



## **REGULATIONS-2022**

### **CHOICE BASED CREDIT SYSTEM Common to all B. E. / B. Tech. Full-Time Programmes**

#### **DEGREE OF BACHELOR OF ENGINEERING / BACHELOR OF TECHNOLOGY**

This Regulation is applicable to the students admitted to B.E/B.Tech. Programmes at Rathinam Technical Campus from the academic year 2022-2023 onwards.

#### **1. PRELIMINARY DEFINITIONS AND NOMENCLATURE**

In these Regulations, unless the context otherwise requires:

- I) “Programme” means Degree Programme, that is B.E./B.Tech. Degree Programme.
- II) “Discipline” means specialization or branch of B.E./B.Tech. Degree Programme, like Computer Science Engineering, Bio Technology etc.
- III) “Course” means a theory or practical subject that is normally studied in a semester, like Mathematics, Physics, etc.
- IV) “Head of the Institution” means the Principal of the College.
- V) “Head of the Department (HOD)” means the Head of the Department concerned.
- VI) “Controller of Examinations (COE)” means the authority of the College who is responsible for all activities of the Examinations.

#### **2. PREAMBLE**

Students of today are much different from the students of the past in many ways. They want to be independent and like to make decisions on their own. Employers expect students to have the right attitude with diverse skill sets to work in a team. In this direction Rathinam Technical Campus will be following Choice Based Credit System (CBCS) in its academic curriculum, wherein the students can register for courses of their choice to enable fast, average and slow learners to plan and pace the same in a Semester. Thus students can register for more/average/less Credits within the prescribed limits, based on their learning activity as observed and alter the pace of learning within the broad framework of academic course and credit requirements. CBCS allows students in deciding their academic plan and permits students to alter it as they progress with their study.

Students will have the option of choosing courses from a “Group of courses” within each classification. Ample options are given to choose interdisciplinary courses from other programmes which will help the student to develop additional skills.

#### **3. ADMISSION**

Candidates seeking admission to the first semester of the eight semester 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 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.

#### **Lateral entry admission**

(i) 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)

(ii) 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 with the approval of COE.

#### **4. PROGRAMMES OFFERED**

A student may be offered admission to any one of the programme of study approved by the University and offered at Rathinam Technical Campus, Coimbatore.

Details of programmes currently offered by Rathinam Technical Campus, Coimbatore are listed below

- B.E. Biomedical Engineering
- B.E. Computer Science Engineering
- B.E. Computer Science Engineering (Tamil Medium)
- B.E. Electronics and Communication Engineering
- B.E. Mechanical Engineering
- B.Tech Agricultural Engineering
- B.Tech. Artificial Intelligence and Data Science
- B.Tech. Biotechnology
- B.Tech. Information Technology
- B.E. Computer Science and Engineering (Artificial Intelligence and Machine Learning)

#### **5. STRUCTURE OF THE PROGRAMMES**

##### **5.1 Credit Assignment**

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

Contact period in a week	Credit
1 Lecture Period	1
1 Tutorial Period	1
2 Practical Periods (Laboratory / Seminar / Project Work / etc.)	1

##### **5.2 Categorization of Courses**

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

- i. **Humanities and Social Science (HS)** include courses such as Technical English, Employability Skills, Engineering Ethics and Human Values, Communication Skills, Environmental Science and Engineering and Management courses.
- ii. **Basic Science (BS)** include courses such as Mathematics, Physics, Chemistry etc.
- iii. **Engineering Science (ES)** include courses such as Engineering practices, Engineering Graphics, Basics of

Electrical / Electronics / Mechanical / Civil/Computer Engineering, Instrumentation etc.

- iv. **Professional Core (PC)** courses include the core courses relevant to the chosen specialization/or programme.
- v. **Professional Elective (PE)** courses include the elective courses relevant to the chosen specialization/programme.
- vi. **Open Elective (OE)** courses include the courses relevant to the chosen specialization /programme which a student can choose from the curriculum of other B.E. / B. Tech. programmes
- vii. **Employability Enhancement Courses (EEC)** includes Project Work and/or Internship, Seminar, Professional Practices, Case Study and Industrial/Practical Training.
- viii. **Mandatory Courses (MC)** include courses in which is to be acquired as part of degree requirements like Induction Programme , Self-study courses etc.,
- ix. **Audit courses (AC)** include the courses such as Constitution of India, Sangam literature etc.
- x. **Non Academic Credit Courses(NAC)** includes the courses such as Technical and Non-Technical Clubs, Extension Activities etc

S.No.	Category	Range of Credits		Suggested Breakdown of Credits (for Range 164)
		Min	Max	
1.	Humanities and Social Sciences (HS), including Management.	9	12	11
2.	Basic Sciences (BS) including Mathematics, Physics, Chemistry.	20	24	23
3.	Engineering Sciences (ES), including Materials, Workshop, Drawing, Basics of Civil/Electrical/Electronics/Mechanical/ Computer Engineering, and Instrumentation.	20	30	25
4.	Professional Core (PC), relevant to the chosen specialization/Programme.	51	54	52
5.	Professional Electives (PE), relevant to the chosen specialization/ Programme.	15	21	18
6.	Open Electives (OE), from other technical and/or emerging subject areas.	12	18	16
7.	Employability Enhancement Courses (EEC), including mini project, internship, project work.	16	18	17
8	Audit Courses (AC) ( Constitution of India, Heritage of Tamil etc.,)	2	4	2
9.	Mandatory Courses (MC) (Induction Program, Self-study Courses.,)	-	-	--
10.	Non Academic Credit Courses(NAC) (Technical and Non-Technical Clubs, Extension Activities etc)	-	-	--
Total Credits				164

**5.2.1** For **lateral entry** student's different categories as given below:

S.No.	Category	Range of Credits		Suggested Breakdown of Credits (for Range 118)
		Min	Max	
1.	Humanities and Social Sciences (HS), including Management.	3	6	05
2.	Basic Sciences (BS) including Mathematics, Physics, Chemistry.	4	8	06
3.	Engineering Sciences (ES), including Materials, Workshop, Drawing, Basics of Civil/Electrical/Electronics/Mechanical/ Computer Engineering, and Instrumentation.	7	15	10
4.	Professional Core (PC), relevant to the chosen specialization/Programme.	45	50	48
5.	Professional Electives (PE), relevant to the chosen specialization/ Programme.	15	21	18
6.	Open Electives (OE), from other technical and/or emerging subject areas.	12	18	16
7.	Employability Enhancement Courses (EEC), including mini project, internship, project work.	14	16	15
8.	Mandatory Courses (MC) (Induction Program, Self-study Courses.,)	-	-	--
9	Non Academic Credit Courses(NAC) (Technical and Non-Technical Clubs, Extension Activities etc)	-	-	--
Total Credits				118

**5.3 Non Academic Credit Courses:**

Students will be encouraged to enroll in any one of the personality and character development programmes (NCC/NSS/Sports/YRC/Clubs/Extension Activities). Every Student should undergo at least any one of the courses in every semester from 1<sup>st</sup> to 6<sup>th</sup>. Every semester the students should submit minimum of 6/8 participation certificates. One winning certificate can be considered as three participation certificates. If any student participated or won in National or International level with recommendation of Dean and Approval of Principal mandatory courses can be considered for equivalence of certificate. If any student is unable to complete these courses in a particular semester, with the due approval of Head of Institution they can move to next semester provided the back log certificates to be submitted within 7<sup>th</sup> semester.

**5.4 Number of courses per semester**

In curriculum each semester shall normally have courses like Theory courses and Laboratory integrated theory courses, Employability Enhancement Course(s), Laboratory Courses, Audit Courses and Mandatory Courses. However, the total number of courses per semester shall not exceed 10 and maximum credit should not exceed 25. Each Course shall have credits assigned as per regulations.

### 5.5 Industrial Training/ Internship

The students should undergo Industrial training for a period of 14 days during the summer / winter vacation. In this case, the training has to be undergone continuously for a period of at least two weeks in an organization or can be carried out as two splits even in different organization.

The students may undergo Internship at a Research organization / University/ Industry (after due approval from the Head of the Department) during the summer / winter vacation, in lieu of Industrial training. Attendance Certificate mentioning the period of Industrial Training / Internship and signed by the competent authority of the industry, as per the format provided by the COE. The attendance certificate shall be forwarded to the COE by the Head of the Department.

The Industrial Training / Internship is mandatory for students to complete the Programme and should earn the credit under EEC category. The credits earned will be indicated in the GradeSheet.

DURATION OF INDUSTRIAL TRAINING/INTERNSHIP	CREDITS
14 days	1
7 days	0.5

The students should undergo Internship at the end of 4<sup>th</sup> and 5<sup>th</sup> semester and should earn 2 credits (one credit during 5<sup>th</sup> semester and one credit during 6<sup>th</sup> semester).

### 5.6 Industrial Visit/ International Tour:

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

### 5.7 Mandatory Courses (MC):

The students should undergo minimum two Non Credit Mandatory Courses over and above the topics covered in the curriculum to obtain practical and industry specific knowledge. At the beginning of 7<sup>th</sup> semester, the head of the department should forward the course completion status to the COE for further process. With approval from BoS, set of courses can be added in the NCMC.

### 5.8 Audit Courses:

The student should study audit courses prescribed in the curriculum as Internal mode during the 1<sup>st</sup> and 2<sup>nd</sup> semester.

### 5.9 Flexibility to Opt. Courses:

A student from semester III to Semester VII may opt online courses NPTEL, SWAYAM /Coursera /Industry offered courses (Advanced Technology/Cutting edge Technology) as an alternative for Professional Elective courses subjected to the approval of Vice Principal - Academics. The students can do online courses and earn credits from the following:

- i. Online courses equivalent (Equivalent to 3 Credits)
- ii. Industry oriented courses (Equivalent to 3 Credits)

### 5.10 Flexibility to drop Courses:

- i. If a student gets his/her research work granted (product patent), then the report of Patent/Project be the Project work report.
- ii. If a student gets his/her research work published in a Scopus/SCI journal as the first author, then the student is eligible to drop a total of 3 credits. The courses, the student wishes to drop should be equivalent to the topic in which the paper is published.

- iii. If a student participates and wins in an Innovative contest / in the challenges like Smart India Hackathon and approved by BOS, then the student is eligible to drop 3 credit PE/OE course.
- iv. If a student turns his/ her idea into a startup and receive the DPIIT certificate of recognition, he/she is eligible to drop three credit courses, provided that the startup must be recommended by any standard agency for startup seed funding.
- v. The above facility (any one only) can be availed only once in the entire duration of his/her studies.
- vi. All the above has to be approved by Board of Studies.

#### **5.11 B.E. / B. Tech. (Hons) and B.E. / B. Tech. minor with specialisation in another discipline.**

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

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

- The student should have earned additionally a minimum of 18 credits in any one of the following verticals
  - Vertical I : Fintech And Block Chain
  - Vertical II : Entrepreneurship
  - Vertical III : Public Administration
  - Vertical IV : Business Data Analytics
  - Vertical V : Environment And Sustainability

5.11.1 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 Board of Studies.

5.11.2 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.

5.11.3 For the categories 5.11 (i), 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.

5.11.4 For the category 5.11 (ii), 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.

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

5.11.6 If a student decides not to opt for Honours, after completing certain number of additional courses, such additional courses studied shall be considered instead of the Professional Elective courses which are part of the curriculum.

If the student has studied more number of such courses than the number of Professional Elective courses required as per the curriculum, the courses with higher grades shall be considered for the calculation of CGPA. Remaining courses shall be printed in the grade sheet however, they will not be considered for calculation of CGPA and the same shall be indicated in a foot note appropriately.

If the student has failed in the additional courses or faced shortage of attendance, they will not be printed in the grade sheet and will not be considered for CGPA calculation and classification of degree.

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

## 5.12 Medium of Instruction:

The medium of instruction is English for all courses, examinations, Seminar presentations and Project Work reports except for the programmes offered as Regional Language.

## 6. DURATION OF THE PROGRAMME

- 6.1 A student is ordinarily expected to complete the B.E./B.Tech. Programme in 8 semesters (for HSC students) and six semesters (for Lateral Entry students) but in any case not more than 14 Semesters for HSC (or equivalent) students and not more than 12 semesters for Lateral Entry students.
- 6.2 Each semester shall normally consist of 75 working days or 540 periods of 45 minutes each. The Head of the Department 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.
- 6.3 The Head of the Department may conduct additional classes for improvement, special coaching, conduct of model test etc., over and above the specified periods. But for the purpose of calculation of attendance requirement for writing the end semester examinations by the students, following method shall be used.

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

Taken together for all courses of the semester

The end semester Examination will normally follow immediately after the last working day of the semester as per the academic schedule prescribed from time to time.

## 7. COURSE REGISTRATION

Each student has to register for all courses to be undergone in the curriculum of a particular semester. The registration details of the student shall be approved by the Head of the Department and forwarded to the Controller of Examinations. This registration is for undergoing the course as well as for writing the End Semester Examinations.

The courses that a student registers in a particular semester may include

- i. Courses of the current semester.
- ii. Backlog courses in the lower semester.
- iii. Any advancement of Courses.

## **8. ATTENDANCE REQUIREMENTS FOR COMPLETION OF THE SEMESTER**

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

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 attendance in every course as calculated as per clause 6.3.

8.2 However, a student who secures overall attendance between 65% and 74% in the current semester due to medical reasons (prolonged hospitalization / accident / specific illness) / participation in sports events may be permitted to appear for the current semester examinations, subject to the condition that the student 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.

8.3 Students who secure less than 65% overall attendance shall not be permitted to write the End semester examination and not permitted to move to the next semester. They are required to repeat the incomplete semester in the next academic year, as per the norms prescribed.

## **9. CLASS TUTOR:**

There shall be a class tutor for each 30 students in a class. He / She will be appointed by the HOD concerned. The class tutor is the ex-officio member and the Convener of the class committee. The responsibilities for the class tutor shall be:

- To act as the channel of communication between the HOD the students of the respective class and parents.
- To collect and maintain various statistical details of students.
- To help the chairperson of the class committee in planning and conduct of the class committee meetings.
- To monitor all the academic and Non Academic performance of the students including attendance.
- To attend the students' welfare activities like awards, medals, scholarships and industrial visits.

## **10. CLASS COMMITTEE**

10.1 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.
- Informing the student representatives, the academic schedule including the date of assessments and the syllabus coverage for each assessment.
- Informing the student representatives, the details of Regulations regarding weightage used for each assessment.
- 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 slow-learners, if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such students.

10.2 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 respective deans.

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

10.4 At least 4 student representatives (usually 2 boys and 2 girls) shall be included in the class committee which includes at least one Lateral entry student.

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

10.6 The chairperson is required to prepare the minutes of every meeting, submit the same to the Head of the Institution within two days of the meeting and arrange to circulate 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.

10.7 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 Chairperson shall display the cumulative attendance particulars of each student on the Notice Board at the end of every such meeting to enable the students to know their attendance details to satisfy the 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.

## **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) examination at the end of the semester.

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

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

11.4 For all theory courses with laboratory component, the continuous internal assessment will carry 50 marks while the End Semester examination will carry 50 marks.

11.5 For all laboratory courses, the continuous internal assessment will carry 60 marks while the End Semester examination will carry 40 marks.

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

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

- 11.8 The examination (theory and practical) of 3 hours' duration shall ordinarily be conducted between October and December during the odd semesters and between April and June during the even semesters.
- 11.9 The 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 5 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 supervisor of the project group and an internal examiner.
- 11.10 For the end semester examination of practical courses including Project Work, the internal and external examiners shall be appointed by the Controller of Examinations.

## 12. PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

For all theory, 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 Courses:

Two assessments each carrying 100 marks shall be conducted during the semester by the Department concerned.

Assessment			Total Internal Assessment
Assignment Presentation / Case Study / Seminar / Mini Project / Innovation	Written Test –1	Written Test –2	
10	15	15	40

### 12.2 Theory cum Laboratory Courses:

Two assessments each carrying 100 marks shall be conducted during the semester by the Department concerned.

Assessment					Total Internal Assessment	
Assignment Presentation / Case Study / Seminar / Mini Project / Innovation	Written Test –1	Written Test –2	Lab Component			
			Record	Lab Exam		Viva Voce
5	10	10	10	10	5	50

The distribution of marks for the theory and laboratory components in the internal assessments and end semester examination for different types of courses are provided in the table.

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

### 12.3 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 to be maintained. There shall be at least one test. The criteria for arriving at the Internal Assessment marks of 60 is as follows:

Internal Assessment (60 Marks)	
Record	20
Lab Exam	20
Viva Voce	20

### 12.4 Project Work:

The student shall register for Project Work (Phase – I) in pre-final semester and Project Work (Phase – II) in final semester. Project work may be allotted to a single student or to a group of students not exceeding 5 per group. Project Work (Phase – II) should be a continuation of Project Work (Phase – I).

Project Work shall be carried out under the supervision of a supervisor who is the faculty of the department. The Project Work-II carried out in industry/academic/research institutions shall be jointly supervised by a supervisor of the department and an expert as a joint supervisor from the organization and the student shall be instructed to meet the supervisor periodically and to attend the review committee meetings for evaluating the progress. The review meetings, if necessary, may also be arranged in online mode with prior approval from the Head of the Institution and suitable record of the meetings shall be maintained.

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

There shall be minimum three reviews during the project period by the review committee. The student shall make presentation on the progress made by him / her before the committee. The total marks obtained in the three reviews shall be reduced for 60 marks and rounded to the nearest integer.

The project report shall carry a maximum of 10 marks. The project report shall be submitted as per the approved guidelines as given by the COE. Marks are awarded to each student of the project group is based on the individual performance in the viva- voce examination.

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

12.5. Internal marks approved by the Head of the Institution shall be displayed by the respective HODs within 5 days from the last working day.

### 12.6 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 put his/her signature and date after due verification. At the end of the semester, the record should be verified by the Head of the Institution.

### 13. REQUIREMENTS FOR APPEARING FOR END SEMESTER EXAMINATIONS

A student shall normally be permitted to appear for the end semester Examinations for all the courses registered in the current semester if he/she has satisfied the semester completion requirements.

Further, examination registration by a student is mandatory for all the courses in the current semester and all backlog course(s) for the end examinations failing which, the student will not be permitted to move to the higher semester. A student who has already appeared for any course in a semester and passed the examination is not entitled to reappear in the same subject for improvement of grades.

### 14. PASSING REQUIREMENTS

14.1 A student who secures not less than 50% of total marks prescribed for the course [Internal Assessment + End semester Examinations] with a minimum of 45% of the marks prescribed for the end-semester 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).

14.2 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. However, from the fourth attempt onwards if a student fails to obtain pass marks (IA + End Semester Examination), then the student shall be declared to have passed the examination if he/she secures a minimum of 50% marks prescribed for the end semester examinations alone.

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

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

14.5 A student can apply for revaluation of all the semester examination answer paper (held during particular semester) in a theory course, as per the guidelines of the COE on payment of a prescribed fee along with prescribed application to the COE through the Head of the department. The COE will arrange for the revaluation and the results will be intimated to the student concerned through the Head of the department. Revaluation is not permitted for laboratory course and EEC courses.

### 15. AWARD OF LETTER GRADES

15.1 The award of letter grades will be decided using relative grading principle. 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 (Fail)	0

RA (Re-appearance)	0
SA (Shortage of Attendance)	0
WH (With Held)	–
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”. “RA” denotes that the student has failed to pass in that course. “The grades RA will figure in the Grade Sheet as well as in the Result Sheet. In such cases, the student has to appear for the End Semester Examinations as per the Regulations.

If the grade RA is given to EEC course (except Project Work), which are evaluated only through internal assessment, the student shall register for the course again in the subsequent semester, fulfil the norms as specified to earn pass in the course.

## 15.2 GRADE SHEET

After results are declared, Grade Sheets will be issued to each student which will contain the following details:

- The list of courses registered during the semester and the grade scored.
- The Grade Point Average (GPA) for the semester and
- The Cumulative Grade Point Average (CGPA) of all courses enrolled from first semester onwards.

GPA for a semester is the ratio of the sum of the products of the number of credits acquired for courses and the corresponding points to the sum of the number of credits acquired for the courses in the semester. CGPA will be calculated in a similar manner, considering all the courses registered from first semester. RA grades will be excluded for calculating GPA and CGPA.

$$\text{GPA / CGPA} = \frac{\sum_{i=1}^n \text{GP}_i \text{C}_i}{\sum_{i=1}^n \text{C}_i}$$

where  $\text{C}_i$  is the number of Credits assigned to the course

$\text{GP}_i$  is the point corresponding to the grade obtained for each course

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

## 16 ELIGIBILITY FOR THE AWARD OF THE 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

- Successfully completed the course requirements, appeared for the End - Semester examinations and passed all the subjects within the period as prescribed in the regulations.
- Successfully passed any additional courses prescribed by the COE whenever the student is readmitted under Regulations R-2022 from the earlier Regulations.
- Successfully completed the NCC / NSS / NSO / YRC / clubs or extension activities requirements.
- No disciplinary action pending against the student.
- The eligible candidate details will be forwarded to the university by the COE.

## **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:

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

### **16.2.2 FIRST CLASS:**

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

- Should have passed the examination in all the courses of all eight semesters and 6 semesters in the case of Lateral Entry within five years.
- One year authorized break of study (if availed of) or prevention from writing the End Semester examination due to lack of attendance (if applicable) is included in the duration of five years and four years in the case of lateral entry for award of First class.
- Should have secured a CGPA of not less than 6.50.

### **16.2.3 SECOND CLASS:**

All other students not covered in above classes and who qualify for the award of the degree shall be declared to have passed the examination in Second Class.

## **16.3 Photocopy / Revaluation:**

A student can apply for photocopy of his/her semester examination answer paper in a theory course, as per the guidelines of the COE, on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of the department. The answer script is to be valued and justified by a faculty member, who has handled the subject and recommend for revaluation with the breakup of marks for each question. Based on the recommendation, the student can register for the revaluation through proper application to the Controller of Examinations. The Controller of Examinations will arrange for the revaluation and the results will be intimated to the student concerned through the Head of the department. Revaluation is not permitted for practical courses and EEC courses.

## **16.4 Review:**

Students not satisfied with Revaluation can apply for Review of his/ her examination answer paper in a theory course, within the prescribed date on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of the department. Students applying for Revaluation only are eligible to apply for Review.

## **17. PROVISION FOR WITHDRAWAL FROM END-SEMESTER EXAMINATION**

17.1 A student may, for valid reasons, (medically unfit / unexpected family situations / sports approved by the Chairman, Sports Board and the HOD) be granted permission to withdraw from appearing for the end semester examination in any course or courses in ANY ONE of the semester examinations during the entire duration of the degree programme. The application shall be sent to the COE through the Head of the department with required documents.

17.2 If a student applies for withdrawal from Project Work, he/she will be permitted for the withdrawal only after the submission of project report before the deadline. However, the student may appear for the viva voce examination within 30/60 days after the declaration of results for Project Work I and II respectively 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 authorised 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 student may apply for additional break of study not exceeding another one year. If a student intends to temporarily discontinue the programme in the middle of the semester for valid reasons, and to re-join the programme in a subsequent year, permission may be granted based on the merits of the case provided he / she applies to the COE 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 department stating the reasons therefore and the probable date of re-joining the programme.
- 18.3 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 COE 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.
- 18.4 The authorized break of study is included in the duration specified for passing all the courses for the purpose of classification
- 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 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'
- 18.7 If a student in Full Time mode wants to take up a job / start-up / entrepreneurship during the period of study he/she shall apply for authorized break of study for one year. The student shall join the job / start-up / entrepreneurship only after getting approval of the same by the COE with due proof to that effect.
- 18.8 No fee is applicable to students during the Break of Study period.

## **19. DISCIPLINE**

- 19.1 Every student is required to observe disciplined and decorous behavior 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 the Institution shall constitute a disciplinary committee consisting of Dean – Student Affairs, Two Heads of Department of which one should be from the faculty of the student, to enquire into acts of indiscipline and notify the same to the Head of the Institution about the disciplinary action recommended for approval. In case of any serious disciplinary action which leads to suspension or dismissal, then a committee shall be constituted including Head of the Institution and COE, with recommendation of the committee action can be taken, provided decision of the Head of the Institution is the final.
- 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 COE from time to time.

## **20. REVISION OF REGULATIONS, CURRICULUM AND SYLLABI**

The Institution may from time to time revise, amend or change the Regulations, curriculum, syllabus and scheme of examinations through the Board of studies and Academic Council.

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