GOVERNMENT COLLEGE OF TECHNOLOGY: COIMBATORE 641 013
(An autonomous Institution affiliated to Anna University)
REGULATIONS 2023

CHOICE BASED CREDIT SYSTEM
Common to all M.E. Full-Time Programmes
(For the students admitted to M.E. Programme during the Academic year 2023 - 2024 onwards)

1   PRELIMINARY DEFINITIONS AND NOMENCLATURE
   In this regulation, unless the context otherwise specifies:

   I. **"University"** means ANNA UNIVERSITY, Chennai.

   II. **"Programme"** means M.E. Degree Programme.

   III. **"Specialization"** means a discipline of the Post Graduate Programme like Structural Engineerng, Engineering Design, etc.

   IV. **"Course"** means a *Theory* or *Theory with Practical component* or *Practical* subject that is normally studied in a semester like High Performance Computer Architecture, Thermodynamics and combustion, vibration Lab., etc.

   V. **"Principal & Chairman"** means the authority of the institution who is responsible for all academic activities, for the implementation of relevant rules and regulations.

   VI. **"Controller of Examinations"** means the authority of the institution who is responsible for all activities of the End Semester Examinations of all Departments and hereafter called COE.

   VII. **"Head of the Department"** means Head of the Post Graduate Programme concerned and hereafter called HOD.

   VIII. **"Programme Coordinator"** means the coordinator of the programme concerned. He/she acts as interface between programme and key stakeholders, students, faculties and employer. He/She is responsible for planning the academic activities of the programme along with the course coordinator(s) and the HOD. He/She also prepares, evaluates and analyses the attainment of the programme outcomes along with Programme Advisory Committee.

   IX. **Faculty Advisor**
   The Faculty Advisor is responsible for providing general advice on the Academic matters, monitor the attendance and academic performance of the students and counsel them periodically. If necessary, the Faculty Advisor may also inform the parents about the progress / performance of the students concerned through HOD.

   X. **Course Coordinator**
   Course Coordinator is responsible for teaching the course, evaluating and analysing the performance of the students. He/ She is also responsible for the assessment of the Course Outcomes/Program Outcomes. He / She recommends to organize workshops /seminars/guest lecture / industrial visits to meet the Course Outcomes and Program Outcomes.

   XI. **Department Consultative Committee (DCC)** consists of the HOD, Programme Coordinator and maximum of two faculty members as applicable.

   XII. **Class Committee**
   Class committee for each semester of a programme comprises of HOD, Programme Coordinator, Faculty Advisor, Course Coordinators (as applicable) and Student Representatives. The functions of the class committee include:

- Solving problems experienced by students in the class room and in the laboratories.
- Clarifying the regulations of the degree programme and the details of rules therein particularly (clause 5, 6 and 7).
- Informing the student representatives, the academic schedule including the dates of assessments and the syllabus coverage for each assessment.
- Informing the student representatives, the details of Regulations regarding weightage used for each assessment. In the case of practical courses (laboratory / drawing / project work / seminar etc.) the breakup of marks (rubrics) for each experiment / exercise / module of work, should be clearly discussed in the class committee meeting and informed to the students.
- Analyzing the performance of the students of the class after each test, review of outcomes and finding the ways and means of solving problems, if any.
- Identifying the slow-learners, if any, and requesting the course coordinators concerned to provide some additional help or guidance or coaching to such students.

- The class committee for a class under a particular branch is normally constituted by the Head of the Department.
- The class committee shall be constituted within the first week of each semester.
- At least 4 student representatives (usually 2 boys and 2 girls) shall be included in the class committee, covering all the elective courses.
- The Head of the Institution may participate in any class committee meeting of the institution.
- The HOD is required to prepare the minutes of every meeting, submit the same to the Head of the Institution within two days of the meeting and arrange to circulate it among the students and course coordinators concerned. If there are some points in the minutes requiring action, the same shall be brought to the notice of the Head of the Institution.
- The first meeting of the class committee shall be held within one week from the date of commencement of the semester, in order to inform the students about the nature and weightage of assessments within the framework of the Regulations. Two or three subsequent meetings may be held in a semester at suitable intervals. The Class Committee Chairperson/HOD shall display the cumulative attendance particulars of each student on the Notice Board at the end of every such meeting to enable the students to know their attendance details to satisfy the 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

XIII. **Programme Advisory Committee**

Programme Advisory Committee consists of HOD, Programme Coordinator, one Senior Faculty Member by rotation, one subject Expert outside the Institution, one representative from Industry and one representative from the Alumni. Their roles are as follows:
- Suggest methodologies for the preparation of syllabi.
- Suggest methodologies for innovative teaching-learning and evaluation techniques.

- Co-ordinate research, teaching, extension and other academic activities of the Programme
- Approval of Vision, Mission, PEOs, POs, Course Objectives and Course Outcomes.
- Suggest methodologies for CO and PO assessments and tools.
- Review of CO and PO attainments.

2 ADMISSION PROCEDURE

2.1 Students for admission to the first semester of the Post Graduate Degree Programme shall be required to have passed an appropriate qualifying Degree Examination of Anna University or any examination of any other University or authority approved by the Directorate of Technical Education and Anna University, Chennai as equivalent thereto.

2.2 Eligibility conditions for admission will be as prescribed by the GOVERNMENT OF TAMILNADU & ANNA UNIVERSITY from time to time.

3 PROGRAMMES OFFERED AND MODE OF STUDY

3.1 PROGRAMMES OFFERED

A student may be offered admission to any one of the following specialisations in M.E. Degree programme of study approved in the Institution and offered by various departments of the Institution.

S.No.	Department Name
Department of CIVIL Engineering.	
1	M.E. Structural Engineering
2	M.E. Environmental Engineering
3	M.E. Geotechnical Engineering
Department of Mechanical Engineering	
4	M.E. Engineering Design
5	M.E. Manufacturing Engineering
6	M.E. Thermal Engineering
Department of Electrical and Electronics Engineering	
7	M.E. Power Systems Engineering
8	M.E. Power Electronics and Drives
Department of Electronics and Communication Engineering	
9	M.E. Applied Electronics
10	M.E. VLSI Design
Department of Computer Science and Engineering	
11	M.E. Computer Science and Engineering

3.2 MODE OF STUDY
3.2.1 FULL TIME

Students admitted under 'Full-Time' should be available in the Institution during the entire duration of working hours for the curricular, co-curricular and extra-curricular activities assigned to them.

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

4 STRUCTURE OF THE PROGRAMMES

4.1 Categorization of Courses

Every post graduate degree programme will have a curriculum with syllabi consisting of theory, theory with practical component and practical courses that shall be categorized as follows:

i. Foundation Courses (FC) may include Mathematics or other basic courses

ii. Professional Core (PC) courses include the core courses relevant to the chosen PG specialization.

iii. Professional Elective(PE) courses include the elective courses relevant to the chosen specialization.

iv. Employability Enhancement Courses (EEC) include project work and/or internship, seminar, professional practices, case study and industrial / practical training

v. Open Elective (OE) Courses under Open Elective are of importance in the context of special skill development and shall make students capable to work in industry environment. Electives from other technical and/or emerging courses are given as a separate list of Elective Courses offered by the Engineering / Science Departments and a student can choose a Course as an Open Elective from the above list of Courses.

vi. Audit Course (AC) includes courses for developing desired attitude among the learners on the line of initiatives such as Unnat Bharat Abhiyan, Yoga, Value Education, Disaster management, Pedagogy, Constitution of India, Personality Development through Indian Culture etc.

4.2 Number of credits per semester

Curriculum of a semester shall normally have a blend of Lecture Courses and practical Courses. In addition, Employability Enhancement Course(s) may also be included. Each course may have credits assigned as per Clause 4.3. However, the total number of credits per semester shall not exceed 32 (including EEC, credit transfer from SWAYAM/NPTEL courses, and excluding Value Added courses, reappearance courses).

4.3 Credit Assignment

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

Table 1- Credit Assignment

CONTACT PERIOD PER WEEK	CREDIT(S)
1 Lecture Period	1
1 Tutorial Period	1
1 Practical Period (practical/ Project Work etc.)	0.5

4.4 Project Work

The Project work is an important component of Post-Graduate programmes. The project work for M.E. consists of Project – I and Project – II. The Project – I is to be undertaken during III semester and Project – II is to be undertaken during IV semester.

4.4.1 The Project work for M.E (for Project II Project work) shall be pursued for a minimum period of 16 weeks and a maximum period of 6 months during the final semester.

4.4.2 The Project work shall be carried out under the supervision of a "qualified teacher" in the Department concerned. In this context "qualified teacher" means a faculty member possessing (i) PG degree with a minimum of 3 years of teaching experience or (ii) Ph.D. degree.

4.4.3 A student may, however, in certain cases, be permitted to work on projects in an industrial /research organization, on the recommendations of the Head of the Department. In such cases, the project work shall be jointly guided by a supervisor of the department and an expert as joint supervisor from the organization and the student shall be instructed to meet the supervisor periodically and to attend the review committee meetings and shall submit attendance particulars from the joint supervisor for evaluating the progress.

4.4.4 Every candidate doing M.E. shall, based on his/her project work/thesis/dissertation, should send a paper for publication in a journal or a conference in which full papers are published after usual review. An acknowledgement for having communicated to the journal or a certificate for having presented the paper in a conference shall be attached to the report of the Project I /Project II project work/thesis/dissertation.

4.4.5 Plagiarism

During the submission of Project Report, the plagiarism report attested by the supervisor and HOD shall be attached with the project report. If the percentage of errors exceeds 20%, the thesis shall be summarily rejected.

4.5 Industrial Training /Internship

4.5.1 The students may undergo Internship/ Industrial Training at Intra or Inter Institution / Research organization / University/ Reputed firms satisfying prescribed qualifications set by the department (after due approval from the department consultative committee) for the prescribed period in the curriculum. In this case, the training has to be undergone continuously for the entire period. The credit framework is given below:

Table 2 – Training: Duration and Credit

DURATION OF INDUSTRIAL TRAINING/ INTERNSHIP	CREDITS
Not less than 2 weeks (80 – 90 hours) /4 weeks (160 – 180 hours)	1 Credit / 2 Credits

4.6 Value added courses

Value added courses shall be offered by the department with the prior approval from BOS and Academic Council. The credits earned through value added course shall be over and above the total credit requirement prescribed in the curriculum for the award of degree. Students can earn maximum of 2 credits from value added courses subject to a maximum of 1 value added course registered per semester. The permitted credit structure for a value added course is 1or 2. Industry offered and skill development courses shall be considered under this category. These value added courses can also be undergone through online platform approved by the Department Consultative Committee. The course(s) (if pursued through online mode) which is/are successfully completed by the student in a particular ODD/EVEN semester during the course of study is eligible for including in the grade sheet in the immediate next EVEN/ODD by registering it.

4.7 Industrial Visit

Every student is required to go for at least one Industrial Visit every year. The Course Coordinator(s) / Faculty Advisor / HODs shall ensure that necessary arrangements are made in this regard.

4.8 Online Courses offered through SWAYAM

Students may be permitted to credit a maximum of two online courses registered through SWAYAM instead of Professional/Open Elective Courses with the approval of Board of Studies through Department Consultative Committee. The online course of minimum 3 credits can be considered instead of one Professional / Open elective course. The DCC consists of the HOD, Programme Coordinator, Senior Faculty member and the department SWAYAM coordinator. The DCC finalizes the courses to be permitted for credit transfer through SWAYAM prior to the commencement of the semester. The courses selected through the SWAYAM may not be necessarily the courses which are offered in the list of Professional/Open Elective courses, as part of the curriculum.

The Committee also intimates the students about the selected courses prior to the commencement of the semester, identify and designate a Course Coordinator for the online course(s) offered. The Course Coordinator guides the students throughout the course, submits the certificates and marks earned by the students to the office of the Controller of Examinations through the HOD concerned during credit transfer request by the student.

4.8.1 Credit Transfer of Online Courses offered through SWAYAM

The student has to register for the credit transfer of the online course during the course registration. The online course(s) which is/are successfully completed by the student in a particular ODD/EVEN semester during the course of study is eligible for credit transfer in the immediate next EVEN/ODD by registering it.

4.9 Medium of Instruction

The medium of instruction is ENGLISH for all Courses, Examinations, Seminar Presentations, Project Reports etc.

5 DURATION OF THE PROGRAMMES

5.1 The minimum and maximum period for the completion of the P.G. programme is given below:

Programme	Minimum No.of Semesters	Maximum No.of Semesters
M.E (Full Time)	4	8

The maximum period includes the authorized break of study of one year.

5.2 Each semester shall normally consist of 90 working days (including examination   days) or 450 hours or 540 periods of each 50 minutes duration. The HOD shall ensure that every course coordinator imparts instruction as per the number of contact periods specified in the syllabus covering the full content of the syllabus for the course being taught.

5.3 The total duration for completion of the programme reckoned from the   commencement of the first semester to which the student was admitted shall not exceed the maximum duration specified in clause 5.1 irrespective of the period of break of study (vide Clause 16) or prevention (vide Clause 7.4) in order that the student may be eligible for the award of the degree (vide Clause 14).

5.4 The curriculum of P.G. programmes shall be so designed that the prescribed credits required for the award of the degree shall be within the limits specified below:

Table 3 – Credit Range

PROGRAMME	PRESCRIBED CREDIT RANGE
M.E. (Full Time-Regular)	81-88

6 COURSE ENROLLMENT AND REGISTRATION

6.1 Each student, on admission shall be assigned to a Faculty Advisor, who shall advice and counsel the student about the details of the academic programme and the choice of courses considering the student's academic background and career objectives.

6.2 Every student shall enroll for the course of the succeeding semester in the current semester. However, the student shall confirm the enrollment by registering for the courses within the first ten working days after publication of results of the previous semester examinations. Students who rejoined the programme after availing permitted Break of Study or Readmitted by DOTE/University need not submit new Enrollment Form, but they have to submit the course registration form.

6.3 Students shall attend the classes, satisfy the attendance requirements, earn continuous assessment marks and appear for the end semester Examinations

6.3.1 Each student shall register for all the courses prescribed in the Curriculum in the student's first semester of study.

6.3.2 The enrollment for all the courses of the semester II will commence 10 working days prior to the last working day of semester I. The student shall confirm the enrollment by registering for the courses within the first ten working days after publications of results of the previous semester examinations. However, the student should register for the failed courses additionally.

6.3.3 The enrollment for the courses of the II semester to final semester will commence 10 working days prior to the last working day of the preceding semester. If the student wishes, the student may drop or add courses (vide clause 6.5) within ten working days after publications of results of the previous semester examinations and complete the registration process duly authorized by the faculty advisor, Programme Co-ordinator and Head of the Department of the programme.
The student should register for courses for which the student has not enrolled, if these are the courses in which the student has failed.

6.3.4 A student 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 the student's marks/grade points in a course or the aggregate marks / CGPA.

6.4 MINIMUM NUMBER OF CREDITS TO REGISTER FOR PROJECT WORK

The project work for M.E. consists of Project – I and Project – II. The Project – I is to be undertaken during III semester and Project – II, is to be undertaken during IV semester. Minimum credits shall be as follows:

Table 4 – Project Work Project II: Credit Requirement

PROGRAMME	MINIMUM NO. OF CREDITS TO BE EARNED
M.E.	20 (FOR PROJECT - I)

6.4.1 If the student has not earned the requisite minimum credits, the student cannot enroll for the project. In such a case, the student can enroll for the project work in a subsequent semester, after earning the minimum credits specified.

6.5 Flexibility to Add or Drop courses

6.5.1 A student has to earn the total number of credits specified in the curriculum of the respective Programme of Study in order to be eligible to obtain the degree. However, if a student wishes, the student is permitted to earn more than the total number of credits prescribed in the curriculum of the student's Programme.

6.5.2 From the II to III semesters, the student has the option of registering for additional courses or dropping existing courses from the list of Professional/Open Elective course with the approval of Faculty Advisor, Programme Coordinator and HOD. The total number of credits that a student can add or drop is limited to 6, subject to a maximum of 2 courses.

However, the maximum number of credits the student can register in a particular semester cannot exceed 32 credits (Including the EEC, credit transfer from SWAYAM/ NPTEL courses, and excluding the courses for which the student has done reappearance registration, value added courses).

6.5.3 The student shall register for the project I in the third semester and Project II in the fourth semester. However, if a student has not earned the minimum number of credits as specified in table 4, the student may be permitted to register for the Project I and II as and when the student earns the minimum number of credits.

6.6 Reappearance Registration

6.6.1 If a student fails in a Theory /Practical course(s), the student shall do reappearance registration for that course in the subsequent semester and attend the end semester examination.

6.6.2 The student who fails in Project work shall register for the same in the subsequent semester, satisfy attendance requirement, earn continuous assessment marks and appear for the End Semester Examinations. The student has submitted the project report and failed to attend the viva voce examination shall also be deemed to have failed in the project work. The student

has not submitted the project report within the specified deadline shall also be deemed to have failed in the project work

6.6.3 The student who fails in project work / seminar or any other EEC course other than Practical Courses which are evaluated through the continuous assessment only shall register for the same in the subsequent semester, when offered next. However, if the overall attendance is below 70%, the student has to rejoin the programme in the next academic year after getting readmission order from DOTE/University. In this case, the student shall attend the classes afresh, satisfy the attendance requirements, earn Continuous Assessment marks and appear for the End Semester Examinations. The facility of Reappearance Registration is not available for such courses.

6.6.4 If a student is prevented from writing end semester examination of a course due to lack of attendance, the student has to re-enroll and register for that course again, when offered next. The student shall attend the classes and fulfil the attendance requirements as per clause 7, earn continuous assessment marks and appear for the end semester examinations.

7 **ATTENDANCE REQUIREMENTS FOR APPEARING FOR THE END SEMESTER EXAMINATION OF A COURSE**

A student who has fulfilled the following conditions (vide Clause 7.1 to 7.3) shall be deemed to have satisfied the attendance requirements for appearing the end semester examination of a particular Course.

7.1 Ideally, every student is expected to attend all periods and earn 100% attendance. However, the student shall secure not less than 80% attendance course wise taking into account the number of periods required for that course as specified in the Curriculum.

7.2 However, a student who secures overall attendance not less than 70% and less than 80% in the current semester due to medical reasons (prolonged hospitalization / accident / specific illness) / participation in sports events may be permitted to appear for the current semester examinations, subject to the condition that the student shall submit the medical certificate / sports participation certificate attested by the Head of the Department and the student shall apply for condonation with a prescribed condonation fee. The condonation should be decided by a condonation recommendation committee consisting of HOD, Programme coordinator, Faculty Advisor and Course Coordinator(s) of the student. The committee scrutinizes the genunity of the "Condonation application" and "Conduct" of the student and recommend it to the Principal and Chairman for the grant of condonation. In such cases, his / her conduct has to be certified "satisfactory" by the Course Coordinator, Faculty Advisor, Programme Coordinator and the HOD. The same shall be forwarded to the Controller of Examinations. **Condonation can be allowed only one time by paying prescribed fee during his / her entire course of study.**

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

7.4 However, if the overall attendance is below 70%, the student will not be permitted to write the end semester examination in any course (excluding the course for which the student has done Re-Appearance Registration) and has to rejoin the programme in the next academic year after getting readmission order from DOTE / University.

7.5 The overall attendance is calculated by

$$\frac{\text{Total no. of periods attended in all the courses in the semester}}{(\text{No. of periods per week as prescribed in the curriculum})\text{x15}} X100$$

Number of courses includes Additional Courses registered by the student during the semester if any.

7.6 A student who has already appeared for a course in a semester and passed the Examination is not entitled to reappear in the same course for improvement of letter grades / marks.

8 ASSESSMENT PROCEDURES FOR AWARDING MARKS

All M.E. Programmes consist of different categories of courses as mentioned in table 5. Appearance in End Semester Examination is mandatory for all courses excluding the courses for which only continuous assessment is recommended as mentioned in table 5.
Performance in each course of study shall be evaluated based on (i) Continuous assessments throughout the semester and (ii) End Semester Examination at the end of the semester.
(i.e.) Each course shall be evaluated for a maximum of 100 marks as shown below:

Table 5 – Categories of Courses

Sl.No	Category of Course	Continuous Assessment marks	End-Semester Examination marks
1.	Theory Courses (Including foundation, audit courses etc)	40	60
2.	Theory Courses with practical Component	50	50
3.	Practical Courses	60	40
4.	Project Work	60	40
5.	Online SWAYAM/NPTEL Courses (Optional)	Marks awarded by SWAYAM/NPTEL shall be directly considered	
6.	All EEC Courses (Except Practical Courses and Project Work)	100	-
7.	Value Added Courses * (Optional)	100	–
* Value Added Courses (come under EEC) – not included for CGPA calculation.			

Every course coordinator is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD' for every semester which consists of attendance marked in each Theory / Theory with practical component / practical/ EEC, the assessment marks and the

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record of class work (topics covered) separately for each course handled by the course coordinator. This should be submitted to the HOD periodically (at least two times in a semester) for checking the syllabus coverage and the records of assessment marks and attendance. The HOD will affix his/her signature and date after due verification. At the end of the semester, the record should be verified by the HOD who shall keep this document after the approval from the Principal for five years. The records of attendance and assessment of both current and previous semesters should be available for inspection whenever required.

8.1 Assessment for Theory Courses including Audit Courses

For Theory Courses including Audit courses out of 100 marks, the maximum marks for Continuous Assessment is fixed as 40 and the End Semester Examination carries 60 marks.

The End Semester Examination for theory courses including audit courses will be of 3 hours duration and shall normally be conducted for a maximum of 100 marks during the Odd and Even Semesters. Every student should appear for the end semester examination for all the courses excluding the courses for which only continuous assessment is recommended.

A minimum of two tests would be conducted in a day (in the case of tests and they would be of two hours duration each) students will not have regular classes on the scheduled day of these tests. In case a student misses the assessment due to medical reasons (hospitalization / accident / specific illness) or due to participation in the College / University / State / National / International level Sports events with prior permission from the HOD, a Reassessment may be given at the end of the semester after getting approval from the HOD through the Course Coordinator concerned.

To arrive the Continuous Assessment Marks, the following guidelines should be followed.

Table 6 – Theory Courses including Audit Courses: Continuous Assessment Marks

Assessment I (100 Marks)		Assessment II (100 Marks)		Total Continuous Assessment Marks
Individual Assignment/ Case Study/ Seminar/ Miniproject	Written Test	Individual Assignment/ Case Study/ Seminar/ Miniproject	Written Test	
40	60	40	60	200*

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

A minimum of two Continuous assessments will be conducted as a part of continuous assessment during the semester by the respective department. Each Continuous assessment is to be conducted for 100 marks and will have to be distributed in two parts viz., Individual Assignment/Case study/Seminar/Mini project and Test with each having a weightage of 40% and 60% respectively. The tests shall be in written mode. The total Continuous assessment marks of 200 shall be converted into a maximum of 40 marks and rounded to the nearest integer.

8.2 Assessment for Practical Courses

For practical including virtual practical Courses, out of 100 marks, the maximum marks for Continuous Assessment is fixed as 60 and the End Semester Examination carries 40 marks.

The maximum marks for Continuous Assessment shall be 60 marks in case of practical courses. Every practical exercise / experiment shall be evaluated (as per the rubrics approved by the class committee) based on conduct of experiment / exercise and records. There shall be at least one test. The criteria for arriving at the Continuous Assessment marks of 60 is as follows:

Table 7 – Practical Courses: Continuous Assessment Marks

Continuous Assessment (100 Marks)*	
Evaluation of Laboratory Observation, Record	Test
75	25

The weighted average shall be converted into 60 marks for Continuous Assessment

The criteria for arriving the evaluation of lab observation, record marks of 75 shall be fixed based on the rubrics approved by the class committee.
The End Semester examinations for practical courses will be of 3 hours duration and shall normally be conducted for a maximum of 100 marks during the odd and Even Semesters.

8.3 Assessment for Theory Courses with Practical Component

Weightage of Continuous Assessment and end semester examination marks will be 50% each. The distribution of marks for the theory and laboratory components in the Continuous Assessment and end semester examination for different types of courses are provided in the table 8.

Table 8 – Theory Courses with Practical Component: Continuous Assessment Marks

L	T	P	C	CONTINUOUS ASSESSMENT		END SEMESTER EXAMINATION
				ASSESSMENT 1	ASSESSMENT 2	
1	0	4	3	Laboratory (25%)	Theory (25%)	Laboratory only (50%)
1	0	2	2	Laboratory (25%)	Theory (25%)	Laboratory only (50%)
2	0	2	3	Theory (25%)	Laboratory (25%)	Theory (25%) Laboratory (25%)
3	0	2	4	Theory (25%)	Laboratory (25%)	Theory (35%) Laboratory (15%)
2	0	4	4	Theory (25%)	Laboratory (25%)	Theory (15%) Laboratory (35%)

The procedure for the conduct of Continuous Assessment for theory and laboratory components shall be as per the clause 8.1 and 8.2 respectively.
The weighted average shall be converted into 50 marks for Continuous Assessment.

8.4 Assessment for Project Work

The evaluation of Project I/ Project II/ Mini project/ any other project work shall be done independently in the respective semesters and marks shall be allotted as per the weightage given in Clause 8.4.1.

8.4.1 The Project work (Project I/ Project II/ Mini project/ any other project work) shall be evaluated as per the details in the table.

Table 9 – Project Work: Continuous Assessment and End Semester Examination Marks

Continuous Assessment Marks (60 Marks)			End Semester Examinations Marks (40 Marks)			
Review I	Review II	Review III	Report Evaluation (20 Marks)		Viva Voce Examination (20 Marks)	
			Internal	External	Internal	External
10	20	30	10	10	10	10

8.4.2 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 consisting of supervisor, project coordinator and another faculty member from the Department for each branch of study.

8.4.3 The Project Report shall be prepared according to approved guidelines as given by the Institution and duly signed by the Supervisor, Programme Co-ordinator and the Head of the Department.

8.4.4 The evaluation of the Project will be based on the project report submitted in each of the semesters and a Viva-Voce Examination by a team consisting of the supervisor/Internal Examiner and External Examiner.
The external examiner shall be appointed by the Office of the Controller of Examinations from the panel of examiners recommended by the HOD

8.4.5 If the student fails to obtain 50% of the continuous assessment marks in the 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.

8.4.6 The Project Report/ Thesis/ Dissertation report/ Drawings prepared according to approved guidelines and duly signed by the supervisor(s), the Programme Coordinator and the Head of the Department shall be submitted at the end of the III and IV semester. The last date for the submission of Thesis (Project - II) will be six months (maximum period) from the reopening date of IV semester. However, in exceptional cases, based on the recommendations of the Professor-incharge of the Programme, the Chairman, Academic Council can permit an extension of time not exceeding 31 days.

8.4.7 If a student fails to submit the project report on or before the specified deadline, student is deemed to have failed in the project work and shall re-enroll for the same in a subsequent (next) semester. This applies to both Project I&II. In case of students not completing Project - I successfully, the students can undertake Project - I again in the subsequent (next) semester. In such cases, the students can enroll for Project-II, only after successful completion of Project I.

8.4.8 A copy of the approved project report after the successful completion of viva-voice Examinations shall be kept in the Department library.

8.5   Assessment for Industrial Training /Internship

The Industrial training/ Internship shall carry 100 marks and shall be evaluated through Continuous Assessment only. At the end of Industrial training/ Internship, the student shall submit a detailed report including attendance certificate and completion certificate from the organization concerned. The evaluation will be made based on this report and a Viva-Voce Examination, conducted internally by a three-member Departmental Consultative Committee constituted by the HOD consisting of Programme Coordinator, Faculty Advisor concerned and Senior Faculty. The evaluation report duly signed by the departmental consultative committee and HOD shall be submitted to the office of the COE.

8.6   Assessment for Value Added Courses (1 or 2 Credits) other than Industrial Training/ Internship

The Value Added Courses 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 to100 marks and rounded off to the nearest integer. The HOD may identify a faculty member as Coordinator for the Course. The Department Consultative committee consisting of the HOD, staff handling the course, Programme Coordinator and a Senior Faculty member nominated by the HOD shall monitor the evaluation process.

If the SWAYAM/NPTEL course is offered as a value added course subject to the approval of BOS concerned, the course shall carry 100 marks and the marks awarded by the SWAYAM/NPTEL shall be directly considered for grading of the course. The online courses other than SWAYAM/NPTEL courses can also be offered as value added courses. In this case, course should be approved by the DCC (consists of the HOD, Programme Coordinator, Senior Faculty member and the department SWAYAM coordinator) and the evaluation methodology of the same shall also be decided by the DCC concerned. No grades shall be awarded for the attendance in the grade sheet and attendance requirement as mentioned in Clause 7 of 2023 Regulations is not applicable.

The candidates who enrolled for value added courses (1 or 2 credits), have to earn minimum of 80% attendance, failing which the registration for courses will be cancelled. Also, the students who failed to secure 'PASS' in value added course, the registration of the course will be cancelled and the course shall not be printed on the grade sheet.

8.7   Assessment for SWAYAM/NPTEL Courses

The students may be permitted to credit online courses which are offered through SWAYAM / NPTEL platform with the approval of Board of Studies concerned (vide Clause 4.8). The course shall carry 100 marks and the marks awarded by the SWAYAM / NPTEL shall be directly considered for grading of the course. No grades shall be awarded for the attendance in the grade sheet for the online course. The attendance requirement as mentioned in Clauses 7 is not applicable for the SWAYAM / NPTEL course.

8.8   Conduct of Academic Audit

Institution shall strive for a better performance of the students by conducting the internal assessments as mentioned in Clause 8.

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 8, the academic records shall be maintained in the form of documentation for the individual assignments / case study

report / report of mini project submitted by each student and assessment test question paper and answer script. For laboratory courses students' record shall be maintained. Further, the attendance of all students 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.

9   **PROCEDURE FOR COMPLETING THE PROGRAMME**

      i.   A candidate who has for some reason discontinued the course can join the course of study of any semester only at the time of its normal commencement in the institution for regular students upon satisfying all the following conditions:

            a.   He / she should have completed the course of study of the previous semesters.

            b.   He / she should be eligible to register for the examinations and satisfy rule 9(iii)

            c.   He / she should have registered for all the examinations of the previous semesters.

      ii.   A candidate will be permitted to proceed from one semester to the next higher semester only if he / she has satisfied the regulation for eligibility to appear for the End-Semester examination in the semester concerned, subject to the condition that the candidate should register for all the arrear course(s) of lower semesters along with the current (higher) semester courses.

      iii.   A candidate should have completed the M.E. Degree Programme with a period of 2 consecutive academic years (4 semesters - including authorized break of study of one year) from the date of admission to the Programme, even if the candidate discontinues and rejoins subsequently, to be eligible for the award of the degree. The minimum and maximum period for completion of the P.G. Programmes are given below:

Programme	Min. No. of Semesters	Max. No. of Semesters
M.E	4	8

10   **REQUIREMENTS FOR APPEARING FOR END SEMESTER EXAMINATION**

A candidate shall normally be permitted to appear for the semester examination of the current semester if he/she has satisfied the semester completion requirements (vide clause 7) and has registered for examination in all courses of that semester. Registration is mandatory for current semester examinations as well as arrears examinations, failing which the candidate will not be permitted to move to the higher semester.

11   **PASSING REQUIREMENTS**

11.1   A student who secures not less than 50% of total marks prescribed for the course [Continuous Assessment + End semester Examinations] with a minimum of 45% of the marks prescribed for the end-semester Examination, shall be declared to have passed the course and acquired the relevant number of credits. This is applicable for theory, theory with practical component and practical courses (including project work).

11.2   If a student fails to secure a pass in a theory course / theory with practical component / practical course, the student shall register and appear only for the end semester examination in the subsequent semester. In such case, the Continuous assessment marks obtained by the student in the first appearance shall be retained and considered valid for all subsequent attempts till the student secures a pass. However, from the third attempt (first attempt + two attempt) onwards if a student fails to obtain pass marks (Continuous Assessment + End

Semester Examination), then the student shall be declared to have passed the examination if he/she secures a minimum of 50% marks prescribed for the end semester examinations alone.

11.3 If a student fails to secure a pass in project work, the student shall register for the course in the subsequent semester/when offered next and repeat the course (vide clause 6.6.2).

11.4 The passing requirement for the courses which are assessed only through continuous assessment, shall be determined based on the marks obtained in the continuous assessment.

11.5 Valued Answer Script review by the students
All the students are allowed to review their valued answer scripts with the faculty in-charge of the course on the specified date (usually the reopening day). Any discrepancies in the valuation can immediately be brought to the notice of the Controller of Examinations.

11.6 Photocopy
Photo Copies of answer script for theory courses can be obtained from the office of the Controller of Examinations on payment of a prescribed fee specified for this purpose through proper application.

11.7 Revaluation
A student can apply for revaluation in a theory course on payment of a prescribed fee along with prescribed application to the COE through the HOD. The COE will arrange for the revaluation and the following procedure is followed in awarding Grade Points after revaluation:
   i.   If there is a change from fail to pass for a Candidate in a Course, Grade Point is awarded as per the relative grade applicable.
   ii.   If a passed candidate in a course obtains more marks after revaluation, the revised grading is used only when the candidate gets Higher Grade, otherwise no change in the grade awarded before the revaluation.

The results will be intimated to the student concerned through the HOD. Revaluation is not permitted for practical course, practical component of theory with practical component courses and project work.

11.8 Challenging the Revaluation
Challenging the revaluation is permitted for those students who have applied for photocopy and revaluation of answer script. The copy of the answer script is to be valued by a competent authority and the valued script should be submitted to the office of the COE along with prescribed fee for challenging the revaluation within 2 working days after the declaration of the Re-valuation results.

12 AWARD OF LETTER GRADES
12.1 The award of letter grades will be decided based on relative grading principle. The relative grading is applicable to ONLY those students who have passed the examination as per the passing requirements enumerated above (vide clause 11). For those students who have not passed the examination, Reappearance (U) shall be awarded as shown in the below Table 10.

For those students who have passed the course, the relative grading shall be done. The marks of those students who have passed only shall be considered 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 student. For a given course, if the students' strength is greater than 30, the relative grading method shall be adopted. However, if the students' strength is less than 30 then the absolute grading shall be followed with the grade range as specified below.

Table 10 – Letter Grades and Range of Marks

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

For Practical Courses and Project Work absolute grading method is to be followed.

The performance of a student shall be reported using letter grades, each carrying certain points as detailed below:

Table 11 – Letter Grades and Grade Points

LETTER GRADE	GRADE POINTS	RESULT
O (Outstanding)	10	PASS
A+ (Excellent)	9	
A (Very Good)	8	
B+ (Good)	7	
B (Average)	6	
C (Satisfactory)	5	
U (Re-appearance)	0	RA (Re-appearance)
SA (Shortage of Attendance)	-	RC (Repeat Course)
WD (Withdrawal)	-	EA (Extended Appearance)
AB (Absent)	0	RA (Re-appearance)

A student is deemed to have passed and acquired the corresponding credits in a particular course if he/she obtains any one of the following grades: "O", "A+", "A", "B+","B", "C".

'SA' denotes shortage of attendance and hence prevented from writing the end semester examinations. 'SA' will figure both in the Grade Sheet as well as in the Result Sheet.

"U" denotes that the student has failed to pass in that course. "WD" denotes withdrawal from the exam for the particular course. The grades U and WD will figure both in the Grade Sheet as well as in the Result Sheet. In both cases, the student has to appear for the End Semester Examinations.

If the grade U/AB is given to the courses which are evaluated through continuous assessment and end semester examinations, it is not required to satisfy the attendance requirements, but has to appear for the end semester examination and fulfil the passing requirements to earn a pass in the respective courses.

If the grade U/AB is given to the courses which are evaluated only through Continuous assessment, the student shall register for the course again in the subsequent semester, fulfill the passing requirements to earn pass in the course. However, attendance requirement need not be satisfied (not applicable for Value added courses).

If the grade U is given to Project work, the course has to be registered again and attendance requirement (vide clause 7) should be satisfied.

12.2 Award of letter grades system for attendance
Letter Grades are awarded for the attendance earned by the student for the individual courses as per table 12.

Table 12 – Attendance Grades and Range

Range of attendance %	95 and above	85 - 94	80-84	< 80
Letter Grade	VG	G	S	M
	Very Good	Good	Satisfactory	Moderately Satisfactory

13 GPA AND CGPA CALCULATION

13.1 The Principal & Chairman of the Academic Council shall call for a Result Passing Board Members meeting after the end-semester examinations, to pass and publish the results. After results are declared, grade sheets will be issued to each student which will contain the following details:

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

During each Semester, the list of courses registered and the grades scored in each course (excluding value added courses) are used to compute the Grade Point Average (GPA). GPA is the ratio of the sum of the products of the number of credits of courses registered and the grade points corresponding to the grades scored in those Courses, taken for all the Courses (excluding value added courses), to the sum of the number of credits of all the courses in the semester. RA grades will be excluded for calculating GPA and CGPA.

$$GPA = \frac{\sum_{i=1}^{n} c_i GP_i}{\sum_{i=1}^{n} c_i}$$

Where,

c_i - is the Credits assigned to the Course
GP_i - is the grade point corresponding to the letter grade obtained for each Course
n   - is number of all Courses registered during the particular Semester in the case of GPA and during all the Semesters in the case of CGPA.

CGPA will be calculated in a similar manner, considering all the courses registered from first Semester.

13.2 The credits earned through Value Added Courses shall not be considered for calculating GPA and CGPA.

13.3 Grade Point to Percentage Conversion
The multiplication factor 9.5 is used for converting CGPA to the corresponding marks in percentage.

14 ELIGIBILITY FOR THE AWARD OF DEGREE

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

(i) Successfully gained the required number of total credits as specified in the Curriculum corresponding to the programme of study within the stipulated time. Total minimum credits needed for each branch of study is given below.

Table 13 – Details of Total Minimum Credits

SL. NO.	BRANCH	TOTAL MINIMUM CREDITS NEEDED FOR SUCCESSFUL COMPLETION
1	M.E. Structural Engineering	84
2	M.E. Environmental Engineering	86
3	M.E. Geotechnical Engineering	83
4	M.E. Engineering Design	88
5	M.E. Manufacturing Engineering	88
6	M.E. Thermal Engineering	88
7	M.E. Power Systems Engineering	81
8	M.E. Power Electronics and Drives	86
9	M.E. Applied Electronics	85
10	M.E. VLSI Design	85
11	M.E. Computer Science and Engineering	85

(ii) Successfully completed the Course requirements, appeared for the End-Semester Examinations and passed all the courses prescribed in all the 4 Semesters within a maximum period of 4 years reckoned from the commencement of the first Semester to which the candidate was admitted.

(iii) Successfully passed any additional courses prescribed by the Board of studies whenever readmitted under Regulations 2023 from other regulations (vide clause 16.3)

(iv) No disciplinary action pending against the student

(v) Award of Degree must have been approved by the Anna University.

14.2 Classification of the Degree Awarded

14.2.1 First Class with Distinction

A candidate who qualifies for the degree (vide clause 14.1), having passed the examination in all courses of the entire Programme in first attempt within the specified minimum number of semesters, securing a CGPA of not less than 8.5 and should not have been prevented from writing end semester examination due to lack of attendance in any of the courses shall be declared to have passed the examination for the degree in **FIRST CLASS WITH DISTINCTION**. For this purpose, the withdrawal from examination (vide clause 15) will not be construed as an appearance. Further, the authorized break of study will not be counted for the purpose of classification.

14.2.2 First Class

A candidate who qualifies for the award of the degree (vide clause 14.1), having passed the examinations in all the courses of the Programme within the specified minimum number of semesters plus one year and securing a CGPA of not less than 6.5 shall be declared to have passed the examination for the degree in **FIRST CLASS**. The authorized break of study will not be counted for the purpose of classification.

14.2.3 Second Class

All other candidates (not covered in clauses 14.2.1 and 14.2.2) who qualify for the award of the degree (vide Clause 14.1) shall be declared to have passed the examination in **SECOND CLASS**.

14.2.4

A student who is absent in End Semester Examination in a Course / Project work after having registered and paid the examination fee for the same shall be considered to have appeared in that Examination (except approved withdrawal from End Semester Examinations as per Clause 15) for the purpose of Classification.

15 PROVISION FOR WITHDRAWAL FROM EXAMINATION

15.1 A student may, for valid reasons, (medically unfit / unexpected family situations / Sports approved by the Chairman) be granted permission to withdraw from appearing for the End Semester Examination in any Course or Courses in **ANY ONE** of the Semester examinations during the entire duration of the Degree Programme. The application shall be sent to the Principal and Chairman through HOD with required documents for approval.

15.2 Withdrawal application shall be valid only if the student is eligible to write the Examination (Clause 7) and if it is made within TEN working days before the commencement of the End Semester Examination in that Course or Courses and also recommended by the HOD.

15.3 Notwithstanding the requirement of mandatory TEN working days notice, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case.

15.4 If a student applies for withdrawal from Project Work, he/she will be permitted for the withdrawal only after the submission of project report before the deadline. However, the

student may appear for the viva voce examination within 30/60 days after the declaration of results for Project Work and the same shall not be considered as reappearance.

15.5 Withdrawal shall not be considered as an appearance for deciding the eligibility of a student for First Class with Distinction.

15.6 Withdrawal is permitted for the End Semester Examinations in the final semester as per Clause 14.2.1.

16 **BREAK OF STUDY FROM A PROGRAMME**

16.1 A student is permitted to go on break of study for a single break of one year only.

16.2 The student can apply for break of study in advance, in any case, not later than the last date of the first assessment period. The application duly filled by the student shall be submitted through the HOD for the approval of the Principal & Chairman.

16.3 The students permitted to rejoin the Programme after break of study / readmission 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 through HOD at the beginning of the readmitted semester itself for prescribing additional/equivalent courses, if any, from any semester of the regulations in-force, so as to bridge the curriculum in-force and the old curriculum.

16.4 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 5.1 irrespective of the period of break of study in order that the student may be eligible for the award of the Degree (vide Clause 14).

16.5 The student is permitted to rejoin the programme on the re-opening day of the semester after the approved break of study duration, failing which the student shall be permitted to continue the programme only if the approval is obtained from the Director of Technical Education / University through the HOD concerned / Principal before the end of the Semester in which the student has taken break of study.

16.6 If a student has not reported to the department for a period of two consecutive Semesters without any intimation, the name of the student shall be deleted permanently from the college enrollment.

16.7 No fee is applicable to the students during Break of Study period

16.8 During the break of study period, the student may optionally write the arrear examinations, if any, by paying prescribed examination fee.

17 **RANK OF A STUDENT**

A candidate who qualifies for the degree by passing the examination in all courses of the entire Programme in first attempt within a period of *TWO* consecutive academic years (Three Academic years, applicable for the students joined after permitted Break of Study) from the date of admission to the Programme can be given his/her position in the class as rank. The Rank is determined from First semester to Fourth semester end semester examination CGPA.

18 **PROCEDURE FOR USING SCRIBE**

If a candidate is physically handicapped (in case of accidents / ill health) at the time of examination, he / she may be permitted to use a scribe to write the examination. The compensatory (additional) time should be one hour for three hour duration of examination. The Scribe shall be a non-engineering student / graduate.

19 INDUSTRIAL VISIT

Every student is required to undergo one industrial visit, starting from the first semester of the programme. Every faculty advisor shall take the students at least for one industrial visit in a semester.

20 DISCIPLINE

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

20.2 If a student indulges in malpractice in any of the Examinations, the student shall be liable for punitive action as prescribed by the University from time to time.

21 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 Academic Council.