn credit from online courses (which are to be provided with a certificate) with the approval of Department Consultative Committee and Head of the Institution subject to a maximum of three credits per course. Department Consultative Committee will take a decision on the evaluation methodology for the online course. The Committee can decide on how to evaluate the online courses and the same may be conveyed to the Head of the institution at the beginning of the semester when the course is offered. The Head of the Department will be responsible for the evaluation process. A committee consisting of the Head of the Department, coordinator and a senior Faculty member nominated by the Head of the Department shall assess the students based on their performance in the end semester examination conducted by the college in that course when assessment is not done by the certificate provider.

12.6 Assessment for Project Integrated Practical

Project Integrated Practical is considered to be purely INTERNAL (with 100% internal marks only). Project work may be assigned to a single student or to a group of students not exceeding 4 in a group. There shall be three assessments (Two reviews and one project presentation) during the semester by a review committee. The student shall make a presentation on the progress made before the committee. There shall be a minimum of three members in the review committee. The project Guide will be one of the members of the Review Committee. The Head of the Department with the approval of the Head of the Institution shall appoint Internal Examiners. The Assessment marks for Project Integrated Practical will be distributed as indicated below.

Assessment (100 Marks)		
Review I	Review II	Project Presentation
30	30	40

12.7 Assessment for Other Employability Enhancement Courses

- 12.7.1** The seminar / Case study is to be considered as purely INTERNAL (with 100% internal marks only). Every student is expected to present a minimum of 2 seminars per semester before the evaluation committee / Department consultative committee and for each seminar, marks can be equally apportioned. The three-member committee appointed by Head of the Institution will evaluate the seminar and at the end of the semester the marks can be consolidated and taken as the final mark. The evaluation shall be based on the content of the seminar paper (40%), presentation (40%)

and response to the questions asked during presentation (20%).

The Industrial / Practical Training shall carry 100 marks. At the end of Industrial / Practical training / internship / Summer Project, the student shall submit a report on the training undergone and a certificate from the organization. The evaluation will be made based on this report and a Viva-Voce Examination, conducted internally by a three-member Departmental Committee constituted by the Head of the Department. Certificates (issued by the Organization) submitted by the student shall be attached to the mark list and sent to Controller of Examinations duly attested by the Head of the institution through the Head of the Department.

12.7.2 For any other EEC courses not covered in clause 12.6.1, 12.6.2 and 12.5 the Department Consultative Committee will take a decision on the evaluation methodology for the course. The Committee can decide on how to evaluate the courses and the same may be conveyed to the COE through the Head of the Institution at the beginning of the semester when the course is offered. The Head of the Department will be responsible for the evaluation process.

12.7.3 For any other EEC courses not covered in clause 12.6.1, 12.6.2, 12.4 and 12.6 the Department Consultative Committee will take a decision on the evaluation methodology for the course. The Committee can decide on how to evaluate the courses and the same may be conveyed to the COE through the Head of the Institution at the beginning of the semester when the course is offered. The Head of the Department will be responsible for the evaluation process.

12.8 Assessment for Mandatory Course

Mandatory courses are non-credit based courses that are required to be completed to fulfil the degree requirements. The Faculty coordinator appointed by the Head of the Department shall be responsible for periodic monitoring and evaluation of the course. The course shall be evaluated through Internal Assessments only (as decided by the Departmental Consultative Committee).

12.8 Assessment for One-Credit Course

The one credit course shall carry 100 marks and shall be evaluated through continuous assessments only. The assessments shall be conducted during the semester by the Department concerned. The total marks obtained in the tests shall be reduced to 100 marks and rounded to the nearest integer. The Head of the Department may identify a faculty member as coordinator for the course. A committee consisting of the Head of the Department, staff handling the course (if available), coordinator and a senior Faculty member nominated by the Head of the Department shall monitor the evaluation process. The grades shall be assigned to the students by the above committee based on their relative performance.

13 REQUIREMENTS FOR APPEARING FOR END SEMESTER EXAMINATIONS

A student shall normally be permitted to appear for the End Semester Examinations for all the courses registered in the current semester (vide clause 7) if he/she has satisfied the semester completion requirements (subject to Clause 8). A student who has already appeared for any subject in a semester and

passed the examination is not entitled to reappear in the same subject for improvement of grades. If the student has not paid tuition fee or End Semester Examination fee, he/she will not be permitted to attend End Semester Examination.

14 PASSING REQUIREMENTS

- 14.1** The Passing requirement for a student in a course is that the student should have obtained 45% marks in the End Semester Examination and should also fulfill 50% of the total by combining both the Continuous Assessments and End Semester Examinations. This is applicable for both theory and laboratory courses (including project work).
- 14.2** If a student fails to secure a pass in a theory course/laboratory course (except electives), the student shall register and appear only for the end-semester examination in the subsequent semester. In such case, the internal assessment marks obtained by the student in the first appearance shall be retained and considered valid for all subsequent attempts till the student secures a pass. However, from the third attempt onwards if a student fails to obtain passing marks (CIA + End Semester Examination), then the student shall be declared to have passed the examination if he/she secures a minimum of 50% marks prescribed for the University end semester examinations alone.
- 14.3** If a student fails an Open Elective, the student may be permitted to register for the same course as an arrear or opt for a new registration to any other Open Elective course respectively in the subsequent semesters. Registering for a new course will require fulfillment of attendance (vide clause 8).
- 14.4** The passing requirement for the courses which are assessed only through continuous assessment (EEC courses except project work), is 50% of the internal assessment (continuous assessment) marks only.
- 14.5** A student can apply for revaluation of his/her end semester examination answer paper in a theory course, within two weeks from the declaration of results, on payment of a prescribed fee along with a prescribed application to the Controller of Examinations (CoE) through the Head of Departments. The CoE will arrange for revaluation and the results will be intimated to the student concerned through the Head of the Department. Revaluation is not permitted for laboratory courses and project work.

15 AWARD OF LETTER GRADES

- 15.1** The award of letter grades will be decided based on relative grading principle. The relative grading is applicable to ONLY those students who have passed the examination as per the passing requirements enumerated above. For those students who have not passed the examination, Reappearance (U) shall be awarded as shown in clause 15.3.
- 15.2** For those students who have passed the course, the relative grading shall be done. The marks of those students who have passed only shall be inputted in the software developed for relative grading. The evolved relative grading method normalizes the results data using the BOX-COX transformation method and computes the grade range for each course separately and awards the grade to each student. For a given course, if the students' strength is greater than 30, the relative grading method shall be adopted. However, if the students' strength

is less than or equal to 30 then the absolute grading shall be followed with the grade range as specified in clause 15.3.

- 15.3 The performance of a student will be reported using letter grades, each carrying certain points as detailed below:

Grade/Citation	Range of Marks	Grade Points
O (Outstanding)	91-100	10
A+ (Excellent)	81-90	9
A (Very Good)	71-80	8
B+ (Good)	61-70	7
B (Average)	56-60	6
C (Satisfactory)	55-50	5
U (Reappearance)	<50	0
AB (Absent)	-	-
SA (Shortage of Attendance)	-	-
W (Withdrawal)	-	-

- 15.4 'SA' denotes shortage of attendance and hence prevented from writing the end semester examinations. 'SA' will appear only in the result sheet. "U" denotes that the student has failed to pass in that course. "WD" denotes withdrawal from the exam for the particular course. The grades U and WD will figure both in the Grade Sheet as well as in the Result Sheet. In both cases, the student has to appear for the End Semester Examinations.
- 15.5 If the grade U is given to Theory Courses/ Laboratory Courses it is not required to satisfy the attendance requirements but has to appear for the end semester examination and fulfil the passing requirements to earn a pass in the respective courses.
- 15.6 If the grade U is given to EEC (Employability Enhancement Course) (except Project Work), which are evaluated only through internal assessment, the student shall register for the course again in the subsequent semester, fulfill the passing requirements to earn pass in the course. However, attendance requirement need not be satisfied.
- 15.7 For the students who complete the Mandatory Course satisfying attendance requirement, the title of the Mandatory Course will be mentioned in the Grade Sheet.
- 15.8 For the extracurricular activities such as National Service Scheme (NSS) / sports / YRC, a satisfactory / not satisfactory grading will appear in the mark sheet. Every student shall put in a minimum of 75% attendance in the training and attend the camp compulsorily. The training and camp shall be completed during the first year of the programme. However, for valid reasons, the Head of the Institution may permit a student to complete this requirement in the second year. Successful completion of any one of the above co-curricular activities is compulsory for the award of degree.

16 GPA AND CGPA CALCULATION

16.1 The CoE shall convene a meeting of the passing board after the End Semester Examinations and with the approval of the board will declare the results. After results are declared, Grade Sheets will be issued to each student which will contain

the following details:

- the list of courses registered during the semester and respective grades earned
- the Grade Point Average (GPA) for the semester and
- the Cumulative Grade Point Average (CGPA) of all the courses from the first semester to the current semester.

GPA is the ratio of the sum of the products of the number of credits for courses acquired and the corresponding grade points to the sum of the number of credits for the courses acquired in the semester.

CGPA will be calculated in a similar manner, considering all the courses enrolled from first semester. U and AB grades will be excluded for calculating GPA and CGPA.

$$\text{GPA/CGPA} = \frac{\sum_{i=1}^n C_i g_i}{\sum_{i=1}^n C_i}$$

where, C_i - is the Credits assigned to the course

g_i - is the grade point corresponding to the letter grade obtained for each course.

n - is number of all Courses successfully cleared during the particular semester in the case of GPA and during all the semesters in the case of CGPA.

16.2 In the case of a student registered for more number of electives (PE/OE) than required as per the requirements in the curriculum, the courses with higher grades alone will be considered for calculation of CGPA.

17 ELIGIBILITY FOR THE AWARD OF DEGREE

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

- i. Scored the required number of credits specified in the curriculum (minimum of 160 credits for regular students and a minimum of 110 credits for lateral entry students) within the stipulated time (vide Clause 6.1).
- ii. Successfully completed the course requirements, appeared for the End Semester Examinations, and passed all the courses prescribed in all eight semesters within a maximum period of seven years reckoned from the commencement of the first semester to which the candidate was admitted.
- iii. Passed in the additional courses prescribed by the Head of the department duly authorized by the Head of the institution and Controller of Examinations whenever readmitted under regulations other than R-2023, if applicable.
- iv. No disciplinary action is pending against the student.

17.2 CLASSIFICATION OF THE DEGREE AWARDED**17.2.1 FIRST CLASS WITH DISTINCTION**

A student who satisfies the following conditions shall be declared to have passed the Programme of study in First class with Distinction:

Degree (i)	Duration of the programme (ii)	Duration permitted (iii)	Additional credits above the requirement of curriculum (iv)	CGPA (v)	Pass in (vi)	Break of study (vii)	Prevention due to lack of attendance (viii)	Withdrawal from writing end semester examination (ix)
B.E./B.Tech. (Regular)	4 years	5 years	-	8.50	First attempt	One year authorised break of study included in the duration permitted (iii)	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 (iii)	Not permitted	Will not be considered as an attempt
B.E./B.Tech. (Honours) Specialization in the same discipline	3/4 years (Lateral entry, regular respectively)	4/5 years (Lateral entry, regular respectively)	18 credits from any one of the vertical of the same programme	8.50	First attempt	One year authorised break of study included in the duration permitted (iii)	Not permitted	Will not be considered as an attempt

B.E./B.Tech. (Honours)	3/4 years (Lateral entry, regular respectively)	4/5 years (Lateral entry, regular respectively)	18 credits from any one of the vertical of the same programme	8.50	First attempt	One year authorised break of study included in the duration permitted (iii)	Not permitted	Will not be considered as an attempt
B.E./B.Tech. minor in other specialization	3/4 years (Lateral entry, regular respectively)	4/5 years (Lateral entry, regular respectively)	18 credits from any one of the vertical of the same programme	8.50	First attempt	One year authorised break of study included in the duration permitted (iii)	Not permitted	Will not be considered as an attempt

17.2.2 FIRST CLASS

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

Degree (i)	Duration of the programme (ii)	Duration permitted (iii)	Additional credits above the requirement of curriculum (iv)	CGPA (v)	Pass in (vi)	Break of study (vii)	Prevention due to lack of attendance (viii)	Withdrawal from writing end semester examination (ix)
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B.E./B.Tech. (Regular)	4 years	5 years	-	6.50	-	One year authorised break of study included in the duration permitted (iii)	Included in the duration permitted (iii)	-
B.E./B.Tech. (Lateral Entry)	3 years	4 years	-	6.50	-	One year authorised break of study included in the duration permitted (iii)	Included in the duration permitted (iii)	-
B.E./B.Tech. (Honours) Specialization in the same discipline	3/4 years (Lateral entry, regular respectively)	4/5 years (Lateral entry, regular respectively)	18 credits from any one of the vertical of the same programme	7.50	First attempt	One year authorised break of study included in the duration permitted (iii)	Not permitted	Will not be considered as an attempt
B.E./B.Tech. (Honours)	3/4 years (Lateral entry, regular respectively)	4/5 years (Lateral entry, regular respectively)	18 credits from any one of the vertical of the same programme	7.50	First attempt	One year authorised break of study included in the duration permitted (iii)	Not permitted	Will not be considered as an attempt
B.E./B.Tech. minor in other specialization	3/4 years (Lateral entry, regular respectively)	4/5 years (Lateral entry, regular respectively)	18 credits from any one of the vertical of the same programme	6.50	-	One year authorised break of study included in the duration permitted (iii)	Not permitted	Will not be considered as an attempt

17.2.3 SECOND CLASS

All other students (not covered in clauses 17.2.1 and 17.2.2) who qualify for the award of the degree (vide Clause 17.1) shall be declared to have passed the examination in Second Class.

17.2.4 A candidate 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 for classification. (subject to clauses 18 and 19).

17.2.5 Student earned additional 18 credits as per Clause 5.9.1. (i) and (ii) but does not satisfy the conditions mentioned in 17.2.1 or 17.2.2 shall not be awarded B.E./B.Tech. Honours. In such cases the mark sheet will show the additional courses studied and those courses shall not be considered for CGPA computation. In such case if the student becomes eligible for First Class, while computing CGPA without taking into account the additional course studied, the student shall be awarded B.E. /B.Tech. in First Class only (or) student may opt to consider these additional courses as per Clause 5.9.6 and 5.9.7.

18 PROVISION FOR WITHDRAWAL FROM END-SEMESTER EXAMINATION

18.1 A student may, for valid reasons, (medically unfit/unexpected family situations / sports approved by the Chairman of the sports board and HOD) be granted permission to withdraw from appearing for the end semester examination in any course or courses in ANY ONE of the semester examinations during the entire duration of the degree programme. The application shall be sent to the Controller of Examinations through the Head of the Department with necessary evidence duly attested by the Head of the Institution.

18.2 Withdrawal application shall be considered only if the student is otherwise eligible to write the examination (Clause 8) and if it is made within TEN working days before the commencement of the End Semester Examination in that course or courses and also be recommended by the Head of the Department.

18.2.1 Notwithstanding the requirement of the mandatory 10 days' notice, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case by the committee duly constituted.

18.3 Withdrawal is permitted for the End Semester Examinations during the final semester if the period of study of the student does not exceed 5 years as per clause 17.2.1.

19 PROVISION FOR AUTHORISED BREAK OF STUDY

19.1 A student is permitted to go on a break of study for a maximum period of one year either as two breaks of one semester each or a single break of one year.

19.1.1 For a break of study, the student shall apply to the Controller of Examinations in advance, in any case, not later than the last date of the first assessment period. The application duly filled by the student shall be submitted through the Head

of the Department duly attested by the Head of the Institution. In the case of short-term employment/ training/ internship, the application for a break of study shall be approved and forwarded by the Departmental Consultative Committee to the Controller of Examinations.

- 19.1.2** A student, permitted to rejoin the programme after a break of study / prevention due to lack of attendance, shall be governed by the Curriculum and Regulations in force at the time of rejoining. The students rejoining in new Regulations shall apply to the controller of examinations in the prescribed format through the Head of the Department at the beginning of the semester rejoining for prescribing additional/equivalent courses, if any, from any semester of the regulations in force, to bridge the curriculum in-force and the old curriculum.
- 19.2** The total period for completion of the programme reckoned from, the commencement of the first semester to which the student was admitted shall not exceed the maximum period specified in clause 6.1 irrespective of the period of break of study to be eligible for the award of the degree (vide clause 17).
- 19.3** In case there is any period of break of study more than the permitted duration of break of study, the student shall be permitted to continue the programme only if the approval is obtained from the Head of the Institution and Controller of Examinations through the concerned HOD before the end of the semester in which the student has taken a break of study.
- 19.4** If a student is absent from his studies for a period of two consecutive semesters without any intimation, the name of the student shall be deleted permanently from enrollment. Such a student is not entitled to seek readmission under any circumstances.
- 19.5** If a student indulges in malpractice in any of the examinations, the student shall be liable for punitive action as prescribed by the Head of the institution and Controller of Examination from time to time.

20 REVISION OF REGULATIONS, CURRICULUM, AND SYLLABI

The College may from time to time revise, amend or change the Regulations, Curriculum, Syllabus, and the Scheme of examinations through the Board of Studies and Academic Council with the approval of the Governing Body.