PANIMALAR ENGINEERING COLLEGE

(AN AUTONOMOUS INSTITUTION)
Approved by AICTE, Affiliated to Anna University, Chennai
(JAISAKTHI EDUCATIONAL TRUST)

Bangalore Trunk Road, Varadharajapuram,

Poonamallee, Chennai – 600 123

REGULATION-2023

Bachelor of Engineering & Bachelor of Technology

PANIMALAR ENGINEERING COLLEGE
REGULATION 2023
CHOICE BASED CREDIT SYSTEM
Common to all B.E / B.Tech Programmes

Degree of Bachelor of Engineering / Bachelor of Technology

This set of Regulations is applicable to the students admitted to B.E./B.Tech. Programmes at Panimalar Engineering College, Chennai, Affiliated to Anna University Chennai from the academic year 2023- 2024 onwards.

1. **PRELIMIARY DEFINITIONS AND NOMENCLATURE**

   In these regulations, unless the context otherwise requires:

   1.1. "Programme" means Degree Programme that is B.E./B.Tech. Degree programme.

   1.2. "Discipline" mean specialization or branch of B.E./B.Tech. degree programme, like Computer Science and Engineering, Information Technology, Artificial Intelligence and Data Science, Computer Science and Business Systems, Artificial Intelligence and Machine Learning, Electronics and Communication Engineering, Electrical and Electronics Engineering, Mechanical Engineering.

   1.3. "Course" means Theory or practical subject that is normally studied in a semester like Mathematics, Physics, and Chemistry etc.

   1.4. "Head of the Institution" means the principal of the institution who is responsible for all the academic activities and for the implementation of relevant rules of this regulation.

   1.5. "Head of the Department" means Head of the Department concerned.

   1.6. "Controller of Examinations" means the authority of the college who is responsible for all the activities of the examination centre.

   1.7. "Department Advisory Committee" consists of Head of the Departments and senior faculties of different specializations

   1.8. "College" means Panimalar Engineering College, Chennai.

   1.9. "University" means Anna University, Chennai.

   1.10. "Curriculum" means the various components/ courses studied under each programme that provides appropriate outcomes in the chosen discipline of study.

   1.11. "Credits" means a measure of a course.

2. **ADMISSION**

   2.1. **Candidates seeking admission to the first semester of the eight semesters B.E. / B.Tech.**

   Degree Programme: Should have passed the Higher Secondary Examinations of (10+2) Curriculum (Academic Stream) prescribed by the Government of Tamil Nadu and AICTE or authority accepted by the Syndicate of Anna University as equivalent thereto. They should also satisfy other eligibility rules as prescribed by the Anna University and Directorate of Technical Education, Government of Tamil Nadu, Chennai from time to time.

   OR

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

   2.2. **Lateral Entry Admission**

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

   OR

   The candidates who possess the Degree in Science (B.Sc.) (10+2+3 stream) with Mathematics as a subject 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 subject(s) in the **third and fourth semesters** as prescribed by the University.

3. **PROGRAMMES OFFERED**

   The various B.E. / B.Tech. Programmes offered at the college are:

   B.E - Computer Science and Engineering

   B.Tech - Information Technology

   B.Tech - Artificial Intelligence and Data Science

   B.Tech - Computer Science and Business Systems.

   B.Tech – Artificial Intelligence and Machine Learning

   B.E - Electronics and Communication Engineering

   B.E - Electrical and Electronics Engineering

B.E - Mechanical Engineering

4. STRUCTURE OF PROGRAMMES

4.1. Categorization of the Course

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 (HS)** courses include Technical English, Engineering Ethics and Human Values, Communication skills, Environmental Science and Engineering and Management.

ii. **Basic Sciences (BS)** courses include Mathematics, Physics, Chemistry, etc.

iii. **Engineering Sciences (ES)** courses include Engineering practices, Engineering Graphics, Basics of Electrical / Electronics / Civil/ Mechanical / Computer Engineering etc.

iv. **Professional Core (PC)** courses include the core courses relevant to the chosen specialization / branch.

v. **Professional Elective (PE)** courses include the verticals with elective courses and elective courses relevant to the chosen specialization/ branch.

vi. **Open Elective (OE)** courses include the courses from Humanities and other disciplines of Engineering and Technology. Students can choose these courses from the list of Open Elective courses specified in the respective curriculum. Students may also choose courses from other disciplines from Swayam/NPTEL platform, including non-engineering courses.

vii. **Employability Enhancement Courses (EEC)** include Project Work and/or Internship, Creative and Innovative Projects which include Core skill Design projects, Seminar, Professional Practices, Case Study and Industrial / Practical Training.

viii. **Mandatory Courses (MC)** includes courses related to social outreach, culture, Indian Constitution, Value Education, Stress Management, heritage of Indian society and induction programme. The mandatory course does not play a role in the CGPA calculation.

ix. **Self-Learning Course (SLC)** is a course to be selected by the students allowing them to be interacting with global network of faculty, peers, and industry experts from anywhere in the world, that facilitates developing an aptitude for life-long learning.

x. **Industry Oriented Courses (IOC)**are offered to allow students to expand their knowledge and skills in niche areas and meet the everchanging arising in the relevant industries, from time to time.

xi. **Skill Development Courses (SDC)**are the courses offered to enhance specific abilities and competencies of the students in academic and professional contexts.

xii. **Value Added Courses (VAC)** is the courses not prescribed in the respective curriculum, but are offered to the students to provide additional value to the programme, for enhancing the knowledge and skills of the student. Completion of these course(s) is / is not mandatory for successful completion of the programme.

xiii. **Off Campus Courses (OCC)** are the courses that can be undergone by the student, offered by other institutions.

4.2. Personality and Character Development

All students shall enroll, on admission, in any one of the personality and character development programmes (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 and health awareness and also training in first-aid.

National Service Scheme (NSS) will have social service activities in and around the College. The activities may include practical projects on recycling and reusing biodegradable and dry waste etc.

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.

Apart from the above, the students may enroll for Professional Societies / Physical Education/ Yoga/ Clubs etc.

4.3. 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 immediately after admission. Students successfully completed the induction programme shall be certified by the Head of the institution. For the studens

who were admitted later and who have not attended the Induction Program, the same shall be conducted later.

4.4. Number of Courses per semester

Each semester curriculum shall normally have maximum of 7 Theory and Laboratory integrated Theory courses and 5 Laboratory courses and Employability Enhancement Course(s) put together**.** However, the total number of courses per semester shall not exceed 11.

4.5. Credit Assignment

Each course is assigned with the credit as in Table 1:

Contact hours per week	Credits
1 Lecture periods	**1**
1 Tutorial periods	**1**
2 Laboratory periods	**1**
2 Periods of EEC courses like seminar / project Work / Case Study	**1**
2 Week summer Internship/ Training / Industrial Training	**1**

Table 1: Credit Assignment

ONE credit is assigned to 'SWAYAM / NPTEL' courses for every 'FOUR WEEKS' duration.

4.6. Industrial training / Internship

Internship is encouraged for all branches of study. The students shall undergo industrial training for a period as specified in the curriculum during summer / winter vacation. In this case the training has to be undergone continuously for the entire period. The credit earned will be indicated in the Grade Sheet as per Table 2. The students may undergo internship at Research organizations / Universities (after due approval from the Department Advisory Committee – DAC) for the period prescribed in the curriculum during summer /winter vacation, in lieu of industrial training.

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

Table 2: Duration of Training / Internship and Assigned Credit

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 as per Table 3.

Duration of Training / Internship	Credits	Indication in Grade Sheet
2 Weeks	1	Credits shall be recorded in the Grade Sheet but not considered for computation of CGPA
4 Weeks	2	Credits shall be recorded in the Grade Sheet but not considered for computation of CGPA
6 Weeks Continuous Training / Internship from one organization	3	He/she may optionally drop one Professional Elective within 15 days of the commencement of the semester and the same is to be recommended by DAC.

Table 3: Duration of Training / Internship and Assigned Credit

4.7. 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.

4.8. Value Added Courses

The Students may optionally undergo Value Added Courses apart from the courses mentioned in the curriculum and the credits earned through these optional Value Added Courses shall be over and above the total credit requirement prescribed in the curriculum for the award of the degree. One / Two / Three credit courses shall be offered by the Department with prior **approval from the Academic Council.** The details of the syllabus, time table and faculty may be sent to the Controller of Examinations after approval from the Head of the department concerned at least one month before the course is offered. Students shall be allowed to take these courses offered in other Departments also, but with the permission of the Head of the Department of student and Head of the department offering the course. The credits earned through these optional courses will not be counted for CGPA computation.

4.9. Semester Long Project Work / Industrial Project / Internship

In the final semester students shall undertake a semester long project work in their own discipline to obtain hands-on experience.

Project work may be assigned to a single student or to a group of students, not exceeding 4 per group with a guide from the same department. However, if the project is of interdisciplinary nature then students from different programmes are permitted to form a group and the guide can be from other department also.

Students are permitted to undertake a semester long industrial project or semester long internship in an industry / research organization in lieu of the final semester project work, provided the domain of such projects or internships come under the same discipline and approved by DAC and the industry has no objection in submitting the work carried out as a report. This industrial project or internship is apart from the summer industrial training or summer internship, if any.

If the outcome of the project work is the development of a finished product then it may lead to a start-up activity.

The students have to submit a project report or internship report or start-up report on or before the last working day of the semester and the assessment of the same is detailed in clause 12.5.

4.10. Online Courses

Students may be permitted to credit online courses with the approval of **Department Advisory Committee** and the Head of the Department to a maximum of three credits. The courses shall be considered in lieu of professional elective / open elective courses of curriculum as approved by DAC. The course may be an online course from SWAYAM platform / NPTEL portal. The number of credits and transfer of credits are based on Table 4 and the Mapping of the marks with the grades shall be as in Table 5. The mapping of marks with grades is applicable, only if the student passes the course as per the guidelines of Swayam / NPTEL.

No. of Weeks	No. of Credit
4	1
8	2
12	3
16	4

Table 4 : Duration of the Course and Number of Credits

Letter Grade	Marks
0	90-100
A+	80-89

A	70-79
B+	60-69
B	50-59
C	40-49

Table 5: Mapping of Marks scored in NPTEL and Credits earned

In case of credits earned through online mode from any institution / industry approved by appropriate authorities of the college, the credits may be transferred after due approval of the Head of the Institution.

4.11 Off Campus Course (OCC)

Student shall have the option of registering courses in physical / online / hybrid mode with other institutes or online platforms in a semester (except VIII semester), with prior permission from the Head of the Department. The department concerned shall notify and obtain such proposals from the interested students, within ONE month from the commencement of a semester, for undergoing the OCCs in the subsequent semester. Such proposals shall be processed through Departmental Advisory Committee (DAC) and recommendations of the DAC shall be submitted to the Principal, ONE month before the last working day of the semester. Repetition of courses already registered / completed shall not be permitted. Post-facto permissions shall not be entertained under any circumstances.

A Professional Course shall be substituted by an OCC.

Students shall opt the OCC offered:

i. By SWAYAM / NPTEL portal.

ii. By Central / State funded Universities or Institutions, which are in the top 20 positions in the latest 'National Institutional Ranking Framework' (NIRF) ranking. NIRF ranking is based on respective stream for Professional Course and based on any stream for Open Elective.

iii. Directly by foreign Universities within QS ranking 300 for the last three years and not through Edutech platforms.

By Central / State Research Laboratories or Institutions (other than Universities & Colleges) or Companies / Firms (manufacturing, software or service) related to the programme and involved in transfer of knowledge (provided the knowledge

transferring company is a spinoff from an Engineering / Technology practicing Industry) and sharing the experience of the respective industry. This Company / Firm offering the OCC,should have an average annual turnover of more than Rs. 100 crores over a period of 5 years. In this case, the academic content and delivery shall be in consonance with the University academic standards and norms and the minimum qualification of the course instructor shall be B.E./B.Tech with 10 years of research / industrial experience. Such courses shall be offered only through MoU / MoA between Anna University and such Company / Firm. The design of such courses with regard to the syllabus content, duration of each course and number of credits offered shall be decided in consultation with the respective Memorandum of Understanding (MoU). A course coordinator shall be nominated from the Department, who shall jointly set the question paper and evaluate answer script(s) with the Course Instructor from the Company / Firm for the continuous assessments and end semester examination conducted by the University.

4.12 Industry Oriented Course (IOC)

There shall be 'THREE' Industry Oriented Course (IOC) to be successfully completed by the student as prescribed in the respective UG curriculum. However, a student shall register for only one course in a semester. Students are also permitted to register for these courses offered by other departments, provided the student has fulfilled the necessary pre-requisites of the course being offered.

Proposal for conduct of IOC shall be submitted by a faculty member, who is the Coordinator of the IOC, to the Head of the Department concerned at the commencement of each semester for conducting IOC(s) in the subsequent semester, as per the curriculum.

Course content of IOC shall be framed by the identified industrial expert in consultation with the Coordinator. Content shall be of trans / interdisciplinary in nature, with practical applications such as case studies, standards, certifications, etc.

The proposal shall contain a brief introduction about the expert, title of the course, lesson plan for 15 hours, tentative schedule of the classes and pre-requisite(s), if any, for the students to attend.

The received proposals shall be placed before the Departmental Advisory Committee (DAC) by the Head of the Department and with recommendations of DAC, proposal(s)

shall be forwarded, within 15 days before the last working day of the ongoing semester to the Principal for further action. Approved IOCs shall be offered in the subsequent semester.

Classes shall be conducted by the industry expert through physical / hybrid mode and slot for these courses shall be allotted depending on the availability of the expert in regular timetable, before or after the working hours. However, time slots on Saturdays may also be judiciously decided by the respective Head of the Department, depending on the convenience of the students and expert. For all sessions, the coordinator shall attend the classes with the students. Attendance register for IOC shall be maintained by the Coordinator.

Size of the batch shall be preferably below 75 for both physical and hybrid mode.

Performance of the students shall be evaluated only through continuous assessments, with 'TWO' tests viz. one test in mid-term of the course and second test at the end of the course. These tests have equal weightage. Mode of assessment can be Quiz, Multiple Choice Questions, Descriptive type, Assignments, Projects, etc., and it is at the discretion of Industrial Expert and Coordinator. End Semester Examinations shall not be conducted for this course.

Students shall also be permitted to attend the IOCs as Value Added Courses over and above the three mandatory IOCs. The result(s) of such VACs shall be printed in the Grade sheet and the credit acquired shall not be considered for computation of CGPA.

4.13 Self-Learning Course (SLC)

Students shall undergo 'one' SLC in the entire programme as prescribed in the respective curriculum of UG Programmes. This course shall not be a part of any other course prescribed in the respective UG curriculum, but should be relevant to engineering and technology.

Students shall opt for the courses offered by SWAYAM / NPTEL as well as State / Central funded Institutions OR Research Laboratories, which are in the top 20 positions in the latest NIRF ranking OR Foreign Universities within QS 300 rankings OR list of EduTech firms approved by the University, from time to time. The learning platform should have a clear process of awarding grades / marks to the students.

Students shall submit a request with a maximum of three interested SLCs to the Head of the Department along with the details of course contents, Name & Affiliation of the

instructor, Mode of evaluation, etc., at least 'ONE MONTH' before the end of the ongoing semester, for undergoing SLC in the subsequent semester. List of proposed SLC shall be placed in the Department Advisory Committee (DAC) for consideration. The recommended proposals shall be forwarded to the Principal, for approval.

In case the SLC undergone by the student fetches more than one credit, only one credit shall be taken for computation of CGPA, upon successful completion of the course.

4.13 Skill Development Course (SDC) (except Capstone Design Project and IOC)

For courses under Laboratory Integrated Theory type, evaluation shall be through continuous assessments and end semester examination. Continuous assessments comprise of two tests, practical and activities. For each test, there shall be a minimum of ONE 'activity' which include assignments, group assignments, quizzes, etc. End semester examination for theory shall be conducted for ONE AND HALF HOUR. End semester examination for practical shall be conducted separately. Continuous assessments have the weightage of 60% and End semester examination has weightage of 40%

Weightage for Continuous Assessment & End Semester Examination for SDC

Continuous Assessment (60 %)		End Semester Examination (40 %)	
Theory	**Practical**	**Theory**	**Practical**
15%	45%	15%	25%

4.14 Medium of Instruction

The medium of instruction is English for all courses of the programmes except the courses related to Tamil.

5. DURATION OF THE PROGRAMME

5.1. A student is ordinarily expected to A student is ordinarily expected to complete the B.E. / B.Tech. Programme in 8 semesters (four academic years) but in any case not more than 14 Semesters for HSC (or equivalent) students and not more than 12 semesters for Lateral Entry Students.

5.2. Each semester shall normally consist of 90 working days each (including the examination days). 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.

5.3. The Head of the Institution may conduct additional classes for improvement, special coaching, conduct of model test etc., over and above the specified periods. The End Semester examination will ordinarily follow immediately after the last working day of the semester commencing from first semester as per the academic schedule prescribed from time to time.

5.4. The total period for completion of the programme reckoned from the commencement of the semester to which the student was admitted shall not exceed the maximum period specified in clause 5.1 irrespective of the period of break of study (Vide Clause 18) or prevention (vide Clause 7) in order that he/she may be eligible for the award of the degree (vide clause 15).

6. COURSE REGISTRATION

6.1. Each student has to register for:

i. Courses of the current semester (including mandatory courses)

ii. Course(s) in which he/ she has failed and required to reappear for the end semester examinations, carrying forward the continuous internal assessment marks earned in the last attempt.

iii. Any other course(s) the student wishes to register as per norms (vide Clause 4.6, 4.8 and 4.10)

6.2. No Elective course shall be offered by a Department unless a minimum of 20 students register for that course, subject to the approval of Head of the Department.

6.3. 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.

6.3.1. Each student on admission shall register for all the courses prescribed in the curriculum for the first semester of study.

6.3.2. The enrolment for the courses of the Semesters II to VIII will commence 5 working days prior to the commencement of the succeeding semester. The student shall enroll for the courses with the guidance of the respective mentor. If the student wishes, the student may drop or add courses (vide clause 6.5 within five working days after the commencement of the concerned semester

and complete the registration process duly authorized by the Head of the Department.

6.3.3. After a student completes EIGHTH semester, if he/she has to complete ONE / TWO course(s) (maximum 2 only) of any semester, he/she will be permitted to appear for a supplementary examination (conducted within a month after the announcement of eighth semester results) for those courses, carrying forward continuous assessment marks of the last attempt, for fulfilling the requirements.

6.4. Registration for reappearance

6.4.1. If a student fails to secure a pass in any course(s) he/she has to register for reappearance for those courses in a subsequent semesters, till he/she secures a pass in such courses. In such a case he/she can carry forward the continuous assessment marks earned in the last attempt and appear for end semester exam.

6.4.2. If a student is prevented from writing end semester examination due to lack of attendance, the student has to register for that course again, when offered next, attend the classes and fulfill the attendance requirements as per clause 7.

6.5. Flexibility to Add / Drop course

6.5.1. 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. From the II to VII semesters, the student has the option of registering for additional courses or dropping existing courses in a semester. The total number of credits that a student can add or drop in a semester is limited to 8, subject to a maximum of 2 courses. Maximum number of credits enrolled in a semester (including Shortage of Attendance (SA), Honours and Minor) shall not exceed 36. The online courses registered shall be over and above 36 credits. However, he/she has to undergo these dropped courses in the subsequent semester to fulfill the requirement of the degree programme.

6.5.2. If the student wishes 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, then he/she can enroll for such additional courses in any programme with the permission of Head of the

Department to which student belongs and Head of the Department in which the course is offered by paying the examination fee. The credits earned will be neither considered for the computation of CGPA nor for the classification of the degree. The courses successfully completed will be printed in the grade sheet, however if there is shortage of attendance or failure, it shall neither be reflected in the grade sheet nor be considered for classification.

6.5.3. The student shall register for the project work in the VIII semester only.

6.6. Choice of Professional Elective Courses

The professional Elective Courses are listed in the Curriculum as verticals in Table format. 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. However, students irrespective of enrolling for additional courses for B.E. / B. Tech. (Hons.) are not permitted to choose more than one course from a row. Students are permitted to enroll more than one elective course from the same vertical in a semester. In the subsequent semesters students are permitted to enroll one more course in a row, provided if he/she has cleared the earlier course of the same row. For a professional elective course and open elective course, minimum number of students enrolment permitted shall be 20. 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.

6.7. 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 the End Semester Examinations. A student has to redo a course as per the following conditions:

6.7.1 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.

6.7.2 If a student is prevented from writing the end semester examination of any professional/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 the classes, fulfill the attendance requirements as per

clause 7, secure Continuous Assessment marks and appear for the End Semester Examinations.

6.7.3 If the course in which a student fails to secure a pass is a professional/open elective course, then the student can opt for a different professional/ open elective course, register for the same when it is offered, attend classes, fulfill the attendance requirements as per clause 7, secure Continuous Assessment marks and appear for End Semester Examinations.

6.7.4 A student who fails in Project work shall register for the course again, when offered next, and redo the course. In this case, the student shall attend the reviews and fulfill the attendance requirements as per clause 7.

6.7.5 student who fails in Seminar / Case Study and Creative and Innovative project, where such other courses are evaluated through 100% continuous assessment, shall register for the same in the subsequent semester and redo the course. In this case, the student shall attend the classes and fulfill the attendance requirements as per clause 7 and earn continuous assessment marks.

6.7.6 The student who fails in summer industrial training / internship shall attend the training / internship again and redo the course with the same organization or different organization with the approval of the Head of the Department.

7. ATTENDANCE REQUIREMENT FOR COMPLETION OF THE SEMESTER

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

7.1. For writing the end semester examination the attendance is calculated as:

$$\% \text{ of Attendance} = \frac{\text{Total Number of periods attended in all course during the semester}}{\text{Total Number of periods to be conducted in that semester}} \times 100$$

7.2. Ideally every student is expected to attend all classes of all the courses and secure 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. Therefore, he/she shall **secure not less than 75%** (after rounding off to the nearest integer) of overall attendance.

7.3. However, a candidate who secures overall attendance between 65% and 75% 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 semester examinations subject to the condition that the candidate shall

submit the medical certificate / sports participation certificate attested by the Head of the Institution. The same shall be forwarded to the Controller of Examinations for record purposes.

7.4. 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 7.2 – 7.3) and has registered for the examination in those courses of that semester by paying the prescribed fee.

7.5. Candidates who **secure less than 65% overall attendance and candidates who do not satisfy the clause 7.2 and 7.3** shall not be permitted to write the University examination at the end of the semester 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.

7.6. In the case of reappearance (Arrear) registration for a course (the courses for which redo is not required), the attendance requirement as mentioned in Clauses 7.1, 7.2 and 7.5 is not applicable. However, the student has to register for the examination in 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.

8. MENTOR AND CLASS IN CHARGE

8.1. Mentor

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 mentor for those students throughout their period of study to help the students in planning their course of study and for general advice on the academic programme. The mentor shall advise the students in registration and reappearance (Arrear) registration of courses, monitor their attendance and progress and counsel them periodically. If necessary, the mentor may also discuss with or inform the parents about the progress / performance of the students concerned. The number of students assigned to a mentor will be decided by the Head of the Department. However, it shall not exceed 30 per mentor. The responsibilities of the mentor includes:

i. To inform the interpretation of Regulations to the students and their rights and duties.

ii. To inform code of conduct to be maintained in the campus and disciplinary actions.

iii. To inform the students about the various facilities and activities available to enhance the student's curricular and co-curricular activities.

iv. Advise the students in registering and reappearance registering of courses.

v. To monitor the academic and general performance of the students including attendance and to counsel them accordingly.

vi. To collect and maintain the academic and co-curricular records of the students.

vii. To facilitate and collect students feedback about the course and course instructor, and the course and programme's exit survey.

viii. To provide all the details of academic including feedback, training, scholarship, placement and co-curricular and extra-curricular activities of the students through Head of the Department.

8.2. Class in charge

The Head of the Department concerned appoint a class in charge for each class, who is one among the course-instructors of the class. The class-in-charge is the ex-officio member and the convener of the class committee.

The responsibilities of the class in charge include:

i. Acting as a channel of communication between the HoD and students of respective classes.

ii. Collecting and maintaining various statistical details of students

iii. Helping the chairperson of the class committee in planning and conduct of the class committee meetings.

iv. Monitoring the academic performance of the students including attendance and to inform the class committee.

v. Guiding the students in various welfare activities like awards, medals, scholarships and industrial visits etc.

9. CLASS COMMITTEE

9.1. Every class will have a class committee constituted by the Head of the Department concerned. The members of the class committee will include:

9.1.1. Chairperson (a senior faculty who is preferably not teaching any course for the class)

9.1.2. All faculty handling courses for the class

9.1.3. Students (usually of 4 consisting of 2 boys and 2 girls on pro-rata basis)

9.2. The functions of the class committee shall include the following:

9.2.1. Clarify Solving problems experienced by students in the class room and in the laboratories.

9.2.2. Informing the student representatives, the academic schedule including the dates of assessments and the syllabus coverage for each assessment.

9.2.3. Clarifying the regulations of the degree programme and the details of rules.

9.2.4. Informing the student representatives the details of Regulations regarding weightage used for each assessment. In the case of practical courses (laboratory / drawing / project work / seminar etc.) the breakup of marks for each experiment / exercise / module of work, should be clearly discussed in the class committee meeting and informed to the students.

9.2.5. Analysing the performance of the students of the class after each test and finding the ways and means of solving problems, if any.

9.2.6. Identifying the weak students, if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such weak students.

9.3. The class committee for a class under a particular branch is normally constituted by the Head of the Department. However, if the students of different branches are mixed in a class (like the first semester which is generally common to all branches), the class committee is to be constituted by the Head of the Institution.

9.4. The class committee shall be constituted within the first week of each semester.

9.5. The Head of the Institution may participate in any class committee meeting of the institution.

9.6. The chairperson is required to prepare the minutes of every meeting, submit the same to Head of the Institution within two days of the meeting and arrange to circulate it among the students and teachers concerned. 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.

9.7. The first meeting of the class committee shall be held within one week from the date of commencement of the semester, in order to inform the students about the nature and weightage of assessments within the framework of the Regulations. Two or three subsequent meetings may be held in a semester at suitable intervals. The Class Committee Chairman shall put on the Notice Board the cumulative attendance

particulars of each student at the end of every such meeting to enable the students to know their attendance details to satisfy the clause 7 of this Regulation. During these meetings the student members representing the entire class, shall meaningfully interact and express the opinions and suggestions of the other students of the class in order to improve the effectiveness of the teaching-learning process.

10. COURSE COMMITTEE FOR COMMON COURSES

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. The nomination of the Course Coordinator shall be made 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 first meeting of the Common Course Committee shall be held within fifteen days from the date of formation of the committee. The lesson plan, books and references to be followed shall be decided at the first meeting. Two or three subsequent meetings in a semester may be held at suitable intervals in order to arrive at a common scheme of evaluation for the test and shall ensure a uniform evaluation of the tests. Wherever feasible, the course committee may also prepare a common question paper for the continuous assessment test(s). The question paper for the end semester examination is common.

11. SYSTEM OF EXAMINATION

11.1. Performance in each course of study shall be evaluated based on (i) continuous internal assessment throughout the semester and (ii) End Semester examination at the end of the semester. The evaluation shall be based on Outcome Based Education (OBE) and the relevant rubrics shall be followed. The weightage for the continuous assessment and end semester examination is given in the table 6. Appearance in End Semester Examination is mandatory for all courses except the courses evaluated only by 100% continuous assessment.

Category of Course	Continuous Assessments	End semester Examinations
Theory Course	40 %	60 %
Theory Course with Laboratory component	50 %	50 %
Laboratory Course	60 %	40 %
Project Work	60 %	40 %

Mandatory Course, Value Added Course, Mini-Project, Seminar / Case study / Creative and Innovative Project, Industrial / Practical Training, Summer Project, Internship	100 %	-

Table 6 : Weightage of Marks for Continuous Assessments and End-Semester Examinations

Theory Courses, Theory courses with laboratory component, Laboratory Courses and Employability Enhancement Courses. Employability Enhancement Courses include Project Work, Seminar, Professional Practices, Case Study and Industrial/Practical Training, Mandatory courses shall be evaluated for a maximum of 100 marks.

Incase of Theory courses with Laboratory component, weightage of marks for the Theory and Laboratory components in the continuous assessments and End-Semester Examination for different types of courses shall be as in Table 7.

L	T	P	C	Continuous Assessment Theory	Continuous Assessment Laboratory	End-Semester Examiantions
1	0	2	2	40 %	60 %	50% Laboratory Only
1	0	4	3	40 %	60 %	50% Laboratory Only
2	0	2	3	40 %	60 %	50% Theory Only
3	0	2	4	40 %	60 %	50% Theory Only
2	0	4	4	40 %	60 %	25% Theory and 25 % Laboratory
3	0	4	5	40 %	60 %	25% Theory and 25 % Laboratory

Table 7: weightage of marks for the Theory and Laboratory components in the continuous assessments and End-Semester Examination for different types of courses

Industrial training shall carry 100 marks and shall be evaluated through continuous internal assessment only.

11.2. The End Semester examination (theory and practical) of 3 hours duration shall ordinarily be conducted in November / December for the odd semesters and in April / May for the even semesters.

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

11.4. There will be a supplementary examination conducted within one month from the announcement of End semester examination results VIII semester and students can register for the failed subjects, **subject to the conditions stated in clause 6.3.3.**

12. PROCEDURE FOR AWARDING MARKS FOR CONTINUOUS ASSESSMENT TESTS

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

12.1. Theory Course

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).

Assessment I (100 Marks)		Assessment II (100 Marks)		
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Total Internal Assessment
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 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.

12.2. Laboratory Courses

The maximum marks for Internal Assessment shall be 60 marks in case of practical courses.

Every practical exercise / experiment shall be evaluated based on conduct of experiment / exercise and records are 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.

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

*The weighted average shall be converted into 60 marks for internal Assessment.

12.3. Theory Courses with Laboratory Component

If there is a theory course with laboratory component, there shall be two assessments: the first assessment (maximum mark is 100) will be similar to assessment of theory course and the second assessment (maximum mark is 100) will be similar to assessment of laboratory course respectively. The weightage of first assessment shall be 40 % and the second assessment is 60%.

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.

12.4. Mandatory Non-credit Courses

For every Mandatory Non-credit Course there will be two continuous assessments carrying equal marks which include tests, assignments, seminars etc. The total marks obtained in all two assessments put together shall be proportionately reduced for 100 marks and rounded to the nearest integer.

12.5. Project Work

Project work may be allotted to a single student or to a group of students not exceeding 4 per group.

The Head of the department shall constitute a review committee for project work. There shall be three reviews during the semester by the review committee. The student shall make presentation on the progress made by him / her before the committee.

12.5.1. The project work shall be evaluated for a maximum of 100 marks, of which continuous Assessments carry 60 marks and the End Semester Examination (Project report evaluation and Viva- Voce Examination) carries 40 marks. The project report shall be submitted as per the approved guidelines as given by the controller of Examinations. The evaluation of the project reports will carry 10 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 30 marks and marks are awarded to each student of the project group based on the individual performance in the viva-voce examination.

Continuous Assessment (60 marks)			End Semester Examination (40 marks)			
Review I	Review II	Review III	Project Report Evaluation		Viva-Voce	
			Supervisor	External	Internal	External
10	20	30	10	10	10	10

12.6. Mini Project

The Mini Project / Mini Project and Seminar shall carry 100 marks and shall be evaluated through three reviews as continuous assessments. The first and second reviews are to be evaluated by a three member committee constituted by the HOD which includes the supervisor, coordinator and an expert from the Department. At the end of the semester the student shall submit a brief report on the Mini Project. The third review will be conducted based on this report and Viva-Voce Examination conducted by the same committee and the evaluation report shall be sent to Controller of Examinations by the Head of the Department. The Evaluation shall be as:

Review I	Review II	Review III	
		Report	Viva-Voce
25	25	20	30

12.7. Employability Enhancement Courses

12.7.1. 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 2 presentations / demonstration per semester before the evaluation committee and for each presentation / demonstration, marks can be equally apportioned. The three member committee consisting of one co-ordinator and two members appointed by the Head of the Department 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 seminar paper / report (40%),

presentation / demonstration (40%) and response to the questions asked during presentation / demonstration (20%).

12.7.2. The **Industrial / Practical Training, Summer Project, Internship**, shall carry 100 marks and shall be evaluated through internal assessment only. At the end of Industrial / Practical training / internship / Summer Project, the candidate shall submit a certificate from the organization where he / she has undergone training and a brief report. 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 Institution. The certificates (issued by the organization) submitted by the students shall be attached to the mark list sent by the Head of the Department to the Controller of Examinations.

Continuous Assessment (100 Marks)		
Report	**Presentation**	**Viva-Voce**
40	30	30

12.8. Value Added Courses

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 on 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 list of students along with the marks and the grades earned may be forwarded to the Controller of Examinations.

12.9. Online Course

Students may be permitted to credit online courses from SWAYAM/ NPTEL platform with the approval of Department Advisory Committee and the Head of the Department to a maximum of three credits. The credits earned through online mode may be transferred after due approval of the Head of the Institution vide

clause 4.10. The Head of the Department may identify a faculty member as coordinator for the course, who is responsible for the evaluation process.

12.10. Attendance Record

Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD' which consists of attendance marked in each lecture or practical or project work class, the test marks and the record of class work (topic covered), separately for each course. This should be submitted to the Head of the department periodically for checking the syllabus coverage and the records of test marks and attendance. The Head of the department will verify and sign it with date after due verification. At the end of the semester, the record should be verified by the Head of the Institution who will 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 auditing.

12.11. Conduct of Academic Audit By The Department

Every department shall strive for a better performance of the students by conducting the continuous assessments as mentioned in Clause 12 and that is followed by the end semester examination, as the case may be.

The Head of the Department shall arrange to conduct the Academic Audit once in every year for all the courses conducted in the respective semesters through external expert(s) approved by the Principal.

- In order to ensure the above, Academic Audit is to be done for every course taught during the semester.

- For the continuous assessments conducted for each course (as per details provided in Clause 12), the academic records shall be maintained for the activity based evaluation and assessment test question paper and answer script. Report of industrial training / internship shall also be maintained, if applicable. For laboratory courses the students' record and course coordinator's system of evaluation shall be maintained. Further, the attendance of all students shall be maintained as a record.

- The Controller of Examinations shall facilitate the conduct of academic audit process including the end semester examination question paper and answer scripts.

- The academic audit shall include verification of all the academic records pertaining to the Regulation in-force, the attendance and assessment record, CO, PO attainment records, student's and course coordinators feedback of the courses, and the overall teaching-learning process based on Bloom's taxonomy. Action shall be taken by HOD based on audit report for continuous improvement. Academic documents of UG degree programmes should be available with the department for 5 years.

13. PASSING REQUIREMENTS

A student who secures not less than 50% of total marks prescribed for the course [Internal Assessment + End semester University Examinations] with a minimum of 45% of the marks prescribed for the end-semester University Examination, shall be declared to have passed the course and acquired the relevant number of credits. This is applicable for both theory and laboratory courses (including project work).

If a student fails to secure a pass in a theory course / laboratory course, 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.

If a student has submitted the project report but absent in the end semester examination of project work, the student is deemed to be failed. In this case and also if a student attends and fails in the End semester examination of Project work of B.E. / B.Tech, he/she shall attend end semester examination again within 60 days from the date of declaration of the results. The subsequent viva-voce examination will be considered as reappearance with payment of exam fee. In case, the student fails in the subsequent viva-voce examination also, the student shall redo the course again, when offered next.

The passing requirement for the courses which are assessed only through continuous assessment shall be fixed as minimum 50%.

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

For Internship / Industrial Training, the student shall secure a minimum 50% of marks in the continuous assessments.

For Mini Project, a student shall secure a minimum 50% of marks in the continuous assessments through three reviews.

For Seminar, a student shall secure a minimum 50% of marks in continuous assessments.

For 'Industry Oriented Courses', a student shall secure a minimum 50% of marks in continuous assessments.

For 'Skill Development Course' – LIT type (other than Capstone Design Project & IOC), a student shall secure a minimum 45% of marks in the end semester examination and also obtain a minimum 50% marks in total combining both Continuous assessments and End semester examination.

For 'Self-Learning Course', a student shall secure a minimum 50% of marks as per the evaluation processes, prescribed by Institute / Firm / Company offering this SLC. However, in the case of the courses offered by NPTEL / SWAYAM, the student shall secure a minimum 40% of marks. Published result of the SLC obtained from the source of learning shall be submitted to the Head of the Department by the student concerned, after completion of the course. Marks obtained by a student in the SLC shall be converted to an equivalent grade based on the average marks obtained and relative performance of the students in a particular course, taking into consideration of passing requirement. Finalisation of the grade shall be decided in the Academic Council Meeting In the case where grade is awarded to SLC, an equivalent new grade shall be arrived by the Head of the Department concerned, based on the grade point secured by a student.

For 'Off Campus Courses', a student shall submit the result of these courses to the Head of the Department, after successful completion of the course(s), within a week's time from the date of publication of the results. Marks obtained by a student in the course(s) shall be converted to equivalent Grade, adopting the procedure as prescribed. In the case where grade is awarded, a new equivalent grade shall be awarded.

For 'Value Added Courses' offered by Frim/ Company, a student shall secure a minimum 50% marks, as per the evaluation processes, prescribed by the approved Firm / Company offering the VAC. Grade shall be awarded as prescribed/ Credits earned shall not be considered for computation of CGPA.

14. AWARD OF LETTER GRADES

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 (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 shall 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.

For the students who complete the Mandatory Course satisfying attendance requirement, the title of the Mandatory Course will be mentioned in the Grade Sheet as **CS** (Completed Successfully). If the attendance requirement is not satisfied, it will not be shown in the Grade Sheet.

The Completion of the Induction programme shall be printed in the Grade Sheet as **CS** (Completed Successfully).

The grades O, A+, A, B+, B, C obtained in value added courses shall figure in the Grade sheet under the title 'Value Added Courses'. The other grades U, SA will not figure in the grade sheet.

Courses categorised under OCC, SLC and VAC, absolute grading system shall be followed.

The GPA / CGPA is calculated as:

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

Where, C_i is the credit assigned to the course

GP_i is the point corresponding to the grade obtained for each course

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

The Grade Point Average (GPA) for the semester is calculated considering only the courses of curriculum and not the additional courses.

The Cumulative Grade Point Average (CGPA) of all courses registered from first semester onwards considering only the courses of curriculum (not the additional courses). However, for the students who have successfully completed the requirements of B.E. / B. Tech. (Hons) and B.E. / B.Tech. Minor, grades scored in the six additional courses shall be taken into account for the computation of CGPA.

Credits earned under value added courses, shall not be considered for calculating the GPA or CGPA

If a student successfully completes all the requirements of the programme and also meets the requirements of B.E. / B. Tech. (Hons) or B.E. / B. Tech. Minor but desires not to opt for the additional qualification, then he/she has to submit a declaration with regard to the same within 30 days before the completion of semester VIII.

In the consolidated grade sheet the CGPA earned shall be converted into percentage of marks as follows:

$$\text{Percentage of Marks} = \text{CGPA} \times 10$$

15. ELIGIBILITY FOR THE AWARD OF THE DEGREE

The Degrees is awarded as B.E. /B.Tech, B.E /B.Tech Minor with specialization in other discipline and B.E /B.Tech (Hons)

(i) B.E /B.Tech. :

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

- Successfully completed the course requirements, appeared for the End-Semester examinations and passed all the courses 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.

- Successfully passed any additional courses prescribed by the Director, Academic Courses.

- Successfully completed the NSS / NSO / YRC requirements.

- No disciplinary action is pending against the student.

- The award of Degree must have been approved by the Syndicate of the University

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

- The Students should have satisfied as per clauses 15(i).

- The student Should have earned additional courses from a specified group of Professional Electives (vertical) or from any of the verticals of the same programme and earned a minimum of 18 credits.

- Should have passed all the courses prescribed in the curriculum and additional courses in the first attempt.

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

(iii)B.E /B.Tech Minor with specialization in another discipline

- The Students should have satisfied as per clauses 15(i).

- The student should have earned additionally a minimum of 18 Credits in any one of the verticals offered from other Engineering Disciplines / Science and Humanities / Management.

15.1 Students can earn maximum of 6 credits in online mode (SWAYAM platform), out of these 18 credits as approved by Centre for Academic Courses.

15.2 B.E / B.Tech. (Hons.) and B.E./B.Tech. minor with specialisation in another discipline will be optional for students and the students shall be permitted to select any one of them only.

15.3 For B.E. / B.Tech (Honours), the students, including Lateral Entry, shall be permitted to register for the courses from Semester V onwards provided the students have earned a minimum CGPA of 7.50 until Semester III and have cleared all the courses in the first attempt.

15.4 For B.E /B.Tech Minor with specialization in another discipline, the students, including Lateral Entry, will be permitted to register the courses from Semester V onwards provided the marks earned by the students until Semester III is CGPA 7.50 and above.

15.5 B.E/B.Tech. (Hons.) or B.E./ B.Tech. Minor shall be offered by the Department irrespective of the number of students enrolled.

15.6 If a student decided 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 requires 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 and the same shall be indicated in a foot note appropriately. If the student has failed in the additional courses or faced shortage of attendance, they will not be printed in the grade sheet and will not be considered for CGPA calculation and classification of degree.

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

15.8   The student has to enroll for these additional courses separately and pay a tuition fee for studying these six additional courses and pay additional exam fee.

15.9   **Classification of Degree:**

15.9.1 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 of all the courses of all the eight semesters (Six Semesters for Lateral Entry) in the student's first appearance within five years (Four years for Lateral Entry), which includes authorized break of study of one year. Withdrawal from examination (vide Clause 17) will not be considered as an appearance.

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

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

- A student who satisfies norms given in clause 15(ii) and 15(iii) becomes eligible for classification of the degree with B.E./B.Tech. (Hons) and B.E./B.Tech. minor.

    - One Year authorize break of study included in the duration Permitted

- Prevention due to Lack of attendance is not permitted.

- Withdrawal from Writing will not be considered as an attempt.

Degree	Duration of Programme in years	Duration Permitted in years	Additional Credits Required	CGPA	Passed in
B.E / B.Tech	4 / 3 (Regular / Lateral Entry)	5/ 4 (Regular / Lateral Entry)	-	8.5	First Attempt
B.E / B.Tech (Hons)	4 / 3 (Regular / Lateral Entry)	5/ 4 (Regular / Lateral Entry)	18	8.5	First Attempt
B.E / B.Tech minor	4 / 3 (Regular / Lateral Entry)	5/ 4 (Regular / Lateral Entry)	18	8.5	First Attempt

15.9.2 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 of all the courses of all eight semesters (Six Semester for Lateral Entry) within five years (within Four years for Lateral Entry), which includes one year of authorized break of study (if availed) or prevention from writing the End Semester Examination due to lack of attendance (if applicable).

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

- A student who satisfies norms given in clause 15(ii) and 15(iii) becomes eligible for classification of the degree with B.E./B.Tech. (Hons) and B.E./B.Tech. minor.

Degree	Duration of Programme in years	Duration Permitted in years	Additional Credits Required	CGPA	Passed in	Prevention due to Lack of Attendance
B.E / B.Tech	4 / 3 (Regular / Lateral Entry)	5/ 4 (Regular / Lateral Entry)		6.50	-	Included in the duration Permitted
B.E / B.Tech (Honours)	4 / 3	5/ 4	18	7.5	First Attempt	Not Permitted
B.E / B.Tech minor	4 / 3	5/ 4	18	6.5	-	Included in the duration Permitted

- One Year authorize break of study included in the duration Permitted

- Withdrawal from Writing will not be considered as an attempt.

15.9.3 Second Class

Students who pursue B.E./B.Tech. in Regular mode or lateral entry mode or B.E./B.Tech. minor in specialisation of another discipline and who are not covered in clauses 15(ii) and 15(ii) and who qualify for the award of the degree (vide Clause 15) shall be declared to have passed the examination in Second Class.

Students who have earned additional 18 credits but does not satisfy 15(ii) 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 calculation. In such case if the student becomes eligible for First class, while computing CGPA with the professional elective / Open Elective Courses with higher grades, the student shall be awarded B.E. / B.Tech. in First Class only.

16. PHOTO COPY/ REVALUATION

The accuracy of the valuation in the end semester examinations is ensured. However, if a student wishes any clarifications, he/she shall apply for review of the result in any subjects by submitting a challenge review application to office of COE within 7 days from the date of Publication of results. A committee consisting of the Head of the Department, Board Chairman and two subject experts (One External Examiner and One Internal Examiner) will review and give its recommendations to the Controller of Examinations. Review is not permitted for practical courses and for project work.

17. PROVISION FOR WITHDRAWAL FROM END-SEMESTER EXAMINATION

17.1. A student may, for valid reasons, (medically unfit / unexpected family situations / sports approved by Chairman, 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 Controller of Examinations through the Head of the Department and Head of the Institutions with required documents.

17.2. Withdrawal application is valid if the student is otherwise eligible to write the examination (Clause 7) and if it is made within TEN days prior to the commencement of the examination in that course or courses and recommended by the Head of the Institution and approved by the Controller of Examinations.

17.3. Notwithstanding the requirement of mandatory 10 days notice, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case.

17.4. In case of withdrawal from a course / courses (Clause 13) the course will figure both in Marks Sheet as well as in Result Sheet. **Withdrawal essentially requires the student to register for the course/courses** the student has to register for the course, fulfill the attendance requirements (vide clause 7), earn continuous assessment marks and attend the end semester examination. However, withdrawal shall not be construed as an appearance for the eligibility of a candidate for First Class with Distinction.

17.5. Withdrawal is permitted for the end semester examinations in the final semester only if the period of study the student concerned does not exceed as per clause 15.

17.6. If a student applies for withdrawal from Project Work, he/she will be permitted for the withdrawal only if the student has submitted the project report before the deadline. However, the student may appear for the viva-voce examination within 60 days after the declaration of results for Project Work and the same shall not be considered as reappearance

18. PROVISION FOR AUTHORISED BREAK OF STUDY

18.1. A student is permitted to go on break of study for a maximum period of one year as a single spell.

18.2. Break of Study shall be granted only once for valid reasons for a maximum of one year during the entire period of study of the degree programme. However, in extraordinary situation the candidate may apply for additional break of study not exceeding another one year by paying prescribed fee for break of study. If a candidate intends to temporarily discontinue the programme in the middle of the semester for valid reasons, and to rejoin the programme in a subsequent year, permission may be granted based on the merits of the case provided he / she applies to the Head of the Institution in advance, but not later than the last date for registering for the end semester examination of the semester in question, through the Head of the Institution stating the reasons therefore and the probable date of rejoining the programme.

18.3. The candidates 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 Head of the Institution through the Head of the in the prescribed format through Head of the Institution at the beginning of the readmitted semester itself for prescribing additional courses, if any, from any semester of the regulations in-force, so as to bridge the curriculum in-force and the old curriculum.

18.4. The authorized break of study would not be counted towards the duration specified for passing all the courses for the purpose of classification (vide Clause 16).

18.5. The total period for completion of the Programme reckoned from, the commencement of the first semester to which the candidate was admitted shall not exceed the maximum period specified in clause 16.7 irrespective of the period of break of study in order that he/she may be eligible for the award of the degree.

18.6. If any student is prevented for want of required attendance, the period of prevention shall not be considered as authorized 'Break of Study'.

19. DISCIPLINE

19.1. 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 College. The Head of Institution shall constitute a disciplinary committee consisting of Head of Institution, Two Heads of Department of which one should be from the faculty of the student, to enquire into acts of indiscipline and initiate necessary action.

19.2. If a student indulges in malpractice in any of the end semester / internal examination he / she shall be liable for punitive action as prescribed by the college 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 scheme of examinations through the Academic Council.

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