



REGULATIONS 2023

(P.G)

ACADEMIC YEAR 2023-2024

VISION, MISSION STATEMENT

Vision

KCG College of Technology aspires to become a globally recognized centre of excellence for science, technology & engineering education, committed to quality teaching, learning and research while ensuring for every student a unique educational experience which will promote leadership, job creation, social commitment and service to nation building.

Mission

- Disseminate knowledge in a rigorous and intellectually stimulating environment.
- Facilitate socially responsive research, innovation and entrepreneurship.
- Foster holistic development and professional competency.
- Nurture the virtue of service and an ethical value system in the young minds.

Quality Policy

KCG College of Technology, committed to achieving excellence in technical education and producing responsible citizens and progressive leaders, strives to achieve the institution goal by

- Focusing on the overall development of the students and strengthening their capacities and leadership abilities.
- Creating a conducive environment for effective teaching, active learning and purposeful research.
- Incorporating value-added programmes to the curriculum and improving the job prospects of the students.
- Periodically evaluating the effectiveness of the programmes offered at the institute and responding positively to the needs of the industry.
- Exposing the students to the challenges of the twenty-first century and providing them with opportunities to think innovatively and to demonstrate their entrepreneurship skills to contribute effectively to the growth of the nation, and
- Continuously benchmarking the institution against premier institutions to adopt the best practices for quality improvement.

REGULATIONS 2023

CHOICE BASED CREDIT SYSTEM

Common to all M.E. Full-Time Programmes

This regulation is applicable to the students admitted to M.E programmes at KCG College of Technology (Autonomous) from the academic year 2023- 2024 onwards.

1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In these Regulations, unless the context otherwise requires:

- I) **“University”** means ANNA UNIVERSITY, CHENNAI.
- II) **“Programme”** means a degree programme that is B.E./ B.Tech degree programmes.
- III) **“Specialization/Branch/Discipline”** means specialization or branch of B.E./B.Tech. degree programme, like Mechanical Engineering, Information Technology, etc.
- IV) **“Course”** means a theory or practical course that is normally studied in a semester, like Mathematics, Physics, etc.
- V) **“Head of the Institution”** means the Principal of the College/Institution.
- VI) **“Head of the Department”** means head of the Department concerned.
- VII) **“Controller of Examinations”** means the authority of the College, who is responsible for all activities of the Examinations Centre.
- VIII) **“College”** means KCG college of Technology (Autonomous).
- IX) **“PT”** means Placement and Training of the college.
- X) **“Regulation”** means a manuscript that contains the principles and standards

designed to control or govern the conduct or provide direction at a more detailed level.

- XI) **“PAC”** represents the Programme Assessment Committee.
- XII) **“Choice Based Credit System (CBCS)”**: The CBCS provides choice for students to select from the prescribed courses (elective or soft skill courses).
- XIII) **“Credit”**: A unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical work/field work per week.
- XIV) **“Grade Point”**: It is a numerical weight allotted to each letter grade on a 10 Point scale.
- XV) **“Grade Point Average (GPA)”**: It is a measure of performance of work done in a semester. It is the ratio of total credit points secured by a student in various courses registered in a semester and the total course credits taken during that semester.
- XVI) **“Cumulative Grade Point Average (CGPA)”**: It is a measure of overall cumulative performance of a student over all semesters. The CGPA is the ratio of total credit points secured by a student in various courses in all semesters and the sum of the total credits of all courses in all the semesters.

2. PROGRAMMES OFFERED, MODES OF STUDY AND ADMISSION REQUIREMENTS

2.1 PG PROGRAMMES OFFERED

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

TABLE 1:LIST OF PG PROGRAMS OFFERED

Sl.No.	Department	Program Name	Degree
1.	Aeronautical Engineering	Aeronautical Engineering	M.E
2.	Computer Science & Engineering	Computer Science & Engineering	M.E
3.	Electronics & Communication Engineering	Communication Systems	M.E
4.	Electrical & Electronics Engineering	Power Electronics and Drives	M.E
5.	Mechanical Engineering	Manufacturing Engineering	M.E

2.2 FULL TIME MODE

Students admitted under 'Full-Time' should be available in KCG College of Technology during the entire duration of working hours (From Morning to Evening on Full-Time basis) for the curricular, co-curricular and extra-curricular activities assigned to them. The Full-Time students should not attend any other Full-Time programme(s) / course(s) in any Institution during the period of the Full-Time programme. Violation of the above rules will result in cancellation of admission to the P.G. programme. However, taking up of job is permitted with authorized break of study as explained in Clause 19.

2.3 ADMISSION REQUIREMENTS

Candidates for admission to the first semester of the Post-Graduate Degree Programme shall be required to have passed an appropriate Under-Graduate Degree Examination of Anna University or equivalent as specified under qualification for admission as per the Tamil Nadu Common Admission (TANCA) criteria. This is applicable for students admitted both under Single Window Counselling process and through the Management Quota. Note: TANCA releases the updated criteria

during the admissions every academic year. Admission shall be offered only to the candidates who possess the qualification prescribed against each programme. 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.

3. STRUCTURE OF THE PROGRAMMES

3.1 CATEGORIZATION OF COURSES

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

- i. **Humanities and Social Sciences including Management Courses (HSMC)** include Technical English, Engineering Ethics and Human Values, Communication skills
- ii. **Basic Science Courses (BSC)** include Mathematics, Physics, Chemistry, etc.
- iii. **Engineering Sciences Courses (ESC)** include Engineering practices, Engineering Graphics, Basics of Electrical / Electronics / Mechanical / Computer Engineering, Instrumentation etc. Environmental Science and Engineering.
- iv. **Professional Core Courses (PCC)** courses include the core courses relevant to the chosen specialization/branch.
- v. **Department Elective Courses (DEC)** courses include the elective courses relevant to the chosen specialization/branch.
- vi. **Non-Department Elective Courses (NEC)** include the courses from other branches which a student can choose from the list specified in the curriculum of the students B.E./B.Tech programmes.
- vii. **Employability Enhancement Courses (EEC)** include Lab project work (Creative, Core skill Design, Innovative Projects) and/or Internship (by AICTE – Internship, Internshala etc.), Seminar, Case Study and Industrial/Practical Training.

Curriculum of a semester shall normally have a blend of lecture courses and practical courses including Employability Enhancement Courses. Each course shall have credits assigned as per Clause 3.2.

3.2 CREDIT ASSIGNMENT

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

TABLE 2: CREDIT ALLOTMENT TO COURSES

CONTACT PERIOD PER WEEK	CREDITS
One Lecture Period	1
One Tutorial Period	1
One Laboratory Period (also for courses like Seminar / Project work/ Case Study/ etc.	0.5

3.3 CAPSTONE PROJECT WORK

- i. The project work for M.E. Programmes consists 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.
- ii. In case of students of M.E. Programmes 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.
- iii. 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.
- iv. A student may, however, undergo Project Work-II (M.E. Programme) in industry/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 and controller of

examinations 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 Controller of Examinations forwarded to the Head of the Institution and suitable record of the meetings shall be maintained.

- v. The Project Work (Project Work-II in the case of M.E.) shall be pursued for a minimum of 16 weeks during the final semester.
- vi. The deadline for submission of final Project Report (Project Work-II for M.E. programmes) 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. Programmes shall be submitted within the last working day of the semester as per the academic calendar published by the KCG College of Technology.
- vii. There shall be three reviews for Project work I & II by the review committee. The student shall make presentation on the progress made by him / her before the committee. The total marks obtained in the three reviews shall be reduced for 40 marks and rounded to the nearest integer.

3.4 INDUSTRIAL TRAINING / INTERNSHIP (SUMMER / WINTER VACATION)

The students shall undergo Industrial training for a period as specified in the Curriculum. In this case, the training has to be undergone continuously for the entire period.

The students shall undergo Internship at Research organization / University after due approval from the Controller of Examinations & Head of Institution

through proper channel for the period prescribed in the curriculum, in lieu of Industrial training.

The academic credit for the internship undergone by the students as part of the programme is proposed as follows: -

- i. 1 credit = minimum 15 days of internship
- ii. Mandatorily 5 credits of internship may be counted for the award of degree.
- iii. Attendance certificate from industry is mandatory to claim the credit points.

3.5 ONLINE COURSES

Students may be permitted to do online courses in the approved agencies. The list of agencies may be approved in the respective board of studies & Academic Council (which are provided with a certificate) with the recommendations of respective department. The online course of 45 hours shall be considered as equivalent to a 3 credits course. This online course can be considered as equivalent to one elective course. The online course will be considered as equivalent for an elective course only. In case of credits earned through online mode from any institution approved by appropriate authorities of the college, the credits may be transferred after due approval of the Controller of Examinations & Head of Institution.

List of approved agencies to undergo online courses is approved and available with HoDs, Controller of Examinations & Head of Institution. MOOC and SWAYAM courses are the approved agencies by AICTE. Students are encouraged to enroll in these agencies for their on-line course with prior permission.

3.5 NON-DEPARTMENT ELECTIVE COURSES

- i. Instead of two electives (Non-Department Elective Courses) in the curriculum, the student may be permitted to choose a maximum of 2 courses from other PG programmes with the approval of the Head of the Department, Controller of Examinations & Head of Institution offering such courses.

4. MEDIUM OF INSTRUCTION

The medium of instruction is ENGLISH for all courses, examinations, seminar presentations and project / thesis / dissertation reports (except foreign language courses).

- i. The blend of all the above different courses (3.1 to 3.5), Co-curricular and extra-curricular activities shall be so designed that, the students at the end of the programme would have been trained not only for his/her relevant professional field but also would have developed as a socially conscious human professional.

5. DURATION AND STRUCTURE OF THE PROGRAMME

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

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

- (a) Each semester shall normally consist of 75 working days or 540 periods of 50 minutes each. The Head of the Institution shall ensure that every teacher imparts instruction as per the number of periods specified in the syllabus and that the teacher teaches the full content of the specified syllabus for the course being taught.
- (b) The Head of the Institution may conduct additional classes for improvement, special coaching, conduct of model tests etc., over and above the specified periods.

But for the purpose of calculation of attendance requirement for writing the end semester examinations (as per clause 6) by the students, the following method shall be used.

Percentage of Attendance:

$$= \frac{\text{Total Periods attended in all the courses per semester}}{(\text{No. of Periods / Week as prescribed in the curriculum}) \times 15} \times 100$$

Taken together for all courses of the semester

- (c) The End Semester Examination will ordinarily follow immediately after the last working day of the semester commencing from I semester as per the academic schedule prescribed from time to time.
- (d) The minimum prescribed credits required for the award of the degree shall be within the limits specified below:

Programme	Prescribed Credit Range
M.E (Full Time)	70- 75

6. COURSE ENROLLMENT & REGISTRATION

- a. For the first semester of study, each student on admission shall register for all the courses prescribed in the curriculum for that semester.
- b. 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.
- c. From the first to pre-final semesters, the student has the option of dropping existing courses in a semester during registration. Total number of credits of such courses cannot exceed 6 for P.G. (Full Time) programmes. The student is permitted to drop the course(s) within 30 days of the commencement of the academic schedule.
- d. The Head of the Department is responsible for registering the courses that each student is proposing to undergo in the ensuing semester. Each student has to register for all courses to be undergone in the curriculum of a particular semester (with the facility to drop courses to a maximum of 6 credits (vide clause 3.5). The registration details of the student shall 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.

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

- (i) Courses of the current semester and
- (ii) Courses dropped in the lower semesters. The maximum number of credits that can be registered in a semester is 36. However, this does not include the number of Re-appearance (RA) and Withdrawal (W) courses registered by the student for the appearance of Examination.

7. EVALUATION OF CAPSTONE PROJECT WORK

- i. The evaluation of Project Work for Project Work-I & Project Work-II shall be done independently in the respective semesters and marks shall be allotted as per the weightages explained below:
- ii. The project work shall be evaluated for a maximum of 100 marks, of which continuous Assessments carry 40 marks (total) and the End Semester Examination (Project report evaluation and Viva- Voce Examination) carries 60 marks. The project report shall be submitted as per the approved guidelines as given by the Controller of Examinations. The evaluation of the project reports will carry 20 marks and the same mark shall be awarded to every student within the project group for the project report. The viva-voce examination shall carry 40 marks and marks are awarded to each student of the project group based on the individual performance in the viva- voce examination.

Continuous Assessment (40 Marks)			End Semester Examination (60 Marks)			
Review 1	Review 2	Review 3	Project Report Evaluation		Viva Voce Marks (40 Marks)	
			Internal	External	Internal	External
10	15	15	10	10	20	20

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.

- i. If the student fails to obtain 50% of the internal assessment marks in the Project Work-I and Project Work-II / final project, he/she will not be permitted to submit the project report and has to register for the same in the subsequent semester. If a student 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 register for the same in a subsequent semester. This applies to both for Project Work-I and Project Work-II in the case of M.E. Project Work.
- ii. If a student fails in the end semester examinations of Project Work-I, he/she has to resubmit the Project Report within 30 days from the date of declaration of the results.
- iii. If he / she fail in the End semester examination of Project Work-II of Project work of M.E. programme, 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. 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.
- iv. A copy of the approved Project Report after the successful completion of viva-voce examinations shall be kept in the library of KCG College of Technology.
- v. Practical / Industrial Training, Summer Project if specified in the Curriculum shall not exceed the maximum duration of 4 weeks and should be organized by the Head of the Department for every student.
- vi. 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.

8. CLASS TEACHER

There shall be a class teacher for each class. He / She will be appointed by the HoD of the department concerned. The class teacher is the ex-officio member of the class committee. The responsibilities for the class coordinator shall be:

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

9. CLASS COMMITTEE

Every class shall have a class committee consisting of teachers of the class concerned, student representatives and a chairperson who is not teaching the class. The class teacher is the ex-officio member of the class committee. It is like the 'Quality Circle' (more commonly used in industries) with the overall goal of improving the teaching- learning process.

The functions of the class committee include

- (a) Solving problems experienced by students in the classroom and in the laboratories.
- (b) Clarifying the regulations of the degree programme and the details of rules therein particularly (clause 5 to clause 7) which should be displayed on college and Department Notice- Board.
- (c) Informing the student representatives, the academic schedule including the dates of assessments and the syllabus coverage for each assessment.
- (d) Informing the student representatives the details of Regulations regarding weightage used for each assessment.
- (e) 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
- (f) Analyzing the performance of the students of the class after each test and finding the ways and means of solving problems, if any.
- (g) Identifying the slow learners, if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such slow learners.
- (h) The class committee for a class under a particular branch is normally constituted by the Head of the Department. However, if the students of different branches are mixed in a class (like the first semester which is generally common to all branches), the class committee is to be constituted by the Head of the Institution.
- (i) The class committee shall be constituted within the first week of each semester.
- (j) The Chairperson of the class committee may invite the Class adviser(s) and the Head of the Department to the class committee meeting. The Head of the Institution may participate in any class committee of the institution.

- (k) The chairperson is required to prepare the minutes of every meeting, submit the same to Head of the Institution within two days of the meeting and arrange to circulate it among the students and teachers concerned. If there are some points in the minutes requiring action by the management, the same shall be brought to the notice of the Management by the Head of the Institution.
- (l) 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.
- (m) The Class Committee Chairperson 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 5 of this Regulation.
- (n) During these meetings, the student members representing the entire class, shall meaningfully interact and express the opinions and suggestions of the other students of the class in order to improve the effectiveness of the teaching-learning process.

10. COURSE COMMITTEE FOR COMMON COURSES

Each common theory course offered to more than one discipline or group, shall have a "Course Committee" comprising all the faculty members teaching the common course with one of them nominated as Course Coordinator. The nomination of the Course Coordinator shall be made by the Head of the Department / Head of the Institution depending upon whether all the teachers teaching the common course belong to a single department or to several departments.

The 'Course committee' shall meet in order to arrive at a common scheme of evaluation for the test and shall ensure a uniform evaluation of the tests. Wherever feasible, the course committee may also prepare a common question paper for the internal assessment test(s).

11. ATTENDANCE REQUIREMENTS FOR COMPLETION OF A SEMESTER

- 11.1 A Candidate who has fulfilled the following conditions shall be deemed to have satisfied the requirements for completion of a semester. Ideally every student is expected to attend all classes of all the courses and secure 100% attendance. However, he/she shall secure not less than 75% (after rounding off to the nearest integer) of overall attendance as calculated as per clause 5.
- 11.2 However, a candidate who secures overall attendance between 65% and 75% 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 candidate shall submit the medical certificate / sports participation certificate attested by the HoD & Head of Institution. The same shall be forwarded to the Controller of Examinations for record purposes. This concession can be availed only for any two semesters during the entire course of the study.
- 11.3 Candidates who secure less than 65% overall attendance and candidates who do not satisfy the clause 7.1 and 7.2 shall not be permitted to write the End Semester 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 per the norms prescribed.

12. SYSTEM OF EXAMINATION

Performance in each course of study shall be evaluated based on

- i. Continuous Assessment (CA 1, CA 2 & Model Examinations) throughout the semester
- ii. Supplementary Continuous Assessment (CA)
- iii. End Semester Examinations (ESE)
- iv. Special End Semester Examinations

i. Continuous Assessment

The system of evaluating student progress through continuous assessment examinations has been refined into three separate assessments (CA 1, CA 2 & Model Examinations), each course will be evaluated to a maximum of 50 marks. It is imperative to emphasize that participating in the Continuous Assessment (CA) is obligatory for all students, and they are expected to partake in the exams without availing any leave. In the exceptional case that a student is granted official on-duty status by the Head of Department (HoD), it is vital that this arrangement is sanctioned by the Head of Institution (HoI) well in advance. This protocol underscores the significance of maintaining clear communication channels and adhering to established guidelines.

ii. Supplementary Continuous Assessment (CA)

An additional round of continuous assessment examinations, known as Supplementary Continuous Assessment Examinations, will be arranged specifically for students who were unable to participate in any of the courses during the CA1 or CA2 assessments due to official on-duty commitments. This participation is subject to prior approval from the Head of Department (HoD).

These supplementary examinations are scheduled to take place between the CA2 and Model Examinations. The content covered in these supplementary exams will pertain to the material encompassed within the first four units of the course curriculum. This approach ensures that students who missed out on certain components have the opportunity to make up for their absence and demonstrate their understanding of the essential topics.

This provision is designed to accommodate unforeseen circumstances that might lead to a student's absence during the initial continuous assessment evaluations. It underscores the institution's commitment to equitable evaluation and affording all students an equal chance to prove their academic capabilities.

Model Examinations

Model Examinations are an integral part of the academic evaluation process and are organized for students subsequent to the culmination of each semester's instructional activities. To ensure optimal preparedness, revision classes for courses selected for the model exam will be thoughtfully arranged prior to the actual model examination for those specific courses.

The content covered in the model examination will encompass the material contained within the first five units of the respective course. The successful completion of these model exams serves as a mandatory requirement, necessitating the attendance and active participation of all students. Securing commendable scores in these assessments is of utmost importance as it reflects not only the individual student's grasp of the subject matter but also their dedication to achieving academic excellence.

The scheduling of these model examinations after the conclusion of regular classes ensures that students have ample time to thoroughly revise and prepare for the assessments. This approach is carefully designed to encourage comprehensive understanding, facilitate effective revision, and promote a conducive learning environment. By actively engaging in these model examinations, students can gauge their own progress, identify areas for improvement, and enhance their overall academic performance.

iii. End Semester Examinations

The culmination of each semester culminates in the administration of the End Semester Autonomous Examinations at KCG College of Technology. These examinations are meticulously conducted in full compliance with the guidelines and protocols stipulated by Anna University. The strict adherence to these regulations ensures the integrity, fairness, and transparency of the evaluation process.

In line with the significance of these assessments, it is imperative that all students participate in the End Semester Autonomous Examinations without availing any form of leave. The holistic assessment of students' knowledge, skills, and comprehension of the course material is contingent upon their active

involvement in these examinations. This commitment to attending the examinations not only serves as a measure of individual progress but also contributes to the overall academic atmosphere and the institution's commitment to maintaining a rigorous and credible evaluation system. The End Semester Examination (theory, practical and theory with 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. For End Semester Autonomous Examinations alone, it is ensured that 50% of the exam hall invigilators are from other institutions and 50 % from KCG College of Technology.

iv. Special End Semester Examinations

After a student completes FOURTH semester, if he/she has to complete ONE or TWO or THREE course(s) (maximum 3 only) only of any semester, for completing the program within 2 years, he/she will be permitted to appear for a **special examination** (conducted within a month after the announcement of eighth semester results) for those courses, carrying forward continuous assessment marks of the last attempt, for fulfilling the requirements.

13. PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

The procedure for awarding Internal marks are given below:

(a) Theory Courses

Three assessments shall be conducted during the semester. The total marks obtained in all assessments put together out of 200, shall be proportionately reduced for 40 marks and rounded off to the nearest integer.

CA1	CA2	CA 3	Other Assessment	Total
Written Test Units 1 & 2	Written Test Units 3 & 4	Model Exam (5 Units)	Assignment / Case Study / Seminar / Projects	Internal Assessment
60	40	60	40	200*

(b) Laboratory Courses

Every practical exercise / experiment shall be evaluated based on conduct of experiment / exercise and records are to be maintained. There shall be at least one test. The criteria for arriving at 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 Exam. The total mark shall be converted into a maximum of 60 marks and rounded off to the nearest integer.

Evaluation of Laboratory Observation, Record	Model Test	Total Internal Assessment
75	25	100

(c) Theory Courses with Laboratory Component

If there is a theory course with laboratory component, there shall be three assessments:

CA 1	CA 2	CA 3	Laboratory Component	Total
Written Test Units 1 & 2	Written Test Units 3 & 4	Model Exam (5 Units)	Model Lab Exam	Internal Assessment
60	40	60	40	200*

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

(d) Capstone Project and Mini Project

Project work may be allotted to a single student or to a group of students not exceeding 3 per group. The Head of the Department concern shall constitute a review committee for project work for each branch of study. There shall be three reviews during the semester by the review committee. The student shall make a presentation on the progress made by him / her before the committee.

The project work shall be evaluated for a maximum of 100 marks, of which continuous Assessments carry 40 marks (total) and the End Semester Examination (Project report evaluation and Viva- Voce Examination) carries 60 marks. The project report shall be submitted as per the approved guidelines as given by the Controller

of Examinations. The evaluation of the project reports will carry 20 marks and the same mark shall be awarded to every student within the project group for the project report. The viva-voce examination shall carry 40 marks and marks are awarded to each student of the project group based on the individual performance in the viva-voce examination.

Continuous Assessment (40 Marks)			End Semester Examination (60 Marks)			
Review 1	Review 2	Review 3	Project Report Evaluation		Viva Voce Marks (40 Marks)	
			Internal	External	Internal	External
10	15	15	10	10	20	20

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. Project Report is mandatory for the students to register for Capstone Project and Mini Project End Semester Examinations.

(e) OTHER EMPLOYABILITY ENHANCEMENT COURSES

The Industrial / Practical Training, Summer Project, Internship, Club activity, soft skills, Technical Seminar & Technical Presentation shall carry 100 marks and shall be evaluated through internal assessment only. At the end of Industrial / Practical training / internship / Summer Project, the candidate shall submit a certificate from the organization where he / she has undergone training and a brief report. The evaluation will be made based on this report and a Viva-Voce Examination, conducted internally by a three-member Departmental Committee constituted by the Head of the 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. There shall be one Faculty in charge for the above Assessment for each class. The Faculty in Charge shall consolidate the assessment details and submit to the COE through HoD.

Certificate	Report	Presentation	Interaction	Total
50 Marks	20 Marks	20 Marks	10 Marks	100

(f) Assessment for Online Courses

Students may be permitted to credit TWO online courses (which is provided with certificate) subject to a maximum of 6 credits. The credits earned in such online course(s) which can be 3 or 1 + 2 credits, can be considered, instead of one elective course. The approved list of online courses will be approved by Academic Council Members and will be available at the Office of the Controller of Examinations from time to time. The committee will take a decision on the evaluation methodology for the online course. At the beginning of the semester, the Committee can decide whether to evaluate the online courses by conducting the End Semester Examination or by taking the marks / grade obtained in the online course itself. The Head of the department may identify a faculty member as coordinator for the course, who will be responsible for the evaluation process (if required). The student needs to obtain certification or credit to become eligible for the award of degree.

In case of credits earned through online mode from an institute approved by appropriate authorities of the college, the credits may be transferred and grades shall be assigned by internal committee headed by Controller of Examinations.

Internal marks approved by the Controller of Examinations & Head of the Institution shall be intimated to the students by the respective HoDs within 5 days from the last working day.

14. 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 (topics covered), separately for each course. This should be submitted to the Head of the Department periodically (at least three times in a semester) for checking the syllabus

coverage and the records of test marks and attendance. The Head of the department will put his/her signature and date after due verification. At the end of the semester, the record should be verified by the Head of the institution who will keep this document in safe custody (for five years). The University or any inspection team appointed by the University may inspect the records of attendance and assessments of both current and previous semesters.

15. REQUIREMENTS FOR APPEARING FOR SEMESTER EXAMINATION

- a. A student shall normally be permitted to appear for the University examinations of the current semester if he/she has satisfied the semester completion requirements as per clause 11 and has registered for examination in all courses of the current semester.
- b. Further, examination registration by a student is mandatory for all the courses in the current semester and all arrear(s) course(s) for the university examinations failing which, the student will not be permitted to move to the higher semester. 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 his/her marks in a course or the aggregate marks / CGPA.
- c. There shall be an End-Semester Examination of 3 hours duration in each lecture based course.
- d. The examinations shall ordinarily be conducted between October and December during the odd semesters and between April and June in the even semesters.
- e. For the practical examinations (including project work), both internal and external examiners shall be appointed by the controller of Examinations.

16. PASSING REQUIREMENTS

A candidate who secures not less than 50% of total marks prescribed for the course [Internal Assessment + End semester University Examinations] with a minimum of 50% of the marks prescribed for the end-semester University 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) as mentioned below:

16.1 PASS PERCENTAGE CRITERIA

	CA minimum	ESE minimum	Overall Passing
Theory	NIL	45% (27 out of 60 marks)	50 % in CA and ESE together
Practical	NIL	50% (25 out of 40 marks)	50 % in CA and ESE together
Project	NIL	45% (27 out of 60 marks)	50 % in CA and ESE together
Theory with Laboratory component	NIL	50% (25 out of 50 marks)	50 % in CA and ESE together

- (a) If a candidate fails to secure a pass in a particular course, it is mandatory that he/she shall register and reappear for the examination for that course during the subsequent semester when examination is conducted for that course. He/she should continue to register and reappear for the examinations in the failed subjects till he / she secures a pass.
- (b) The internal assessment marks obtained by the candidate in the first appearance shall be retained and considered valid for next three attempts. From fourth attempt onwards, the candidate shall be declared to have passed the examination if he/she secures a minimum of 50% marks prescribed for the end semester examinations alone.
- (c) The passing requirement for the courses which are assessed only through purely internal assessments, is 50% of the internal assessment (continuous assessment) marks only.

A student can apply for revaluation of the student's semester examination answer paper in a theory course, as per the guidelines of the COE on payment of a prescribed fee along with prescribed application to the COE through the Head of the Institution. The COE will arrange for the revaluation and the results will be

intimated to the student concerned through the Head of the Institution. Revaluation is not permitted for laboratory course and EEC courses.

17. AWARD OF LETTER GRADES

The award of letter grades will be decided based on relative grading principle. The marks of those students who have passed only shall be entered in the software developed for relative grading. The evolved relative grading method normalizes the results and computes the grade range for each course separately and awards the grade to each student.

GRADE POINTS

Letter Grade	Grade Points	Marks Range
O (Outstanding)	10	91-100
A + (Excellent)	9	81-90
A (Very Good)	8	71-80
B + (Good)	7	61 - 70
B (Average)	6	50-60
RA (Fail / Reappear)	0	<50
SA (Shortage of Attendance)	0	
W (Withdrawal)	0	
WH (Withheld)	0	

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".

'SA' denotes shortage of attendance (as per clause 11) and hence prevention from writing the end semester examinations. It will appear in the Grade sheet. In this case the student has to earn Continuous Assessment marks and only then appear for the End Semester Examinations.

"RA" denotes that the student has failed to pass in that course. "W" denotes

withdrawal from the exam for the particular course. The grades RA and W will figure both will appear in the grade sheet.

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

If the grade RA is given to EEC (Employability Enhancement Course) (except Project Work), which are evaluated only through internal 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.

For the extra-curricular activities such as National Cadet Corps (NCC)/ National Service Scheme (NSS) / National Sports Organization (NSO) / Youth Red Cross (YRC)/Unnat Bhaart Abhiyan (UBA), 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.

18. ELIGIBILITY FOR THE AWARD OF THE DEGREE

- (a) A student shall be declared to be eligible for the award of the P.G. Degree (M.E.) provided the student has successfully gained the required number of total credits as specified in the curriculum corresponding to the student's programme within the stipulated time
- (b) M.E.- Successfully completed the course requirements, appeared for the End-Semester examinations and passed all the subjects prescribed in all the 4 semesters within a maximum period of 4 years reckoned from the commencement of the first semester to which the student was admitted.

- (c) Successfully passed any additional courses prescribed by the controller of Examinations. No disciplinary action pending against the student.
- (d) The award of Degree must have been approved by the Controller of Examinations & Anna University, Chennai.

19. CLASSIFICATION OF THE DEGREE AWARDED

19.1 FIRST CLASS WITH DISTINCTION:

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

M.E. (Full Time)

- (a) Should have passed the examination in all the courses of all the four semesters in the student's First Appearance within three years, which includes authorized break of study of one year (if availed). Withdrawal from examination (vide Clause 20) will not be considered as an appearance.
- (b) Should have secured a CGPA of not less than 8.50.
- (c) Should NOT have been prevented from writing end Semester examination due to lack of attendance in any of the courses.

19.2 FIRST CLASS:

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

M.E. (Full Time)

Should have passed the examination in all the courses of all four semesters within three years, which includes one year of authorized break of study (if availed) or prevention from writing the End Semester Examination due to lack of attendance (if applicable).

Should have secured a CGPA of not less than 6.50.

19.3 SECOND CLASS:

All other students (not covered in clauses 19.1 and 19.2) who qualify for the award of the degree shall be declared to have passed the examination in Second Class.

A student who is absent in End Semester Examination in a course / project work after having registered for the same shall be considered to have appeared in that examination (except approved withdrawal from end semester examinations as per clause 20) for the purpose of classification.

20. REVALUATION

A student can apply for revaluation of his/her semester examination answer paper in a theory course, as per the guidelines of COE on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of Institutions. The Controller of Examinations will arrange for the revaluation and the results will be intimated to the student concerned through the Head of the Institutions. Revaluation is not permitted for practical courses and for EEC courses. A student can apply for revaluation of answer scripts for not exceeding 5 courses at a time.

21. PROVISION FOR WITHDRAWAL FROM END-SEMESTER EXAMINATION

- (a) A student may, for valid reasons, (medically unfit / unexpected family situations / sports approved by Physical Education, HoD, Controller of Examinations & Head of the Institution) be granted permission to withdraw from appearing for the end-semester examination in any course or courses in ANYONE of the semester examinations during the entire duration of the degree programme. The application shall be sent to Controller of Examinations, through the Head of the Department with required documents.
- (b) Withdrawal application is valid ONLY if the student is otherwise eligible to write the examination and if it is made within TEN days prior to the

commencement of the END SEMESTER examination in that course or courses and recommended by the Head of the Department.

- (c) 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.
- (d) In case of withdrawal from a course, the course will figure in the grade Sheet. Withdrawal essentially requires the student to re-register for the course/courses and attend the supplementary or the end semester examination in the subsequent semester, when the examination is conducted.
- (e) The student has to register for the course, fulfill the attendance requirements, 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 and for First Class.
- (f) 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.

22. PROVISION FOR AUTHORISED BREAK OF STUDY

- (a) A student is permitted to go on break of study for a maximum period of one year as a single spell.
- (b) 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 an 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 Dean (Academics), but not

later than the last date for registering for the end semester examination of the semester in question, through Head of The Department stating the reasons therefore and the probable date of rejoining the programme.

- (c) The Student permitted to rejoin the programme after break of study / prevention due to lack of attendance / more than 10 number of arrears, 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 Head of the Institution duly forwarded by Head of the Department at the beginning of the readmitted semester itself for prescribing additional courses, if any, from any semester of the regulations in-force, so as to bridge the curriculum in-force and the old curriculum.
- (d) The authorized break of study would not be counted towards the duration specified for passing all the courses for the purpose of classification.
- (e) The total period for completion of the Programme reckoned from, the commencement of the first semester to which the candidate was admitted shall not exceed the maximum period specified in clause 5.1 irrespective of the period of break of study in order that he/she may be eligible for the award of the degree.
- (f) If any student is prevented for want of required attendance, the period of prevention shall not be considered as authorized 'Break of Studies'.

23. DISCIPLINE

- (a) 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 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.

- (b) If a student indulges in malpractice in any of the END SEMESTER / internal examination, he / she shall be liable for punitive action as prescribed by the COLLEGE from time to time.

24 . REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

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