

**SRI KRISHNA COLLEGE OF TECHNOLOGY :: COIMBATORE – 641 042**

**REGULATIONS 2022**

**CHOICE BASED CREDIT SYSTEM**

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

**(For the students admitted to B.E. / B.Tech. Programme from the  
Academic year 2022 - 2023 onwards)**

**1. PRELIMINARY DEFINITIONS AND NOMENCLATURE**

**In this Regulation, unless the context otherwise specifies:**

- I. “Programme”** means Degree Programme (i.e.) B.E. / B.Tech. Degree Programme.
- II. “Branch”** means Discipline or Specialization of B.E. / B.Tech. Degree Programme, like Civil Engineering, Information Technology, etc.,
- III. “Course”** means a Theory, Theory with Practical and Practical courses etc., that is normally studied in a semester, like Mathematics, Physics, Engineering Graphics, etc.,
- IV. “Head of the Institution”** means the Principal of the College who is responsible for all academic activities of the College and for the implementation of relevant rules and regulations.
- V. “Controller of Examinations”** means the Authority of the College who is responsible for all examination activities of the College.
- VI. “Head of the Department”** means Head of the Department concerned.
- VII. “Chairman / BoS”** means Head of the Department concerned.
- VIII. “University”** means the affiliating university, viz., ANNA UNIVERSITY, CHENNAI.

**2. ADMISSION PROCEDURE**

2.1 Students seeking admission to the first semester of the eight semester B.E. / B.Tech. Degree Programme:

Should have passed the Higher Secondary Examination of (10 + 2) Curriculum (Academic Stream) prescribed by the Government of Tamil Nadu with Mathematics, Physics and Chemistry as three of the four subjects of study under Part-III or any examination of any other University or authority accepted by the Syndicate of Anna University as equivalent thereto.

**(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, Tamil Nadu or its equivalent are eligible to apply for Lateral entry admission to the third semester of B.E. / B. Tech. as per the rules fixed by Government of Tamil Nadu.

**(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 College.

## 3. PROGRAMMES OFFERED

The following are the branches of study under B.E. / B.Tech. degree programme.

Bachelor of Engineering	Civil Engineering
	Computer Science and Engineering
	Computer Science and Engineering (Artificial Intelligence and Machine Learning)
	Computer Science and Engineering (Cyber Security)
	Computer Science and Engineering (Internet of Things)
	Electronics and Communication Engineering
	Electrical and Electronics Engineering
	Mechanical Engineering
	Bachelor of Technology
	Information Technology

## 4. STRUCTURE OF THE PROGRAMMES

### 4.1 Categorization of Courses

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

- i. **Humanities, Social Sciences and Management Courses (HSMC)** includes Professional English, Communication skills etc.
- ii. **Basic Sciences Courses (BSC)** includes Mathematics, Physics, Chemistry, Biology etc.

- iii. **Engineering Science Courses (ESC)** includes Engineering Practices, Engineering Graphics, Basics of Civil / Mechanical / Electrical / Electronics / Computer Science 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 the courses offered by a branch to other branches, from the list specified in the respective curriculum of the B.E / B.Tech. Programme.
- vii. **Emerging Elective Courses (EEC)** includes the recent or advanced topics in thrust areas.
- viii. **Employability Enhancement Courses** includes project work, seminar and internship in industry or elsewhere
- ix. **Mandatory Courses (MC)** includes the courses such as languages, wellbeing etc.

The recommended credit range for each programme is 160 – 168. (as per clause 22) and each course may have credits assigned as per clause 4.3.

#### 4.2. Personality and Character Development Activity Points for Award of Degree

Apart from technical knowledge and skills, to be successful as professional, students should have excellent soft skills, leadership qualities and team spirit. They should have entrepreneurial capabilities and societal commitment

Every regular student, who is admitted to the 4 years Degree programme, is required to earn 100 Activity Points in addition to the required academic grades. For students entering 4 years Degree programme through lateral entry are required to earn 75 Activity Points, in addition to the academic grades, for getting 4 years' degree program.

These activities will be coordinated by NSS/NCC/YRC/Sports Coordinator of the Institute. The student will be provided a certificate from the concerned coordinator and Head of the Institution.

Every student is required to prepare a file containing documentary proofs of activities, done by him/ her. This file will be duly verified by the concerned evaluator. The student should earn at least 100 activity points before he/ she appears for his/ her Eighth semester

The student shall be permitted to do these activities anytime during the semester weekends and holidays, as per the interest and convenience of the student from the year of entry to the programme. However, minimum hours specified must be satisfied.

Activity Points (non-credit) have no effect on SGPA/CGPA and shall not be considered for the classification of the degree.

The Activity Points earned shall be reflected on the students eighth semester grade sheet. In case students fail to earn the prescribed activity points, eighth semester grade sheet shall be issued only after earning the required activity points. Students shall be admitted for the award of degree only after the release of the eighth semester grade sheet.

**Following suggestive activities may be carried out by students in teams as per their choice:**

Sl.No.	Activity Head	Minimum duration		Maximum points/ activity
		Weeks	Hours	
1	Helping local schools to achieve good result and enhance their enrolment in Higher / Technical / Vocational education.	2	80 – 90	20
2	Preparing an actionable business proposal for enhancing the village income.	2	80 – 90	20
3	Developing Sustainable Water management system.	2	80 – 90	20
4	Tourism promotion through innovative approaches.	2	80 – 90	20
5	Promotion of appropriate technologies.	2	80 – 90	20
6	Reduction in energy consumption.	2	80 – 90	20
7	To skill rural population.	2	80 – 90	20
8	Facilitating 100% digitized money transactions.	2	80 – 90	20
9	Setting of the information imparting club for women leading to contribution in social and economic issues.	2	80 – 90	20
10	Developing and managing efficient garbage disposable system.	2	80 – 90	20
11	To assist the marketing of rural produce.	2	80 – 90	20
12	Food preservation/ packaging.	2	80 – 90	20
13	Automation of local activities.	2	80 – 90	20
14	Spreading public awareness under rural outreach programme.	2	80 - 90	20
15	Contribution to any national level initiative of Government of India. For e.g. Digital India, Skill India, Swachh Bharat Internship etc.	2	80 - 90	20
16	NCC/NSS/YRC	2	80 - 90	20

#### 4.3. Credit Assignment

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

<b>Contact hours per week</b>	<b>Credits</b>
1 Lecture hour / 1 Tutorial hour	1
2 Practical hours (Practical / Seminar / Project Work / etc.)	1

#### 4.4 Industrial Training / Internship

4.4.1 The students may undergo Industrial training for a period as specified in the Curriculum during the summer / winter vacation. They may undergo industrial training / internship at an Industry after due approval from the Head of the Institution. However, the students have to complete the industrial training / internship before the commencement of VII semester. The attendance certificate and completion certificate obtained from the industry shall be submitted to the CoE office within 5 working days from the commencement of VII semester. The credits earned shall be reflected on the student's VII semester grade sheet.

4.4.2 The student may undergo Internship optionally and the credits earned will be indicated in the Grade Sheet. They may undergo internship at a Research organization / University / Industry (after due approval from the Head of the Institution). If the student earns three credits in Internship, the student become eligible for waiver of one Professional / Open / Emerging Elective. In such cases, Industrial training / Internship need to be undergone continuously or with a combination one two weeks and one four weeks from one/two organisations. However, students shall become eligible for waiver of one such course during the entire duration of study. If the number of credits earned is 1 or 2, the credits will be indicated as additional credits and shall not be considered for classification of the degree. In both cases the attendance certificate and completion certificate obtained from the industry shall be submitted to the CoE office. The student is allowed to undergo a maximum of 6 weeks of Internship during the entire duration of study.

<b>DURATION OF INTERNSHIP</b>	<b>CREDITS</b>
2 Weeks	1
4 Weeks	2
6 Weeks	3

**\*1 Week = 40 Internship Hours**

#### 4.5 Industry Offered / Value added Courses

Students can opt for Industry Offered / Value added Courses which will be offered by experts from industry/Institution collaborated with industry, subject to the approval by the Head of the institution. There will not be any End Semester Examination for industry offered / value added courses. Students shall complete such courses during the semester from III to VII as and when the courses are offered by the department. If the student earns three credits in industry offered / value added courses the student shall become eligible for waiver of one Professional /Open / Emerging Elective. However, students shall become eligible for waiver of one such course during the entire duration of study. If the number of credits earned is 1 or 2, the credits will be indicated as additional credits and shall not be considered for SGPA/CGPA calculation.

<b>DURATION OF INDUSTRY OFFERED / VALUE ADDED COURSES</b>	<b>CREDITS</b>
15 Hours	1
30 Hours	2
45 Hours	3

#### 4.6 Self –Study Course

Students shall apply for a self-study course with appropriate recommendation of the course coordinator and the Head of the Department with the due approval from the Head of the Institution. Normally, no formal lectures will be held for a self-study course. The course coordinator will hold continuous assessment process. However, the students those who have secured CGPA of greater than or equal to 7.5 and without history of arrears until 4<sup>th</sup> semester are eligible to carry out such course. Moreover, the students can opt one such theory course during VI and VII semesters.

#### 4.7 SWAYAM / MOOC Courses

Students may be permitted to undergo SWAYAM/MOOC courses with the approval of the Head of the Department concerned and the Head of the Institution. Credits earned through SWAYAM/MOOC (which are provided with certificate) after due approval shall be considered for the following categories.

##### 4.7.1 Transfer of credits

Credits earned through SWAYAM/MOOC courses are eligible for transfer of credits provided it is similar/equivalent to the course for which transfer is requested, however it cannot be claimed elsewhere and is restricted to one such course per semester from second semester onwards.

##### 4.7.2 Waiver of Open Elective

Credits earned through SWAYAM/MOOC courses are eligible for waiver of Open Elective, provided if it hadn't been claimed elsewhere however it is restricted to one such course per semester. The waiver of Open Elective/ Emerging Elective will be considered for every three credits earned.

If the credits earned for such courses are

- a. Greater than the credits mentioned in the curriculum only the credits in the curriculum shall be considered and the extra credit earned will not be considered for additional credits.
- b. Less than the credits mentioned in the curriculum, it will not be considered for credit transfer or waiver, however it shall be considered as additional credits

#### 4.8 Induction Programme

- 4.8.1 Induction programme is mandatory for the students pursuing the under graduate programme.
- 4.8.2 List of students who have successfully completed the induction programme shall be certified by the Head of the Institution.
- 4.8.3 Completion of the Induction programme shall be printed in the Grade sheet as "Completed".
- 4.8.4 In case of student who have got admitted later and those who have not attended the Induction programme at the time of joining the degree programme, it shall be conducted later and on completion, it shall be recorded in the grade sheet.

#### 4.9 Mandatory Courses

The student shall study the mandatory courses mentioned in the curriculum and the grades will be mentioned in the grade sheet. However, it will not be considered for computation of CGPA.

#### 4.10 Additional credits

A student has to earn the total number of credits specified in the curriculum of the respective programme of study in order to be eligible to obtain the degree. However, if the student wishes, he/she is permitted to earn more than the total number of credits as additional credits. These credits will not be considered for SGPA/CGPA calculations.

- |     |   |  |
|-----|---|--|
| i   | Each Publication (Scopus/SCI)   | : one credit                                       |
| ii  | SWAYAM/ MOOC courses  | :as recommended by SWAYAM / MOOC as per clause 4.7 |
| iii | Industrial Training / Internship  | : As per clause 4.4.2                              |
| iv  | Industry Offered / Value added courses  | : As per clause 4.5                                |
| v   | Winners in National / International level hardware / Software contest organized by Government organization or | :One credit  |
| vi  | Fortune 500 companies   |  |

4.11. Medium of Instruction

The medium of instruction is English for all courses, examinations, seminar presentations and project reports except for the courses offered in Tamil.

4.12. B.E. / B.Tech. (Hons.) and B.E. / B.Tech. minor with specialisation in other discipline

**(i) B.E. / B.Tech. (Hons.)**

- a. The students should have taken 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.
- b. Should have passed all the courses prescribed in the curriculum and additional courses in the first attempt.
- c. Should have earned a minimum of 7.50 CGPA taking into account of all the courses prescribed in the curriculum and additional courses.

**(ii) B.E. / B.Tech. minor with specialisation in other discipline**

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

4.12.1 For these 18 credits students can optionally enroll and study a maximum of 6 credits in online mode from SWAYAM- NPTEL platform as approved by the Head of the Department and Head of the Institution.

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

4.12.3 **For the categories 4.12 (i)**, the students, including lateral entry, shall be permitted to register the courses from Semester V onwards provided the marks earned by the students until Semester III should be of CGPA 7.50 (and above) and cleared all the courses in the first attempt.

4.12.4 **For the category 4.12 (ii)**, the students, including lateral entry, shall be permitted to register the courses from Semester V onwards provided the marks earned by the students until Semester III should be of CGPA 7.50 (and above).

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



- 4.12.6 If a student decides not to opt for Hons., after completing certain number of additional courses, the additional courses studied shall be considered instead of the Professional Elective courses which are part of the curriculum. If the student has studied more number of such courses than the number of Professional Elective courses required as per the curriculum, the courses with higher grades shall be considered for the calculation of CGPA. Remaining courses shall be printed in the mark sheet, however, they will not be considered for calculation of CGPA and the same shall be indicated in a foot note appropriately.
- 4.12.7 If a student decides not to opt for Minor, after completing certain number of courses, the additional courses studied shall be considered instead of Open Elective courses which are part of the curriculum. If the student has studied more number of such courses than the number of open electives required as per the curriculum, the courses with higher grades shall be considered for calculation of CGPA. Remaining courses shall be printed in the mark sheet, however, they will not be considered for calculation of CGPA and the same shall be indicated in a foot note appropriately.
- 4.12.8 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.

## **5. DURATION OF THE PROGRAMMES**

- 5.1 A student is normally expected to complete the B.E. / B.Tech. programme in 4 academic years (8 Semesters), but in any case, not more than 7 academic years (14 Semesters) for HSC (or equivalent) candidates. Lateral Entry (or equivalent) candidates are expected to complete the programme in 3 academic years (6 Semesters), but in any case, not more than 6 academic years (12 Semesters).
- 5.2 Each semester shall normally consist of 90 working days (including examination days). The Head of the Department shall ensure that every teacher imparts instruction as per the number of periods specified in the syllabus, covering the full content of the syllabus for the course being taught.
- 5.3 The total duration for completion of the programme reckoned from the commencement of the first semester to which the student was admitted shall not exceed the maximum duration specified in clause 5.1, irrespective of the period of break of study (vide clause 18), or prevention (vide clause 7.4), in order that the student may be eligible for the award of the degree (vide clause 16).

## **6. COURSE ENROLLMENT AND REGISTRATION**

- 6.1 Each student, on admission, shall be assigned to a Class Advisor (vide clause 8), who shall advise and counsel the student about the details of the academic programme and the choice of courses, considering the student's academic background and career objectives.

- 6.2 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
- 6.2.1 Each student on admission shall register for **all the courses prescribed in the curriculum** of the student's **first semester of study**.
- 6.2.2 The enrollment for all the courses from 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 student's faculty advisor. If the student wishes, the student may drop or add courses (vide clause 6.3) within 5 working days after the commencement of the concerned semester and complete the registration process duly authorized by the Head of the department and head of the institution. Number of students opting an elective course should not be less than 30 for departments with triple intake and 15 for departments with double and single intake. However, the minimum number is not applicable for students enrolling B.E. / B. Tech. (Hons) and B.E. / B. Tech. Minor.
- 6.3 Flexible to Add or Drop Courses
- 6.3.1 A student has to earn the total number of credits specified in the curriculum of the respective programme of study in order to be eligible to obtain the degree. However, if the student wishes, 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.
- 6.3.2 From the second to final semesters, the student has the option of dropping existing courses in a semester during registration. Total number of credits of such courses shall not exceed 6 per semester. The student is permitted to drop the course(s) within 5 working days of the commencement of the academic schedule
- 6.3.3 From the V to VIII semesters, the student has the option of registering for additional courses in a semester.
- 6.3.4 With regard to enrolling for B.E. / B. Tech. (Hons) or B.E. / B. Tech. Minor. The total number of credits that a student can add in a semester is limited to 6, subject to a maximum of 2 courses. Maximum number of credits enrolled in a semester (Honours and Minor) shall not exceed 36. The online courses registered for B.E. / B. Tech. (Hons.) and B.E. / B. Tech. minor shall be over and above this 36 credits.

## **7. ATTENDANCE REQUIREMENTS FOR APPEARING THE END SEMESTER EXAMINATION**

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 the end semester examination.

- 7.1. 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 students are expected to attend at least 75% of the classes. Therefore, he/she shall secure not less than 75% attendance (after rounding off to the nearest integer) of overall attendance.
- 7.2. If a student secures attendance between 65% and less than 75% 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 / Technical events, with prior permission from the Head of the Institution through 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 current end semester examination subject to the condition that the candidate shall submit the medical certificate / sports participation certificate. The same shall be forwarded to the Controller of Examinations for record purposes. In all such cases, the students should submit the required documents on joining after the absence to the Head of the Department through the Faculty Advisor.
- 7.3. A student shall normally be permitted to appear for the end semester examination if the student has satisfied the attendance requirements (vide Clause 7.1 – 7.2) and has registered for the examination 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 will not be permitted to write the end semester examination and not permitted to move to the next semester. They are required to repeat the incomplete semester in the next academic year subject to the approval of Directorate of Technical Education.
- 7.5. 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 in that course by paying the prescribed fee.
- 7.6. The student permitted to re-join 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 re-joining. The students re-joining in new Regulations shall register for additional courses, if any, as notified by the Head of the department under change of Regulations. These courses may be from any of the semesters of the curriculum in force, so as to bridge the curriculum in force and the old

curriculum. In such cases, the total number of credits to be earned by the student may be more than or equal to the total number of credits prescribed in the curriculum in force.

- 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. CLASS ADVISOR**

To help the students in planning their courses of study and for general advice on the academic programme, the Head of the Department will attach a certain number of students to a teacher of the Department, who shall function as Class Advisor for those students throughout their period of study. The Class 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 Class Advisor may also discuss with or inform the parents about the progress / performance of the students concerned.

The responsibilities of the class 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 enrollment 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 and co-curricular records of the students.

## **9. VARIOUS COMMITTEES**

### **9.1 Class Committee**

9.1.1 Every class shall have a class committee consisting of teachers of the class concerned, student representatives and a chairperson who is not teaching the class. It is like the 'Quality Circle' (more commonly used in industries) with the overall goal of improving the teaching- learning process. The functions of the class committee include.

- Solving problems experienced by students in the class room and in the laboratories.
- Clarifying the regulations of the degree programme and the details of rules therein particularly (clause 5 and 7).

- Informing the student representatives, the academic schedule including the dates of assessments and the syllabus coverage for each assessment.
- 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.
- Analyzing the performance of the students of the class after each test and finding the ways and means of solving problems, if any.
- Identifying the weak students, if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such weak students.

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.

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

9.1.3 At least 4 student representatives (usually 2 boys and 2 girls) shall be included in the class committee

9.1.4 The Chairperson of the class committee may invite the Class advisor(s) and the Head of the Department to the class committee meeting.

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

9.1.6 The Chairperson is required to prepare the minutes of every meeting, submit the same to Head of the Institution within two working 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.

9.1.7 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 subsequent meetings may be held (one before the first assessment and the other before the second assessment) in a semester. **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.

## 9.2 Course Committee for common courses

Each common theory/theory with practical 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 'Course committee' shall be held within five days from the date of formation of the committee. The nature and weightage of the continuous assessments shall be decided in the first meeting, to arrive at a common scheme of evaluation for the assessment and shall ensure a uniform evaluation of the assessment. Wherever feasible, the course committee may also prepare a common question paper for the internal assessment within the framework of the Regulations. Two or three subsequent meetings in a semester may be held at suitable intervals.

## 10. SYSTEM OF EXAMINATION

10.1 Performance in each course of study shall be evaluated based on (i) continuous internal assessment throughout the semester and (ii) End examination at the end of the semester.

10.2 Each course, theory, theory with practical and practical (including project work & viva voce examinations) shall be evaluated for a maximum of **100 marks**.

10.2.1 For all theory courses, the continuous internal assessment will carry **40 marks** while the End Semester examination will carry **60 marks**.

10.2.2 For all theory with practical courses, the continuous internal assessment will carry **50 marks** while the End Semester examination will carry **50 marks**. Separate End semester examination for theory and practical will be conducted for 100 marks each

10.2.3 For all practical courses, the continuous internal assessment will carry **60 marks** while the End Semester examination will carry **40 marks**.

10.2.4 The continuous internal assessment for the project work will carry **60 marks** while the End Semester examination will carry **40 marks**.

10.3 Industrial Training and Internship shall carry 100 marks and shall be evaluated through internal assessment only.

10.4 The end semester examination for Project Work shall consist of evaluation of the final report submitted by the student or students of the project group (of not exceeding 4 students) by an external examiner and an internal examiner, followed by a viva-voce examination conducted separately for each student by

a committee consisting of the external examiner, the guide of the project group and an internal examiner.

- 10.5 For the end semester examination of practical courses including Project Work, the internal and external examiners shall be appointed by the Controller of Examinations.

## 11. PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

### 11.1 Assessment for Theory/Theory with Practical Courses

For theory courses out of 100 marks, the maximum marks for continuous assessment is 40 and the end semester examination carries 60 marks. For theory with practical courses out of 100 marks, 50 marks are assigned for continuous assessment and end semester examination shall carry 50 marks.

**Theory Courses:** Continuous assessment for theory courses comprises of two assessments. The assessment comprises of internal component and written test each having a weightage of 40% and 60% respectively as per the table given below. The internal component may be based on capstone model assessments. The total internal assessment marks of 200 shall be converted into a maximum of 40 marks and rounded to the nearest integer.

Assessment	Details of Assessment Parameters	Mark Conversion	Total	Internal Mark
Assessment I	Internal Component	40	100	40
	CIA test 1	60		
Assessment II	Internal Component	40	100	
	CIA test 2	60		

**Theory with Practical Courses:** Weightage of internal assessment and end semester examination marks will be 50% and 50%, respectively. The distribution of marks for the theory and laboratory components in the internal and end semester examination for different type of courses are provided in the table.

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

The following table shows evaluation methods of theory and laboratory components of theory with practical courses. The weighted average shall be

converted into 50 marks for internal assessment and rounded to the nearest integer.

Assessment	Details of Assessment Parameters	Mark Conversion	Total Marks	Internal Assessment
Assessment I Theory	CIA test 1	60	100	50
	Internal Component	40		
	CIA test 2	60		
	Internal Component	40		
Assessment II Laboratory	Lab Experiments	75	100	
	Model exam	25		

### 11.2 Assessment for Practical Courses

For Practical Courses out of 100 marks, 60 marks are assigned for Continuous Assessment and End Semester Examination shall carry 40 marks. Every practical exercise/ experiment shall be evaluated based on conduct of experiment / exercise. The criteria for arriving at the continuous assessment marks of 60 is as follows: 75 % of marks shall be awarded for successful completion of all the prescribed experiments done in the practical based on assessment through rubrics and 25 % of marks for Model laboratory. The total mark shall be reduced to 60 and rounded to the nearest integer.

Assessment	Details of Assessment Parameters	Max. Mark Allocation	Mark Conversion	Total	Internal Mark
I	Lab Experiments	100 marks per experiment	75	100	60
	Model lab	100	25		

### 11.3 Assessment for Mini Project/Project Work:

The evaluation of Mini Project/ Project work for Phase-I and Phase-II shall be done independently in the respective semester and marks shall be allotted as per the weightage given in the Table below. For Mini Project/Project work out of 100 marks, the maximum marks for Continuous Assessment is 60 and the End Semester Examinations carries 40 marks. Project work may be assigned to a single student or to a group of students not exceeding four in a group.



There shall be three reviews (each 100 marks) during the semester by a review committee. The student shall make presentation on the progress made before the review committee constituted by the Head of the Department. There shall be a minimum of three members in the review committee. The project guide will be one of the members of the Review Committee. The total marks obtained in the three reviews shall be reduced to 60 marks rounded to the nearest integer.

The student(s) is/are expected to submit the project report on or before the last working day of the semester. The End Semester Examination for Mini Project/Project Work shall consist of evaluation of the final project report submitted by the student(s) of the project group by an external examiner followed by a vivavoce examination conducted separately for each student by a committee consisting of the external examiner, the guide of the project group and an internal examiner. The Controller of Examinations shall appoint Internal and External Examiners for the End Semester Examinations of the Mini Project/ Project Work.

Details of Assessment Parameters		Mark Conversion	Mark
<b>Continuous Internal Assessment</b>			
Review 1		20	60
Review 2		20	
Review 3		20	
<b>End Semester Examination</b>			
Project Report	External Examiner	10	40
Viva Voce	Internal Examiner	10	
	External Examiner	10	
	Project Guide	10	

If the project report is not submitted on or before the specified deadline, an extension of time up to a maximum limit of 7 days may be given for the submission of project report with due approval obtained from the Head of the Department. If the project report is not submitted even beyond the extended time, then the student(s) is deemed to have failed in the Mini Project/Project Work. The failed student(s) shall register for the same Mini Project/Project Work in the subsequent semester and repeat the Mini Project/Project Work again.

#### 11.4 Assessment for Industrial Training / Internship / Self Study /SWAYAM /MOOC / Industry offered courses/ value added courses/ Mandatory Courses

11.4.1 Industrial Training / Internship: The course shall be evaluated by the industry where the student undergone training / intern and viva voce at the concern department. The completion of course, credits earned and the relevant equivalence of the course shall be ensured and approved

by the committee constituted by the Head of the Department and should be forwarded to the Controller of Examinations after getting due approval from the Head of the Institution.

- 11.4.2 Self-Study Course: In case of Self Study Course, the course shall be evaluated through End Semester Examination only. The evaluation methodology for the End Semester Examination shall be the same as that of a theory course (vide clause 11.1).
- 11.4.3 SWAYAM/MOOC Course: For SWAYAM/MOOC courses, the credit allocation may be based on duration/nature of course with equivalent to SWAYAM / MOOC courses. The credits earned through such SWAYAM/ MOOC courses shall be considered as per clause 4.7. The completion of course, credits earned and the relevant equivalence of the course shall be ensured and approved by the committee constituted by the Head of the Department and should be forwarded to the Controller of Examinations after getting due approval from the Head of the Institution.
- 11.4.4 Industry offered / Value added Courses: Industry offered / Value added Courses shall carry 100 marks and shall be evaluated through continuous assessments only. A committee consisting of the Head of the Department, staff handling the course/ Industry expert and a senior faculty member nominated by the Head of the Institution shall do the evaluation process. The list of students along with the marks and the grades earned approved by the head of the institution shall be forwarded to the Controller of Examinations at least one month before the commencement of End Semester Examinations.
- 11.4.5 Mandatory Induction Programme & Mandatory Course: The mandatory three-week induction programme shall not carry any marks but to be successfully completed by all students. Other Mandatory course will be evaluated for 100 marks through internal mode. The Head of the Department shall identify and appoint a senior faculty member as the coordinator for the course. The completion of course shall be ensured by coordinator and forwarded by Head of the Department to Controller of Examinations after getting due approval from the Head of the Institution.
- 11.5 Internal marks approved by the Head of the Institution shall be displayed by the respective Head of the Department within 5 Days from the last working day.
- 11.6 Every faculty member is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD' for every semester which consists of attendance marked in each Theory/Theory with Practical / Practical / Project, the assessment marks and the record of class work (topics covered), separately for each course handled by the faculty member. This should be submitted to the Head of the Department periodically 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 audit.

## **12. REQUIREMENTS FOR APPEARING IN END SEMESTER EXAMINATIONS**

- 12.1 A student shall normally be permitted to appear for the End Semester Examinations of the current semester if he/she has satisfied the semester completion requirements as per clause 7.
- 12.2 Further, registration in the End Semester Examinations is mandatory for all the courses of the current semester, Reappearance course(s) and additional course opted Honors and Minor degree. Failing which the student will not be permitted to move to the next higher semester.
- 12.3 In the case of examination in project work, Mini-projects and project (Phase I and II), no student will be permitted to appear in the project work examination unless he /she has satisfied the requirements (vide clause 11.3).

## **13. PASSING A COURSE**

- 13.1 A Student who secures grade point of 5 or more in any course of study will be declared to have passed that course, provided a minimum of 45% is secured in the End Semester Examination of that course of study. The passing requirements for the courses which are assessed only through continuous assessment is 50% of the continuous assessment marks only.
- 13.2 A student, who absents or withdraws or is disqualified as per clause 7.1 or who secures a letter grade U (Re-appearance - Grade point 0) in End Semester Examination in any course carrying continuous assessment and final examination marks, will retain the already earned continuous assessment marks for the next immediate appearance only in the examination of that course and thereafter he/she will solely be assessed by the End Semester Examination carrying the entire marks of that course. In that case, the marks scored by a student in End Semester examinations will be given full weightage and will alone be considered for awarding Grades.
- 13.3 A student, who absents or secures a letter grade U (Re-appearance - Grade point 0) in any course carrying only continuous assessment marks, will solely be examined subsequently for the entire marks of that course through final assessment conducted by a committee constituted by Head of the Department.
- 13.4 If a student fails to submit the report on project work on or before the date specified by the college / department, he/she is deemed to have failed in the project work and will be awarded grade U.
- 13.5 A student who lacks in attendance or who fails to submit the report on the VII and VIII semester project (or whose report is not accepted for reasons of

incompleteness or other serious deficiencies) within the prescribed date or whose project work and viva-voce has been assessed as grade U will have to register for the project at the beginning of a subsequent semester following the current semester, redo, and submit the project report at the end of that semester. Continuous Assessment marks earned earlier for the project will be discarded.

13.6 If a student fails to appear for the viva-voce examination after submitting the report on project work on the date specified by the college / department, he/she will be marked as absent for the project work. Such students will be allowed to appear for the viva-**voce** examination at the next earliest opportunity, the project being evaluated at that time. Continuous Assessment marks earned earlier for the project will be considered.

#### 13.7 Provision for Rechecking and Revaluation of Answer Paper

When the semester results are published and in case any candidate feels aggrieved, he / she can request for rechecking of answer scripts of the respective semester examinations. The candidate is also required to pay a nominal fee, as prescribed by Controller of Examinations office, for rechecking of the answer sheet. The candidate has to submit a request to the Head of the Institution within a week from the publication of the results. After rechecking the answer scripts, if a student feels that he is deserved for a different grade other than what he has been awarded, he can apply for revaluation by paying the prescribed fee. When the revaluation is completed the result will be published. Revaluation will be allowed only for theory courses. Revaluation is not permitted for practical courses, Industrial practices and for project work.

#### 13.8 Retaining Period for Evaluated Answer Scripts

The answer scripts of a student which are evaluated for awarding grades shall be retained by office of Controller of Examinations for a period of one year from the date of publishing the End Semester results. After the mentioned period, any claim by the students related to answer scripts shall not be considered for any further action.

### **14. AWARD OF LETTER GRADES**

14.1 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 (U) shall be awarded as shown in the below table.

For a given course, if the student's strength is greater than 30, the relative grading method shall be adopted. However, if the student's strength is less than or equal to 30, also for project work/Internship and Laboratory courses the absolute grading shall be followed with the grade range as specified below.

O	A+	A	B+	B	C	U
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
U (Re-appearance)	0
W (Withdrawal)	0
AB (Absent)	0

“U” denotes Reappearance registration is required for that particular course.  
“W” indicates withdrawal from the course.

14.2 The grades O, A+, A, B+, B obtained for the one/two credit course shall figure in the grade sheet under the title ‘**Additional Credit Courses**’. The other grades **U, AB will not figure in the grade sheet.**

## 15. GRADE SHEETS

After the publication of the results, each student will be issued individual grade sheet for each Semester containing the following information:

- 15.1 The list of courses enrolled during the semester and the grade awarded.
- 15.2 List of courses studied for Hons., minor and any other additional courses in which the student has passed with the grades under the title additional courses
- 15.3 The Grade Point Average (GPA) for the semester considering only the courses of curriculum (not the additional courses) and
- 15.4 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 vide Clause 4.12, grades scored in the six additional courses shall be taken into account for the computation of CGPA.

## 15.5 Credits enrolled and credits earned up to the current semester.

Computation GPA/CGPA to be done by dividing the sum of Credit Point of all Courses by the total number of credits registered in a semester, leading finally to CGPA for evaluating student's performance at the end of two or more semesters cumulatively.

**Formula for GPA & CGPA**

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

Where,

$C_i$  - is the Credit assigned to the  $i$ th subject

$GP_i$  – is the Grade point corresponding to the grade in  $i$ th subject. (Refer Table Above)

$n$  – is the number of subjects registered during the particular semester in the case of SGPA and during all the semester in the case of CGPA

CGPA will be calculated in a similar manner, considering all the subjects registered from first semester. "U" grade will be excluded for calculating GPA and CGPA.

**Formula for calculating percentage of marks as follows:**

$$\text{Percentage of mark} = \text{CGPA} * 10$$

15.6 If a student studies more number of professional and open electives than required as per the student's programme curriculum, the calculation of final CGPA shall be as per 4.12.6 and 4.12.7.

15.7 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 30 days before the completion of semester VIII.

**16. ELIGIBILITY FOR THE AWARD OF DEGREE**

16.1 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 courses prescribed in all the 8 semesters within a maximum period of 7 years (6 years for lateral entry) reckoned from the commencement of the first semester to which the candidate was admitted.
- iii. Successfully passed any additional courses prescribed by the Head of the Institution based on curriculum and syllabi of the specific programme whenever readmitted under regulations other than R- 2022 (vide clause 7.4 and 18.4).
- iv. Successfully completed the requirements vide clause 4.2, 4.8 and 4.9
- v. No disciplinary action pending against the student.

## 16.2 Classification of the Degree Awarded

### 16.2.1 First Class with Distinction:

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

- 16.2.1.1 Should have passed the examination in all the courses of all the eight semesters in the student's **First Appearance** within **five** years (**four** years in case of lateral entry), which includes authorized break of study of one year. **Withdrawal from examination** (vide Clause 17) will not be considered as an appearance.
- 16.2.1.2 Should have secured a CGPA of not less than **8.50**
- 16.2.1.3 Should not have been prevented from writing End Semester Examinations due to lack of attendance in any of the courses.
- 16.2.1.4 A student who satisfies norms given in clause 4.12 becomes eligible for classification of the degree with B.E./B.Tech. (Hons) and B.E./B.Tech. minor. Details as Provided in below table

Degree (i)	Duration of programme (ii)	Duration permitted (iii)	Additional credits above the requirement of curriculum (iv)	CGPA (v)	Pass in (vi)	Break of study (vii)	Prevention to write end semester examination (viii)	Withdrawal from writing end semester examination (ix)
B.E./ B.Tech. (Regular)	4 years	5 years	-	8.5	First attempt	One year authorised break of study included in the Duration permitted (iii)	Not permitted	Will not be considered as an attempt
B.E./ B.Tech. Lateral Entry	3 years	4 years	-	8.5	First attempt	One year authorised break of study included in the Duration permitted (iii)	Not permitted	Will not be considered as an attempt
B.E./ B.Tech. (Hons)	3/4 years (Lateral entry/ Regular)	4/5 years (Lateral entry/ Regular)	18 credits from one or more than one verticals of the same programme	8.5	First attempt	One year authorised break of study included in the Duration permitted (iii)	Not permitted	Will not be considered as an attempt
B.E./ B.Tech. minor	3/4 years (Lateral entry/ Regular)	4/5 years (Lateral entry/ Regular)	18 credits from any one vertical of the other programme	8.5	First attempt	One year authorised break of study included in the Duration permitted (iii)	Not permitted	Will not be considered as an attempt

### 16.2.2 First Class

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

16.2.2.1 Should have passed the examination in all the courses of all eight semesters within five years (four years in case of lateral entry), which includes one year of authorized break of study (if availed) or prevention from writing the End Semester Examinations due to lack of attendance (if applicable).



16.2.2.2 Should have secured a CGPA of not less than **6.50**

16.2.2.3 A student who satisfies norms given in clause 4.12 becomes eligible for classification of the degree with B.E./B.Tech. (Honours) and B.E./B.Tech. minor. Details are provided in below table

Degree (i)	Duration of programme (ii)	Duration permitted (iii)	Additional credits above the requirement of curriculum (iv)	CGPA (v)	Pass in (vi)	Break of study (vii)	Prevention to write end semester examination (viii)	Withdrawal from writing end semester examination (ix)
B.E./ B.Tech. (Regular)	4 years	5 years	-	6.5	-	One year authorised break of study included in the Duration permitted (iii)	Included in the Duration permitted (iii)	-
B.E./ B.Tech. Lateral Entry	3 years	4 years	-	6.5	-	One year authorised break of study included in the Duration permitted (iii)	Included in the Duration permitted (iii)	-
B.E./ B.Tech. (Hons)	3/4 years (Lateral entry/ Regular)	4/5 years (Lateral entry/ Regular)	18 credits from more than one verticals of the same programme	7.5	First attempt	One year authorised break of study included in the Duration permitted (iii)	Not permitted	Will not be considered as an attempt
B.E./ B.Tech. minor	3/4 years (Lateral entry/ Regular)	4/5 years (Lateral entry/ Regular)	18 credits from any one vertical of the other programme	6.5	-	One year authorised break of study included in the Duration permitted (iii)	Included in the Duration permitted (iii)	-

16.2.3 Second Class:

All other students (not covered in clauses 16.2.1 and 16.2.2) who qualify for the award of the degree (vide Clause 16.1) shall be declared to have passed the examination in **Second Class**.

16.2.3.1 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 (except approved withdrawal from End Semester Examinations as per clause 17) for the purpose of classification.

16.2.3.2 B.E. / B.Tech. Regular and lateral entry and B.E. / B.Tech. minor in other specialization degree students (not covered in clauses 16.2.1 and 16.2.2) who qualify for the award of the degree (vide Clause 16.1) shall be declared to have passed the examination in **Second Class**

16.2.3.3 Student earned additional 18 credits as per Clause 4.12 (i) and (ii) but does not satisfy the conditions mentioned in 16.2.1 or 16.2.2 shall not be awarded, B.E. / B.Tech. (Hons.). 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.

**17 PROVISION FOR WITHDRAWAL FROM END SEMESTER EXAMINATION**

17.1 A student may, for valid reasons, be granted permission to withdraw from appearing for the examination in any course(s) in any one of the semester examinations during the entire duration of the degree programme, if he/she does not have any history of arrears at the time of request for withdrawal.

17.2 Withdrawal application shall be valid only if the student is otherwise eligible (vide clause 7) to write the examination and if it is made within ten days prior to the commencement of the examination in that course(s) and also recommended by the Head of the Department and approved by the Head of the Institution.

17.3 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 and with the approval from the Head of the Institution.

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

- 17.5 Withdrawal shall not be considered as an appearance for deciding the eligibility of a student for First Class with Distinction.
- 17.6 Withdrawal is permitted for the End Semester Examinations in the final semester only if the period of study the student concerned does not exceed 5 years as per clause 16.2.1 .

### **18 TEMPORARY BREAK OF STUDY FROM THE PROGRAMME**

- 18.1 A student is permitted to go on break of study for a maximum period of one year as a single break in the entire course of study.
- 18.2 A student is not normally permitted to temporarily break the study. However, if a student intends to temporarily discontinue the programme in the middle for valid reasons (such as accident or hospitalization due to prolonged ill health) and to rejoin the programme in a later respective semester, he/she shall apply to the Head of the Institution through the Head of the Department and stating the reasons there for subjected to the approval by the committee constituted by Head of the Institution.
- 18.3 A student is permitted to rejoin the programme at the respective semester as and when it is offered after the break, subjected to the approval of Directorate of Technical Education.
- 18.4 A student is permitted to rejoin the programme after break of study/prevention shall be governed by the Curriculum and Regulations in force at the time of rejoining. The students rejoining in new Regulations shall apply to the Controller of Examinations in the prescribed format through the Head of the Department at the beginning of the 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.
- 18.5 The authorized break of study would not be counted towards the duration specified for passing all the courses for the purpose of classification conditions (vide clauses 16.2) shall be applicable to such break of study permitted.
- 18.6 The total period for completion of the programme reckoned from, the commencement of the semester to which the student was first admitted shall not exceed the maximum period specified in clause 5.1 irrespective of the period of break of study in order that he/she may be qualified for the award of the degree.
- 18.7 If any student is detained for want of requisite attendance and conduct, the period spent in that semester shall not be considered as authorized 'Break of Study' (Clause 18.1).

## **19 DISCIPLINE**

Every student is expected to observe discipline and decorum both inside and outside the Institution and not to indulge in any activity which will tend to bring down the prestige of the Institution. Any act of such indiscipline / misbehavior including unfair practice in the class / practical / End Semester Examinations will be dealt with by the disciplinary committee of the college. Based on the committee report, Head of the Institution / Management will take suitable action.

## **20 MALPRACTICE**

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

## **21 REVISION OF REGULATION AND CURRICULUM**

The Institution may from time to time revise, amend or change the Regulations, scheme of Examinations and syllabi if found necessary through the Board of Studies and Academic Council of the Institution and implement either in retrospective or prospective manner as decided by the Academic Council.

## **22 CURRICULUM AND SYLLABI**