



REGULATIONS 2023

(U.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 **B.E. / B.TECH.** Full-Time Programmes

This regulation is applicable to the students admitted to B.E / B.Tech 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. ADMISSION ELIGIBILITY CRITERIA

2.1 First Semester Admission

Candidates seeking admission to the first semester of the eight semester B.E. / B.Tech. degree programme:

Should have passed the Higher Secondary Examinations of (10+2) Curriculum (Academic Stream) prescribed by the Government of Tamil Nadu and AICTE or authority accepted by the Syndicate of Anna University as equivalent thereto. They should also satisfy other eligibility rules as prescribed by the Anna University and Directorate of Technical Education, Government of Tamil Nadu, Chennai from time to time.

(OR)

Should have passed the Higher Secondary Examination of Vocational stream (Vocational groups in Engineering / Technology) as prescribed by the Government of Tamil Nadu.

2.2 Lateral entry Admission

The candidates who possess the Diploma in Engineering / Technology awarded by the State Board of Technical Education, Tamil Nādu or its equivalent are eligible to apply for Lateral entry admission to the third semester of B.E. / B.Tech. in the branch corresponding to the branch of study.

(OR)

The candidates who possess the Degree in Science (B.Sc.,) (10+2+3 stream) with Mathematics as a subject at the B.Sc. levels are eligible to apply for Lateral entry admission to the third semester of B.E. /B.Tech. Such candidates shall undergo two additional Engineering subject(s) in the third and fourth semesters as prescribed by the Board of Studies.

3. UG 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 UG PROGRAMS OFFERED

Faculty of Engineering and Technology			
Sl.No.	Code	Programme	Branch
1.	AE	B.E.	Aeronautical Engineering
2.	AS	B.E.	Aerospace Engineering
3.	AU	B.E.	Automobile Engineering
4.	CE	B.E.	Civil Engineering
5.	CS	B.E.	Computer Science and Engineering
6.	CB	B.E.	Computer Science and Engineering (Cyber Security)
7.	EE	B.E.	Electrical and Electronics Engineering
8.	EC	B.E.	Electronics and Communication Engineering
9.	ME	B.E.	Mechanical Engineering
10.	MT	B.E.	Mechatronics Engineering
11.	AD	B.Tech.	Artificial Intelligence and Data Science
12.	FT	B.Tech.	Fashion Technology
13.	IT	B.Tech.	Information Technology

4. STRUCTURE OF PROGRAMMES

4.1 Categorization of Courses

Every B.E. / B. Tech. 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, Environmental Science and Engineering etc
- 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.

4.2 Personality and Character Development

All students shall enroll, on admission, in any one of the personality and character development programmes which are listed below. The students shall undergo training for the specified number of hours as specified in the relevant programmes (50/100 hours and / or attend a camp as applicable).

- (a) **National Cadet Corps (NCC)** will have about 20 parades.
- (b) **National Service Scheme (NSS)** will have social service activities in and around the College / Institution.
- (c) **National Sports Organization (NSO)** will have sports, Games, Drills and Physical exercises.
- (d) **Youth Red Cross (YRC)** will have activities related to social services in and around College/Institutions. While the training activities will normally be during weekends, the camp will normally be during vacation period.
- (e) **Extension Activities**

These activities may be coordinated by CSR coordinator.

Following are the suggestive activity as listed by AICTE:

1. Prepare and implement a plan to create local job opportunities.
2. Prepare and implement a plan to improve education quality in villages.
3. Prepare an actionable Detailed Project Report (DPR) for doubling the village Income.
4. Developing a sustainable water management system.
5. Prepare and implement a plan to improve health parameters of villagers.
6. Developing and implementing low cost sanitation facilities.
7. Prepare and implement a plan to promote local tourism through innovative approaches.
8. Implement/develop technology solutions which will improve quality of life.
9. Prepare and implement solutions for energy conservation.
10. Prepare and implement a plan to skill village youth and provide employment.
11. Develop localized techniques for reduction in construction cost.
12. Prepare and implement a plan of sustainable growth of the village.
13. Setting up an information imparting club for women leading to contribution

in social and economic issues.

14. Developing and managing an efficient garbage disposal system.
15. Contribution to any national level initiative of Government of India, For Eg Digital India/Skill India/ Swachh Bharat Internshipetc.,

(f) Club Activities

Every student who is admitted to the UG programme shall join in the club activities as per their choice. It is mandatory for the student to enroll themselves in at least one club. Activities they perform in their club carries weightage in their continuous assessment during their first year of study.

TABLE 2: LIST OF CLUBS AT KCG COLLEGE OF TECHNOLOGY

Technical Clubs	General Clubs
Mobile App Club	Dance Club
Robotics Club	ECO Club
Drone Club	Heritage Club
Space Exploration Club	Music Club
Maths Club	English Literary Club
IOT Club	Film Appreciation Club
AR Club	Fine Arts Club
Programming Club	Quiz Club

4.3 Mandatory Induction Programme

The students immediately after admission should undergo a mandatory induction programme comprising of yoga class, nurturing various human traits like trust, commitment, gratitude, care, humanity, responsibility, dedication, respect, self-confidence, creativity, gratitude, happiness, affection etc., universal human values, proficiency modules, lectures by eminent people, visits to local areas and familiarization to department/branch and innovations immediately after admission.

4.4 Number of Courses per Semester:

Each semester curriculum shall normally have a blend of lecture courses not exceeding 7 (Theory courses and Laboratory integrated theory courses) and 3 Employability Enhancement Course(s) and Laboratory Courses. However, the total number of courses per semester shall not exceed 10. Each Course shall have credits assigned as per clause 4.5.

4.5 Credit Assignment

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

TABLE 3: 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

4.6 Industrial Training/Internship

4.6.1 The students may 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 may undergo Internship at Research organization / University after due approval from the Head of Institution through proper channel for the period prescribed in the curriculum, in lieu of Industrial training. Attendance Certificate mentioning the period of Industrial Training / Internship and signed by the competent authority of the industry, as per the format provided by the Dean Academic Courses shall be submitted to the Head of the Institution. The attendance certificate shall be forwarded to the COE, by the Head of the Institution for processing results.

4.6.2 If Industrial Training/ Internship is not prescribed in the curriculum, the

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

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

***1 Week = 40 Internship Hours**

4.7 Industrial Visit

Every student is required to go for at least one Industrial Visit every semester starting from the second year of the Programme. The Heads of Departments shall ensure that necessary arrangements are made in this regard.

4.8 Online Courses

Students may be permitted to credit a maximum of two online courses, subject to a maximum of six credits, with the approval of the Head of the Institution and the Dean Academic Courses, in lieu of open elective / professional elective courses. The online course of 45 hours shall be considered as equivalent to a 3 credits course. Such online course can be considered as equivalent to one elective course. The Head of the Institution shall form a three-member committee with members as HOD and a faculty member from the Department of the student, HOD of any other branch of the Institution to ensure that the student has not studied such courses and

would not repeat it again as Professional Core/Professional Elective/Open Elective courses. Suitable online courses shall be chosen from the SWAYAM platform or from any other equivalent platforms approved by the respective department and Dean Academics

4.9 Value Added Courses

The students may optionally undergo Value Added Courses (VAC) over and above the topics covered in the curriculum to obtain practical and industry specific knowledge. The credits earned through the Value Added Courses shall be over and above the total credit requirements prescribed in the curriculum for the award of the degree. One / Two credit courses shall be offered by a Department of an institution with the prior approval from the Head of the Institution and the Centre for Academic courses without any additional fee charged from the students. The details of the syllabus, time table and course coordinator may be sent to the Centre for Academic Courses at least one month before the course is offered for approval. Students can take a maximum of two one credit courses / one two credit course during the entire duration of the Programme.

4.10 Audit courses

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

4.11 Medium of Instruction

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

The blend of all the above different courses (4.1 to 4.10), 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 OF THE PROGRAMME

- 5.1 A student is ordinarily expected to complete the B.E./ B.Tech. Programme in 8 semesters (four academic years) but in any case, not more than 14 Semesters for HSC (or equivalent) candidates and not more than 12 semesters for Lateral Entry Candidates.
- 5.2 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.
- 5.3 Students have to get credits in the range between 165 – 175 for the award of degree for any programmes.
- 5.4 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 by the students, the following method shall be used.

Percentage of Attendance

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

Taken together for all courses of the semester

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.

- 5.5 The total period for completion of the programme reckoned from the commencement of the first semester to which the candidate was admitted shall not exceed the maximum period specified in clause 5.1 irrespective of the

period of break of study (vide clause 21) in order that he/she may be eligible for the award of the degree (vide clause 18).

6. COURSE ENROLLMENT & REGISTRATION

6.1 For the first semester of study, each student on admission shall register for all the and Withdrawal (W) courses registered by the student for the appearance of Examination.

- (i). Courses of the current semester (including Department & Non-Department elective courses, Minor/ Honours Degree courses, Project related courses if any)
- (ii). Course(s) in which he/she has not been permitted to appear for the end semester examinations in an earlier semester, for want of the minimum required attendance, if such courses are offered in that semester (vide clause 8.2)
- (iii). A student has to register for reappearance in a subsequent semester, for those courses in which he/she has failed in the earlier semester(s) including any special supplementary examination, which he/she has taken and failed or was absent
- (iv). Department or Non Department Elective Course(s) opted by the students in lieu of such courses in which he/she has failed, if the courses are offered in that semester or the same elective course chosen earlier by the student.
- (v). If a student wishes, then he/she is also permitted to register for courses offered in a higher semester, in advance, to earn more than the total number of credits prescribed in the current semester in the curriculum of the student's programme (subject to maximum of 36 credits) with the approval of controller of Examination & Head of Institution.

7. COURSE REGISTRATION SUPPORT

Each student, on admission shall be assigned to a Faculty adviser 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.

Every student shall enroll for the course of the succeeding semester before the end of the current semester. However, the student shall confirm the enrolment by registering for the courses within the first five working days after the commencement of the concerned semester.

Elective courses shall be offered by the department unless a minimum of 15 students registered for that course, subject to the approval of the Head of the Department, Controller of Examinations & Head of Institution.

After registering for a course, a student shall attend the classes, satisfy the attendance requirements, earn Continuous Assessment marks and appear for the End Semester Examinations.

Each student on admission shall register for all the courses prescribed in the curriculum for the first semester of study.

The enrollment for all the courses of Semester II will commence 10 working days prior to the last working day of Semester I. The student shall confirm the enrolment by registering for the courses within the first five working days after the commencement of Semester II.

The enrolment for the courses of the Semesters III to VIII will commence 10 working days prior to the last working day of the preceding semester. The student shall enroll for the courses with the guidance of the student's Faculty Mentor. If the student wishes, the student may drop or add courses (vide clause 7.3) within five working days after the commencement of the concerned semester and complete the registration process duly authorized by the Faculty Mentor.

7.1 B.E./B.Tech. Honors, Honors Degree with Specialization and Minor Degree programmes Eligibility for Enrolling in B.E./ B. Tech. (Honors) degree or B.E./B.Tech Honors degree with specialization in the same discipline or B.E./B.Tech. Minor degree with specialization in other disciplines is as follows:

- i. Enrolling for B.E./ B. Tech. (Honors degree with specialization in the same discipline or B.E./B.Tech Honors degree or B.E./B.Tech. Minor degree in other specialization is optional for the students.
- ii. B.E./B.Tech. Honors (Specialization in the same discipline) & B.E. / B.Tech Honors

The students shall be permitted to register for the courses from the V Semester onwards provided the students has earned a minimum CGPA 7.50 of until III Semester and has cleared all the courses in the first attempt.

- iii. B.E. /B.Tech (Minor in other Specialization)

The students shall be permitted to register for the courses from the V Semester onwards provided the marks earned by the students until semester III is CGPA 7.50 and above.

- iv. Out of these 18 credits to be earned by the students opting for either B.E./ B.Tech (Honours with specialization), B.E., / B.Tech (Honours) or B.E / B.Tech (Minor degree) programmes, can earn a maximum of 6 credits in online mode (like SWAYAM platform), with the approval of the respective HoD & Head of the Institution.
- v. If a student decides to opt out from Honours degree programme, after completing certain number of additional courses, the additional courses studied shall be considered instead of the Department Elective courses which are part of the curriculum. If the student has studied more number of such courses than the number of Department Elective courses required as per the curriculum for B.E. / B.Tech. degree (without Honours degree), the courses

with higher grades shall be considered for the calculation of CGPA. Remaining courses shall be printed in the grade sheet and they will not be considered for calculation of CGPA.

- vi. If a student decides to opt out from Minor degree programme, after completing certain number of courses, the additional courses studied shall be considered, instead of Non Department Elective courses which are part of the curriculum. With this option, if the student has accumulated more number of Non department electives than required for B.E. / B.Tech. degree (without minor degree) as per the curriculum, then the courses with higher grades shall be considered for calculation of CGPA. Remaining courses shall be printed in the grade sheet, however, they will not be considered for calculation of CGPA.

7.2 Registration for Reappearance

- 7.2.1** If a student fails to secure a pass in any course(s), he/she has to register for reappearance for those courses in a subsequent semester, till he/she secures a pass in such courses. In such a case he/she can carry forward the continuous assessment marks earned in the last attempt, or can avail the option of reappearing in Continuous Assessment Tests for improving the continuous Assessment marks and appear for the end semester exam. However, the attendance requirement is not compulsory for such courses.
- 7.2.2** If the theory course, in which a student has failed is a Department & Non – Department electives, either he/she may register for the same elective course, or any other professional elective/ Non department elective respectively if offered in that semester. In such a case he/she can carry forward the continuous assessment marks earned in the last attempt if the student registers for the same elective course else student has to attend the newly opted course and obtain the continuous assessment marks for the new elective.
- 7.2.3** If a student is prevented from writing end semester examination of a course due to lack of attendance, the student has to redo the same semester again after paying rejoining fee.

7.3 Flexibility to Add or Drop Courses (Online Courses or Additional Courses)

7.3.1 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, then he/she is also permitted to register for courses offered in a higher semester, in advance, to earn more than the total number of credits prescribed in the current semester in the curriculum of the student's programme (subject to maximum of 36 credits) with the approval of HoD, Controller of Examinations & Head of Institution.

7.3.2 Similarly, a student has the option of dropping current semester courses limited to 2 courses, subject to a maximum of 6 credits. (By getting a certificate from approved online agencies).

7.3.3 The student shall register for the project work in the VI and VII semesters.

8. ATTENDANCE REQUIREMENTS FOR COMPLETION OF THE SEMESTER

8.1 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 5.4.

8.2 Candidates who secure less than 65% overall attendance 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.

9. CLASS ADVISOR

There shall be a class advisor 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 advisor shall be:

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

9.1 Class Committee

Every class shall have a class committee consisting of teachers of the class concerned, student representatives (Maximum of 5 members) 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

- i. Solving problems experienced by students in the classroom and in the laboratories.
- ii. 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.
- iii. Informing the student representatives, the academic schedule including the dates of assessments and the syllabus coverage for each assessment.
- iv. Informing the student representatives, the details of Regulations regarding weightage used for each assessment. In the case of practical courses (laboratory / drawing / project work / seminar etc.) the breakup of marks for each experiment / exercise / module of work, should be clearly discussed in the class committee meeting and informed to the students.
- v. Analyzing the performance of the students of the class after each test and

- finding the ways and means of solving problems, if any.
- vi. Identifying the slow learners, if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such slow learners.
 - vii. 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.
 - viii. The class committee shall be constituted within the first week of each semester.
 - ix. 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.
 - x. 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.
 - xi. 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 Regulation. Two or three subsequent meetings may be held in a semester at suitable intervals.
 - xii. 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 7 of this Regulation.
 - xiii. 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.

11. 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/HoI).

These supplementary examinations are scheduled to take place after the CA2 and before 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 scheduling of these model examinations after the conclusion of regular classes ensures that students have ample time to thoroughly revise and prepare for the exams. 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

Each semester culminates with 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 the remaining 50 % from KCG College of Technology.

iv. Special End Semester Examinations

After a student completes EIGHTH semester, if he/she has to complete ONE, TWO or THREE course(s) (maximum 3 only) only of any semester, for completing the program within 4 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.

12. 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.

CA 1	CA 2	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
50	50	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 Exam. 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 Model 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 Exam	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:

CA1	CA 2	CA3	Laboratory Component	Total
Written Test Units 1 & 2	Written Test Units 3 & 4	Model Exam (5 Units)	Model Exam (LAB)	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 Dean Academics. 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	Super visor
10	15	15	10	10	10	20	10

The last date for submitting the project report is on the last working day of the semester. If the student fails to submit the project report on or before the specified deadline or the student has submitted the project report but did not appear for the viva voce examination , it will be considered as fail in the project work and the student shall re register for the same in the subsequent semester.

(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.

(g) Soft Skill Courses

Soft skills, also known as non-technical skills, often determine one's ability to work in teams, deal with clients, vendors, the public, or the board. Soft skills include leadership ability, effective communication and listening skills, empathy, professionalism, strategic thinking, and time management.

Project based Evaluation	Oral Presentation	Group Discussion	Mock Interview	Total
40	20	20	20	100

(h) Assessment for Aptitude & Logical Reasoning Courses

The Aptitude & Logical Reasoning courses shall carry 100 marks and shall be evaluated through internal assessment only. Students will be assessed based on the assessment tests supervised by Head Placement & Training.

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.

13. ATTENDANCE RECORD

Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD' which consists of attendance marked in each lecture or practical or project work class, the test marks and the record of class work (topic covered), separately for each course. This should be submitted to the Head of the department periodically (after every unit completion) for checking the syllabus coverage and the records of test marks and attendance. The Head of the department will put his 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 verify the records of attendance and assessment of both current and previous semesters. The inspection team appointed by the Principal may verify the records of attendance and assessment of both current and previous semesters.

14. CONDUCT OF ACADEMIC AUDIT

Every educational institution shall strive for a better performance of the students by conducting the internal assessments as mentioned in Clause 12. 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 12, 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. Report of industrial training / internship shall also be maintained, if applicable. 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 with an external course expert as one of the members drawn from a Technical institution of repute near the institute.

The University or any inspection team appointed by the University may verify the records of Academic Audit report of the courses of both current and previous semesters, as and when required.

15. REQUIREMENTS FOR APPEARING FOR UNIVERSITY EXAMINATIONS

- i. A candidate shall normally be permitted to appear for the ESE for all the courses registered in the current semester if he/she has satisfied the semester completion requirements.
- ii. Registration is mandatory for current semester examinations as well as for arrear examinations, failing which the candidate will not be permitted to move to the higher semester.
- iii. A candidate who has already appeared for any course in a semester and passed the examination is not entitled to reappear in the same subject for improvement of grades.
- iv. If a student indulges in malpractice in any of the end semester / internal examinations, he / she shall be liable for punitive action as prescribed by the college from time to time.

16. PASSING REQUIREMENTS

- 16.1** 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 45% 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:

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	45% (18 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	45% (23 out of 50 marks)	50 % in CA and ESE together

- i. 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.
- ii. 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.
- iii. The passing requirement for the courses which are assessed only through purely internal assessments, is 50% of the internal assessment (continuous assessment) marks only.
- iv. 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

- i. 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.
- ii. 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 fixed grading shall be followed with the grade range as specified below.

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
C (Satisfactory)	5	50-55
U (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", "C".

'SA' denotes shortage of attendance (as per clause 7.3) 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.

"U" denotes that the student has failed to pass in that course. "W" denotes withdrawal from the exam for the particular course. The grades U and W will figure both 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 U is given to a core theory course, the attendance requirement need not be satisfied, but if the grade U is given to a Laboratory Course/ Project work / Seminar and any other EE course, the attendance requirements (vide clause 7) should be satisfied.

If the grade U 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 Organisation(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.

17.1 Grade Sheet

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

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

GPA for a semester is the ratio of the sum of the products of the number of credits for courses acquired and the corresponding points to the sum of the number of credits for the courses acquired in the semester.

CGPA will be calculated in a similar manner, considering all the courses registered from first semester. RA grades will be excluded for calculating GPA and CGPA.

$$\text{GPA/CGPA} = \frac{\sum_{i=1}^n C_i \text{GP}_i}{\sum_{i=1}^n C_i}$$

Where

C_i is the number of Credits assigned to the course

GP_i is the point corresponding to the grade obtained for each course

n is number of all courses successfully cleared during the particular semester in case of GPA and during all the semesters in the case of CGPA

The credits earned through Online Courses with less than 3 credits shall not be considered for calculating GPA and CGPA.

17.2 Eligibility for the Award of the Degree

A student shall be declared to be eligible for the award of the B.E./B.Tech.

Degree provided the student has

- i. Successfully gained the required number of total credits as specified in the curriculum corresponding to the student's programme within the stipulated time.
- ii. Successfully completed the programme requirements, appeared for the End-Semester examinations and passed all the courses prescribed in all the 8 semesters within a maximum period of 7 years and 6 years in the case of Lateral Entry) reckoned from the commencement of the first (third in the case of Lateral Entry) semester to which the candidate was admitted.
- iii. No disciplinary action pending against the student.
- iv. The award of Degree must have been approved by the authorized body of the university.

18. CLASSIFICATION OF THE DEGREE AWARDED

(i) Degree	(ii) Duration of the Program	(iii) Duration Permitted	(iv) Additional Credits above the requirement of curriculum	(v) CGPA	(vi) Pass in	(vii) Break of Study	(viii) Prevention due to lack of attendance	(ix) Approved withdrawal from writing the end semester examination
B.E./B.Tech Honours Degree – First Class with Distinction								
B.E./B.Tech. (Honours) Specialization in the same discipline	3/4 years (Lateral entry, Regular, respectively)	4/5 Years	18 credits from any one vertical of the same programme	8.50	First attempt	One year authorized break of study included in the duration permitted (iii)	Not Permitted	Will not be considered as First attempt
B.E./B.Tech. (Honours)			18 credits from more than one vertical of the same programme					
B.E./B.Tech Honours Degree with First Class								
B.E./B.Tech. (Honours) Specialization in the same discipline	3/4 years (Lateral entry, Regular, respectively) 3/4 years)	4/5 Years	18 credits from any one vertical of the same programme	7.50	First attempt	One year authorized break of study included in the duration permitted (iii)	Not Permitted	Will not be considered as First attempt
B.E./B.Tech. (Honours)			18 credits from more than one vertical of the same programme					

B.E. / B.Tech (First Class with Distinction)								
B.E./B.Tech. (Regular)	4 Years	5 Years	-	8.50	First Attempt	One year authorized break of study included in the duration permitted (iii)	Not Permitted	Will not be considered as First attempt
B.E./B.Tech. (Lateral Entry)	3 Years	4 Years	-					
B.E./B.Tech. minor in other specialization	3/4 years (Lateral entry, Regular, respectively)	4/5 Years	18 credits from any one vertical of the other programme					
B.E. / B.Tech First Class								
B.E./B.Tech. (Regular)	4 Years	5 Years	-	6.50	-	One year authorized break of study included in the duration permitted (iii)	Included in the Duration permitted (iii)	-
B.E./B.Tech. (Lateral Entry)	3 Years	4 Years	-		-			-
B.E./B.Tech. minor in other specialization	3/4 years (Lateral entry, Regular, respectively)	3/4 years (Lateral entry, Regular, respectively)	18 credits from any onevertical of theother programme		-			-

18.1 Second Class

For all the B.E./B.Tech. courses (regular and lateral entry), B.E./B.Tech. Minor in other specialisation degree students (not covered in clauses 18) who qualify for the award of the degree (vide Clause 16) shall be declared to have passed the examination in Second Class.

Any student who has opted for B.E./B.Tech. Honours or B.E./B.Tech. Honours with specialization in the same discipline, appearing for the supplementary examination, (refer clause 7.4.5) he / she will no more be considered for Honours degree category and will come under the category of students who have not opted for B.E. / B.Tech. Honours or B.E./B.Tech. Honours with specialization degree. However, appearing for supplementary examinations for withdrawn course or Courses, he/she will be considered for Honours degree.

Any student who has earned additional 18 credits as per Clause 4.10 but does not satisfy the conditions mentioned in clause 18 shall not be awarded B.E./B.Tech. Honours with specialization or B.E./B.Tech. Honours. In such cases, the grade sheet will show the additional courses studied and those courses shall not be considered for CGPA computation. In such case, while computing CGPA without taking into account the additional course he /she has studied.

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 for the purpose of classification.

19. REVALUATION

A candidate can apply for a revaluation of his/her semester examination answer paper in a theory course, within 1 week from the declaration of results, on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of Institutions.

20. PROVISION FOR WITHDRAWAL FROM END-SEMESTER EXAMINATION

- i. 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.
- ii. 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.
- iii. 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.
- iv. In case of withdrawal from a course / courses 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.
- v. 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.
- vi. Withdrawal is permitted for the end semester examinations in the final semester only if the period of study the student concerned does not exceed 5 years.

21. PROVISION FOR AUTHORISED BREAK OF STUDY

- i. A student is permitted to go on break of study for a maximum period of one year as a single spell.

- ii. 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 Head of the Institution, 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.
- iii. 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.
- iv. The authorized break of study would not be counted towards the duration specified for passing all the courses for the purpose of classification.
- v. 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.
- vi. If any student is prevented for want of required attendance, the period of prevention shall not be considered as authorized 'Break of Study'

22. DISCIPLINE

- i. 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.

- ii. 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.

23. REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

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