

S.A. ENGINEERING COLLEGE, CHENNAI – 600 077

(An Autonomous Institution)

Affiliated to Anna University, Chennai.

REGULATIONS 2023

CHOICE BASED CREDIT SYSTEM

Common to all M.E. Degree Programmes

(For the Students admitted from the Academic Year 2023-2024 onwards)



VISION

To transform our institution into quality technical education centre imparting updated technical knowledge with character building.

MISSION

- To create an excellent teaching and learning environment for our staff and students to realize their full potential thus enabling them to contribute positively to the community.
- To significantly enhance the self-confidence level for developing creative skills of staff and students.

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The amendments to Regulations 2023 hereunder are effective from the Academic Year 2023- 2024 and are applicable to students admitted to S.A. Engineering College (Autonomous), Chennai-600077, from the Academic year 2023-2024 onwards. The regulations hereunder are subject to amendments as may be made by the Academic Council of the College from time to time. Any or all such amendments will be effective from such date and to such batches of students (including those already undergoing the programme) as may be decided by the Academic Council.

1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In the following Regulations, unless the context otherwise requires,

- 1.1 **“Programme”** means Post Graduate Degree Programme that is M.E. Degree Programme.
- 1.2 **“Branch”** means specialization or discipline of M.E. Degree Programme, like Communication Systems, CAD/CAM etc.
- 1.3 **“Course”** means a theory or practical course that is normally studied in a semester, like Applied Mathematics, Advanced Thermodynamics, etc.
- 1.4 **“Head of the Institution”** means the Principal of the College.
- 1.5 **“Head of the Department”** means head of the Department concerned.
- 1.6 **“Controller of Examinations”** means the authority in the college who is responsible for all activities of the Assessment and Semester Examinations.
- 1.7 **“University”** means the affiliating University, Anna University, Chennai, which will award the M.E. degree.
- 1.8 **“Institution”** means S.A. Engineering College, Chennai, an autonomous institution affiliated to Anna University, Chennai.

2. MODE OF STUDY

The Full –Time M.E. program is of 4 semesters (2 years) duration. The medium of instruction and the language to be used for examinations, seminar presentations and project report shall be English.

3. ELIGIBILITY FOR ADMISSION

The 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 COMMON ENGINEERING ENTRANCE TEST AND ADMISSION (CEETA-PG-2023) for admission to M.E. Degree Programme vide its G.O.(MS) No. 14, dated: 24.01.2023 of Higher Education Department. This is applicable for students admitted both under single window counselling process and through the Management Quota.

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.

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.

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 University from time to time.

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 University from time to time.

4. DURATION OF THE PROGRAMME

4.1 Minimum Duration: The programme will extend over a period of two years leading to the Degree of Master of Engineering (M.E). The two academic years will be divided into four semesters. Each semester shall normally consist of 90 working days including examination days.

4.2 Maximum Duration: The student shall complete all the passing requirements of the M.E. degree programme within a maximum period of 4 years; these periods reckoned from the commencement of the semester to which the student was first admitted to the programme.

The Curriculum and Syllabi of all the P.G. Programmes shall be verified and recommended by the Board of Studies and approved by the Academic Council of S.A. 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.

Table.1: The minimum prescribed credits required for the award of the degree shall be within the limits specified below:

Programme	Prescribed Credit Range
M.E	70-75

4.3 M.E. PROGRAMMES OFFERED: Candidates shall be admitted to one of the following branches of study and obtain a Degree of M.E. of Anna University, Chennai.

Table.2: Branches of study

M.E.	CAD / CAM
M.E.	Communication Systems
M.E.	Computer Science and Engineering
M.E.	Embedded System Technologies

5. STRUCTURE OF PROGRAMMES

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 post graduate Programmes of M.E./M.Tech/ M. Arch. and online courses.
 - vii. **Audit courses (AC)** include the courses such as Constitution of India, Natramizh Ilakiam, etc.
 - viii. **Self-Study Course(SSC)** include the list of self-study courses relevant to their research work
- 5.1 Number of courses per semester:** Each semester curriculum shall normally have a blend of lecture courses not exceeding 7 and Laboratory courses and Employability Enhancement Course(s) not exceeding 4. However, the total number of courses per semester shall not exceed 10.

5.2 Electives: Students shall opt for professional elective courses from second semester onwards. He/she shall opt for elective courses from the list provided in the curriculum of their department in consultation with the Faculty Advisor / Class Advisor / Head of the Department.

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

Table.3: Contact period and Number of Credits

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

5.4 Online Courses: Students may be permitted to credit a maximum of two online courses (which are provided with certificate) subject to a maximum of six credits from first semester onwards. The approved list of online courses offered by reputed institutions will be provided by the Head of the department concerned with the approval of Head of the Institution from time to time. The online course of 3 credits can be considered in lieu of professional elective courses. The Head of the Institution shall form a centralized committee to ensure that the student has not studied such courses and would not repeat it again as Professional Core/Professional Elective/Open Elective courses. Suitable online courses shall be chosen from the SWAYAM platform. Students are permitted to optionally enroll and study these courses through SWAYAM / NPTEL platforms and credit transfer is to be done based on the marks and certificate provided by the NPTEL. The number of credits and transfer of credits are based on the procedure explained in Table 4 and the Mapping of the marks with the grades is explained in Table 5. The mapping of marks with grades is applicable, only if the student passes the course as per the guidelines of NPTEL. **Amendment of clause 5.4**

Table 4. Duration of courses and Number of credits

S.No	Number of weeks	Number of credits
1	4	1
2	8	2
3	12	3
4	16	4

Table 5. : 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

- 5.5 Value Added Courses:** The Students may optionally undergo Value Added Courses and the credits earned through the Value-Added Courses shall be over and above total credit requirement prescribed in the curriculum for the award of the degree. One / Two credit courses shall be offered by a Department **with the prior approval from the Head of the Institution.** The details of the syllabus, timetable and faculty may be sent to the Controller of Examinations after approval from the Head of the Institution concerned at least one month before the course is offered. **Students can take a maximum of two one credit courses / one two credit course during the entire duration of the Programme.** The credits earned through this shall be over and above the total credit requirements prescribed in the curriculum for the award of the degree and will not be counted for GPA evaluation.
- 5.6 Self-study courses:** The students are permitted to optionally enroll and study a maximum of one self-study course of student's choice in physical/online/hybrid mode under each PG programme with the approval of Head of the Department and controller of Examination as per the Regulation. The students shall study on their own under the guidance of a faculty member. No formal lectures need be delivered. The Head of the Institution shall form a centralized committee to ensure that the student has not studied such courses and would not repeat it again as Professional Core/Professional Elective/Open Elective courses and also the assessment and award the grade. The successful completion of this course through any of the modes shall be considered in lieu of professional elective courses of curriculum as approved by the Head of the Institution. **Amendment of clause 5.6**

- 5.7 **Industrial Training / Internship:** The students 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 students 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 Controller of Examination 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 college shall be submitted to the Head of the Institution. The attendance certificate shall be forwarded to COE for processing results.

- 5.7.1 If Industrial Training/ Internship is not prescribed in the curriculum, the student may undergo Industrial Training/ Internship during Summer/Winter vacation optionally and the credits earned will be indicated in the Grade Sheet. If the student earns three credits in Industrial Training/ Internship, the student 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 which is MSME approved or with More than or equal to 2 crore turnover organization. The Head of the Institution shall form a centralized committee to verify the standard of the organization as per the regulation and continuous assessment. However, if the number of credits earned is 1 or 2, these credits shall not be considered for computation of CGPA. Students 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. **Amendment of clause 5.7.1**

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

*1 Week = 40 Internship Hours

5.8 Project Work:

- 5.8.1 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.
- 5.8.2 In case of students of M.E. Programme not completing Project Work-I of project work successfully, the students can undertake Project Work-I again in the subsequent semester. In such cases the students can enroll for Project Work-II, only after successful completion of Project Work-I.
- 5.8.3 Project work shall be carried out under the supervision of a "qualified teacher" in the Department concerned. In this context "qualified teacher" means the faculty member possessing (i) PG degree with a minimum of 3 years' experience in teaching or (ii) Ph.D. degree.
- 5.8.4 A student may, however, undergo Project Work-II (M.E Programme) in industry/academic institution of repute offering PG programmes 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 students shall undergo the Project Work-II with the approval obtained from the Head of the institution 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 student shall be instructed to meet the supervisor periodically and to attend the review committee meetings for evaluating the progress. The review meetings, if necessary, may also be arranged in online mode with prior approval from the Head of the Institution and suitable record of the meetings shall be maintained.

5.8.5 The Project Work II of M.E.) shall be pursued for a minimum of 16 weeks during the final semester.

5.8.6 The deadline for submission of final Project Report (Project Work-II for M.E. programme) is 60 calendar days from the last working day of the semester in which project work / thesis / dissertation is done. However, 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 College.

5.9 Audit courses

The student may optionally study audit courses prescribed by the University and it will be mentioned in the Grade Sheet. However, it will not be considered for computation of CGPA.

6. COURSE ENROLLMENT AND REGISTRATION

6.1 A Faculty advisor / Class Advisor assigned from the department shall be responsible for the course enrollment and registration of students every semester as per the curriculum. They are also responsible to provide the details of courses offered by the department or by other department in case of open electives. The student can also register for courses for which he/she has failed in the earlier semesters.

6.2 The registration details of the candidates may be approved by the Head of the Institution and forwarded to the Controller of Examinations. This registration is for undergoing the course as well as for writing the End Semester Examinations.

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

6.3.1 Courses of the current semester.

6.3.2 The core (Theory/Lab /EEC) courses that the student has not cleared in the previous semesters.

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

7. ATTENDANCE REQUIREMENTS FOR COMPLETION OF THE SEMESTER

7.1 A Candidate who has completed course registration shall be eligible to enroll for examination of any course only if, he/she shall secure not less than 75% attendance (after rounding off to the nearest integer) in each course.

7.2 Ideally every student is expected to attend all classes of all the courses and secure 100% attendance. However, in order to give provision for certain unavoidable reasons such as **Medical / participation in sports, the student is expected to attend at least 75% of the classes.**

7.3 However, a candidate who secures overall attendance between 65% and 74% in the current semester due to medical reasons (prolonged hospitalization / accident / specific illness) may be permitted to appear for the current semester examinations subject to the condition that the candidate shall submit the medical certificate issued by a registered medical practitioner to the Controller of Examinations and the Head of the Institution.

7.4 A candidate who secures overall attendance between 65% and 74% in the current semester due to participation in any Co-curricular /Extra Curricular activities may be permitted to appear for the current semester examinations subject to the condition that the candidate shall submit the

participation certificate attested by the Head of the Institution and the same shall be considered as "ON DUTY" (OD). The same shall be forwarded to the Controller of Examinations for record purposes.

- 7.5 Candidates who **secure less than 65% attendance in all courses** shall not be permitted to write any examination at the end of the semester and not permitted to move to the next semester. They are required to repeat the incomplete semester in the next academic year, as listed in clause 6.

8. **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 HoD 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:

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

9. **FACULTY ADVISOR**

There shall be a Faculty advisor for every 15-20 students. The faculty advisor may be one among the course-instructors of the class. He / She will be appointed by the HoD of the department concerned. The responsibilities for the faculty advisor shall be:

- To act as the channel of communication between the HoD and the parents of the respective student.
- To counsel / mentor the allotted students, guide and motivate them towards a successful career.
- To collect and maintain various statistical details of students in proctor cards in regular intervals.
- To monitor the academic performance of the students.
- To track the daily attendance of their respective students and if they found absent there is a reason to be recorded in the Students Leave Report available in the department office.
- To encourage the students to participate in extra and co-curricular activities.

10. **CLASS COMMITTEE**

Every class shall have a class committee consisting of faculty handling the subjects of the class concerned, student representatives and one chairperson who is not teaching the class. It is a part of IQAC with the overall goal of improving the teaching-learning process. Responsibilities of the class committee include:

- 10.1 Solving problems experienced by students in the class room and in the laboratories.
- 10.2 Clarifying the regulations of the degree programme and the details of rules there in which should be displayed on college Notice-Board.
- 10.3 Informing the student representatives, the academic schedule including the dates of assessments and the syllabus coverage for each assessment.
- 10.4 Informing the student representatives, the details of Regulations regarding weightage used for

each assessment. In the case of practical courses (laboratory / drawing / project work / seminar etc.) the breakup of marks for each experiment / exercise / module of work, should be clearly discussed in the class committee meeting and informed to the students.

- 10.5 Analyzing the performance of the students of the class after each test and finding the ways and means of solving problems, if any.
- 10.6 Identifying the weak students, if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such weak students.
- 10.7 The class committee for a class under a particular branch is normally constituted by the Head of the Department.
- 10.8 The class committee shall be constituted within the first week of each semester.
- 10.9 At least 2 student representatives (usually 1 boy and 1 girl, as applicable to individual departments) shall be included in the class committee.
- 10.10 The Chairperson of the class committee may invite the Class advisor and the Head of the Department to the class committee meeting.
- 10.11 The Head of the Institution may participate in any class committee of the institution.
- 10.12 The chairperson is required to prepare the minutes of every meeting, submit the same to Head of the Institution within two days of the meeting and arrange to circulate it among the students and teachers concerned. If there are some points in the minutes requiring that to be addressed by the management, the same shall be brought to the notice of the Management by the Head of the Institution.
- 10.13 The first meeting of the class committee shall be held within one week from the date of commencement of the semester, in order to inform the students about the nature and weightage of assessments within the framework of the Regulations. Two or three subsequent meetings may be held in a semester at suitable intervals. The Class Committee Chairman shall put on the Notice Board the cumulative attendance particulars of each student at the end of every such meeting to enable the students to know their attendance details to satisfy the clause 7 of this Regulation. During these meetings the student members representing the entire class, shall meaningfully interact and express the opinions and suggestions of the other students of the class in order to improve the effectiveness of the teaching-learning process.

11. COURSE COMMITTEE FOR COMMON COURSES:

Each common theory course offered to more than one programme or same programme, shall have a "Course Committee" comprising all the faculty 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 faculty teaching the common course belong to a single department or to several departments. The 'Course committee' shall meet in order to arrive at a common scheme of evaluation for the test and shall ensure a uniform evaluation of the tests. Wherever it is feasible, the course committee may also prepare a common question paper for the Assessment Test(s).

12. SYSTEM OF EXAMINATION

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

- 12.1 Each course, both theory and practical (including project work & viva voce Examinations) shall be evaluated for a maximum of 100 marks.
- 12.2 For all theory courses, the continuous internal assessment will carry 40 marks while the End - Semester examination will carry 60 marks.
- 12.3 For all laboratory courses, the continuous internal assessment will carry 60 marks while the

End Semester examination will carry 40 marks.

- 12.4 For project Work the continuous internal assessment will carry 40 Marks while the End Semester examination will carry 60 marks.
- 12.5 End Semester examination (theory and practical) of 3 hours duration shall ordinarily be conducted between October and December during the odd semesters and between April and June during the even semesters.
- 12.6 End Semester examination for project work shall consist of evaluation of the final report submitted by the student by an external examiner and an internal examiner, followed by a viva- voce examination conducted separately for each student by a committee consisting of the external examiner, the supervisor of the project group and an internal examiner.
- 12.7 For the End Semester examination in practical courses including project work the internal and external examiners shall be appointed by the Controller of Examinations of the institution and for theory courses, examiners for question paper setting shall be appointed by the Controller of Examinations of the institution.

13. PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

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

13.1 THEORY COURSES

Two assessments shall be conducted during the semester by the Department / College concerned. The total marks obtained in all assessments put together out of 200, shall be proportionately reduced for 40 marks and rounded to the nearest integer.

Assessment I (100 Marks)		Assessment II (100 Marks)		Total
Individual Assignment / Case Study/ Seminar / Mini Project	Written Test	Individual Assignment / Case Study /Seminar / Mini Project	Written Test	Internal Assessment
40	60	40	60	200

Each internal assessment is to be considered for 100 marks and will have to be distributed in two parts viz., Individual Assignment/Case study/Seminar/Mini project and Written Test with each having a weightage of 40% and 60% respectively. The tests shall be in written mode. The total internal assessment marks of 200 shall be converted into a maximum of 40 marks and r

13.2 LABORATORY COURSES

The maximum marks for Internal Assessment shall be 60 marks in case of practical courses. Every practical exercise / experiment shall be evaluated based on conduct of experiment / exercise and records to be maintained. There shall be at least one test. The criteria for arriving the Internal Assessment marks of 60 are 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, Record	Model Lab Exam
75	25

13.3 THEORY COURSES WITH LABORATORY COMPONENT

If there is a theory course with laboratory component, there shall be two assessments: the first assessment (maximum mark is 100) will be similar to assessment of theory course and the second assessment (maximum mark is 100) will be similar to assessment of laboratory course respectively. The weightage of first assessment shall be 40 % and the second assessment be 60 %. The weighted average of these two assessments shall be converted into 50 marks and rounded to the nearest integer.

Assessment I (100 Marks)		Assessment II (100 Marks)		Total
Individual Assignment / Case Study/ Seminar / Mini Project	Written Test	Evaluation of Laboratory Observation, Record	Test	Internal Assessment
40	60	75	25	200

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

13.3 PROJECT WORK

The student shall register for Project Work in final year as prescribed in the curriculum. The project work shall be carried out by individual student. The evaluation of Project Work for Phase-I & Phase-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 below.

- 13.3.1 There shall be three assessments (each 100 marks) during the Semester by a review committee. The student shall make presentation on the progress made before the Committee. The Head of the department 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. For Project Phase I and II assessment, Scopus indexed conference is mandatory. **Amendment of clause 13.3.1**

- 13.3.2 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). The project report shall carry a maximum of 20 marks. The project report shall be submitted as per the approved guidelines as given by the CoE. There will be a viva - 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 viva-voce examination shall carry 35 marks. 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 (25 Marks)		Viva-Voce (Rounded to 35 Marks)		
			Internal	External	Internal	External	Supervisor
10	15	15	10	15	10	15	10

- 13.3.3 The Project Report prepared according to approved guidelines and duly signed by the supervisor(s) and the Head of the Department concerned shall be submitted to the CoE.

- 13.3.4 If the candidate fails to obtain 50% of the internal assessment marks in the Phase-I and Phase-II

- II / final project, he/she will not be permitted to submit the report for that particular semester and has to re-enroll for the same in the subsequent semester.
- 13.3.5 If a candidate fails to submit the project report on or before the specified deadline, he/she is deemed to have failed in the Project Work and shall re-enroll for the same in a subsequent semester. This applies to both Phase-I and Phase-II.
- 13.3.6 If a candidate fails in the end semester 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 End semester examination of Phase-II of Project work of M.E 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 Internal and External examiners shall evaluate the resubmitted report.
- 13.3.7 If a student 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 resubmit the report within 30/60 days from the declaration of results and permitted for reappearance in viva voce examination, for Project Work-I and II respectively.
- 13.3.8 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.
- 13.3.9 Industrial Training, if specified in the Curriculum shall not exceed the maximum duration of 6 weeks and should be organized by the Head of the Department for every student.
- 13.3.10 At the end of Practical / Industrial Training, Summer Project, the student 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 students shall be attached to the mark list sent by the Head of the Institution to the Controller of Examination.
- 13.4 OTHER EMPLOYABILITY ENHANCEMENT COURSES**
- (a) The seminar / Case study is to be considered as purely INTERNAL (with 100% internal marks only). Every student is expected to present a minimum of 2 seminars per semester before the evaluation committee and for each seminar, marks can be equally apportioned. The three-member committee appointed by Head of the Institution will evaluate the seminar and at the end of the semester the marks can be consolidated and taken as the final mark. The evaluation shall be based on the seminar paper (40%), presentation (40%) and response to the questions asked during presentation (20%).
- (b) The Industrial / Practical Training, Summer Project, Internship, shall carry 100 marks and shall be evaluated through internal assessment only. At the end of Industrial / Practical training / internship / Summer Project, the candidate shall submit a certificate from the organization where he / she has undergone training and a brief report. The evaluation will be made based on this report and a Viva-Voce Examination, conducted internally by a Committee constituted by the Head of the Institution. The certificates (issued by the organization) submitted by the students shall be attached to the mark list sent by the Head of the Institution to the Controller of Examinations.
- (c) For all the courses under Employability Enhancement Courses Category, except the Project Work, the evaluation shall be done with 100% internal marks

13.5 ASSESSMENT FOR VALUE ADDED COURSE

The one / two credit 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 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 necessary action at least one month before the commencement of End Semester Examinations.

13.6 ASSESSMENT FOR ONLINE COURSES

Students may be permitted to credit two online courses (which are provided with certificate), subject to a maximum of six credits. The online course of 3 credits can be considered instead of one elective course. These online courses shall be chosen from the SWAYAM platform, provided the offering organization conducts regular examination and provides marks. The credits earned shall be transferred and the marks earned shall be converted into grades and transferred, provided the student has passed in the examination as per the norms of the offering organization. The details regarding online courses taken up by the student and marks/credits earned and the approval for the course from the department shall be sent to the Controller of Examinations in the subsequent semester(s) along with the details of the elective(s) to be dropped. Internal marks approved by the Head of the Institution shall be displayed by the respective HODs within 5 days from the last working day.

13.7 Attendance Record

Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD' which consists of attendance marked in each lecture or practical or project work class, the test marks and the record of class work (topic covered), separately for each course. This should be submitted to the Head of the department periodically (at least three times in a semester) for checking the syllabus coverage and the records of test marks and attendance. The Head of the department shall sign with date after due verification. At the end of the semester, the record should be verified by the Head of the Institution who will keep this document in safe custody (for five years). The University or any inspection team appointed by the University may verify the records of attendance and assessment of both current and previous semesters.

14. REQUIREMENTS FOR APPEARING FOR END SEMESTER EXAMINATIONS

A candidate shall normally be permitted to appear for the End Semester Examinations for all the courses registered in the current semester (vide clause 6) if he/she has satisfied the semester completion requirements (subject to Clause 7).

A candidate, who has already appeared and passed the examination in any subject, is not entitled to reappear for the same subject for improvement of grades.

15. PASSING REQUIREMENTS

15.1 A candidate who secures not less than 50% of total marks prescribed for the course [Internal Assessment + End semester Examinations] with a minimum of 50% 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 practical courses (including project work).

15.2 If a student fails to secure a pass in theory courses in the current semester examination, he/she is allowed to write arrear examinations in the consecutive semesters and the internal marks

earned in first appearance shall be carried over to the subsequent attempts till the student secures a pass. However, from the third attempt onwards if a student fails to obtain pass marks (IA + End Semester Examination) as per clause 15.1, then the student shall be declared to have passed the examination if he/she secures a minimum of 50% marks prescribed for the university end semester examinations alone.

- 15.3 If a student fails to secure a pass in a laboratory course, the student shall register for the course again, in the consecutive semesters and the internal marks earned in first appearance shall be carried over to the subsequent attempts till the student secures a pass. However, from the third attempt onwards if a student fails to obtain pass marks (IA + End Semester Examination) as per clause 15.1, then the student shall be declared to have passed the examination if he/she secures a minimum of 50% marks prescribed for the university end semester examinations alone.
- 15.4 If a student fails to secure a pass in project work, **the student shall register** for the course again in the next semester itself.
- 15.5 The passing requirement for the courses which are assessed only through purely internal assessments (EEC courses except project work), is 50% of the internal assessment (continuous assessment) marks only.

16. AWARD OF LETTER GRADES

- 16.1 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 relative grading principle.
- 16.2 The relative grading is applicable ONLY those students who have passed the examination as per the passing requirements enumerated above. For those students who have not passed the examination, U grade shall be awarded. For those students who have passed the course, the relative grading shall be done using the Software AURG developed by Anna University for relative grading.
- 16.3 The performance of a student shall 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
W (Withdrawal)	0

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

Range of Marks	91 - 100	81 - 90	71 - 80	61 - 70	56 - 60	50 - 55	<50
Letter Grade	O	A +	A	B +	B	C	U
Grade Points	10	9	8	7	6	5	0

- 16.5 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", and "C".
- 16.6 'SA' denotes shortage of attendance (as per clause 7.5) and hence prevented from writing the end semester examinations. 'SA' will appear only in the result sheet.
- 16.7 "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 appear for the End Semester Examinations.
- 16.8 If the grade U is given to Theory Courses/ Laboratory Courses it is not required to satisfy the attendance requirements (vide clause 7), but has to appear for the end semester examination and fulfil the norms specified in clause 14 to earn a pass in the respective courses.
- 16.9 If the grade U is given to EEC course (except Project Work), which are evaluated only through internal assessment, the student shall register for the course again in the subsequent semester, fulfil the norms as specified in clause 14 to earn pass in the course. However, attendance requirement need not be satisfied.
- 16.10 For the Co-curricular activities such as National Service Scheme (NSS) / NSO, a satisfactory / not satisfactory grading will appear in the mark sheet. Every student shall put in a minimum of 75% attendance in the training and attend the camp compulsorily. The training and camp shall be completed during the first year of the programme. However, for valid reasons, the Head of the Institution may permit a student to complete this requirement in the second year. A satisfactory grade in the above co-curricular activities is compulsory for the award of degree.
- 16.11 The grades O, A+, A, B+, B, and C obtained for the one credit course shall figure in the Mark sheet under the title 'Value Added Courses'. The Courses for which the grades are U, SA will not figure in the mark sheet.

17. GRADE SHEET

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

- The college in which the candidate has studied
- The list of courses enrolled during the semester and the grade scored.
- The Grade Point Average (GPA) for the semester and
- The Cumulative Grade Point Average (CGPA) of all courses enrolled from first semester onwards.

GPA for a semester is the ratio of the sum of the products of the number of credits 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 grades will be excluded for calculating GPA and CGPA.

$$GPA/CGPA = \frac{\sum_{i=1}^n C_i G P_i}{\sum_{i=1}^n C_i}$$

Where, C_i is the number of Credits assigned to the course.
 GP_i is the point corresponding to the grade obtained for each course.
 n is number of all courses successfully cleared during the particular semester in the case of GPA and during all the semesters in the case of CGPA.

18 ELIGIBILITY FOR THE AWARD OF THE DEGREE

18.1 A student shall be declared to be eligible for the award of the M.E. Degree provided the student has:

18.1.1 Successfully gained the required number of total credits as specified in the curriculum corresponding to the student's programme within the stipulated time.

18.1.2 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 for M.E. programme.

18.1.3 Successfully passed any additional courses, whenever readmitted.

18.1.4 No disciplinary action pending against the student.

18.1.5 The award of Degree must have been approved by the affiliating University.

18.2 CLASSIFICATION OF THE DEGREE AWARDED

18.2.1 FIRST CLASS WITH DISTINCTION

- A student who qualifies for the award of degree as above, having passed the examination in all required courses in the first appearance within two years from the date of joining the program (or within three years including an authorized break of study of one year) and securing a CGPA of not less than 8.50 shall be declared to have passed in First Class with Distinction.
- In the above case, the student should NOT have been prevented from writing endsemester examination due to lack of attendance in any semester.

18.2.2 FIRST CLASS

- A student who qualifies for the award of degree as above, having passed the examination in all required courses within two years from the date of joining the program (or within three years including an authorized break of study of one year) and securing a CGPA of not less than 6.50 shall be declared to have passed in First Class.
- In the above case, the student should NOT have been prevented from writing end semester examination due to lack of attendance in any semester.

18.2.3 SECOND CLASS

All other students not covered above and who are eligible for the award of degree having passed the examinations in all required courses within the maximum duration of the program shall be declared to have passed in Second Class.

18.3 Students who have withdrawn from any end-semester examinations with prior approval will not be eligible for the award of a rank in the program.

18.4 Photocopy / Revaluation

A candidate can apply for 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

Institution. 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 candidate can register for the revaluation through proper application to the Controller of Examinations. The Controller of Examinations will arrange for the revaluation and the results will be intimated to the candidate concerned through the Head of the Institution. 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.

18.5 Review

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

19 PROVISION FOR WITHDRAWAL FROM END-SEMESTER EXAMINATION

- 19.1 A student may, for valid reasons, (medically unfit / unexpected family situations / sports approved by Chairman, sports board and HOD) be granted permission to withdraw from appearing for the end semester examination in any course or courses in **ANY ONE** of the semester examinations during the entire duration of the degree programme. The application shall be sent to **Dean, Academic Courses** through the Head of the Institution with required documents.
- 19.2 Withdrawal application is valid if the student is otherwise eligible to write the examination and if it is made within TEN days prior to the commencement of the examination in that course or courses and recommended by the Head of the Institution and approved by the Controller of Examinations.
- 19.3 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.
- 19.4 In case of withdrawal from a course / courses the course will figure both in Marks Sheet as well as in Result Sheet. **Withdrawal essentially requires the student to register for the course/courses.** The student has to register for the course, fulfill the attendance requirements (vide clause 7), earn continuous assessment marks and attend the end semester examination. However, withdrawal shall not be construed as an appearance for the eligibility of a candidate for First Class with Distinction.
- 19.5 Withdrawal is permitted for the end semester examinations in the final semester only if the period of study the student concerned does not exceed 3 years as per clause 18.2.1.

20 PROVISION FOR AUTHORISED BREAK OF STUDY

- 20.1 A student is permitted to go on break of study for a maximum period of one year as a single spell.
- 20.2 Break of Study shall be granted only once for valid reasons for a maximum of one year during the entire period of study of the degree programme. However, in extraordinary situation the candidate may apply for additional break of study not

exceeding another one year by paying prescribed fee for break of study. If a candidate intends to temporarily discontinue the programme in the middle of the semester for valid reasons, and to rejoin the programme in a subsequent year, permission may be granted based on the merits of the case provided he / she applies to the Director, Student Affairs 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.

- 20.3** The candidates permitted to rejoin the programme after break of study / prevention due to lack of attendance, shall be governed by the Curriculum and Regulations in force at the time of rejoining. The students rejoining in new Regulations shall apply in the prescribed format to Head of the Institution at the beginning of the readmitted semester itself for prescribing additional courses, if any, from any semester of the regulations in-force, so as to bridge the curriculum in-force and the old curriculum.
- 20.4** The authorized break of study would not be counted towards the duration specified for passing all the courses for the purpose of classification (vide Clause 18.2.1).
- 20.5** The total period for completion of the Programme reckoned from, the commencement of the first semester to which the candidate was admitted shall not exceed the maximum period specified in clause 4.2 irrespective of the period of break of study in order that he/she may be eligible for the award of the degree.
- 20.6** If any student is prevented for want of required attendance, the period of prevention shall not be considered as authorized 'Break of Study'

21 PERSONALITY AND CHARACTER DEVELOPMENT

All students shall enroll, on admission, in any one of the personalities and character development programmes (NSS/NSO) and undergo training for about 40 hours and attend a camp of about six days. The training shall include classes on hygiene and health awareness and also training in first aid etc.

- National Service Scheme (NSS) will have social service activities in and around the College/ Institution.
- National Sports Organization (NSO) will have sports, Games, Drills and Physical exercises.

22 DISCIPLINE

- 22.1** Every student is required to observe disciplined and decorous behavior both inside and outside the college and not to indulge in any activity which will tend to bring down the prestige of the University / College. The Head of Institution shall constitute a disciplinary committee consisting of Head of Institution, Two Heads of Department of which one should be from the faculty of the student, to enquire into acts of indiscipline and notify about the disciplinary action recommended for approval to Head of the Institution. In case of any serious disciplinary action which leads to suspension or dismissal, then a committee shall be constituted including one representative from Anna University, Chennai. In this regard, the member will be nominated by the University on getting information from the Head of the Institution.

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

23 REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

The Institution may from time to time revise, amend or change the Regulations, Curriculum, Syllabus and scheme of examinations through the Board of Studies and Academic Council of the Institute.




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