

St. JOSEPH'S INSTITUTE OF TECHNOLOGY

PROPOSED REGULATIONS 2022

CHOICE BASED CREDIT SYSTEM

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

This Regulation is applicable to the students admitted to B.E. / B.Tech. programmes at St. Joseph's Institute of Technology, OMR, Chennai, from the academic year 2022- 2023 onwards.

1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In these Regulations, unless the context otherwise specifies:

- i. **“Programme”** means Degree Programme (i.e) B.E / B.Tech. Degree Programme.
- ii. **“Discipline”** means Specialization of B.E/ B.Tech. Degree Programme, like Mechanical Engineering, Artificial Intelligence and Data Science, etc.,
- iii. **“Course”** means a Theory or Practical subject that is normally studied in a semester, like Mathematics, Physics, Engineering Graphics, etc.,
- iv. **“Controller of Examinations”** means the Authority of the Institution who is responsible for all activities of the End Semester Examinations of the Institution.
- v. **“Head of the Institution”** means the Principal of the Institution.
- vi. **“Head of the Department”** means Head of the Department concerned.
- vii. **“University”** means ANNA UNIVERSITY, CHENNAI.

2. ADMISSION PROCEDURE

2.1. Admission to First Semester

- i. Students for admission to the first semester of the eight semesters B.E. / B.Tech Degree Programme shall be required to have a pass in Higher Secondary Examination (Academic 10+2) Curriculum or its equivalent examinations with Mathematics, Physics and Chemistry / any other subject accepted by the Directorate of Technical Education, Tamil Nadu and the affiliating University

(OR)

- ii. Shall be required to have a pass in Higher Secondary Examination of Vocational Stream (Vocational groups in Engineering / Technology) as prescribed by the Directorate of Technical Education, Tamil Nadu and the affiliating University.

2.2. Lateral Entry Admission

- i. Candidates who possess Diploma in Engineering / Technology awarded by the State Board of Technical Education, Tamil Nadu or its equivalent are eligible to apply for Lateral entry admission to the third semester of B.E. / B.Tech. Programme as per the rules fixed by Government of Tamil Nadu.

(OR)

- ii. The candidates who possess the Degree in Science (B.Sc.) (10+2+3 stream) with Mathematics as a course at the B.Sc. level are eligible to apply for lateral entry admission to the third semester of B.E. / B.Tech. Such candidates shall undergo two additional engineering courses in the third and fourth semesters as prescribed by the academic council of the institution.

3. UG PROGRAMMES OFFERED

A student may be offered admission to any one of the programme of study approved by the University.

1. B.E. - Computer Science and Engineering
2. B.E. - Electrical and Electronics Engineering
3. B.E. - Electronics and Communication Engineering
4. B.E. - Mechanical Engineering
5. B.Tech. - Information Technology
6. B.Tech. – Artificial Intelligence and Data Science.

4. STRUCTURE OF THE PROGRAMMES

4.1. 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:

- i. **Humanities and Social Sciences including Management Courses (HSMC)** include Technical English, Employability Skills, Engineering Ethics and Human Values, Communication skills and Management courses.
- ii. **Basic Sciences Courses (BSC)** includes Mathematics, Physics, Chemistry, Environmental Sciences, etc.
- iii. **Engineering Sciences Courses (ESC)** includes Engineering Practices, Engineering Graphics, Basics of Electrical / Electronics / Mechanical, Computer Engineering, etc.
- iv. **Professional Core Courses (PCC)** includes the core courses relevant to the chosen specialization/branch.
- v. **Professional Elective Courses (PEC)** includes the elective courses relevant to the chosen specialization/branch.
- vi. **Open Elective Courses (OEC)** includes inter-disciplinary courses which are offered in other Engineering / Technology Programme of study.
- vii. **Employability Enhancement Courses (EEC)** includes Project Work, Internship, Career Development Skills, Creative and Innovative Project, Seminar, Professional Practices, Case Study and Industrial/Practical Training.
- viii. **Mandatory Courses (MAC)** includes Personality and Character development and

the courses recommended by the regulatory bodies such as University, AICTE, UGC, etc.

- ix. **Audit Courses (AC)** expose the students to Unnat Bharath Abhiyan, Constitution of India, Essence of Indian Knowledge Traditional, Yoga, English for Research Paper Writing, Value education, Pedagogy Studies, Stress Management and Personality Development through Life Enlightenment Skills. Registration for any of these courses is optional to students.

4.1.1 Mandatory Personality and Character Development Programme

All students shall enrol on admission in anyone of the personality and character development programmes (NCC/NSS/NSO/YRC) and undergo training for about 80 hours and attend a camp of about seven days. The training shall include classes on hygiene, Women self esteem, self defence and health awareness and also training in first-aid. Alternately, activities of science, Literature and Arts also help for personality and character development. So, student shall conduct and participate actively in Maths club/Science club / Literary Forum / Fine arts activities for 80 hours and participate in at least ONE event.

- **National Cadet Corps (NCC)** will have about 20 parades.
- **National Service Scheme (NSS)** will have social service activities in and around the College / Institution. The activities will include hygiene and practical projects on recycling and reusing biodegradable and dry waste.
- **National Sports Organization (NSO)** will have sports, games, drills and physical exercises.
- **Youth Red Cross (YRC)** will have activities related to social services in and around College/Institutions. While the training activities will normally be during weekends, the camp will normally be during vacation period.
- **Maths Club** shall organise activities that will enable students to communicate Mathematical ideas, reasoning and findings by sharing their thinking with teachers, peers and to examine different problem solving strategies.
- **Science Club** shall organise activities of popularisation 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 (i) 'Tamil Ilakkiya Mandram' shall be formed, which shall organise colourful literary events to propagate good humanist values, morals and ethics reflected in the literature. (ii) English Literary Club shall organise activities that shapes the inner self, nurtures the creative thirst and sculpts the raw potential of

Young Ignited Minds.

- **Fine Arts Club** like music, painting and documentary films with social themes shall be encouraged.

Students who enroll and take active participation in any one of the above activities for 80 hours and participate, at least one event/programme will be given a certificate by the Head of the Institution and the copy of the same shall be forwarded to the Controller of Examinations for the purpose of record and scrutiny. No fee shall be charged for all these activities.

4.1.2. Mandatory Two-Week Induction Programme

The students are expected to undergo a mandatory two week induction programme comprising of physical activity, creative arts, universal human values, proficiency modules, lectures by eminent people, visits to local areas and familiarization to department/branch & innovations immediately after admission, **as per UGC/AICTE guidelines.**

4.2. Number of Courses per Semester

The Curriculum of each semester shall normally have a blend of theory courses and theory cum practical courses not exceeding 7 and Practical courses not exceeding 4. In addition, Employability Enhancement Course(s) may also be included. Each course may have credits assigned as per **clause 4.3.** However, the total number of courses per semester shall not exceed **10** (including EEC). Pre-final semester may have 5 to 7 theory courses, laboratory courses not exceeding 2 and Internship. The final semester may have a blend of 2 theory courses and Project work.

4.3 Credit Assignment

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

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

The Contact Periods per week for laboratory can only be in multiples of 2. The length of the semesters shall be 15 to 18 weeks. Credit for a course shall vary from 1 to 4.

4.4. Industrial Training / Internship

The students may undergo Industrial training for a period as specified in the Curriculum

during the summer / winter vacation. In such cases, the Industrial training/internship needs to be undergone continuously for the entire period from one organization only. The students may undergo Internship at a Research organization / University / Industry (after due approval from the Heads of the Departments). If internship is not prescribed in the curriculum, the student may undergo Internship optionally and the credits earned through the internship shall be over and above the total credit requirement for the award of the degree.

Duration of Training / Internship	Credits
2 Weeks	1
4 Weeks	2

4.5. Industrial Visit

Every student is required to go for at least one Industrial Visit every semester, starting from the second year of the Programme. The Heads of Departments shall ensure that necessary arrangements are made in this regard.

4.6. Value Added Courses

Students may optionally undergo value added courses and the credits earned through the value-added courses shall be over and above the total credit requirements prescribed in the curriculum for the award of the degree. The Head of the Department can constitute a committee, a team of senior faculty members (preferably three) to recommend the list of value added course. One/two credit courses shall be offered by a department with the prior approval from the Head of the committee. The details of the syllabus, timetable and faculty may be sent to the controller of examinations after approval from the Head of the Department. Students can take a maximum of two ‘one credit courses’ or one ‘two credit course’ during the entire duration of the programme.

4.7. Online Courses

Students will be permitted to do online courses during 3rd to 8th semesters with final certification exams (NPTEL) to earn up to a maximum of six credits (which are provided with certificate after evaluation of the performance) with the prior approval from the Head of the Department. The Head of the Department can constitute a committee, a team of senior faculty members (preferably three) to recommend the list of online courses. On successful completion of each online course, the student has to submit the copy of the certificate to the Head of the Department. The committee recommends the credit and the grade that should be awarded to the student by appropriately mapping the score earned by the student. The results can be sent to the Controller of Examinations after the due approval by the Head of the Department. On successful completion of online courses adding to three credits, the student

can obtain a waiver from doing either a Professional Elective or an Open Elective course.

4.8. Audit courses

The student may optionally study audit courses prescribed by the Institution and it will be mentioned in the Grade Sheet. However, it will not be considered for computation of CGPA.

4.9. Advancement of Courses

The students, who completed their final semester courses (except project work) in advance, shall be permitted to carry out their final semester Project Work for six months in an industry/research organization. These students shall undergo the eighth semester courses other than the Project Work in the sixth and seventh semesters, provided they do not have current arrears and have a CGPA of 7.50 and above at the end of Semester IV. The Head of Department, in consultation with the faculty handling the said courses shall forward the proposal recommended by the Head of Institution to the Controller of Examinations for approval at least 4 weeks before the commencement of the sixth semester of the programme.

4.10. Medium of Instruction

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

5. DURATION OF THE PROGRAMME

5.1 The minimum and maximum periods for completion of the UG programmes are given below:

Programme	Minimum No. of semesters	Maximum No. of semesters
B.E. / B.Tech.	8	14
B.E. / B.Tech. Lateral Entry	6	12

Each semester normally consists of 90 working days. In any contingent situation, the number of working days per semester shall not be less than 75 days. The Head of the Institution is given the discretionary powers to decide the number of working days in such contingencies.

The Head of the Institution shall ensure that every teacher imparts instruction as per the number of periods specified in the syllabus and that the teacher teaches the full content of the specified syllabus for the course being taught.

For Regulations, the academic year has been divided into two semesters, the Odd semester normally spanning from July to November and the even semester from January to May.

The First semester of B.E. / B.Tech. Degree Programme normally spans from August to December and Second semester from January to May.

$$\text{Percentage of Attendance} = \frac{\text{Total no. of periods attended in all the courses per semester}}{\text{(No. of periods / week as prescribed in the curriculum taken together for all courses of the semester)} \times 15} \times 100$$

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 5.1**, irrespective of the period of break of study (**vide clause 17**) or prevention (**vide clause 7.4**), in order that the student may be eligible for the award of the degree (**vide clause 14**).

6. COURSE REGISTRATION

- i. Each student on regular admission must register for all the courses prescribed in the first year of study.
- ii. A student has to earn the minimum number of total credits specified in the curriculum of the chosen programme of study in order to be eligible to obtain the degree. However, a student can earn more than the minimum number of credits, if he/she wishes. In such cases, the minimum number of credits required for the completion of the programme alone would be considered for CGPA calculation.
- iii. The registration for the courses of the semesters III to VIII will commence 10 working days prior to the commencement of classes of the current semester. The student shall register for the courses with the guidance of his faculty mentor. The student may also drop courses (**vide clause 6.1**) within 5 working days of the commencement of the concerned semester and complete the registration process.
- iv. For an elective course to be offered, the department shall specify the minimum number of students required.
- v. After registering for a course, a student should attend classes, satisfy attendance requirements (**vide clause 7**), earn continuous assessment, and appear for the End Semester Examinations.

6.1. Flexibility to add or Drop courses

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, then the student is permitted to earn more than the total number of credits prescribed in the curriculum of the student's programme within the minimum duration of the programme.

From the II to VIII semesters, the student has the option of registering for additional courses or dropping existing courses. The total number of credits that a student can add or drop is

limited to 6 per semester, subject to a maximum of 2 courses.

The student shall register Project Work in VIII Semester.

6.2. Redoing a Course

Redoing a course means reregistering for a course, attending all classes, fulfilling the attendance requirements as per clause 7, earning fresh Continuous Assessment marks and appearing for End Semester Examinations. A student has to redo a course in the following conditions.

6.2.1 If a student is prevented from writing end semester examination of any core course due to lack of attendance, the student has to register for that course again when offered next and redo the course.

6.2.2 If a student is prevented from writing the end semester examination of any professional elective course/open elective course due to lack of attendance, the student can opt to register for the same course again when offered next and redo the course, or he/she can opt to register for a different professional/open elective course when it is offered, attend classes, fulfill the attendance requirements as per clause 7, secure Continuous Assessment marks and appear for End Semester Examinations.

7. REQUIREMENTS FOR APPEARING FOR THE END SEMESTER EXAMINATION OF A COURSE

A student who has fulfilled the following conditions (**vide clause 7.1 and 7.2**) shall be deemed to have satisfied the attendance requirements for appearing for the end semester examination of a particular course.

7.1 Ideally every student is expected to attend all periods and earn 100% attendance. However, in order to give provision for certain unavoidable reasons such as medical/participation in sports, the student is expected to attend at least 75% of the classes, the student shall secure not less than 75% attendance, course wise, taking into account the number of periods required for that course, as specified in the curriculum.

7.2 If a student secures attendance between 65% and less than 75% in any course in the current semester, due to medical reasons (hospitalization / accident / specific illness) or due to participation in the College / University / State / National / International level Sports events, with prior permission from the Principal, Competent Authority and Head of the Department concerned, the student shall be given exemption from the prescribed attendance requirement and the student shall be permitted to appear for the end semester examination of that course. In all such cases, the students should submit the required documents after joining, to the Head of the Department

through the Faculty Advisor and same should be submitted to office of the Controller of Examinations.

- 7.3** A student shall normally be permitted to appear for the end semester examination of the course if the student has satisfied the attendance requirements (**vide Clause 7.1 - 7.2**) and has registered for the examination for those courses of that semester by paying the prescribed fee.
- 7.4** Students who do not satisfy clause 7.1 and 7.2 and who secure less than 65% attendance in a course will not be permitted to write the end semester examination of that course. The student has to register and redo the course when it is offered next as per Clause 6.2. If the course in which the student has been prevented is a professional/open elective, the student can opt to redo the same course or opt for different professional/ open elective course.
- 7.5** If a student has shortage of attendance in all the registered courses, he/she would not be permitted to move to the higher semester and has to repeat the current semester in the subsequent year.
- 7.6** In the case of reappearance (Arrear) registration for a course, the attendance requirement as mentioned in Clauses 7.1 - 7.3 is not applicable. However, the student has to register for the examination on that course by paying the prescribed fee.
- 7.7** A student who has already appeared for a course in a semester and passed the examination is not entitled to reappear for the same course for improvement of letter grades / marks.

8. 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 of the students 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 and reappearance (Arrear) registering of courses, authorize the process, 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 of the faculty advisor shall be:

- To inform the students about the various facilities and activities available to enhance the student's curricular and co-curricular activities.
- To guide student enrolment and registration of the courses.

- To authorize the final registration of the courses at the beginning of each semester.
- To monitor the academic and general performance of the students including attendance and to counsel them accordingly.
- To collect and maintain the academic, co-curricular and extra-curricular records of the students.

9. COURSE COMMITTEES

9.1. Common Course Committee

A theory course handled by more than one teacher shall have a “Common Course Committee”, comprising of all teachers teaching that course. One of the teachers shall be nominated as Course Coordinator by the Head of the Department concerned.

The first meeting of the Common Course Committee shall be held within fifteen days from the date of formation of the committee. The nature and weightage of the continuous assessments shall be decided in the first meeting, within the framework of the Regulations. Two or three subsequent meetings in a semester may be held at suitable intervals.

In addition, 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 10). Wherever feasible, the common course committee shall prepare a common question paper for the continuous assessment tests also. The question paper for the end semester examination is common.

9.2. Overall Monitoring Committee

In addition, there shall be an overall monitoring committee for each semester of a programme, which comprises of (i) the Head of the Department (convener), (ii) the Faculty Advisors of the programme and (iii) Common Course Coordinator. 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 also invite some of the students for any of the committee meetings if necessary.

10. SYSTEM OF EXAMINATION AND ASSESSMENT PROCEDURE

Performance in each course of study shall be evaluated based on

- i. Continuous internal assessment throughout the semester
- ii. End Semester Examinations (ESE) at the end of the semester.

Each course, both theory / integrated and practical including project work shall be

evaluated for a maximum of 100 marks.

For all the End semester examinations, wherever necessary, the internal and external examiners shall be appointed by the Controller of Examinations.

Each course shall be evaluated for a maximum of 100 marks as detailed in Table :

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

There is no evaluation for Audit Courses. However, minimum attendance requirement as per clause 7 shall be satisfied.

Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD' for every semester, which consists of attendance marked in each theory / Laboratory/EEC/AC 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 (for five years). The records of attendance and assessment of both current and previous semesters should be available for inspection.

10.1. Assessment for Theory Courses

For Theory Courses including mandatory courses out of 100 marks, the maximum marks for Continuous assessment is fixed as 40 and the End Semester Examination carries 60 marks. The End Semester Examination for theory courses including mandatory courses will be of 3 Hours duration and shall normally be conducted for a maximum of 100 marks between November /December during the Odd Semesters and between April/May during the Even Semesters. End semester Examination is mandatory requirement for passing the Course.

Continuous Assessment is based on the performance of the Students in tests and tutorial or

objective type tests. Two assessments of equal weightage will be conducted by the Controller of Examinations. The total marks obtained in the assessments put together shall be reduced to 40 marks and rounded off to the nearest integer. In case a student misses the assessment due to medical reasons (hospitalization / accident / specific illness) or due to participation in the College / University / State / National / International level Sports events with prior permission from the HOD, a Re-assessment may be given at the end of the semester after getting approval from the Head of the Department through the concerned Course handling faculty.

To arrive the Continuous Assessment Mark, the following guidelines are to be followed

S. No.	Category Details	Marks
1	Assessment I	15
2	Assessment II	15
3	Mini Projects / Scopus indexed publications/ Online comprehensive Questions (MCQs)/ Employability enhancement Test/Case studies/Tutorials/Innovative Projects idea generation and implementation/ Problem solving and Implementation	10
Total		40

10.2. Assessment for Theory Courses with Laboratory Component

The maximum marks for Internal Assessment shall be 50 in case of theory courses with Laboratory component.

(i.e.) Each course shall be evaluated for a maximum of 100 marks as shown below:

Assessment I (40% weightage) (Theory Component)		Assessment II (60% weightage) (Laboratory Component)		Total Internal Assessment
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Evaluation of Laboratory Observation, Record	Test	
40	60	75	25	200*

* The weighted average shall be converted into 50 marks for internal Assessment

10.3. Assessment for Laboratory Courses

Each laboratory Courses shall be evaluated for a maximum of 100 marks. Every laboratory exercise / experiment shall be evaluated based on the student performance during the laboratory class and the student's record shall be maintained. The End Semester Examination will be conducted for 3 hours duration and shall normally be conducted for a

maximum of 100 marks by Examiner other than the concerned laboratory course handling faculty.

S. No	Description	Marks
1	Internal Assessment Average mark awarded for Design and conduct of experiments (10 Marks), observation / coding / implementation (10 Marks), Results (10 Marks), Viva-Voce (10 Marks) and Record (10 Marks) in regular class works	60
2	End Semester Practical Examinations conducted by Internal Examiner appointed by Controller of Examinations.	40
Total		100

Examinations shall normally be conducted between October and December during the ODD semester and between April and June during the EVEN semester.

10.4. Assessment for Project Work

The student shall register for Project Work in final semester. Project work may be allotted to a single student or to a group of students not exceeding 4 per group. 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.

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

There shall be three reviews during the semesters VIII 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 (as per the scheme given in 10.4.1).

If the Project Work is carried out in industry/academic/research institutions, the Project Work 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 continuous assessment and End Semester Examinations marks for Project Work and the Viva-Voce Examination will be distributed as indicated below.

10.4.1 The project work shall be evaluated for a maximum of 100 marks, of which continuous Assessments carry 40 marks (total) and the End Semester Examination (Project report evaluation and Viva- Voce Examination) carries 60 marks. The evaluation of the project reports will carry 20 marks and the same mark shall be awarded to every student within the project group for the project report. The viva-voce examination shall carry 40 marks and marks are awarded to each student of the project group based on the individual performance in the viva-voce examination.

Continuous Assessment 40 Marks (By Supervisor and Committee Members)			End Semester Examination 60 Marks			
Review I	Review II	Review III	Project Report / Evaluation 20 marks		Viva-voce 40 marks	
10	10	20	Internal	External	Internal	External
			10	10	20	20

10.4.2. If a student fails to submit the project report on or before the specified deadline 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.

10.5. Assessment for Seminar / Case Study/ Creative and Innovative project

The Seminar / Case study / Creative and Innovative Project shall carry 100 marks and shall be evaluated through continuous assessment only. Every student is expected to present a minimum of one presentation / demonstration in the prescribed semester before the evaluation committee. The three member committee consisting of one coordinator and two members appointed by the Head of the Department will evaluate the seminar at the end of the semester, the marks can be consolidated and taken as the final mark. The evaluation shall be based on the seminar paper/ report (40%), presentation / demonstration (40%) and response to the questions asked during presentation / demonstration (20%).

10.6. Assessment for Internship

The Internship shall carry 100 marks and shall be evaluated through only continuous assessment only as given below. At the end of the Industrial Training / Internship, the student shall submit a certificate from the organization where the student has undergone

training and a brief report about the training. The evaluation will be made based on this report, presentation and a Viva Voce Examination conducted internally by a three member Departmental Committee consisting of one coordinator and two members 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 the Controller of Examinations by the Head of the Department.

INTERNSHIP / INDUSTRIAL TRAINING EVALUATION		
REPORT	PRESENTATION	VIVA VOCE
40	30	30

10.7. Assessment for Value Added Course

The one/two credit course shall carry 100 marks and shall be evaluated through continuous assessments only. Two 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. The grades earned by the students for Value Added Courses will be recorded in the Grade Sheet, however the same shall not be considered for the computation of CGPA.

10.8. Assessment for Online Course

On successful completion of each online course, the student has to submit the copy of the certificate to the Head of the Department. The Head of the Department shall form a team of senior faculty members (preferably three) for recommending the credit and the grade that should be awarded to the student by appropriately mapping the score earned by the student. The results can be sent to the Controller of Examinations after the due approval by the Head of the Department. On successful completion of online courses adding to three credits, the student can obtain a waiver from doing either a Professional Elective or an Open Elective course.

10.9. Conduct of Academic Audit by every Institution

Every educational institution shall strive for a better performance of the students by conducting the internal assessments as mentioned in Clause 10.

In order to ensure the above, Academic Audit is to be done for every course taught during the semester. For the internal assessments conducted for each course as per details provided in Clause 12, the academic records shall be maintained in the form of documentation for the individual

assignments / case study report / report of mini project submitted by each student and assessment test question paper and answer script. Report of industrial training / internship shall also be maintained, if applicable. For laboratory courses students' record shall be maintained. Further, the attendance of all students shall be maintained as a record. The Head of the Institution shall arrange to conduct the Academic Audit for every course in a semester by forming the respective committees with an external course expert as one of the members drawn from a Technical institution of repute near the institute.

11. PASSING REQUIREMENTS

- 11.1.1 The passing requirement for a student in a course is determined based on the marks obtained both in continuous assessment and end semester examinations. A student, who secures not less than 50% of total marks prescribed for the course [continuous Internal Assessment + End semester Examinations] earns a minimum of 5 grade points in a course subject to secure a minimum of 45% marks in the end semester examinations, wherever applicable, shall be declared to have successfully passed the course.
- 11.1.2 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 pass marks (IA + End Semester Examination) as per clause 11.1.1, then the student shall be declared to have passed the examination if he/she secures a minimum of 50% marks prescribed for the end semester examinations alone.
- 11.1.3 If the course, in which the student has failed, is a Professional Elective or an Open Elective course, the student may be permitted to complete the same course. 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 candidate secures a pass. However, from the third attempt onwards if a candidate fails to obtain pass marks (IA + End Semester Examination) as per clause 11.1.1, then the candidate shall be declared to have passed the examination if he/she secures a minimum of 50% marks prescribed for the end semester examinations alone.
- 11.1.4 If any other Professional Elective or Open Elective course is opted by the student, the previous registration is cancelled and henceforth it is to be considered as a new Professional Elective or Open Elective course. The student has to register and attend the classes, earn the continuous assessment marks, fulfil the attendance requirements

as per clause 7 and appear for the end semester examination.

11.1.5 If a student is absent during the project viva - voce examination, it would be considered as fail. If a student fails to secure a pass in Project Work, the student shall register for the course again in the subsequent semester and can do Project Work.

11.1.6 The passing requirement for the courses which are assessed only through purely internal assessments (EEC courses except Project Work and laboratory), is 50% of the internal assessment (continuous assessment) marks only.

11.1.7 If a candidate fails in the Creative innovative project (EEC course), he/she has to revise the Project Report within 30 days from the date of declaration of the results. The revised report is reassessed by subsequent viva-voce examination. It will be considered as reappearance with payment of exam fee. In case a student fails in the resubmission of the project report and the subsequent viva-voce examination, the student shall register for the course in the subsequent semester.

11.1.8 Double valuation is adopted for all the theory courses in order to overcome any subjectivity in single valuation in the end semester examinations. Average of marks from double valuation will be considered as final mark. If there is any deviation of marks greater than 15 in two valuations, third valuation will be carried out. So the provision for revaluation does not arise. However, if a student wants to appeal for review of the result in any subject, he / she can submit a challenge review application to COE office. A committee consisting of the Head of the Department, concerned faculty advisor and a subject expert (Internal / External) nominated by the Head of the Institution will review and give its recommendations to the Controller of Examinations.

11.2. Supplementary Examinations

If a student fails to secure a pass in theory course(s) of VIII semester examination, he/she is eligible to appear for a one time Supplementary Examination which shall be conducted at the end of VIII semester, for the subjects of VIII semester alone within 30 days from the date of declaration of the results.

12. AWARD OF LETTER GRADES

The award of letter grades will be decided using 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 (RA) shall be awarded as shown in the below Table. 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 30 then the fixed grading shall be followed with the grade range as specified below.

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

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

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

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", "C". 'SA' denotes shortage of attendance and hence prevented from writing the end semester examinations. 'SA' will appear only in the result sheet.

"RA" denotes that the student has failed to pass in that course. "W" denotes withdrawal from the exam for the particular course. The grades RA and W 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.

If the grade RA 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.

If the grade RA 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.

13. GPA AND CGPA CALCULATION

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 the grades scored.
- The grade point average (GPA) for the semester
- The cumulative grade point average (CGPA) of all courses registered from first semester onwards.

During each semester, the list of courses registered and the grades scored in each course are used to compute the Grade Point Average (GPA). GPA is (the ratio of the sum of the products of the number of credits of courses registered and the grade points corresponding to the grades scored in those courses, taken for all the courses, to the sum of the number of credits of all the courses in the semester.

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

Where C_i - is the Credits assigned to the course

GP_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.

CGPA will be calculated in a similar manner, considering all the courses enrolled from first semester.

“RA” and “SA” grades will be excluded for calculating GPA and CGPA.

The credits earned through one / two credit courses shall not be considered for calculating GPA and CGPA.

If a student studies more number of electives {PEC/OEC} than required as per the student’s programme curriculum, the courses with higher grades alone will be considered for calculation of CGPA.

14. 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

- i) Successfully gained the required number of total credits as specified in the curriculum corresponding to the student's programme within the stipulated time.
- ii) Successfully completed the course requirements, appeared for the End-Semester examinations and passed all the subjects prescribed in all the 8 semesters within a maximum period of 7 years reckoned from the commencement of the first semester to which the candidate was admitted.
- iii) Successfully passed any additional courses prescribed by the Board of Studies.
- iv) Successfully completed the NCC / NSS / NSO / YRC / Science Club / Literature Club / Fine Arts Club requirements.
- v) No disciplinary action is pending against the student.
- vi) The award of Degree must have been approved by the Syndicate of the University.

15. CLASSIFICATION OF THE DEGREE AWARDED

15.1. First Class with Distinction:

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

- Should have passed the examination in all the courses of all the eight semesters and 6 semesters in the case of Lateral Entry in the student's First Appearance within **five** years and four years in the case of Lateral Entry. Withdrawal from examination will not be considered as an appearance.
- Should have secured a CGPA of not less than **8.50**.
- One year authorized break of study (if availed of) is included in the five years and four years in the case of lateral entry for award of First class with Distinction.
- Should NOT have been prevented from writing end semester examination due to lack of attendance in any semester.

15.2. First Class:

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

- Should have passed the examination in all the courses of all eight semesters and 6 semesters in the case of Lateral Entry within **five** years and four years in the case of Lateral Entry.
- 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 and four years in the case of lateral entry for award of First class.

- Should have secured a CGPA of not less than **6.50**.

15.3. Second Class:

All other students (not covered in clauses 15.1 and 15.2) who qualify for the award of the degree shall be declared to have passed the examination in **Second Class**.

15.4 A student who is absent in end semester examination in a course / project work after having registered for the same shall be considered to have appeared in that examination for the purpose of classification. (subject to clause 17).

16. PROVISION FOR WITHDRAWAL FROM END SEMESTER EXAMINATION

A student may, for valid reasons, (medically unfit / unexpected family situations / sports approved by Head of the Institution, 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 Head of the Institution through the HOD with the required documents.

Withdrawal application shall be valid only if the student is otherwise eligible to write the examination (Clause 7) and if it is made within TEN working days before the commencement of the end semester examination in that course or courses and also recommended by the Head of the Department.

Notwithstanding the requirement of mandatory TEN working days' notice, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case.

If a student withdraws a course or courses from writing end semester examinations, he/she shall register the same in the subsequent semester and write the end semester examination(s).

Withdrawal shall not be considered as an appearance for deciding the eligibility of a student for First Class with Distinction.

Withdrawal is permitted for the end semester examinations in the final semester only if the period of study of the student concerned does not exceed 5 years with approval of controller of examinations.

17. BREAK OF STUDY FROM A PROGRAMME

A student is permitted to go on break of study for a fixed period of one year as a single break in the entire course of study.

When a student applies for break of study, the student shall apply to the Head of the Institution in advance. The application duly filled by the student shall be submitted through the Head of

the Department.

The students permitted to rejoin the programme after 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 Academic Council in the prescribed format through the Head of the Department at the beginning of the readmitted semester itself for prescribing additional/equivalent courses, if any, from any semester of the regulations in-force, so as to bridge the curriculum in-force and the old curriculum.

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 5.1** irrespective of the period of break of study, in order that the student may be eligible for the award of the degree (**vide clause 14**).

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 Director of Technical Education /University through the Head of Institution before the end of the semester in which the student has taken break of study.

If a student has not reported to the department for a period of two consecutive semesters without any intimation, the name of the student shall be deleted permanently from the college enrollment. Such students are not entitled to seek readmission under any circumstances.

18. PROCEDURE FOR USING SCRIBE

If a candidate is physically handicapped (in case of accidents / ill health) at the time of examination, He / she may be permitted to use a scribe to write the examination. In such case 30 minutes extra time will be permitted for continuous assessment test and 60 minutes for end semester examination. The Scribe shall be a non-engineering student / graduate.

19. DISCIPLINE

Every student is required to observe disciplined and decorous behaviour both inside and outside the college and not to indulge in any activity which will tend to bring down the prestige of the institution.

In the event of an act of indiscipline being reported, the Head of the Institution shall constitute a disciplinary committee to enquire into act of indiscipline.

The Head of the Institution shall constitute a disciplinary committee consisting of the Head of the department to which the student concerned belongs, and the Heads of other department to enquire into acts of indiscipline and notify the Head of the institution about the

disciplinary action recommended for approval. In case of any serious disciplinary action which leads to suspension or dismissal, then a committee shall be constituted by the Head of the Institution for taking a final decision.

If a student indulges in malpractice in any of the examinations, the student shall be liable for punitive action as prescribed by the institution from time to time.

20. REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

The Academic council of the college reserves the right to revise or change or amend the regulations, the scheme of examinations, the curriculum and the syllabi from time to time if found necessary.