

PG REGULATIONS 2024

M.E.

FLEXIBLE CHOICE BASED CREDIT SYSTEM

Common to all M.E. Full-Time Programme

(For the learners admitted to M.E. Programme in

Saveetha Engineering College)

PG REGULATIONS 2024**FLEXIBLE CHOICE BASED CREDIT SYSTEM COMMON TO M.E PROGRAMME**

The following Regulations are applicable to the learners admitted to M.E Programme at Saveetha Engineering College affiliated to Anna University, Chennai, from the academic year 2024-2025.

1 PRELIMINARY DEFINITIONS AND NOMENCLATURE

In these Regulations, unless the context otherwise requires:

- I. **“Programme”** means Post graduate Degree Programme e.g., M.E., M.Tech. Degree Programme.
- II. **“Discipline”** means specialization or branch of M.E. / M.Tech. Degree Programme like “Computer Science and Engineering”, “VLSI”, etc.
- III. **“Course”** means Theory or Practical subject that is normally studied in a semester, like Applied Mathematics, Advanced Thermodynamics, etc.
- IV. **“Institutional Academic Committee”** means the authority of Saveetha Engineering College which is responsible for all academic activities of the college for implementation of relevant Rules and Regulations.
- V. **“Chairperson”** means the Head of the Faculty.
- VI. **“Head of the Institution”** means the Principal of a College / Institution who is responsible for all academic activities of that College / Institution and for implementation of relevant Rules and Regulations.
- VII. **“Head of the Department (HoD)”** means the Head of the Department concerned.
- VIII. **“Controller of Examinations (CoE)”** means the Authority of the Saveetha Engineering College who is responsible for all activities of the Internal and End Semester Examinations.
- IX. **“University”** means ANNA UNIVERSITY, CHENNAI.

2 PROGRAMMES OFFERED, MODES OF STUDY AND ADMISSION REQUIREMENTS**2.1 P.G. PROGRAMMES OFFERED:**

1. M.E. – VLSI
2. M.E. – Computer Science and Engineering

2.2 MODES OF STUDY:

2.2.1 Learners admitted under 'Full-Time' should be available in the College / Institution during the entire duration of working hours (From Morning to Evening on Full- Time basis) for the curricular, co-curricular and extra-curricular activities assigned to them.

The Full-Time learners should not attend any other Full-Time programme / course(s) or take up any Full-Time job / Part-Time job in any Institution or Company during the period of the Full-Time programme. Violation of the above rules will result in cancellation of admission to the P.G. programme.

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. This is applicable for learners admitted both under Single Window Counselling process and through the Management Quota.

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.

2.3.2 However, the University may decide to restrict admission in any particular year to candidates having a subset of qualifications prescribed at the time of admission.

2.3.3 Notwithstanding the qualifying examination the candidate might have passed, he/she shall have a minimum level of proficiency in the appropriate programme / courses as prescribed by the college from time to time.

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 College from time to time.

3 STRUCTURE OF THE PROGRAMME

3.1 Categorization of Courses:

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 Courses (PCC)** include the core courses relevant to the chosen specialization/branch.
- III. **Professional Elective Courses (PEC)** include the elective courses relevant to the chosen specialization/ branch.
- IV. **Research Methodology and IPR Course (RMC)** covers topics on the process of research and patenting.
- V. **Employability Enhancement Courses (EEC)** include Project Work and/or Internship, Seminar, Professional Practices, Summer Project, Case Study and Industrial / Practical Training.
- VI. **Open Elective Courses (OEC)** include the courses credited from other postgraduate Programme of M.E. and online courses.

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 shall have credits assigned as per clause 3.3.

3.3 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
1 Practical Period	0.5

3.4 Project Work:

- 3.4.1** The project work for M.E. Programme consist of Project Work–I and Project Work–II. The Project Work–I is to be undertaken during

Semester III and Project Work–II, which is a continuation of Project Work–I, (except when project work II is carried out in the industry) is to be undertaken during Semester IV.

- 3.4.2** In case of learners of M.E. Programme not completing Project Work-I of project work successfully, the Learners can undertake Project Work-I again in the subsequent semester. In such cases the learners can enroll for Project Work-II, only after successful completion of Project Work-I.
- 3.4.3** Project work shall be carried out under the supervision of a “qualified facilitator” in the Department concerned. In this context “qualified facilitator” means the faculty member possessing (i) PG degree with a minimum of 3 years experiences in teaching or (ii) Ph.D. degree.
- 3.4.4** A learner may, however, undergo Project Work-II (M.E. Programme) in industry/academic institution of repute offering PG programme in Engineering/Technology (other than affiliated colleges of Anna University)/research institutions for a minimum of 16 weeks during the final semester. In such cases, the learners shall undergo the Project Work-II with the prior approval obtained from the Head of the institution and Centre for Academic Courses preferably one month before the start of the industrial project.

The Project Work-II carried out in industry/academic institution of repute/research institutions need not be a continuation of Project Work-I. In such cases, the Project Work shall be jointly supervised by a supervisor of the department and an expert as a joint supervisor from the organization and the learner shall be instructed to meet the supervisor periodically and to attend the review committee meetings for evaluating the progress. The review meetings, if necessary, may also be arranged in online mode with prior approval from the Head of the Institution and suitable record of the meetings shall be maintained.

- 3.4.5** The Project Work (Project Work-II in the case of M.E) shall be pursued for a minimum of 16 weeks during the final semester.
- 3.5** The Project Work-I in the case of M.E. programme shall be submitted within the last working day of the semester as per the academic calendar published by the Institution.

3.6 Industrial Training / Internship (Summer / Winter Vacation):

- 3.6.1** The Learners may undergo Industrial Training for a period as specified in the Curriculum during the summer / winter vacation. In this case, the training has to be undergone continuously for at least two weeks in an organization.

The Learners may undergo Internship at a Research organization / University / Industry (after due approval from the Head of the Institution and a copy of the same shall be forwarded to the Institutional Academic Committee) for the period prescribed in the curriculum during the summer / winter vacation, in lieu of Industrial training. Attendance Certificate signed by the competent authority of the industry, as per the format provided by the Institutional Academic Committee shall be submitted to the Head of the Institution.

- 3.6.2** If Industrial Training/ Internship is not prescribed in the curriculum, the learner may undergo Industrial Training/ Internship during Summer/Winter vacation optionally and the credits earned will be indicated in the Grade Sheet. If the learner earns three credits in Industrial Training/ Internship, the learner may drop one Professional Elective (only one professional elective can be dropped). In such cases, Industrial Training / Internship need to be undergone continuously from one organization or with a combination one two week and one four week programme, from one/two organizations. However, if the number of credits earned is 1 or 2, these credits shall not be considered for classification of the degree. Learners shall get permission from the Head of the Institution for taking industrial training/internship and the Certificate of completion of Industrial Training / Internship shall be forwarded to COE.

DURATION OF TRAINING / INTERNSHIP	CREDITS
2 weeks*	1
4 weeks	2
6 weeks	3

***1 Week = 40 Internship Hours**

3.7 Value Added Courses

- i. Learners may optionally 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. Courses with two/ three credits shall be offered by a Department of an institution with the prior approval from the Director, Academic Courses.
- ii. The details of the syllabus, timetable and faculty may be sent to the Centre for Academic Courses after approval from the Head of the Institution.
- iii. Learners shall be allowed to take these courses offered in other Departments also, but with the permission of the Head of the Institution of learner and Head of the Institution offering the course.
- iv. The courses once approved by the institution represented by any Department shall be made available in the website of the institution and these courses can be offered along with other courses.

3.8 Off Campus Courses and Transfer of Credits

Learners are permitted to optionally enroll and study a maximum of three off campus courses in physical/online/hybrid mode under each PG programme with the approval of Institutional Academic Committee as per the Regulations. The successful completion of these courses through any of the following modes shall be considered in lieu of professional elective / open elective courses of curriculum as approved by the Head of the Institution.

- 3.8.1** Learners are permitted to optionally enroll and study these courses through SWAYAM / NPTEL/MOOC platforms. And credit transfer is to be done based on the marks and certificate provided by the NPTEL/MOOC. The number of credits and transfer of credits are based on the procedure explained in Table 3 and the Mapping of the marks with the grades is explained in Table 4. The mapping of marks with grades is applicable, only if the learner passes the course as per the guidelines of NPTEL/MOOC.

Table 3: Duration of the course and Number of credits

S. No.	No. of Weeks	No. of Credits
1	4	1
2	8	2
3	12	3
4	16	4

Table 4: Mapping of Marks scored in NPTEL course and Credits earned

Letter Grade	Marks
O	90-100
A+	80-89
A	70-79
B+	60-69
B	50-59
C	40-49

3.8.2 Learners are permitted to optionally enroll and study the courses in physical / hybrid / online modes offered by reputed Central / State funded Universities / Institutions which are in the top 20 positions in the latest NIRF ranking and also conducting examination towards award of marks and grades. (NIRF Ranking of any of the last three years with respect to the year in which course is to be registered; NIRF ranking is based on respective stream for professional elective courses and based on any stream for open elective courses).

Learners are also permitted to enroll and undergo such courses in Online mode at Universities abroad in top 500 in QS ranking in the last three years.

Learners are also permitted to study courses of a particular semester in a University / Institution abroad based on MoU. A learning agreement shall be evolved to map all the courses offered in the programme and the courses offered in University abroad as per the procedure outlined by the

Institution. The credits earned by the learners in the University abroad shall be transferred as per the learning agreement.

In the case of 3.8.2, the learners can enroll for the courses with the approval of the Head of the Institution only if the course is offered directly by Institution/University and not with the edutech platforms. The marks/credits earned by the learner shall be transferred based on the decision of a committee constituted by Institutional Academic Committee.

- 3.9** A learner is permitted to register a maximum of two courses in total from clause 3.8.

3.10 Medium of Instruction:

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

4 DURATION AND STRUCTURE OF THE PROGRAMMES

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

Programme	Minimum Number of Semesters	Maximum Number of Semesters
M.E. (Full-Time)	4	8

- 4.2** The Curriculum and Syllabi of all the P.G. Programme shall be approved by the Academic Council of Saveetha Engineering College. 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.
- 4.3** Each semester shall normally consist of 75 working days or 540 periods of each 50 minutes duration, for full-time mode of study or 250 periods for part-time mode of study. The Head of the Institution shall ensure that every facilitator imparts instruction as per the number of periods specified in the syllabus and that the facilitator teaches the full content of the specified syllabus for the course being taught. For the purpose of calculation of attendance requirement for writing the end semester examinations (as per clause 10) by learners, following method shall be used.

$$\text{Percentage of Attendance} = \frac{\text{Total no. of periods attended in a particular course per semester}}{\text{Total number of periods allotted for the course per semester}} \times 100$$

End Semester Examinations conducted by the college will be scheduled after the last working day of the semester.

- 4.4** The minimum prescribed credits required for the award of the degree shall be within the limits specified below:

Programme	Prescribed CreditRange
M.E.	70 - 75

5 COURSE REGISTRATION

5.1 Flexibility to Drop courses

5.1.1 A learner 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.

5.1.2 From the first to pre-final semesters, the learner has the option of dropping existing courses in a semester during registration. Total number of credits of such courses cannot exceed 6 for P.G. (Full Time) programme. The learner is permitted to drop the course(s) within 10 days of the commencement of the academic schedule.

5.2 Each learner has to register for all courses to be undergone in the curriculum of a particular semester. This registration is for undergoing the course as well as for writing the End Semester Examinations.

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

Courses of the current semester and Courses dropped in the lower semesters.

The maximum number of credits that can be registered in a semester is 36.

6 EVALUATION OF PROJECT WORK

The evaluation of Project Work for Project Work-I & Project Work-II in the case of M.E. shall be done independently in the respective semesters and marks shall be allotted as per the weightages given in Clause 6.1.

- 6.1** There shall be three assessments (each 100 marks) during the Semester by a review committee. The learner shall make presentation on the progress made before the Committee. The Head of the Institution shall constitute the review committee for each programme. The review committee consists of supervisor expert from the department and a project coordinator from the Department. If the project coordinator/expert member happens to be the Supervisor then an alternate member shall be nominated. In the case of project work II carried out in industry/academic/research institutions, the review committee shall have the coordinator from industry / academic / research institutions and the project coordinator from the Department. The total marks obtained in the three assessments shall be reduced to 40 marks and rounded to the nearest integer (as per the Table given below). There will be a vice-voce Examination during End Semester Examinations conducted by a committee consisting of the supervisor, one internal examiner and one external examiner. The internal examiner and the external examiner shall be appointed by the Controller of Examination. The distribution of marks for the internal assessment and End semester examination is given below:

Internal Assessment (40 Marks)			End Semester Examination (60 Marks)			
Review I	Review II	Review III	Thesis Submission	Viva-Voce Examination		
10	15	15	External Examiner	Internal Examiner	External Examiner	Supervisor Examiner
			25	10	15	10

- 6.2** The Project Report prepared according to approved guidelines as given by the Institutional Academic Committee and duly signed by the supervisor(s) and the Head of the Department concerned shall be submitted to the Head of the Institution.
- 6.3** If a learner fails to submit the project report on or before the specified deadline as mentioned in clause 3.5, he/she is deemed to have failed in the Project Work and shall register for the same in a subsequent semester. This applies to both for Project Work–I and Project Work–II in the case of M.E. Project Work.

If a learner has submitted the project report but did not appear for the viva- voce examination, it will be considered as fail and he/she will be permitted to re-register for the same in the next semester.

6.3.1 A copy of the approved Project Report after the successful completion of viva-voce examinations shall be kept in the library of the college / institution.

6.3.2 Practical / Industrial Training, Summer Project if specified in the Curriculum shall not exceed the maximum duration.

6.3.3 At the end of Practical / Industrial Training, Summer Project, the learner shall submit an Attendance 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 Institution. The attendance certificate submitted by the learners shall be attached to the mark list sent by the Head of the Institution to the Controller of Examination.

7 CLASS ADVISOR

There shall be a class advisor for each class. The class advisor will be one among the (course-instructors) of the class. He / She will be appointed by the Head of the department concerned. The class advisor is the ex-officio member and the Convener of the class committee. The responsibilities for the class advisor shall be:

- I. To act as the channel of communication between the HoD and the learners of the respective class.
- II. To collect and maintain various statistical details of learners.
- III. To help the chairperson of the class committee in planning and conduct of the class committee meetings.
- IV. To monitor the academic performance of the learners including attendance and to inform the class committee.
- V. To attend to the learners' welfare activities like awards, medals, scholarships and industrial visits.

8 CLASS COMMITTEE

8.1 A Class Committee consists of facilitators of the concerned class, learner 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:

- 1) Solving problems experienced by learners in the class room and in the laboratories.
- 2) Clarifying the regulations of the programme and the details of rules therein.
- 3) Informing the learner representatives, the "academic schedule" including the dates of assessments and the syllabus coverage for each assessment period.
- 4) Informing the learner 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 learners.
- 5) Analyzing the performance of the learners of the class after each test and finding the ways and means of improving the performance of the Learners.
- 6) Identifying the slow learners, if any, in any specific subject and requesting the facilitators concerned to provide some additional help or guidance or coaching to such 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 learners of different programme are mixed in a class, the class committee is to be constituted by the Head of the Institution.

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

8.4 At least 2 learner representatives (usually 1 boy and 1 girl) shall be included in the class committee.

8.5 The chairperson of the class committee shall invite the Class adviser(s) and the

Head of the Department to the meeting of the class committee.

- 8.6** The Head of the Institution may participate in any class committee of the institution.
- 8.7** The Chairperson of the Class Committee is required to prepare the minutes of every meeting, submit the same to the Head of the Institution within two days of the meeting and arrange to circulate among the concerned learners and facilitators. 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.
- 8.8** 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 learners 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 learner members, representing the entire class, shall meaningfully interact and express the opinions and suggestions of the class learners 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 learners shall have a "Course Committee" comprising all the facilitators 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 facilitators 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 ATTENDANCE REQUIREMENTS FOR COMPLETION OF A SEMESTER

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

Ideally every learner is expected to attend all classes and earn 100% attendance.

However, in order to allow provision for certain unavoidable reasons such as

prolonged hospitalization / accident / specific illness the learner is expected to earn a minimum of 75% attendance to become eligible to write the End-Semester Examinations.

Therefore, every learner shall secure not less than 75% of overall attendance in that semester as per clause 4.3.

However, a learner who secures overall attendance between 70% and 74% in that current semester due to medical reasons (prolonged hospitalization / accident

/ Specific illness) / participation in sports events may be permitted to appear for the current semester examinations subject to the condition that the learner shall submit the medical certificate / sports participation certificate to the Head of the Institution. The same shall be forwarded to the Controller of Examinations for record purposes.

Learners who secure less than 70% overall attendance will not be permitted to write the end-semester examination of that course.

11 PROCEDURES FOR AWARDING MARKS FOR INTERNAL ASSESSMENT (IA)

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

11.1 THEORY COURSES:

For Theory Courses out of 100 marks, the maximum marks for continuous assessment are fixed as 40 and the end semester examination carries 60 marks.

Continuous Internal Assessment (CIA) comprises two written test based assessments (CIA 1 and CIA 2) and two Skill assessments (SA1 and SA2) (Assignment/Case study / Seminar / Mini project /Quiz/ Simulation) conducted by the course instructor. The total percentage of marks obtained in all assessments put together is 200 and shall be proportionately reduced for 40% of marks and rounded to the nearest integer.

Weightage of Marks for Continuous Assessment

CIA 1	CIA 2	SA1	SA2	Total*
60	60	40	40	200%

*The weighted average shall be converted into 40 marks for Internal Assessment.

11.2 LABORATORY COURSES:

The maximum marks for Internal Assessment shall be 60 in case of practical courses. Every practical exercise / experiment shall be evaluated based on conduct of experiment / exercise and records to be maintained. There shall be at least one test. The criteria for arriving at the Internal Assessment marks of 60 is as follows: 75 marks shall be awarded for successful completion of all the prescribed experiments done in the Laboratory and 25 marks for the test. The total mark shall be converted into a maximum of 60 marks and rounded to the nearest integer.

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

* Internal assessment marks shall be converted into 60 marks

11.3 THEORY COURSES WITH LABORATORY COMPONENT / LABORATORY COURSES WITH THEORY COMPONENT:

Weightage of internal assessment and end semester examination marks will be 50% each. The distribution of marks for the theory and laboratory components in the internal assessments and end semester examination for different types of courses are provided in the table.

TCP with Credit Split - up	Internal Theory	Internal Practical	End Semester Theory	End Semester Practical
T-1, P-2	25%	25%	0%	50%
T-1 , P-1	25%	25%	0%	50%
T-2 , P-1	25%	25%	25%	25%
T-3 , P-1	25%	25%	35%	15%
T-4 , P-1	25%	25%	35%	15%
T-2 , P-2	25%	25%	15%	35%
T-3 , P-2	25%	25%	20%	30%

The procedure for the conduct of internal assessments for theory and laboratory components shall be as per the clause 11.1 and 11.2 respectively.

*The weighted average shall be converted into 50 marks for internal Assessment.

11.4 OTHER EMPLOYABILITY ENHANCEMENT COURSES:

The Seminar / Case study course is to be considered as purely INTERNAL (with 100% internal marks only). Every learner is expected to present a minimum of 2 seminars per semester before the evaluation committee and for each seminar marks can be equally apportioned. A three member committee appointed by Head of the Institution consisting of course coordinator and two experts from 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%).

The Industrial / Practical Training 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 an attendance certificate from the organization where he / she has undergone training and a brief report. The evaluation will be made based on this report and a viva-voce Examination, conducted internally by a three member Departmental Committee constituted by the Head of the Institution consisting of course coordinator and two experts from the Department. The certificates submitted by the candidate shall be attached to the mark list sent by the Head of the Department.

11.5 ASSESSMENT FOR VALUE ADDED COURSE:

The value added course shall carry 100 marks and shall be evaluated through **continuous assessments only**. Two Assessments shall be conducted during the semester by the Department concerned. The total marks obtained in the tests shall be reduced to 100 marks and rounded to the nearest integer. 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 do the evaluation process. The list of learners along with the marks and the grades earned shall be forwarded to the Controller of Examinations for appropriate action at least one

month before the commencement of End Semester Examinations. The grades earned by the learners for Value Added Courses will be recorded in the Grade Sheet, however the same shall not be considered for the computation of CGPA.

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

11.7 Every facilitator 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 (topics 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/her 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).

11.8 CONDUCT OF ACADEMIC AUDIT BY EVERY INSTITUTION:

Every educational institution shall strive for a better performance of the learners by conducting the internal assessments as mentioned in Clause 11.

In order to ensure the above, Academic Audit is to be done for every course taught during the semester. For the internal assessments conducted for each course as per details provided in Clause 11, the academic records (Physical/Digital) shall be maintained in the form of documentation for the individual assignments / case study report / report of mini project submitted by each learner and assessment test question paper and answer script. Report of industrial training / internship shall also be maintained, if applicable. For laboratory courses learners' record shall be maintained. Further, the attendance of all learners shall be maintained as a record.

The Head of the Institution shall arrange to conduct the Academic Audit for every course in a semester by forming the respective committees with an external course expert as one of the members drawn from a technical institution of repute near the institute.

12 REQUIREMENTS FOR APPEARING FOR SEMESTER EXAMINATION

- 12.1** A learner shall normally be permitted to appear for the End Semester examinations of the current semester if he/she has satisfied the semester completion requirements as per clause 10 and has registered for examination in all courses of the current semester.
- 12.2** A learner who has passed all the courses prescribed in the curriculum for the award of the degree shall not be permitted to re-enroll to improve his/her marks in a course or the aggregate marks / CGPA.

13 END SEMESTER EXAMINATIONS

There shall be an End-Semester Examination of 3 hours duration in each lecture based course.

The examinations shall ordinarily be conducted between October to January during the odd semesters and between April to July in the even semesters.

For the practical examinations (including project work), both internal and external examiners shall be appointed by the Institution.

Supplementary exams will be conducted within 45 days after the publication of Revaluation Results in a semester.

14 PASSING REQUIREMENTS

- 14.1** A candidate who secures not less than 50% of total marks prescribed for the courses (Continuous Assessment + End semester examination) with a minimum of 45% of the marks prescribed for the end-semester Examination, shall be declared to have passed the course and acquired the relevant number of credits. This is applicable for both theory and laboratory courses (including project work). For theory courses with laboratory component the candidate should earn a minimum of 45% of the marks in end semester examination individually in theory and laboratory.
- 14.2** If a learner fails to secure a pass in a theory course/ Practical/Project work, the learner shall Re-register for that course in the subsequent semester, when offered next, earn internal assessment marks and attend the end semester examination.

- 14.3** If the course, in which the learner has failed, is a professional elective or an open elective, the learner may be permitted to complete the same course. In such case, the internal assessment marks obtained by the candidate in the first appearance will not be considered for all subsequent attempts and he/she has to re-register the course again and have to take up the internal assessments.

If any other course is opted by the learner, the previous registration is cancelled and henceforth it is to be considered as a new course. The learner has to re-register and attend the classes, earn the continuous assessment marks, fulfill the attendance requirements as per Clause 10 and appear for the end semester examination.

- 14.4** If a learner is absent during the viva voce examination, it would be considered as fail. If a learner fails to secure a pass in project work even after availing clause (6.3), **the learner shall re-register** for the course again.

- 14.5** The passing requirement for the courses which are assessed only through purely internal assessment is 50% of the internal assessment marks only.

- 14.6** A learner can apply for revaluation of his/her semester examination answer paper in a theory course as per the guidelines of COE, on payment of a prescribed fee alongwith prescribed application to the COE through the Head of the Institution. The COE will arrange for the revaluation and the results will be intimated to the learner concerned through the Head of the Institution. Revaluation is not permitted for laboratory courses.

- 14.7** For the passed out learners, who have not passed one or more courses:

If a learner fails to secure a pass in a theory course / laboratory course, the learner shall re-register and appear only for the end semester examination in the subsequent semester. In such case, the internal assessment marks obtained by the learner in the first appearance shall be retained and considered valid for all subsequent attempts till the learner secures a pass.

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

15 AWARD OF LETTER GRADES

15.1 The award of letter grades will be decided using relative grading principle except Laboratory Courses and Project Work. The performance of a learner will be reported using letter grades, each carrying certain points as detailed below:

Letter Grade	Grade Points
O (Outstanding)	10
A+ (Excellent)	9
A (Very Good)	8
B+(Good)	7
B(Average)	6
C (Satisfactory)	5
U (Re-appearance)	0
SA (Shortage of Attendance)	0
WD (Withdrawal)	0

A learner is deemed to have passed and acquired the corresponding credits in a particular course if he/she obtains any one of the following grades:

“O”, “A+”, “A”, “B+”, “B”, “C”.

‘SA’ denotes shortage of attendance (as per clause 10.1) and hence Prevention from writing the end semester examinations. ‘SA’ will appear only in the result sheet.

“U” denotes that the learner has failed to pass in that course. “WD” denotes withdrawal from the exam for the particular course. The grades U and W will figure both in the Grade Sheet as well as in the Result Sheet. In both cases, the learner has to reappear for the End Semester Examinations as per the Regulations.

15.1.1 Relative Grading

For those learners who have passed the course (theory courses / theory with laboratory integrated courses) the relative grading shall be done. The marks of those learners who have passed only shall be inputted in the software developed for relative grading. The evolved relative grading method normalizes the results data using the BOX-COX transformation method and computes the grade range for each course separately and awards the grade to each learner. If the learners' strength is greater than 30, the relative grading method shall be adopted.

15.1.2**Absolute Grading**

- 1) In all the courses, for those learners who have passed the course, if their strength is less than or equal to 30 then absolute grading shall be followed with the grade range as specified in the Table.
- 2) For the Project Work / Internship and Laboratory Courses, absolute grading procedure shall be followed as given in the Table below irrespective of the number of learners who have passed the course.

Table – Grade range for absolute grading

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

15.2 The grades O, A+, A, B+, B, C obtained for the one/two credit courses (not part of curriculum) under the title 'Value Added Courses' and 'internship/industrial training' (if not part of curriculum) shall figure in the Grade Sheet. For these courses if the grades obtained are RA, SA then they shall not figure in the Grade Sheet.

15.3 GRADE SHEET:

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

- (i) The college in which the candidate has studied.

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

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

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

Where

C_i is the number of 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.

16 ELIGIBILITY FOR THE AWARD OF THE DEGREE

16.1 A learner shall be declared to be eligible for the award of the M.E. provided the learner has

- i. Successfully gained the required number of total credits as specified in the curriculum corresponding to the learner'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 4 semesters within a maximum period of 4 years reckoned from

the commencement of the first semester to which the learner was admitted.

- iii. Successfully passed any additional courses prescribed by the Institutional Academic Committee whenever readmitted under regulations other than R-2024 (vide clause **19.3**)
- iv. No disciplinary action pending against the learner.
- v. The award of Degree must have been approved by the Syndicate of the University.

17 CLASSIFICATION OF THE DEGREE AWARDED

17.1 FIRST CLASS WITH DISTINCTION:

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

M.E.(Full Time)

- Should have passed the examination in all the courses of all the four semesters in the learner's First Appearance within **three** years, which includes authorized break of study of one year (if availed). Withdrawal from examination (vide Clause 18) will not be considered as an appearance.
- Should have secured a CGPA of not less than **8.50**.
- Should NOT have been prevented from writing end Semester examination due to lack of attendance in any of the courses.

17.2 FIRST CLASS:

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

M.E. (Full Time)

- Should have passed the examination in all the courses of all four semesters **within three years**, which includes one year of authorized break of study (if availed) or prevention from writing the End Semester Examination due to lack of attendance (if applicable).
- Should have secured a CGPA of not less than **6.50**.

17.3 SECOND CLASS:

All other learners (not covered in clauses 17.1 and 17.2) who qualify for the award of the degree (vide Clause 16.1) shall be declared to have passed the examination in **Second Class**.

- 17.4** A learner who is absent in End Semester Examination in a course / project work after having registered for the same shall be considered to have appeared in that examination (except approved withdrawal from end semester examinations as per clause 18) for the purpose of classification.

17.5 Photocopy / Revaluation:

A learner can apply for photocopy of his/her semester examination answer paper in a theory course, as per the guidelines of CoE on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of Institutions. The answer script is to 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 learner 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 learner concerned through the Head of the Institutions. Revaluation is not permitted for practical courses. A learner can apply for revaluation of answer scripts for not exceeding 5 courses at a time.

17.6 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 Examinations through the Head of the Institution. Learners applying for Revaluation only are eligible to apply for Review.

18 PROVISIONS FOR WITHDRAWAL FROM EXAMINATION:

- 18.1** A learner may, for valid reasons, (medically unfit / unexpected family situations / sports approved by Head of the Institution) 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 COE through the Head of the Institutions with required documents.

18.2 Withdrawal application is valid if the learner is otherwise eligible to write the examination (Clause 10) and if it is made within TEN days after the date of the examination(s) in that course or courses and recommended by the Head of the Institution and approved by the Controller of Examinations. For a learner to withdraw from a course / courses, he/she should have registered for the course, fulfilled the attendance requirements (vide clause 10) and earned continuous assessment marks.

18.2.1 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.

18.3 In case of withdrawal from a course / courses, it will figure both in Marks Sheet as well as in Result Sheet. However, withdrawal shall not be considered as an appearance for the eligibility of a learner for First Class with Distinction.

18.4 If a learner withdraws from writing end semester examinations for a course or courses, he/she shall register for the same in the subsequent semester and write the end semester examination(s).

18.5 If a learner applies for withdrawal from Project work, he/she will be permitted to re-register the project work in the subsequent semester only.

18.6 Withdrawal is permitted for the end semester examinations in the final semester, as per clause 18.1.

19 AUTHORIZED BREAK OF STUDY FROM A PROGRAMME

19.1 A learner is permitted to avail authorized break of study for a maximum period of one year in a single spell.

19.2 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 learner may apply for additional break of study not exceeding another one year. If a learner intends to temporarily discontinue the programme in the middle of the semester for valid reasons, and to rejoin the programme in a subsequent year, permission may be granted based on the merits of the case provided he / she applies to the Head of the Department in advance, but not later than the last date for registering for the end semester examination of the semester in question, through the Head of the Institution stating the reasons

therefore and the probable date of rejoining the programme.

- 19.3** The learners permitted to rejoin the programme after break of study / prevention due to lack of attendance, shall be governed by the Curriculum and Regulations in force at the time of rejoining. The learners rejoining in new regulations shall register for additional courses, if any, as notified by the Institutional Academic Committee under change of regulations. These courses may be from any of the semesters of the curriculum in force, so as to bridge the curriculum in force and the old curriculum. In such cases, the total number of credits to be earned by the learner may be more than or equal to the total number of credits prescribed in the curriculum in force.
- 19.4** The authorized break of study of maximum of one year is included in the duration specified for passing all the courses for the purpose of classification (vide Clause 19.1).
- 19.5** The total period for completion of the Programme reckoned from, the commencement of the first semester to which the student 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.
- 19.6** If any learner is prevented for want of required attendance, the period of prevention shall not be considered as authorized 'Break of Study' (Clause 19.1).
- 19.7** If a learner in Full Time mode wants to take up job / start-up / entrepreneurship during the period of study he/she shall apply for authorized break of study for one year. The student shall undertake the job / start-up / entrepreneurship only after getting approval of the same by Institutional Academic Committee with due proof to that effect.
- 19.8** No fee is applicable to learners during the Break of Study period.

20 DISCIPLINE

- 20.1** Every learner is required to observe disciplined and decorous behavior both inside and outside the college and not to indulge in any activity which will tend to bring down the prestige of the Institution. The Head of Institution shall constitute a disciplinary committee consisting of Two Heads of Department of which one should be from the faculty of the student, to enquire into acts of indiscipline and decision on disciplinary action will be recommended to the Head of the Institution.

20.2 If a learner indulges in malpractice in any of the End Semester/ internal examination he / she shall be liable for punitive action as prescribed by the Institution from time to time.

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 with the approval of the Syndicate.