

Sri Venkateswara College of Engineering
(An Autonomous Institution, Affiliated to Anna University, Chennai)

Regulations – 2018-A
(Applicable to those students admitted in the academic year 2021-2022)

CHOICE BASED CREDIT SYSTEM

Common to all B.E./B.Tech. Degree Program (8 Semester)

These regulations are applicable to the candidates admitted into B.E./B.Tech. programmes from the academic year 2018-19 onwards.

1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In these Regulations, unless the context otherwise requires:

- i. “**University**” means Anna University, Chennai.
- ii. “**Programme**” means Under Graduate Degree Programme. i.e., B.E. / B.Tech. Degree Programme.
- iii. “**Specialization/Branch/Discipline**” means a specialization or branch or discipline of B.E. / B.Tech. Degree Programme like Civil Engineering, Biotechnology etc.,
- iv. “**Course/Subject**” means a Theory or Practical subject that is normally studied in a semester, like Physics, Engineering Graphics, Engineering Practices Laboratory etc.,
- v. “**Controller of Examinations**” means the Authority who is responsible for all the activities of the End Semester Examinations of SVCE.
- vi. “**Head of the Institution**” means the Principal of SVCE who is responsible for all the academic activities of it and for implementation of relevant rules of this Regulation.
- vii. “**Chairperson**” means Head of the Faculty.
- viii. “**Head of the Department**” means Head of the Department concerned.

2. QUALIFICATIONS FOR ADMISSION

2.1 Admission to First Semester

The candidates seeking admission for the First Semester Bachelor of Engineering and Bachelor of Technology degree programme:

Regulation approved vide circular resolutions No. CR1/27.06.2022 and CR2/27.06.2022.

- (i) Should have passed the Higher Secondary Examinations of (10+2) in the academic stream with Mathematics, Physics and Chemistry as main courses of study conducted by the Government of Tamil Nadu or an examination accepted by the syndicate of Anna University as equivalent there to. They should also satisfy other eligibility rules as prescribed by the Anna University and Directorate of Technical Education, Government of Tamil Nadu, Chennai and **Directorate General of Shipping, Government of India** from time to time.

(OR)

- (ii) 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

- (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. in the branch corresponding to the branch of study.

(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** as prescribed by the College.

3. UG PROGRAMMES OFFERED

The following Programmes and Branches of study, approved by Anna University, Chennai, and All India Council for Technical Education, New Delhi, are offered by the College.

| Programme | Branch |
|------------------|--|
| B.E. | Automobile Engineering Civil Engineering Computer Science and Engineering Electrical and Electronics Engineering Electronics and Communication Engineering Marine Engineering Mechanical Engineering |
| B.Tech | Biotechnology Chemical Engineering Information Technology Artificial Intelligence and Data Science |

4. STRUCTURE OF PROGRAMMES

4.1 Categorization of Courses

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

- i. **Humanities and Social Sciences (HS)** courses include Technical English, Engineering Ethics and Human Values, Communication Skills, Environmental Science and Engineering.
- ii. **Basic Sciences (BS)** courses include Mathematics, Physics, Chemistry, Biology, etc.
- iii. **Engineering Sciences (ES)** courses include Engineering Practices, Engineering Graphics, Basics of Electrical/ Electronics/Mechanical/Computer Engineering/Instrumentation, etc.
- iv. **Professional Core (PC)** courses include the core courses relevant to the chosen specialisation/branch.
- v. **Professional Elective (PE)** courses include the elective courses relevant to the chosen specialisation/branch.
- vi. **Open Elective (OE)** courses include the courses from other branches which a student can choose from. The number of such courses is specified in the curriculum of the students B.E./B.Tech. Programmes.
- vii. **Employability Enhancement Courses (EEC)** include Project Work and/or Internship, Seminar, Professional Practices, Case Study and Industrial/Practical Training.

4.2 Personality and Character Development

All students shall enrol, on admission, in any one of the personality and character development programmes (NCC/NSS/NSO/YRC) and undergo training for about 80 hours and attend a camp of about seven days if applicable. The training shall include classes on hygiene and health awareness and also training in first-aid.

National Cadet Corps (NCC) will have about 20 parades.

National Service Scheme (NSS) will have social service activities in and around the College/Institution.

National Sports Organization (NSO) will have sports, Games, Drills and Physical exercises.

Youth Red Cross (YRC) will have activities related to social services in and around College/Institutions.

While the training activities will normally be held during weekends, the camp will normally, be held during vacation period.

4.3 Number of courses per semester

Each semester curriculum shall normally have a blend of lecture courses not exceeding 7 and Laboratory courses and Employability Enhancement Course(s) not exceeding 4. Each Employability Enhancement Course may have credits assigned as per clause 4.4. However, the total number of courses per semester shall not exceed 10.

4.4 Credit Assignment

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

| Contact period per week | CREDITS |
|---|---------|
| 1 Lecture Period | 1 |
| 1 Tutorial Period | 1 |
| 2 Laboratory Periods (also for EEC courses like / Seminar / Project Work / Case study / etc.) | 1 |
| 2 Weeks Industrial Training / Internship | 1 |
| 4 Weeks Industrial Training / Internship | 2 |

4.5. Industrial Training / Internship

The students should undergo Industrial training for a period as specified in the Curriculum during summer / winter vacation. In this case the training has to be undergone either 2 or 4 weeks period.

The students may undergo Internship at Research organization / University (after due approval from the Department Consultative Committee (DCC)) for a period prescribed in the curriculum during summer / winter vacation, in lieu of Industrial training.

4.6 Industrial Visit

Every student is required to go for at least one Industrial Visit every year starting from the second year of the Programme. However, for those students admitted to the various programmes in 2018 and 2019, it is sufficient to complete at least two Industrial visits during the whole programme. The Class Committee Chairperson (CCC) shall ensure that necessary arrangements are made in this regard.

4.7 Value Added Courses

The students should undergo Value Added Courses and the credits earned through the Value Added Courses shall be over and above the total credit requirement prescribed in the curriculum for the award of the degree. One / Two credit courses shall be offered by a Department with the prior approval from the Head of the Department. Students can take a maximum of two one credit courses / one two credit

course during the entire duration of the Programme. The credits earned through these optional courses will not be counted for CGPA calculation.

4.8 Online Courses

Students may be permitted to credit maximum of n number of online courses (which are provided with certificate) subject to a maximum of three credits each. Where n is the number of professional electives offered in their respective curriculum. The approved list of online courses will be provided by the Department Consultative Committee from time to time. The student needs to obtain certification or credit to become eligible for an oral examination which will be conducted with 25% weightage. The expert members for the oral examination will be decided by the department consultative committee. The details regarding online courses taken up by students should be sent to the Controller of Examinations, SVCE one month before the commencement of End Semester Examination.

- 4.9** The students satisfying the following conditions shall be permitted to carry out their final semester Project work for six months in industry/research organizations. The student should not have standing arrears.

The student shall undergo the eighth semester courses in the sixth and seventh semesters. The Head of Department, in consultation with the faculty handling the said courses shall forward the proposal recommended by the Department Consultative Committee to the Controller of Examinations, SVCE for approval at least 4 weeks before the commencement of the sixth/seventh semester of the programme for approval.

4.10 Medium of Instruction

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

5. DURATION OF THE PROGRAMME

- 5.1** A student is ordinarily expected to complete the B.E. / B.Tech. Programme in 8 semesters (four academic years) but in any case not more than 14 Semesters for HSC (or equivalent) students and not more than 12 semesters for Lateral Entry students.
- 5.2** Each semester shall normally consist of 75 working days or 540 periods of 50 minutes each. The Head of the Department shall ensure that every teacher imparts instruction as per the number of periods specified in the syllabus and that the teacher teaches the full content of the specified 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).

- 5.4** The prescribed range of total credits for each degree programme is around 160 -175 (For Marine Engineering, it is around 190).

6. COURSE ENROLLMENT AND REGISTRATION

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

- i. Courses of the current semester.
- ii. The core (Theory/Lab/EEC) courses that the student has not cleared in the earlier semesters. For laboratory courses, registration is permitted only when the course is offered.
- iii. Elective courses in which the student has failed
- iv. The student shall register for the project work in the VIII semester only.
- v. Any other course(s) the student wishes to register as per norms (vide Clause 4.5, 4.7 and 4.8)

- 6.1** Each student, on admission shall be assigned to a faculty 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** Every student shall enroll for the course of the succeeding semester before the end of the current semester. However, the student shall confirm the enrollment by registering for the courses within the first five working days after the commencement of the concerned semester.

- 6.3** No Elective course shall be offered by a Department unless a minimum of 15 students register for that course, subject to the approval of Head of the Department.

- 6.4** 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.

- 6.4.1** Each student on admission shall register for all the courses prescribed in the curriculum for the first year of study.

- 6.4.2** The enrolment for the courses of the Semesters III to VIII will commence 10 working days prior to the last working day of the preceding semester. The student shall enroll for the courses with the guidance of his/her faculty advisor. If the student wishes, the student may drop or add courses (vide clause 6.6) within five working days after the

commencement of the concerned semester and complete the registration process duly authorized by the faculty advisor.

6.5 Registration for Reappearance

6.5.1 If a student fails to secure a minimum pass in theory courses, he/she has to register for reappearance for that course with same continuous assessment mark in the subsequent semester and attend the End Semester Examination. However, if a student wishes to improve his/her **continuous assessment mark**, they have to write their continuous assessment test and assignment again when the course is offered next. However, the attendance requirement is not compulsory for such courses.

The following two conditions to be fulfilled for applying internal mark improvement in any subjects.

- a. The subject should be offered in that particular semester.
- b. The subject with “U” grade and internal marks LESS THAN 23 OUT OF 50.

6.5.2 The student who fails in any laboratory course/ project work / seminar and any other EEC course shall register for the same in the subsequent semester, when they are offered next, and repeat the course. In this case, the student shall attend the classes, satisfy the attendance requirements (vide clause 7), earn Continuous Assessment marks and appear for the End Semester Examinations. Passed out students can redo the practical courses, if they have any arrear in the practical courses, in all semesters instead of when it is offered as a regular course. Withdraw of the practical courses will be considered as reappearance and hence they have to appear only for end semester examination by retaining same internal mark earned.

6.5.3 If a student is prevented from writing End Semester Examinations of a course due to lack of attendance, the student has to register for that course again, when offered next, attend the classes and fulfil the attendance requirements as per clause 7. If the course, in which the student has lack of attendance, is a professional elective or an open elective, the student may register for the same or any other professional elective or open Elective course respectively in the subsequent semesters.

6.6 Flexibility to Add or Drop Courses

6.6.1 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.

6.6.2 From the III to VIII semesters, the student has the option of registering for additional courses or dropping existing courses with the approval of the Department Consultative Committee. The total number of courses, a student can drop/add in a semester is limited

to 2 courses. The student can drop/add a course if it is in the category of movable in the curriculum.

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

7. ATTENDANCE REQUIREMENTS FOR COMPLETION OF THE SEMESTER

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

7.1 A candidate 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 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, course wise, taking into account the number of periods required for that course as specified in the curriculum.

Therefore, he/she shall **secure not less than 75%** (after rounding off to the nearest integer) of the classes course wise attendance.

- (i) He/she has earned not less than 75% of attendance on an average in all the courses in that semester
- (ii) His/her progress has been satisfactory, and
- (iii) His/her conduct has been satisfactory.

7.2 However, a student who secures attendance between 65% and 74% in a course due to medical reasons (prolonged hospitalization / accident / specific illness) / Participation in sports events may be permitted to appear for the current semester examinations subject to the condition that the candidate shall submit the medical certificate / sports participation certificate attested by the Head of the Institution and also by paying the condonation fees. The same shall be forwarded to the Controller of Examinations for record purposes.

7.3 A student shall normally be permitted to appear for End Semester Examination of the course if the student has satisfied the attendance requirements (vide Clause 7.1 – 7.2) and has registered for examination in those courses of that semester by paying the prescribed fee.

7.4 Students who do not satisfy clause 7.1 and 7.2 and who secure less than 65% attendance in a course will not be permitted to write the End Semester Examination of that course. The student has to register and repeat this course in a subsequent semester with the permission of the Head of Department of the course when it is offered next. Students who failed to become eligible in one-third of the registered courses in the current semester, they would not be permitted to move for higher semester.

- 7.5** In the case of reappearance 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 End Semester Examination in that course by paying the prescribed fee.
- 7.6** A student who has already appeared for a course in a semester and passed the examination is not entitled to reappear in the same course for improvement of letter grades / marks.
- 7.7** For the purpose of calculation of attendance requirement for writing the End Semester Examinations by the students for every course, the following method shall be used.

$$\text{Percentage of Attendance} = \frac{\left[\begin{array}{c} \text{Number of periods attended in every} \\ \text{course during the semester} \end{array} \right]}{\left[\begin{array}{c} \text{Number of periods conducted in that semester} \\ \text{for that particular course} \end{array} \right]}$$

8. FACULTY ADVISOR

There shall be a faculty advisor for each student. He / She will be appointed by the Head of Department of the student concerned. The faculty advisor is the ex-officio member and the Convener of the class committee. The responsibilities for the faculty advisor shall be:

- To act as the channel of communication between the HoD and the students of the respective class.
- 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 the academic performance of the students including attendance and to inform the class committee.
- To attend to the student's welfare activities like awards, medals, scholarships and industrial visits.
- To communicate the academic performance of their student to the parents.

9. CLASS COMMITTEE

- 9.1.** 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 and not limited to

- 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) which should be displayed on college Notice-Board.
- 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.
- Analysing 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.

9.2 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, the class committee is to be constituted by the Head of the Institution.

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

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

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

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

9.7 The chairperson is required to prepare the minutes of every meeting, submit the same to Head of the Institution within two days of the meeting and arrange to circulate it among the students and teachers concerned. If there are some points in the minutes requiring action by the management, the same shall be brought to the notice of the Management by the Head of the Institution.

9.8 The first meeting of the class committee shall be held within one week from the date of commencement of the semester, in order to inform the students about the nature and weightage of assessments within the framework of the Regulations. Two or three subsequent meetings may be held in a semester at suitable intervals. **The Class Committee Chairman shall put on the Notice Board the cumulative attendance particulars of each student at the end of every such meeting to enable the students to know their attendance details to satisfy the clause 7 of this Regulation.** During these meetings the student members representing the entire class, shall meaningfully interact and express the opinions and suggestions of the other students of the class in order to improve the effectiveness of the teaching-learning process.

10. COURSE COMMITTEE FOR COMMON COURSES

Each common theory course offered to more than one discipline or group, shall have a “Course Committee” comprising all the teachers teaching the common course with one of them nominated as Course Coordinator. The nomination of the Course Coordinator shall be made by the Head of the Department / Head of the Institution depending upon whether all the teachers teaching the common course belong to a single department or to several departments. The ‘Course committee’ shall meet in order to arrive at a common scheme of evaluation for the test and shall ensure a uniform evaluation of the tests. Wherever feasible, the course committee may also prepare a common question paper for the internal assessment test(s).

11. SYSTEM OF EXAMINATION

11.1 Performance in each course of study shall be evaluated based on

- (i) Continuous Assessment (CA) throughout the semester and
- (ii) End Semester Examination (ESE) 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.

For all theory courses, the internal assessment will carry **40% weightage** while the End Semester Examination will carry **60% weightage**.

For all practical courses, the internal assessment will carry **60% weightage** while the End Semester Examination will carry **40% weightage**.

For theory cum practical courses, the internal assessment will carry **50% weightage** while the End Semester Examination will carry **50% weightage**.

For project work, the internal assessment will carry 40% **weightage** while the End Semester Examination will carry 60% **weightage**.

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

| S.No | Category of course | Continuous Assessments | End-Semester Examinations |
|-------------|--|-------------------------------|----------------------------------|
| i. | Theory Courses | 40 Marks | 60 Marks |
| ii. | Laboratory Courses | 60 Marks | 40 Marks |
| iii. | Theory Courses with Laboratory Component | 50 Marks | 50 Marks |
| iii. | Project Work | 40 Marks | 60 Marks |
| iv. | All other EEC Courses | 100 Marks | - |

- 11.3** Industrial training and seminar shall carry 100 marks and shall be evaluated through internal assessment only.
- 11.4** The End Semester Examination (theory and practical) of 3-hour duration shall ordinarily be conducted between October and December during the odd semesters and between April and June during the even semesters.
- 11.5** 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 3 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.
- 11.6** For the End Semester Examination in both theory and practical courses including project work the examiners shall be appointed by the Controller of Examinations.

12. PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

- For all theory courses, the continuous assessment shall be for a maximum of 40 marks.
- For all practical courses, the continuous assessment shall be for a maximum of 60 marks.
- For project work, the continuous assessment shall be for a maximum of 40 marks.

The above continuous assessment shall be awarded as per the procedure given below.

12.1 (a) Theory Courses

The award of marks for continuous assessment shall be based on three continuous assessments. Each continuous assessment may contain the following:

1. Test - 70% weightage
2. Assignment/tutorial/seminar/mini project/Quiz/MCQ - 30% weightage

The marks obtained in written test and activity based assignments will be added with the weightage of 70% and 30%, respectively. This mark is out of 50 and known as continuous assessment mark of a particular course.

There will be three continuous assessments. Hence each student will have three marks continuous assessments for a particular course. Total of all these three continuous assessments would be scaled down to 40. The mark so obtained would be rounded to nearest integer. This is the continuous assessment mark of a particular student in a particular subject. (This implies equal weightage to all the three continuous assessments). The final continuous assessment will be out of 40.

(b) Practical Courses:

The maximum marks for formative assessment shall be 60% in case of practical courses. Every practical exercise / experiment shall be evaluated based on conduct of experiment / exercise, observations / records maintained and viva-voce. There shall be at least one model test. The criteria for arriving at the Internal Assessment marks of 60 is as follows:

Maximum of 40 marks shall be awarded for successful completion of all the prescribed exercises / experiments done in the Laboratory and a model test will be conducted and the mark will be scaled down to 20. The total mark, rounded to the nearest integer, shall be out of 60.

(c) Theory Courses with Laboratory component:

If there is a theory course with Laboratory component, there shall be three assessments: the first two assessments will be from theory portions and the third assessment will be for laboratory component. The sum of marks of all three assessments shall be reduced to 50 marks and rounded to the nearest integer.

12.2 Project Work

Project work may be allotted to a single student or to a group of students not exceeding 3 per group. In some special cases, 4 students may be grouped and the same has to be recommended by the project guide and approved by the Head of the Department.

The Head of the Department concern shall constitute a review committee for project work for each branch of study. There shall be three reviews during the semester by the review committee. The student shall make presentation on the progress made by them before the committee. The total marks obtained in the three reviews shall be reduced for 40 marks and rounded to the nearest integer (as per the scheme given in 12.2.1).

12.2.1 The project report shall be submitted as per the approved guidelines as given by Board of Studies. Same mark shall be awarded to every student within the project group for the project report. The viva-voce examination shall carry 40 marks. Marks are awarded to each student of the project group based on the individual performance in the viva-voce examination.

| Review 1 | Review 2 | Review 3 | End Semester Examinations | | | | |
|-------------|-------------|-------------|---------------------------|---------------|-------------------------|---------------|------------|
| | | | Project Report | | Viva – Voce Examination | | |
| | | | Examiner 1 | Examiner 2 | Examiner 1 | Examiner 2 | Supervisor |
| 10 | 15 | 15 | 10 | 10 | 15 | 15 | 10 |

12.2.2 If a candidate fails to submit the project report on or before the specified deadline, he/she is deemed to have failed in the Project Work and shall re-enroll for the same in a subsequent semester.

12.3 OTHER EMPLOYABILITY ENHANCEMENT COURSES

(a) The seminar / Case study is to be considered as purely INTERNAL (with 100% internal marks only). Every student is expected to present a minimum of 2 seminars per semester before the evaluation committee and for each seminar, marks can be equally apportioned. The three-member committee appointed by Head of the Department will evaluate the seminar and at the end of the semester the marks can be consolidated and taken as the final mark. The evaluation shall be based on the seminar paper (40%), presentation (40%) and response to the questions asked during presentation (20%).

(b) The Industrial / Practical Training, Summer Project, Internship, shall carry 100 marks and shall be evaluated through internal assessment only. At the end of Industrial / Practical training / internship / Summer Project, the candidate shall submit a certificate from the organization where he / she has undergone training and a brief report. The evaluation will be made based on this report and a Viva-Voce Examination, conducted internally by a three-member departmental committee constituted by the Head of the Department.

12.4 ASSESSMENT FOR VALUE ADDED COURSE

The one / two credit course shall carry 100 marks and shall be evaluated through internal assessments only. Assessments shall be conducted during the semester by the Department concerned. The total marks obtained in the tests shall be reduced to 100 marks and rounded to the nearest integer. A committee consisting of the Head of the Department, staff handling the course and a senior Faculty member nominated by the Head of the Department shall monitor the evaluation process. The list of students along with the marks and the grades earned may be forwarded to the Controller of Examinations for appropriate action at least one month before the commencement of End Semester Examinations.

12.5 ASSESSMENT FOR ONLINE COURSES

Students may be permitted to credit maximum of n number of online courses (which are provided with certificate) subject to a maximum of three credits each. Where n is the number of professional electives offered in their respective curriculum. The approved list of online courses will be provided by the Department Consultative Committee from time to time. Each online course of 3 credits can be considered instead of one professional elective course. The student needs to obtain certification or credit to become eligible for appearing the End Semester Examination to be conducted by Controller of Examinations, SVCE. The marks/credits obtained in online course shall be proportionately reduced to 75 marks and it is considered as an internal mark. The course shall be evaluated through the End Semester Examination as per clause 4.8.

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

12.7 CREDIT TRANSFER COURSES

Students are permitted for Credit Transfer from the courses offered by SWAYAM and other reputed institutions. Maximum 20% credit can be transferred by a student in a semester. The credit transfer courses to be selected only in the SWAYAM MOOC if it is through online mode. The same can be done in physical mode also in the reputed institutions during the summer and winter vacations. DCC should approve the equivalency of the subject to be studied and the institution for studying those subjects. Credit transfer facility can be used for any courses except open electives.

12.7.1 Difference between online courses and credit transfer courses are as follows

For better understanding the difference between online course and credit transfer through SWAYAM is given below.

| Sl.No. | Credit Transfer Courses | Online Courses |
|--------|---|--|
| 1. | Identification of a particular subject (either Professional Core or Professional Elective) in the curriculum for which an equivalent course through online/ physical mode will be identified for credit transfer. | No such identification. A Student can replace only Professional Elective subjects. |
| 2. | No Examination will be conducted by the college. | Viva-voce will be conducted in the college which holds 25% weightage. |
| 3. | Equivalent course should be approved by DCC. | List of courses will be given by DCC. |
| 4. | A student can attend through SWAYAM Portal if it is online mode or in reputed institutions during summer/winter vacations for physical mode. | A student can attend through any platform which is approved by DCC. |
| 5. | Limitations: Maximum 20% of total credits. | Limitations: Only n number of online courses. Where n is equal to number of professional electives mentioned in the respective curriculum. |
| 6. | Credit will be transferred in the same semester. | After completing the course, a student can replace in any of the higher semesters. |
| 7. | Name of the course in the curriculum will be printed along with the SWAYAM course title within the bracket in the grade sheet. | Name of the online course will be printed in the grade sheet. |

12.8 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 (at least three times in a semester) for checking the syllabus coverage and the records of test marks and attendance.

The Head of the department will put his signature and date after due verification. At the end of the semester, the record should be verified by the Head of the Institution who will keep this document in safe custody (for five years). The inspection team appointed by the Principal may verify the records of attendance and assessment of both current and previous semesters.

13. REQUIREMENTS FOR APPEARING FOR END SEMESTER EXAMINATIONS

A candidate shall normally be permitted to appear for the End Semester Examinations for all the courses registered in the current semester (vide clause 6) if he/she has

satisfied the semester completion requirements (subject to Clause 7). A candidate who has already appeared for any subject in a semester and passed the examination is not entitled to reappear in the same subject for improvement of grades.

14. PASSING REQUIREMENTS

14.1 A candidate 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 theory, practical and project work.

14.2 The passing requirement for the courses which are assessed only through purely internal assessments (EEC courses except project work), is 50% of the internal assessment (continuous assessment) marks only.

15. AWARD OF LETTER GRADES

15.1 All assessments of a course will be evaluated on absolute marks basis. However, for the purpose of reporting the performance of a candidate, letter grades, each carrying certain number of points, will be awarded as per the range of total marks (out of 100) obtained by the candidate in each subject as detailed below:

| Letter grade | Grade Points | Marks Range |
|-----------------|--------------|--|
| O (Outstanding) | 10 | University Provided the software for allocation of grades. The evolved relative grading method normalizes the results data using the BOX-COX transformation method and computes the grade range for each course separately and awards the grade to each student. |
| A + (Excellent) | 9 | |
| A (Very Good) | 8 | |
| B + (Good) | 7 | |
| B (Average) | 6 | |
| C(FAIR) | 5 | |
| U | 0 | |
| AB (Absent) | 0 | |
| WD (Withdrawn) | 0 | |

For a given course, if the students' strength is greater than 30, the relative grading method shall be adopted. However, if the students' strength is less than 30 then the fixed grading shall be followed with the grade range as specified below.

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

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.

“U” denotes that the student has failed to pass in that course. “WD” denotes withdrawn from the exam for the particular course. The grades “U” and “WD” will figure both in Marks Sheet as well as in Result Sheet. In both cases the student has to reappear for the End Semester Examinations. For the grade WD, the attendance requirement need not to be satisfied.

If the grade “U” is given to a core theory course, the attendance requirement need not be satisfied, but if the grade “U” is given to a Laboratory Course/ Project work / Seminar and any other EEC course, the attendance requirements (vide clause 7) should be satisfied.

- 15.2** For the Co-curricular activities such as National Cadet Corps (NCC)/ National Service Scheme (NSS) / NSO / YRC, a satisfactory / not satisfactory grading will appear in the mark sheet. Every student shall put in a minimum of 75% attendance in the training and attend the camp compulsorily. The training and camp shall be completed during the first year of the programme. However, for valid reasons, the Head of the Institution may permit a student to complete this requirement in the second year. A satisfactory grade in the above co-curricular activities is compulsory for the award of degree.
- 15.3** The grades O, A+, A, B+, B, C obtained for the one credit course shall figure in the Mark sheet under the title ‘Value Added Courses’. The Courses for which the grades are U will not figure in the mark sheet.

Grade sheet

After results are declared, Grade Sheets will be issued to each student.

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

$$\text{GPA} = \frac{\text{Sum of [Credits Earned} \times \text{Grade Points]}}{\text{[Sum of Credits Earned]}}$$

CGPA will be calculated in a similar manner, considering all the courses registered from first semester. ‘U’, ‘SA’ and ‘WD’ grades will be excluded for calculating GPA and CGPA.

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

where C_i - is the Credits assigned to the course

GP_i - is the 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.

The GPA and CGPA indicate the academic performance of a candidate at the end of a semester and at the end of successive semesters respectively.

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

- i. Successfully gained the required number of total credits as specified in the curriculum corresponding to the student's programme within the stipulated time.
- ii. Successfully completed the course requirements, appeared for the End-Semester examinations and passed all the subjects prescribed in all the 8 semesters within a maximum period of 7 years (6 years in the case of Lateral Entry) reckoned from the commencement of the first (third in the case of Lateral Entry) semester to which the candidate was admitted.
- iii. Successfully passed any additional courses prescribed by the Board of Studies concerned whenever readmitted under regulations R-2018A (vide clause 18.3)
- iv. Successfully completed the NCC / NSS / NSO / YRC requirements.
- 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*:

- 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 (Four years in the case of lateral entry). Withdrawal from examination (vide Clause 17) will not be considered as an appearance.

- Should have secured a CGPA of not less than 8.50
- One-year authorized break of study (if availed of) is included in the five years (Four years in the case of lateral entry) for award of First class with Distinction.
- Should NOT have been prevented from writing End Semester Examination due to lack of attendance in any semester.

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 (6 semesters in the case of Lateral Entry) within Six years (Five years in the case of Lateral Entry).
- One-year authorized break of study (if availed of) or prevention from writing the End Semester Examination due to lack of attendance (if applicable) is included in the duration of six years (five years in the case of lateral entry) for award of First class.
- Should have secured a CGPA of not less than **6.5**

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**.

16.3 A candidate who is absent in End Semester Examination in a course / project work after having registered for the same shall be considered to have appeared in that examination for the purpose of classification. (subject to clause 17 and 18)

16.4 Photocopy / Revaluation

A candidate can apply for photocopy of his/her semester examination answer paper in a theory course, within the date announced by the CoE from time to time after the declaration of results, on payment of a prescribed fee through proper application to the Controller of Examinations through Head of the Department.

The answer script may be valued and justified by a faculty member, who handled the subject and recommend for revaluation with breakup of marks for each question. Based on the recommendation, the candidate 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. Revaluation is not permitted for practical courses and for project work. A candidate can apply for revaluation of answer scripts for not exceeding 5 subjects at a time.

16.5 Review

Candidates 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 Controller of Examination through the Head of the Department. Candidates 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 Director/PED and HOD) be granted permission to withdraw from appearing for the End Semester Examination in any course or courses in any one of the semester examinations during the entire duration of the degree programme. The application shall be sent to Controller of Examinations through the Head of the Institutions with required documents.

17.2 Withdrawal application is valid if the student is otherwise eligible to write the examination (Clause 7) and if it is made within TEN days prior to the commencement of the examination in that course or courses and recommended by the Head of the Institution and approved by the Controller of Examinations. Notwithstanding the requirement of mandatory 10 days notice, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case.

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

17.4 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. PROVISION FOR AUTHORISED BREAK OF STUDY

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

18.2 Break of Study shall be granted only once for valid reasons for a maximum of one year during the entire period of study of the degree programme. However, in extraordinary situation the candidate may apply for additional break of study not exceeding another one year by paying prescribed fee for break of study. If a candidate

intends to temporarily discontinue the programme in the middle of the semester for valid reasons, and to rejoin the programme in a subsequent year, permission may be granted based on the merits of the case provided he / she applies to Head of the Institution, but not later than the last date for registering for the End Semester Examination of the semester in question, through the Head of the Institution stating the reasons therefore and the probable date of rejoining the programme.

- 18.3** The candidates permitted to rejoin the programme after break of study / prevention due to lack of attendance, shall be governed by the Curriculum and Regulations in force at the time of re-joining. The students rejoining in new Regulations shall apply to the Head of the Institution in the prescribed format through Head of the Department at the beginning of the readmitted semester itself for prescribing additional courses, if any, from any semester of the regulations in-force, so as to bridge the curriculum in-force and the old curriculum.
- 18.4** The authorized break of study would be counted towards the duration specified for passing all the courses for the purpose of classification (vide Clause 16.2).
- 18.5** The total period for completion of the Programme reckoned from, the commencement of the first semester to which the candidate was admitted shall not exceed the maximum period specified in clause 5.1 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' (Clause 18.1)
- 18.7** If a student cannot complete the degree within the maximum period specified in clause 5.1, including all authorised and unauthorised Break of study, the student could apply for extension to the Head of the Institution. The student may be permitted for one more year based on the merit of the case.

19. DISCIPLINE

- 19.1** Every student is required to observe disciplined and decorous behaviour both inside and outside the college and not to indulge in any activity which will tend to bring down the prestige of the College. The Head of Institution shall constitute a disciplinary committee consisting of Head of Institution, Two Heads of Department of which one should be from the faculty of the student, to enquire into acts of indiscipline.
- 19.2** If a student indulges in malpractice in any of the End Semester/ Internal Examination he/she shall be liable for punitive action as prescribed by the College from time to time.

20. SPECIAL CASES

In the event of any clarification in the interpretation of the above rules and regulations, they shall be referred to the Academic Appeals Board. The Academic Appeals Board will offer suitable interpretations/ clarifications / amendments required for special case on such references and get them ratified in the next meeting of the Academic Council. The decision of the Academic Council will be final.

21. REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

The College may from time to time revise, amend or change the Regulations, Curriculum, Syllabus and scheme of examinations through the Academic Council of the college.
