Sri Venkateswara College of Engineering

(An Autonomous Institution, Affiliated to Anna University, Chennai)

Regulations – 2022

CHOICE BASED CREDIT SYSTEM

Common to all M.E./M. Tech. Degree Program (4 semesters)

The following rules and regulations shall be applicable for all the Post Graduate (PG) programmes offered in Sri Venkateswara College of Engineering, Sriperumbudur from the academic year 2022-2023 onwards.

1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In these Regulations, unless the context otherwise requires:

- 1. "University" means Anna University, Chennai.
- 2. "*Programme*" means Post Graduate Degree Programme e.g. M.E. / M.Tech. Degree Programme.
- 3. "*Specialization*" means a specialization or discipline of M.E. / M.Tech. Degree Programme like "Computer Aided Design" and "Communication Systems" etc.
- 4. "*Course/subject*" means a Theory or Practical subject that is normally studied in a semester, like Computer Architecture, Advanced Materials Technology etc.
- 5. "*Controller of Examinations*" means the Authority of the SVCE who is responsible for all the activities of the Summative Examinations of SVCE.
- 6. "*Head of the Institution*" means the Principal of the SVCE who is responsible for all the academic activities of SVCE and for implementation of relevant rules of this Regulation.
- 7. "Chairman" means Head of the Faculty.
- 8. "Head of the Department" means Head of the Department concerned.
- 9. "DCC" means Department Consultative committee responsible for the decision related to teaching learning and assessment methodologies.
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2. PROGRAMMES OFFERED, MODE OF STUDY AND ADMISSION REQUIREMENTS

2.1 The following PG programmes are offered by Sri Venkateswara College of Engineering:

Programme	Branch
M.E.	Communication Systems Computer Science and Engineering Power Electronics and Drives Industrial Automation and Robotics
M.Tech	Biotechnology Chemical Engineering Cyber Forensics and Information Security

2.2. MODES OF STUDY

2.2.1 Full-Time

Candidates admitted under 'Full-Time' should be available in the respective departments during the entire duration of working hours (From Morning to Evening on Full-Time basis) for the curricular, co-curricular and extra-curricular activities.

The Full-time candidates should not attend any other Full-time programme(s) / course(s) or take up any Full-Time job / Part-Time job in any Institution or company during the period of Full- Time programme. Violation of the above rules will result in cancellation of admission to the PG programme. The students should submit a undertaken in this regard to the Head of the Institution.

2.3 ADMISSION REQUIREMENTS

2.3.1 Candidates for admission to the first semester of the Post-Graduate Degree Programme shall be required to have passed an appropriate Under-Graduate Degree Examination of Anna University or equivalent as specified under qualification for admission as per the Tamil Nadu Common Admission (TANCA) criteria.

Note: TANCA releases the updated criteria during the admissions every academic year. Admission shall be offered only to the candidates who possess the qualification

prescribed against each programme. Any other relevant qualification which is not prescribed against each programme shall be considered for equivalence by the committee constituted for the purpose. Admission to such degrees shall be offered only after obtaining equivalence to such degrees.

- **2.3.2** However, the Academic Council may decide to restrict admission in any particular year to candidates having a subset of qualifications prescribed at the time of admission.
- **2.3.4** Eligibility conditions for admission such as the class obtained, the number of attempts in qualifying examination and physical fitness will be as prescribed by the Syndicate of the University from time to time.

3. STRUCTURE OF THE PROGRAMMES

3.1 Categorization of Courses

Duration of all the PG programmes is 4 semesters. Every Post Graduate Degree Programme will have a curriculum with syllabi consisting of theory and practical courses that shall be categorized as follows:

- i. Foundation Courses (FC) may include Mathematics or other basic courses.
- ii. **Professional Core (PC)** courses include the core courses relevant to the chosen specialization/branch.
- iii. **Professional Elective (PE)** courses include the elective courses relevant to the chosen specialization/ branch.
- iv. Employability Enhancement Courses (EEC) include Project Work and/or Internship, Seminar, Professional Practices, Case Study and Industrial / Practical Training.

3.2 Courses per Semester

Curriculum of a semester shall normally have a blend of lecture courses and practical courses including Employability Enhancement Courses. Each course may have credits assigned as per clause 3.3. 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.

3.3 Credits will be assigned to the courses for different modes of study as given below (The following will apply to all modes of P.G. Programmes).

Contact period per week	CREDITS
1 Lecture Period	1
1 Tutorial Periods	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
6 Weeks Industrial Training / Internship	3

- **3.3.2** Practical training or Industrial Training if specified in the Curriculum should be organized by the Head of the Department / Institution for a duration not exceeding 4-weeks.
- **3.3.3** Summer project if specified in the Curriculum, should be organized by the Head of the Department / Institution for a duration not exceeding 6 weeks.
- 3.4 The electives from the curriculum are to be chosen with the approval of the Head of the Department. A candidate may be permitted by the Head of the Department to choose a maximum of two electives from other P.G. Programmes offered in the Department/any other Department of the Institutions during the period of his/her study, provided the Head of the Department offering such course also approves such requests subject to no clash in the time table for the lecture classes of both departments.

3.5 Project Work

- 3.5.1 The Project work is an important component of Post-Graduate programmes. The Project work for M.E. / M.Tech. consists of Phase I and Phase II. The Phase I is to be undertaken during III semester and Phase II, which is a continuation of Phase I is to be undertaken during IV semester.
- **3.5.2** The Phase-II Project work for M.E / M.Tech. shall be pursued for a minimum of 15 weeks during the final semester.
- 3.5.3 The Project work shall be carried out under the supervision of a "qualified teacher" in the Department concerned. In this context "qualified teacher" means a faculty member possessing (i) PG degree with a minimum of 3 years of teaching experience or (ii) Ph.D. degree.
- 3.5.4 A student may, however, in certain cases, be permitted to work on projects in an Industrial/Research Organization, on the recommendations of the Head of the Department. In such cases, the Project work shall be jointly guided by a supervisor of the department and an expert as joint supervisor from the organization and the student shall be instructed to meet the supervisor periodically and to attend the reviews for evaluating the progress.

3.6. Industrial Training / Internship

3.6.1 The students may undergo Industrial training for a period as specified in the curriculum during summer / winter vacation. In this case the training has to be undergone continuously for the entire period.

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

3.6.2 If Industrial Training/Internship is not prescribed in the curriculum, the student may undergo Industrial Training/Internship optionally and the credits earned will be indicated in the Mark Sheet. If the student earns three credits in Industrial Training/Internship, the student may drop one Professional Elective. In such cases Industrial Training/Internship needs to be undergone continuously from one organization only, for a period of 6 weeks recommended by the college, with prior approval of the Head of the Institution. The student is allowed to undergo such Industrial Training/Internship only once during the entire duration of study.

3.7 Value Added Courses

The Students may optionally undergo Value Added Courses apart from the courses mentioned in the curriculum and the credits earned through these optional Value Added Courses shall be over and above the total credit requirement prescribed in the curriculum for the award of the degree. One/Two credit courses shall be offered by the Department with prior approval from the Head of the Institution.

The details of the syllabus, time table and faculty may be sent to the Controller of Examinations after approval from the Head of the department concerned at least one month before the course is offered. The students should complete two credits of value added course. He/she could take two one credit courses or one Two credit course. The credits earned through these optional courses will not be counted for CGPA computation.

3.8 Online Courses

- **3.8.1** Students may be permitted to study <u>maximum of "N"</u> online courses of 3 credits each with the approval of Department Consultative Committee. Where N is the sum of the number of professional courses. Minimum duration of the course should be 12 weeks.
- 3.8.2 The approved list of online courses will be provided by the Department Consultative Committee (DCC) from time to time. The student needs to obtain certification or credit to become eligible for transferring the credit to any of the electives in the curriculum.

3.8.3 The DCC will decide the methodology to allocate the letter grade to each student based on their performance in the online course. The details regarding online courses taken up by students should be sent to the Controller of Examinations, SVCE one month before the commencement of Summative Examinations.

3.9 Medium of Instruction

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

4. **DURATION OF THE PROGRAMME**

4.1 The minimum and maximum period for completion of the P.G. Programmes are given below:

Programme	Min. No. of	Max. No. of
	Semesters	Semesters
M.E. / M.Tech. (Full Time)	4	8

- **4.2** Every **Programme** will have a curriculum and syllabus consisting of core courses, elective courses and project work. The Programme may also include seminar, practical, industrial training, summer project if they are specified in the curriculum.
- 4.3 The Curriculum and Syllabi of all the P.G. Programmes shall be approved by the Academic Council of Sri Venkateswara College of Engineering. The number of credits to be earned for the successful completion of the programme shall be as specified in the Curriculum of the respective specialization of the P.G. Programme.
- 4.4 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.
- 4.5 The minimum prescribed credits required for the award of the degree shall be within the limits specified below:

PROGRAMME	PRESCRIBED CREDIT RANGE
M.E. / M.Tech.	72 - 73

5. COURSE ENROLMENT AND REGISTRATION

- **5.1** Each student, on admission, shall be assigned to a Faculty Advisor (vide Clause 7) who shall advice 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.
- 5.2 Every student shall enrol for the course of the succeeding semester before the end of the current semester. However, the student shall confirm the enrolment by registering for the courses within the first five working days after the commencement of the concerned semester.
- 5.3 Minimum number of students for an Elective course to be offered is 40% of the class and will be left to the discretion of the department.
- 5.4 After registering for a course, a student shall attend the classes, satisfy the attendance requirements, earn Continuous Assessment marks and appear for the Summative Examinations
- **5.4.1** On admission, the student shall register for all the courses of the first semester as prescribed in the curriculum. The enrolment for all the courses of the Semester II will commence 10 working days prior to the last working day of Semester I. The student shall confirm the enrolment by registering for the courses within the first five working days after the commencement of the Semester II.
- **5.4.2** The enrolment for the courses of the III and IV Semesters will commence 10 working days prior to the last working day of the preceding semester.

5.5 Registration for Reappearance

5.5.1 If a student fails to secure a minimum pass in theory/laboratory courses, he/she has to register for reappearance for that course with same formative assessment marks in the subsequent semester and attend the Summative Examination. However, if a student wishes to improve his/her formative Assessment mark they have to write their formative assessment test and assignment again when the course is offered next by the parent department. However, the attendance requirement is not compulsory for such courses.

The following conditions to be fulfilled for applying formative assessment Mark improvement in any of the theory/laboratory subjects.

- A. The subject should be offered in that particular semester by the parent department.
- B. The subject with "U" grade.
- C. Original formative assessment mark should be <u>LESS THAN</u> 23 OUT OF 40 for theory courses, 27 OUT OF 50 for theory cum laboratory courses and 32 OUT OF 60 for laboratory courses.
- 5.5.2 If a student is prevented from writing summative examinations of a semester due to lack of attendance, the student has to register for that semester again, when offered next, attend the classes and fulfil the attendance requirements as per clause 6. If any of the courses in that semester, 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.

5.6 Flexibility to Add or Drop courses

A student has to earn the total number of credits specified in the curriculum of the respective Programme of study in order to be eligible to obtain the degree. However, if the student wishes, then the student is permitted to earn more than the total number of credits prescribed in the curriculum of the student's programme. From the second to final semesters, the student has the option of registering for additional courses or dropping existing courses. The total number of such courses cannot exceed two for

all PG programmes. This registration is for undergoing the course as well as for writing the Summative Examinations and for project work if applicable.

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

- 1. Courses of the current semester.
- 2. The core (Theory/Lab /EEC) courses that the student has not cleared in the previous semesters.
- 3. Elective courses in which the student has failed
- 4. Additional courses which the student has registered (Clause 5.4.5 and 5.4.7)
- 5. Phase-I/Phase-II project work

A student who has passed all the courses prescribed in the curriculum for the award of the degree shall not be permitted to re-enrol to improve the student's marks in a course or the aggregate marks/CGPA.

6. REQUIREMENTS FOR COMPLETION OF THE SEMESTER

6.1 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 80% of the classes for all the courses put together taking into account the number of periods required for those courses as specified in the curriculum.

$$\% \ of \ Overall \ Attendance = \frac{\begin{bmatrix} Number \ of \ Periods \ a \ students \ attended \ in \\ all \ the \ theory \ and \ practical \ subjects \end{bmatrix}}{\begin{bmatrix} Number \ of \ Periods \ conducted \ in \ all \\ the \ theory \ and \ practical \ subjects \ during \ the \ semester \end{bmatrix}}$$

$$\% \ of \ subjectwise \ Attendance = \frac{\begin{bmatrix} Number \ of \ Periods \ a \ students \ attended \ in \\ that \ particular \ subject \end{bmatrix}}{\begin{bmatrix} Number \ of \ Periods \ conducted \ in \ that \ particular \\ subject \ as \ per \ the \ curriculum \ requirement \end{bmatrix}}$$

The students should also ensure that their attendance percentage in each and every course would be more than 75%. For the purpose of clarity of attendance requirement for writing the summative examinations by the students for every course, the following methods shall be used. He/she shall be permitted to write the examinations if the following criteria are fulfilled.

- a. He/she has earned not less than 75 % of attendance on an average in all the courses in that semester (after rounding off to the nearest integer).
- b. Overall attendance should be more than 80%
- c. His/her progress has been satisfactory, and
- d. His/her conduct has been satisfactory.
- 6.2 However, a student who secures attendance between 70% and 79% overall or 65 to 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.
- 6.3 A student shall normally be permitted to appear for Summative examination of the course if the student has satisfied the attendance requirements (vide Clause 10.1 10.2) and has registered for examination in those courses of that semester by paying the prescribed fee.
- 6.4 Students are advised to refer the following table for the sake of clarity regarding the attendance requirement.

	Attend	ance %	Attend	ance %	Remark		
	Overall Subject wise for all the courses		Overall Subject wise		Student having the valid reason and proper document for the reduction in the	Student is not having the valid reason and proper document	
	80	75	70-79	65-74	attendance %.	for the reduction in the attendance %.	
Scenario 1	✓	✓	NA	NA	(Not required) Permitted to write the Summative examination.		
Scenario 2	✓	×	NA	√	Permitted to write the Summative examination After paying the Condonation fee.		
Scenario 3	cenario 3 ×		√	NA	Permitted to write the Summative examination After paying the Condonation fee.	Not permitted to write the Summative examinations	
Scenario 4	×	×	√	√	Permitted to write the Summative examination After paying the Condonation fee.		

Scenario 5	✓	×	NA	×	Student should attend in those subjects in which the attendance is less than 65% to increase the attendance
Scenario 6	×	×	✓	×	percentage up to 65%. Then they have to pay the condonation fee.
Scenario 7	×	×	×	✓	Not permitted to write the Summative examinations
Scenario 8	×	×	×	×	Not permitted to write the Summative examinations

6.5 In the case of reappearance registration for a course, the attendance requirement as mentioned in Clauses 6.1 - 6.3 is not applicable. However, the student has to register for summative examination in that course by paying the prescribed fee.

7. FACULTY ADVISER

There shall be a faculty adviser for each student. He / She will be appointed by the Head of the Department concerned. The responsibilities for the faculty adviser 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 class committee chairman 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 chairman and parents concerned.
- To attend to the students' welfare activities like awards, medals, scholarships and industrial visits.
- To inform the parents about their ward's academic performance.

8. CLASS COMMITTEE

8.1 A Class Committee consists of teachers of the concerned class, student representatives and a chairman 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 programme and the details of rules therein.
- Informing the student representatives, the "academic schedule" including the dates of assessments and the syllabus coverage for each assessment period.
- Informing the student representatives, the details of regulations regarding the weightage used for each assessment. In the case of practical courses (laboratory/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 improving the Students Performance.
- Identifying the slow learners, if any, in any specific subject and requesting the
 teachers concerned to provide some additional help or guidance or coaching to such
 slow learners as frequently as possible.
- 8.2 The class committee for a class under a particular programme is normally constituted by the Head of the Department. However, if the students of different programmes are mixed in a class, the class committee is to be constituted by the Head of the Institution. The class committee shall be constituted within the week of each semester. At least 2 student representatives (usually 1 boy and 1 girl) shall be included in the class committee.
- **8.3** The chairman of the class committee shall invite the Class adviser(s) and the Head of the Department to the meeting of the class committee. The Head of the Institution may participate in any class committee of the institution.
- 8.4 The Chairman of the Class Committee is required to prepare the minutes of every meeting, submit the same to the Head of the Institution with a copy to Dean (Academic) within two days of the meeting and arrange to circulate among the concerned students and teachers. 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.

8.5 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 at suitable intervals. During these meetings, the student members, representing the entire class, shall meaningfully interact and express the opinions and suggestions of the class students to improve the effectiveness of the teaching-learning process.

9. COURSE COMMITTEE FOR COMMON COURSES

Each common course offered to more than one group of students 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 as often as possible, and ensure uniform evaluation of the tests and arrive at a common scheme of evaluation for the tests. Wherever it is feasible, the course committee may also prepare a common question paper for the Assessment Test(s).

10. ASSESSMENT PROCEDURES FOR AWARDING MARKS

- 10.1 Performance in each course of study shall be evaluated based on
 - A. Formative Assessment (FA) which will be done throughout the semester and
 - B. Summative Assessment (SA) at the end of the semester.
- Examinations) shall be evaluated for a maximum of 100 marks.
 - a. For all **theory courses**, the Formative Assessment will carry **40%** weightage while the Summative Assessment will carry **60%** weightage.

- b. For all **theory courses with laboratory component**, the Formative Assessment will carry **50%** weightage while the Summative Assessment will carry **50%** weightage.
- c. For all **practical courses**, the Formative Assessment will carry **60%** weightage while the Summative Assessment will carry **40%** weightage.
- d. For <u>project work</u>, the Formative Assessment will carry 40% weightage while the Summative Assessment will carry 60% weightage.
- e. All other **Employability Enhancement courses** like Comprehension and Seminar are to be evaluated with **100%** weightage to Formative Assessment.
- 10.3 The Summative Assessment examinations for theory, theory with practical component and practical courses of three-hour duration shall ordinarily be conducted between October and December during the odd semesters and between April and June during the even semesters.
- 10.4 The Summative Assessment 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 three students) by the two expert members, followed by a viva-voce examination conducted separately for each group by a committee consisting of the two expert members and the supervisor of the project group.
- 10.5 For the Summative Assessment examination in both theory and practical courses including project work the examiners shall be appointed by the Controller of Examinations, SVCE.

11. PROCEDURE FOR AWARDING MARKS FOR FORMATIVE ASSESSMENT.

- For all theory courses, the formative assessment shall be for a maximum of 40 marks.
- For all **theory courses with laboratory component**, the formative assessment shall be for a maximum of **50 marks**.
- For all **practical courses**, the formative assessment shall be for a maximum of **60 marks**.
- For <u>project work</u>, the formative assessment shall be for a maximum of <u>40 marks</u>.

The above formative assessments shall be awarded as per the procedure given below:

11.1 Theory Courses

The award of marks for formative assessment shall be based on three formative assessments during the semester. Each formative assessment should contain the following:

- 1. Written test for 90 minutes and will be conducted for maximum of 50 marks, carrying 70% weightage.
- Activity based assessments: Assignment/tutorial/seminar/mini project/ Quiz/ Class room activity / MCQ etc. The total marks for all these activities should be 50 and it carries the 30% weightage
- 11.1.1 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 FA (Formative Assessment) mark of a particular course.
- 11.1.2 There will be three formative assessments. Hence Each student will have three marks FA1, FA2 and FA3 for a particular course. Total of all these three FAs would be scaled down to 40. The mark so obtained would be rounded to nearest integer. This is the FA mark of a particular student in a particular subject. (This implies equal weightage to all the three formative assessments). The final FA will be out of 40.

11.2 Theory Courses with laboratory component

The award of marks for formative assessment shall be based on three formative assessments during the semester. Formative assessments for theory component should contain the following:

- 1. Written test for 90 minutes and will be conducted for maximum of 50 marks, carrying 70% weightage.
- 2. Activity based assessments: Assignment/tutorial/seminar/mini project/ Quiz/ Class room activity / MCQ etc. The total marks for all these activities should be 50 and it carries the 30% weightage
- 11.2.1 Formative assessment of practical component would be conducted as per the following format.

- 1. Practical test for 90 minutes and will be conducted for maximum of 50 marks, carrying 70% weightage.
- 2. Record and observation of all the lab experiments would be evaluated for a maximum of 50 Marks and it carries the 30% weightage
- 11.2.2 The marks obtained in written test/practical test and activity based assignments/record and observation marks will be added with the weightage of 70% and 30%, respectively. This mark is out of 50 and known as FA (Formative Assessment) mark of a particular course.
 - 11.2.3 There will be three formative assessments. Hence Each student will have three marks FA1, FA2 and FA3 for a particular course. Total of all these three FAs would be scaled down to 50. The mark so obtained would be rounded to nearest integer. This is the FA mark of a particular student in a particular subject. (This implies equal weightage to all the three formative assessments). The final FA will be out of 50. Please refer section 12.1 for the scheme of evaluation.

11.3 Practical Courses

- 11.3.1 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.
- 11.3.2 The criteria for arriving at the Formative 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.

11.4 Absence in Formative Assessments

If a student would not be in a position to complete any one of the FA as per the schedule, due to sports/medical reasons or any other personal reasons, he/she should get the permission from the head of the department to write the retest for the same course(s). Even

if it is not possible for a student to write the test/assignment it will be considered as absent and zero mark will be entered into the portal.

11.5 Project Work

- 11.5.1 Project work may be allotted to a single student either in house or in any other Industry/reputed educational institutions.
- 11.5.2 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 11.5.4).
- of Studies and the same is available in our college website under the CoE page.

 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.
- 11.5.4 The review committee has to be appointed by the Head of the department concerned with the approval of the Principal.

				Summative Examinations					
Project Review Work 1		Review	Review	Project	Report	Viva – Voce Examination			
		2	3	Examiner 1	Examiner 2	Examiner 1	Examiner 2	Supervisor	
Phase 1	10	15	15	10	10	15	15	10	
Phase 2	10	15	15	10	10	15	15	10	

- 11.5.5 The examination panel consists of examiner 1 and examiner 2 should be appointed by the DCC to each and every student based on the subject relevance of the project.
- 11.5.6 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-enrol for the same in a subsequent semester.

11.6 OTHER EMPLOYABILITY ENHANCEMENT COURSES

- 11.6.1 The seminar / Case study is to be considered as purely FORMATIVE (with 100% Formative 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%).
- 11.6.2 The Industrial / Practical Training, Summer Project, Internship, shall carry 100 marks and shall be evaluated through formative 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 the DCC.

11.7 ASSESSMENT FOR VALUE ADDED COURSE

- 11.7.1 The one / two credit course shall carry 100 marks and shall be evaluated through formative assessments only. Two Assessments shall be conducted during the semester by the Department concerned. The total marks obtained in the tests shall be reduced to 100 marks and rounded to the nearest integer. Course in charge for the VA course is responsible for the marks.
- 11.7.2 A committee consisting of the Head of the Department, staff handling the course and a senior Faculty member nominated by the Head of the Institution 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 Summative Examinations.

11.8 Assessment for online courses

- 11.8.1 The approved list of online courses will be provided by the department class committee from time to time. This online course of 3 credits can be considered instead of one professional/open elective course.
- 11.8.2 The student needs to obtain certification to become eligible for the replacement of either a professional elective or an open elective. Methodology for allocating grade based on the performance of the students in the course would be decided by the DCC. Same should be communicated to the O/o CoE, SVCE.

11.9 Mandatory Courses

The Course committee, constituted by the head of the institution, for these mandatory courses will determine the methodology for the evaluation procedure. The methodology would be circulated to all concerned well in advance by the chairperson of the course committee.

12. PROCEDURE FOR AWARDING MARKS FOR SUMMATIVE ASSESSMENT

12.1 For theory courses

Summative examinations for theory subjects will be conducted as a written examination for three hours' duration with a maximum of 100 marks. In case if the theory paper is having the practical component in it, then the examination will be done as per the following table.

Sl. NO	Weightag e Formative assessmen		sment	nt Summative assessment		Weightage (Hours)		Weightage (Exam)				
NO	L	T	P	С	FA1	FA2	FA3	assessment	T	P	T	P
1	1	0	2	2	Theory	Theory	Practical	Practical (100%)	33.33	66.67	33.33	66.67
2	1	0	4	3	Theory	Practical	Practical	Practical (100%)	20.00	80.00	16.67	83.33
3	2	0	2	3	Theory	Theory	Practical	Theory (50%) Practical (50%)	50.00	50.00	58.33	41.67
4	1	0	6	4	Theory	Practical	Practical	Practical (100%)	14.28	85.72	16.67	83.33
5	2	0	4	4	Theory	Practical	Practical	Theory (40%) Practical (60%)	33.33	66.67	36.67	63.33
6	3	0	2	4	Theory	Theory	Practical	Theory (60%) Practical (40%)	60.00	40.00	63.33	36.67

12.2 For Practical courses

Summative examinations for the practical courses will be done with two examiners (Examiner 1 and Examiner 2). The examination would be conducted for three hours with a maximum of 100 marks, in the laboratory.

12.3 For Project work.

Summative examinations for the project work or any other activity based examinations, which requires a dissertation to be submitted, will be done as viva voce examination with two examiners (Examiner 1 and Examiner 2). The examination would be conducted with a maximum of 100 marks.

- 12.3.1 The Project Report prepared according to approved guidelines as given by Board of Studies and duly signed by the supervisor(s) shall be submitted to the Head of the Department.
- 12.3.2 If the candidate fails to obtain 50% of the formative assessment marks in the Phase–I and Phase–II / final project, he/she will not be permitted to submit the report for that particular semester and has to re-enrol for the same in the subsequent semester. 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-enrol for the same in a subsequent semester. This applies to both Phase–I and Phase–II of M.E. / M.Tech. Project Work.
- 12.3.3 If a candidate fails in the Summative examinations of Phase–I, he/she has to resubmit the Project Report within 30 days from the date of declaration of the results. If he / she fails in the Summative Examination of Phase–II of Project Work of M.E. / M.Tech., he/she shall resubmit the Project Report within 60 days from the date of declaration of the results. The resubmission of a project report and subsequent viva-voce examination, will be considered as reappearance with payment of exam fee. For this purpose, the same Formative and External examiners shall evaluate the resubmitted report.

- 12.3.4 A copy of the approved Project Report, after the successful completion of vivavoce examinations, shall be kept in the library of the college/institution. Practical/Industrial Training, Summer Project, if specified in the Curriculum shall not exceed the maximum duration of 4 weeks, and should be organized by the Head of the Department for every student.
- 12.3.5 At the end of Practical/Industrial Training, Summer Project the candidate shall submit a certificate from the organization where he/she has undergone training and also a brief report. The evaluation for 100 marks will be carried out internally based on this report and a Viva-Voce Examination will be conducted by a Departmental Committee constituted by the Head of the Department. Certificates submitted by the students shall be attached to the mark list sent by the Head of the Department to the Controller of Examination.

12.4 For Comprehension and seminar courses

There will not be any summative examinations for these courses and the assessment for these courses is based on formative assessment only.

12.5 For Special Elective courses

The methodology for the summative examinations for the special elective courses will be decided by the course in charge. Of course, for these courses, the methodology for the formative assessments also decided by the course in charge.

12.6 For any other courses.

Summative examinations for the remaining courses, not mentioned in 12.1, 12.2, 12.3, 12.4 and 12.5 will be decided by the course instructor.

12.7 Assessment for Seminar/Professional Practices/Case Study

The seminar/case study shall carry 100 marks and shall be evaluated through formative assessment 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 / report (40%), presentation (40%) and response to the questions asked during presentation (20%).

12. PASSING REQUIREMENTS

- 13.1 A student who secures not less than 50% of total marks prescribed for the course [Formative Assessment + Summative Examinations] with a minimum of 45% of the marks prescribed for the Summative Examination, shall be declared to have passed the course and acquired the relevant number of credits. This is applicable for both theory and practical courses (including project work).
- 13.2 The passing requirement for the courses which are assessed only through purely formative assessments (EEC courses except project work), is 50% of the formative assessment marks only.
- 13.3 A student can apply for revaluation of the student's semester examination answer paper in a theory course, within a week from the declaration of results, on payment of a prescribed fee along with prescribed application to the CoE through the Head of Departments. 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 project work.

13. AWARD OF LETTER GRADES

- 14.1 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:
- 14.2 A relative grading is going to be adopted for fixing the range of marks for various letter grades. The same has been given in the following table.

Letter grade	Grade	Marks Range							
	Points								
		Lower	Higher						
O (Outstanding)	10	University provided the software for al	ε						
A+ (Excellent)	9	relative grading method normalizes the results of those st who secure the total marks greater than or equal to 50, using							
A (Very Good)	8	BOX-COX transformation method and c for each course separately and awards the							
B+ (Good)	7	For a given course, if the students' streng	gth is greater than 30, the						
B (Average)	6	relative grading method shall be ado practical courses and the theory or theory							
C (Satisfactory)	5	which the students' strength is less than 30 then the fixed grading shall be followed with the grade range as specified below. < 50%							
U	0								
W	0	NA							

О	A+	A	B+	В	С	U
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. "W" denotes withdrawal from the exam for the particular course. The grades U and W will figure both in Marks Sheet as well as in Result Sheet. In both cases the student has to reappear for the Summative Examinations. For the grade W and U, the attendance requirement need not to be satisfied.

- 14.3 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 80% 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.
- 14.4 If a student obtains a grade O, A+, A, B+, B, and C in a Value added course, the course shall figure in the Mark sheet. However, value added courses in which the

grade is U will not figure in the mark 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.

CGPA will be calculated in a similar manner, considering all the courses registered from first semester. 'U', and 'W' 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 Grade 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.

15. ELIGIBILITY FOR THE AWARD OF DEGREE

- 15.1 A student shall be declared to be eligible for the award of the PG Degree (M.E./M.Tech.) provided the student has
 - Successfully gained the required number of total credits as specified in the curriculum corresponding to the students' programme within the stipulated time.
 - ii. Successfully completed the course requirements, appeared for the Summative examinations and passed all the subjects prescribed in all the 4

- semesters within a maximum period of 4 years reckoned from the commencement of the first semester to which the student was admitted.
- iii. Successfully passed any additional courses prescribed by the Department Consultative Committee, whenever readmitted under subsequent new regulations (vide Clause 18.2)
- iv. No disciplinary action pending against the student.

The award of degree must have been approved by the authorized body of the University.

15.2 Classification of the Degree Awarded

15.2.1 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 four semesters in the student's First Appearance within two years, which excludes authorized break of study (if availed), of one year. Withdrawal from examination (vide Clause 17) will not be considered as an appearance.
- Should have secured a CGPA of not less than 8.50.
- Should NOT have been prevented from writing Summative Examination due to lack of attendance in any of the courses.

15.2.2 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 four semesters within three years, which excludes one year of authorized break of study (if availed) of one year or prevention from writing the Summative Examination due to lack of attendance (if applicable).
- ➤ Should have secured a CGPA of not less than 6.5.

15.2.3 Second Class

All other students (not covered in Clauses 15.2.1 and 15.2.2), who qualify for the award of the degree (vide Clause 15.1) shall be declared to have passed the examination in Second Class.

15.2.4 A student, who is absent in Summative Examination in a course / project work after having registered for the same shall be considered to have appeared in that examination (except approved withdrawal from Summative examinations as per clause 17) for the purpose of classification.

16. Revaluation

A candidate can apply for revaluation / photocopy of his/her semester examination answer paper in a theory course, within 2 weeks from the declaration of results, on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of Department. The Controller of Examinations will arrange for the revaluation and the results will be intimated to the candidate concerned through the Head of the Department. 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.

16.1 Review

Candidates who have not satisfied with revaluation results 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 Examination through the Head of Department.

17. PROVISION FOR WITHDRAWAL FROM END-SEMESTER EXAMINATION

A candidate may for valid reasons and on prior application, be granted permission to withdraw from appearing for the examination of any one course or consecutive examinations of more than one course in a semester examination.

- 17.1 Such withdrawal shall be permitted only once during the entire period of study of the degree programme. Withdrawal application is valid only if it is made within 10 days prior to the commencement of the examination in that course or courses and recommended by the Head of the Institution and approved by the Controller of Examinations.
- 17.2 Notwithstanding the requirement of mandatory TEN days' notice, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case.
- 17.3 Withdrawal shall not be construed as an appearance for the eligibility of a candidate for First Class with Distinction. Withdrawal is not permitted after the final semester. Those candidates who withdraw are eligible for the award of First Class and First Class with Distinction as per the requirement in this regard. However, he/she will not be considered for ranking.
- 17.4 Withdrawal from the Summative Examination is NOT applicable to arrear subjects of previous semesters. The candidate shall reappear for the withdrawn courses during the examination conducted in the subsequent semester. Withdrawal shall not be permitted after the final semester examinations.

18. AUTHORIZED BREAK OF STUDY FROM A PROGRAMME

18.1 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 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 Head of the Institution in advance, but not later than the last date for registering for the Summative examination of the semester in question, through the Head of the Institution stating the reasons thereof and the probable date of re-joining the programme.

- 18.2 The candidates 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 apply to the Head of Institution in the prescribed format through Head of Department for prescribed additional courses, if any, at the beginning of the re-admitted semester itself, so as to compensate for the shortage of the credits.
- 18.3 The authorized break of study (for a maximum of one year) will not be counted for the duration specified for passing all the courses for the purpose of classification (vide Clause-15). However, additional break of study granted will be counted for the purpose of classification.
- 18.4 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 4.1 irrespective of the period of break of study in order that he/she may be eligible for the award of the degree.
- 18.5 If any student is detained for want of required attendance, the period spent in that semester shall not be considered as authorized 'Break of Study'.
- 18.6 If a student cannot complete the degree within the maximum period specified in Clause 4.1, 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 expected to observe discipline and decorum both inside and outside the college and not to indulge in any activity which will tend to bring down the reputation of the College. In the event of an act of indiscipline being reported, the Head of the Institution shall constitute a disciplinary committee consisting of two Heads of Departments of which one should be from the faculty of the student and two senior professors and his/her class advisor, to inquire into acts of indiscipline and notify the Head of the Institution about the disciplinary action taken. Any

expulsion of the student from the college shall be done with prior concurrence of the University.

19.2 If a student indulges in malpractice in any of the Summative / Formative 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 SYLLABUS

The college reserves the right to, amend or change the Regulations, scheme of examinations, the curriculum and the syllabi from time to time, if found necessary through the appropriate committee.
