

GOVERNMENT COLLEGE OF TECHNOLOGY: COIMBATORE 641 013

(An autonomous Institution affiliated to Anna University)

REGULATIONS 2016

CHOICE BASED CREDIT SYSTEM

Common to all B.E. / B.Tech. Full-Time Programmes

**(For the students admitted to B.E. / B.Tech. Programme during the
Academic year 2016 - 2017 and onwards)**

1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In this regulation, unless the context otherwise specifies:

- I. **"Programme"** means B.E. /B.Tech. Degree Programme.
- II. **"Branch"** means a discipline or specialization of B.E. /B.Tech., Degree Programme like Civil Engineering, Bio Technology etc.
- III. **"Course"** means a Theory or Practical subject that is normally studied in a semester like Engineering Mathematics, Engineering Mechanics etc..
- IV. **"Principal & Chairman"** means the authority of the Institution who is responsible for all academic activities for the implementation of relevant rules and regulations.
- V. **"Controller of Examinations"** means the Authority of the Institution who is responsible for all activities of the End Semester Examinations of all Departments and hereafter called COE.
- VI. **"Head of the Department"** means Head of the Under Graduate Programme Concerned and hereafter called HOD.
- VII. **"University"** means ANNA UNIVERSITY, Chennai.

2. ADMISSION PROCEDURE

- 2.1 (a)** Students for admission to the first semester of the eight semesters B.E. / B.Tech. Degree Programme shall be required to have a pass in Higher Secondary Examination (Academic 10 + 2) Curriculum or its equivalent examinations with the subjects Mathematics, Physics and Chemistry as notified by the Government of Tamilnadu.

2.1 (b) Candidates for admission to the Second year of the Four year B.E. / B.Tech Degree course shall be required to have passed,

i. the Diploma Examination in Engineering conducted by the State Board of Technical Education and Training, Tamilnadu.

(or)

ii. an Examination of any University or Authority, accepted by the Syndicate of the Anna University as equivalent thereto

(or)

iii. any other examination as notified by the Government of Tamilnadu.

Candidates who have passed Bachelor of Science conducted by the State Board of Collegiate Education, are eligible for admission to the Third Semester under Lateral Entry Scheme of the B.E. / B.Tech Degree Programmes.

2.2. The eligibility criteria shall be as prescribed by Anna University, Chennai and Government of Tamilnadu from time to time.

3. BRANCHES OF STUDY

A student may be offered admission to any one of the branches of study approved by the Authorities.

Details of branches of study currently being offered by the Institution are listed below:

1. B.E. Civil Engineering
2. B.E. Mechanical Engineering
3. B.E. Electrical and Electronics Engineering
4. B.E. Electronics and Communication Engineering
5. B.E. Production Engineering
6. B.E. Electronics and Instrumentation Engineering
7. B.E. Computer Science and Engineering
8. B.Tech Information Technology
9. B.Tech Industrial Biotechnology

4. STRUCTURE OF THE 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 (HS)** Courses include Technical English, Employability Skills, Engineering Ethics and Human Values, Communication skills, Environmental Science and Engineering.
- ii. **Basic Sciences (BS)** Courses include Mathematics, Physics, Chemistry, Biology, etc.
- iii. **Engineering Sciences (ES)** Courses include Engineering Practices, Engineering Graphics, Basics of Electrical / Electronics / Mechanical / Computer Engineering, Instrumentation etc.
- iv. **Professional Core (PC)** Courses include the core courses relevant to the chosen specialization/branch of study.
- v. **Professional Elective (PE)** Courses include the elective courses relevant to the chosen specialization/ branch of study.
- vi. **Open Elective (OE)** Courses are given as a separate list of Elective Courses offered by the Engineering / Science Departments and a student can choose a Course as a Open Elective from the above list of Courses.
- vii. **Employability Enhancement Courses (EEC)** include Project Work and/or Internship, Seminar, Professional Practices, Case Study and Industrial/Practical Training.

4.2 Number of courses per semester

Curriculum of a semester shall normally have a blend of 5 or 6 Lecture Courses and Laboratory Courses. In addition, Employability Enhancement Course(s) may also be included. Each course may have credits assigned as per Clause 4.3. However, the total number of courses per semester shall not exceed 10 (including EEC).

4.3 Credit Assignment

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

Contact period per week	CREDITS
1 Lecture Period	1
2 Tutorial Periods	1
2 Practical Periods (Laboratory / Seminar / Project Work / etc.)	1

The Contact Periods per week for Tutorial and Practical can only be in multiples of 2.

4.4. Industrial Training / Internship

4.4.1 The students may undergo Industrial training for a period as specified in the Curriculum during summer / winter vacation. 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 HOD) for the period prescribed in the curriculum during summer / winter vacation, in lieu of Industrial training.

4.4.2 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. In such cases, Industrial Training / Internship needs to be undergone continuously from one organization only.

However the number of credits earned shall not be considered for computation of CGPA. The student is allowed to undergo a maximum of 6 weeks Industrial Training / Internship during the entire duration of study.

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

4.5 Industrial Visit

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

4.6 Value added One Credit Courses

Value added one credit courses shall be offered by a Department with the prior approval. The details of the syllabus, time table and faculty may be sent to the COE after approval from the Board of Studies concerned and Academic Council. The details of the syllabus, time table and faculty may be sent to the Principal & Chairman for the introduction of new value added one credit courses after approval from the Board of Studies concerned. The credits earned through the value added one credit courses shall be over and above the total credit requirement prescribed in the curriculum for the award of degree. Students can take a maximum of six value added one credit courses, limited to a maximum of one per semester. The B.E / B.Tech. candidates who enrolled for one credit courses, have to earn minimum of 75% attendance, failing which the registration for courses will be cancelled.

4.7 Online Courses / Self Study Courses

4.7.1 Students may be permitted to enroll for one Online Course or Self Study Course with the approval of respective Boards of Studies.

4.7.2 The student can opt for Self Study Course from the list of Professional Electives provided, the student does not have any standing arrears and the CGPA should be 8.0 and above.

The Department may offer self study courses. The purpose of the course is to permit the student to study a course of the student's choice. The students shall study on their own under the guidance of a faculty member. No formal lectures need to be delivered. One Faculty member assigned by the HOD shall be responsible for the periodic monitoring and assessment of the student in that course.

4.7.3 The Self Study Course or Online Course of 3 credits can be considered instead of one Professional Elective Course.

4.8 Medium of Instruction

The medium of instruction is ENGLISH for all Courses, Examinations, Seminar Presentations and Project / Thesis / Dissertation Reports.

5. DURATION OF THE PROGRAMMES

5.1(a) A student is normally expected to complete the B.E. / B.Tech. Programme in 4 years (8 Semesters) but in any case not more than 8 years (16 Semesters).

5.1(b) A Lateral Entry student is normally expected to complete the B.E. / B.Tech Programme in 3 years (6 Semesters) but in any case not more than 6 years (12 Semesters). The duration of B.E. / B.Tech Programme shall be three academic years with semester pattern. The courses of study for the Lateral Entry Diploma candidates shall be both theory and practical and shall be in accordance with the prescribed syllabus of Third to Eighth semesters of the Full Time Four year B.E / B.Tech. Degree Programme of the respective branches. The courses of study for the Lateral Entry Science Graduates shall be both theory and practical and shall be in accordance with the prescribed syllabi of the Full Time Four year B.E. / B.Tech. Degree Programme of the respective branches, but the additional courses offered will be decided by the respective Chairman, Board of Studies.

5.2 Each semester shall normally consist of 90 working days (including examination days). The HOD shall ensure that every teacher imparts instruction as per the number of contact periods specified in the syllabus covering the full content of the syllabus for the course being taught.

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

5.4 The Curriculum of U.G. Programmes shall be so designed that the prescribed credits required for the award of the degree, which depends in the branch of study, shall be within the limits specified below:

PROGRAMME	PRESCRIBED CREDIT RANGE
B.E./B.TECH (Full Time-Regular)	175-187
B.E./B.TECH (Full Time-Lateral Entry)	129 -139

6. COURSE ENROLLMENT AND REGISTRATION

- 6.1** Each student, on admission shall be assigned to a Student Counsellor (vide clause 8) who shall advise and counsel the student about the details of the academic programme and the choice of courses considering the student's academic background and career objectives.
- 6.2** Every student shall enroll for all the courses (including additional courses and excluding dropping courses) in the previous Semester for the next Semester of study. Students who rejoined the programme after availing permitted Break of Study or Readmitted by DOTE/University need not submit new Enrollment Form, but they have to submit the course registration form within the first 10 working days after the commencement of the semester concerned.
- 6.3** The student shall confirm the enrollment by registering for the courses within the first ten working days after the commencement of the current semester of study. No course shall be offered by a department unless a minimum of 5 students register for that course.
- 6.4** Students shall attend the classes, satisfy the attendance requirements, earn Continuous Assessment marks and appear for the End Semester Examinations.
- 6.4.1** Each student on admission shall register for **all the courses prescribed in the curriculum** in the student's **first Semester of study**.
- 6.4.2** The enrollment for all the courses of the Semester II will commence 10 working days prior to the last working day of Semester I. The student shall confirm the enrollment by registering for the courses within the first ten working days after the commencement of the Semester II. However, the student has to register for courses for which the student has not enrolled, if these are the courses in which the student has failed.
- 6.4.3** The enrollment 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 Student Counsellor. If the student wishes, the student may drop or add a course from V

semester (vide clause 6.5) within **ten** working days after the commencement of the semester concerned and complete the registration process duly authorized by the Student Counsellor and HOD. The student has to register for courses for which the student has not enrolled, if these are the Courses in which the student has failed.

6.5 Flexibility to Add or Drop courses

6.5.1 A student has to earn the total number of credits specified in the curriculum of the respective Programme of Study in order to be eligible to obtain the degree.

However, if a student wishes, the student is permitted to earn more than the total number of credits prescribed in the curriculum of the student's Programme.

6.5.2 From the V to VII semesters, the student has the option of registering for one additional theory course or dropping one existing theory course with the approval of Student Counsellor and HOD. Total number of credits of such Courses cannot exceed 3. However, the maximum number of credits the student can register in a particular semester cannot exceed 30 credits (Excluding courses for which the student has done reappearance registration).

6.6 Reappearance Registration/Re-enrollment Registration

6.6.1 If a student fails in a theory/Practical course, the student shall do reappearance registration for that course in the subsequent semester and attend end semester examination. The student shall earn Continuous Assessment marks optionally.

6.6.2 The student shall fulfil the continuous assessment criteria to re-earn the continuous assessment marks for the reappearance registration courses, if the student wishes. In such a case, latest Continuous Assessment marks will only be valid. However, the re-earning of attendance is not permitted for such courses.

6.6.3 If the theory course, in which the student has failed, is a Professional Elective or an Open Elective, the student may register for the same or any other Professional Elective or Open Elective Course respectively in the subsequent semesters. Such changes can be done only with due approval by Head of the Department.

6.6.4 The student who fails in Project work / Seminar other than Practical Courses shall register for the same in the subsequent Semester and reappear for the End Semester Examinations.

6.6.5 If a student is prevented from writing end semester examination of a course due to lack of attendance, the student has to re-enroll and register for that course again, when offered next. The student shall attend the classes and fulfil the attendance requirements as per clause 7, earn continuous assessment marks and appear for the end semester examinations. If the course, in which the student has lack of attendance, is a Professional Elective, the student may register for the same or any other Professional Elective Course in the subsequent semesters.

7. REQUIREMENTS FOR APPEARING FOR THE END SEMESTER EXAMINATION OF A COURSE

A student who has fulfilled the following conditions (vide Clause 7.1 and 7.2) shall be deemed to have satisfied the attendance requirements for appearing for end semester examination of a particular Course.

7.1 Ideally every student is expected to attend all periods and earn 100% attendance. However, the student shall secure not less than 75% attendance course wise taking into account the number of periods required for that Course as specified in the Curriculum.

7.2(i) If a student secures not less than 65% and less than 75% attendance in any Course in the Current Semester due to medical reasons (hospitalization / accident / specific illness) or due to participation in the College / University / State / National / International Level Sports events with prior permission from the Head of the Department concerned, the student shall apply for condonation with a prescribed condonation fee payable per course. The condonation should be decided by a condonation recommendation committee consisting of Head of the Department of the student, Programme coordinator of the student, Student Counsellor, Faculty incharge of the course and an Assistant Controller of Examinations. The committee scrutinizes the genuinity of the "Condonation application Form A" and conduct of the student and recommend it to the Principal and Chairman to grant of condonation after satisfying the requirements specified in clause 7.2 (ii). In such cases, his / her conduct has

been certified to be satisfactory by the Faculty Advisor / Student Counsellor concerned and the Head of the Department.

7.2 (ii) The student applied for condonation, has to compensate the shortfall periods to 75% by attending the contact classes scheduled by the Course Incharge (One week before the commencement of subsequent semester). The results of the End Semester Examination of such courses will be published only after the shortfall period is condoned by the PRINCIPAL.

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

7.4 Students who do not satisfy Clause 7.1 and 7.2 and who secures **less than 65%** attendance in a Course will not be permitted to write the End-Semester Examination of that course. The student has to register and repeat this Course in a subsequent Semester when it is offered next (vide Clause 6.6.5).

7.5 In the case of reappearance registration for a Course (vide Clause 6.6.1), the attendance requirement as mentioned in Clauses 7.1 - 7.3 is not applicable. However, the student has to register for examination in that Course by paying the prescribed fee.

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

8. STUDENT COUNSELLOR/FACULTY ADVISOR

To help the students in planning their courses of study and for general advice on the Academic Programme, the HOD of the students will attach a certain number of students to a teacher of the Department who shall function as Student Counsellor/Faculty Advisor for those students throughout their Period of Study. The Student Counsellor/Faculty Advisor shall advise the students in registering and reappearance registering of Courses, authorize the process, monitor their attendance and progress and counsel them periodically. If necessary, the Student Counsellor/Faculty Advisor may also

discuss with or inform the parents about the progress / performance of the students concerned.

The responsibilities for the Student Counsellor/Faculty Advisor shall be:

- a. To inform the students about the various facilities and activities available to enhance the student's curricular and Co-curricular activities.
- b. To guide student enrollment and registration of the Courses.
- c. To authorize the final registration of the Courses at the beginning of each semester.
- d. To monitor the academic and general performance of the students including attendance and to counsel them accordingly.

9. CLASS COMMITTEE

Class committee for each semester of a programme which comprises of (i) the Course Coordinators / Course teachers (as applicable), (ii) the Students Counsellor/Faculty Advisor of the class and (iii) Programme Coordinator (iv) Head of the Department (v) student representatives. This class committee shall meet periodically to discuss academic related matters, progress and status of the students of the semester concerned.

10. ASSESSMENT PROCEDURES FOR AWARDING MARKS

All B.E./B.Tech. Programmes consist of Theory Courses, Laboratory Courses and Employability Enhancement Courses. Employability Enhancement Courses include Project Work, Seminar, Case Study and Industrial/Practical Training. Appearance in End Semester Examination is mandatory for all courses including Theory, Laboratory and Project Work.

Performance in each Course of Study shall be evaluated based on (i) Continuous assessments throughout the semester and (ii) End Semester Examination at the end of the semester. For Theory Courses out of 100 marks, the maximum marks for Continuous Assessment is fixed as 50 and the End Semester Examination carries 50 marks. For Laboratory Courses out of 100 marks, the maximum marks for Continuous Assessment is fixed as 50 and the End Semester Examination carries 50 marks. The continuous assessment is 50 marks for the Project Work, and Project Report evaluation and Viva-Voce

examination carries 50 marks. All other courses included under Employability Enhancement Courses which are not theory courses are evaluated by Continuous Assessments only.

(i.e.) Each course shall be evaluated for a maximum of 100 marks as shown below:

S.No	Category of course	Continuous Assessment	End-Semester Examinations
i.	Theory Courses	50 Marks	50 Marks
ii.	Laboratory Courses	50 Marks	50 Marks
iii.	Project Work	50 Marks	50 Marks
iv.	Online Courses/Self Study Courses (Optional)	50 Marks	50 Marks
v.	All other EEC Courses * (Except Laboratory Courses and Project Work)	100 Marks	-
vi.	Value Added One Credit Course * (Optional)	100 Marks	-

*** Value Added Courses – not included for CGPA calculation.**

Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD' for every semester which consists of attendance marked in each theory / Laboratory/EEC class, the assessment marks and the record of class work (topics covered), separately for each Course handled by the teacher. This should be submitted to the HOD periodically (at least three times in a semester) for checking the syllabus coverage and the records of assessment marks and attendance. The HOD will affix his/her signature and date after due verification. At the end of the semester, the record should be verified by the HOD who shall keep this document after the approval from the Principal in safe custody for eight years. The records of attendance and assessment of both current and previous semesters should be available for inspection whenever required.

10.1 ASSESSMENT FOR THEORY COURSES:

For Theory Courses out of 100 marks, the maximum marks for Continuous Assessment is fixed as 50 and the End Semester Examination carries 50 marks.

The End Semester Examination for theory courses will be of 3 hours duration and shall normally be conducted for a maximum of 100 marks between November/December during the Odd Semesters and between April/May during the Even Semesters. End semester Examination is mandatory requirement for passing the Course and Every Student should appear for the End Semester Examination for Theory, Laboratory Courses and Project Work.

Continuous Assessment is to be arrived on the basis of performance of the Students in tests, assignments and tutorial **or** objective type tests. Three assessments of equal weightage, conducted by the Course Instructor / Coordinator / Department. The total marks obtained in the **assessments** put together shall be reduced to 50 marks and rounded off to the nearest integer. A minimum of two tests would be conducted in a day (in the case of tests and they would be of one and a half hours duration each) students will not have regular classes on the scheduled day of these tests. In case a student misses the assessment due to medical reasons (hospitalization / accident / specific illness) or due to participation in the College / University / State / National / International level Sports events with prior permission from the HOD, a **Reassessment** may be given at the end of the semester after getting approval from the Head of the Department through the concerned Course Instructor.

To arrive the Continuous Assessment Mark the following guidelines are to be followed.

Sl.No.	Category Details	CA Marks	Weightage
i.	Test (3 Nos.) {each test is to be conducted for 50 Marks}	30 Marks	60%
ii.	Assignment (3 Nos.)	15 Marks	30%
iii.	Tutorial/Objective type tests (3 Nos)	5 Marks	10%
	TOTAL	50 Marks	100%

If a student has failed (vide Clause 11.1) in a Theory Course, revised Continuous Assessment marks can optionally be earned (vide 6.6.1). In such case the student has to appear for the assessments and earn continuous assessment marks again.

10.2 ASSESSMENT FOR LABORATORY COURSES:

For Laboratory Courses out of 100 marks, the maximum marks for Continuous Assessment is fixed as 50 and the End Semester Examination carries 50 marks.

Every laboratory exercise / experiment shall be evaluated based on the student performance during the laboratory class and the student's records shall be maintained. There shall be at least one assessment test. The criteria for arriving at the Continuous Assessment marks of 50 shall be decided at the respective class Committee meetings.

The End Semester examinations for Laboratory Courses will be of 3 hours duration and shall normally be conducted for a maximum of 100 marks between October and December during the odd semesters and between April and June during the Even Semesters.

10.3 ASSESSMENT FOR PROJECT WORK:

The Project work shall be carried out under the supervision of a "qualified teacher" in the Department concerned. A student may, however, in certain cases, be permitted to work on projects in an industrial / research organization, on the recommendations of the head of the department. In such cases, the project work shall be jointly guided by a supervisor of the department and an expert as joint supervisor from the organization and the student shall be instructed to meet the supervisor periodically and to attend the review committee meetings **and shall submit attendance particulars from the joint supervisor** for evaluating the progress. **Absolute grading is adopted for the evaluation of Project Work.**

For Project Work, out of 100 marks, the maximum marks for Continuous Assessment is fixed as 50 and the End Semester Examination (Project Report evaluation and Viva-Voce examination) carries 50 marks.

Project work may be assigned to a single student or to a group of students not exceeding 4 per group.

There shall be **two assessments** (each 100 marks) during the semester by a Review Committee. The student shall make presentation on the progress made before the Committee. The HOD shall constitute a Review Committee for each Programme. There shall be a minimum of three members in the Review Committee. The Project **Guide** will be one of the members of the Review Committee. The total marks obtained in the two Reviews shall be 50 marks.

The student(s) is expected to submit the Project Report on or before the notified date. The End Semester Examination for Project Work shall consist of evaluation of the final Project Report submitted by the student or students of the Project group by an external examiner and followed by a Viva-Voce examination conducted separately for each student by a committee consisting of the External Examiner, the Guide of the Project group and an Internal Examiner.

The Continuous Assessment and End Semester Examinations marks for Project Work and the Viva-Voce Examination will be distributed as indicated below.

Continuous Assessment 50 Marks				End Semester Examination 50 Marks			
Review I (25 Marks)		Review II (25 Marks)		Report Evaluation (20 Marks)	Viva - Voce (30 Marks)		
Review Committee (excluding guide)	Guide	Review Committee (excluding guide)	Guide	External Examiner	Guide	External Examiner	Internal Examiner
15	10	15	10	20	10	10	10

10.3.1 If the Project Report is not submitted on or before the specified date, the student is deemed to have failed in the Project Work. The failed student(s) shall register for the same in the subsequent semester and repeat the Project Work.

10.4 ASSESSMENT FOR INDUSTRIAL / PRACTICAL TRAINING / INTERNSHIP / SUMMER PROJECT

The Industrial / Practical Training / Internship / Summer Project shall carry 100 marks and shall be evaluated through Continuous Assessment only. At the end of Industrial / Practical training / internship / Summer Project, the student shall submit a detailed report on the training undergone and a certificate from the organization concerned. The evaluation will be made based on this report and a Viva-Voce Examination, conducted internally by a three member Departmental Committee constituted by the HOD. Certificates (issued by the Organization) submitted by the student shall be attached to the mark list and sent to COE by the HOD with due recommendations. The training will appear in the list of Value Added Courses in the Grade sheet with the credits (additional / extra credits) obtained.

10.5 ASSESSMENT FOR VALUE ADDED ONE CREDIT COURSE

The Value Added One Credit Course shall carry 100 marks and shall be evaluated through **Continuous Assessments only**. Two assessments shall be conducted during the Semester by the Department concerned. The total marks obtained in the tests shall be reduced to 100 marks and rounded off to the nearest integer. The HOD may identify a faculty member as Coordinator for the Course. A committee consisting of the HOD, staff handling the course (if available), Programme Coordinator and a Senior Faculty member nominated by the HOD shall monitor the evaluation process.

10.6 ASSESSMENT FOR ONLINE COURSE

Students may be permitted to earn Online Courses (which are provided with certificate) with the approval of Board of Studies and HOD subject to a maximum of three credits. This Online Course of 3 credits can be considered instead of one Elective Course. Respective Boards of Studies will take a decision on the evaluation methodology for the Online Course. The BOS can decide whether to evaluate the Online Courses through Continuous Assessment and End Semester Examination or through End Semester Examination only and the same may be conveyed to the COE, at the beginning of the semester whenever the course is offered. The student needs to obtain certification or credit to become

eligible for writing the End Semester Examination to be conducted by the Institution. The Head of the Department may identify a Faculty member as Coordinator for the Course, who is responsible for evaluation of Continuous Assessment.

10.7 ASSESSMENT FOR SELF STUDY COURSE

The faculty member approved by the head of the department shall be responsible for periodic monitoring and evaluation of the self study course. The course shall be evaluated through continuous assessment and end semester examination. The evaluation methodology shall be the same as that of a theory course (vide clause 10.1).

11. PASSING REQUIREMENTS

11.1 The passing requirement for a student in a course is determined based on the marks obtained both in continuous assessment and end semester examinations. A student who earns a minimum of 6 grade points in a course subject to securing minimum of 50% marks in the end semester examinations, wherever applicable, shall be declared to have successfully passed the course.

11.1.1 If a student fails to secure a pass in a theory course (except electives), the student shall do reappearance registration for that course in the subsequent semester, with an option of re-earning the continuous assessment marks or retaining the original continuous assessment marks and attend the end semester examination.

11.1.2 If the course, in which the student has failed, is an elective, the student may be permitted to register for the same or any other elective course in the subsequent semesters. The student shall attend the classes, fulfil the attendance requirements and earn Continuous Assessment marks as per clause 7, if he/she opted for any other elective course (vide clause 6.6.3).

11.1.3 If a student fails to secure a pass in a laboratory course, the student shall do reappearance registration for that course in the subsequent semester, with an option of re-earning the continuous assessment marks or retaining the original continuous assessment marks and attend the end semester examination (vide clause 6.6.1 and 6.6.2).

11.1.4 If a student fails to secure a pass in project work, the student shall register for the course in the subsequent semester/when offered next and repeat the course (vide clause 6.6.4).

11.2 The passing requirement for the courses which are assessed only through continuous assessment (EEC except Laboratory and project work), shall be determined based on the marks obtained in continuous assessment.

11.3.1. Valued Answer Script review by the students

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

11.3.2. Revaluation

A student can apply for revaluation of the student's semester examination answer script in a theory course within 2 days from the date of review of valued answer scripts by the students on payment of a prescribed fee along with prescribed application to the COE through the head of the department. The results will be intimated to the student concerned through the head of the department within 5 working days from the last date of application of revaluation. Revaluation is not permitted for laboratory course and project work.

11.3.3 Challenging the Revaluation

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

12 AWARD OF LETTER GRADES

12.1. RELATIVE GRADING SYSTEM

In this system, grades are awarded to the students based on their performance relative to others in all the courses having continuous assessment (CA) and/or End-Semester Examination components.

For each course, the total mark M (ie., the sum of Continuous Assessment marks (CA) and/or End-Semester Examination (EE)) is computed for every candidate. The statistical parameters Mean (μ) and Standard Deviation (σ) of the distribution of the marks are arrived at as given below:

$$\mu = \frac{1}{N} \sum_{j=1}^N M_j \qquad \sigma = \sqrt{\frac{\sum_{j=1}^N (M_j - \mu)^2}{N}}$$

Where M_j - Total mark of the j^{th} student in the course

N - Number of students who appeared for the examination in that particular course.

The students who secure the total mark M as detailed below are first declared as fail (RA) in a course

M < minimum of ($\mu - 1.5\sigma$, 50) Or	RA
End -Semester Examination (EE) less than 50% of maximum of EE marks for the course Or	
M less than 50% in total marks for theory and laboratory courses with 100% CA component	

Note: "RA" denotes Reappearance in a course

After omitting the marks (M) of all failed candidates, revised μ and σ are computed for the marks secured by the remaining candidates (ie., passed candidates), letter grades and grade point to each student are awarded based on the revised μ and σ as detailed below:

Total mark, M secured by the student (CA+EE)	Grade	Relative Grade Point
$M \geq [(\mu + 1.5\sigma)]$	O (Outstanding)	10
$(\mu + 0.52\sigma) \leq M < (\mu + 1.5\sigma)$	A+ (Excellent)	9
$(\mu - 0.45\sigma) \leq M < (\mu + 0.52\sigma)$	A (Very Good)	8
$(\mu - 1.35\sigma) \leq M < (\mu - 0.45\sigma)$	B+ (Good)	7
$M < (\mu - 1.35\sigma)$	B(Above Average)	6
	SA (Shortage of Attendance)	0
	W (Withdrawal)	0

- No 'O' Grade shall be allowed if scored maximum mark is less than 80.
- If the maximum marks awarded in a course is greater than or equal to 95% and if the number of candidates getting 'O' Grade is less than 7% of the total number of candidates, then some candidates with A+ grade may be awarded 'O' Grade. In such a case some candidates with 'A' Grade may be awarded A+ and some with B+ Grade may be awarded 'A' in order to ensure that minimum 24% of candidates are awarded A+ and 38% are awarded 'A' Grade.
- If the total number of candidates passed is less than 10, grades shall be awarded as per the following Absolute Grading System otherwise Relative Grading System may be followed.

ABSOLUTE GRADING SYSTEM

Letter Grade	Grade Points	Range of Marks (M)
O (Outstanding)	10	90-100
A+ (Excellent)	9	80-89
A (Very Good)	8	70-79
B+ (Good)	7	60-69
B (Above average)	6	50-59
RA (Reappearance Registration)	0	----
SA (Shortage of Attendance)	0	----
W (Withdrawal)	0	----

PERFORMANCE ANALYSIS COMMITTEE

Head of the Department, Programme Co-ordinator, Course Co-ordinator/Course Teacher, Student Counsellor will by collective wisdom, normalize the marks secured by the students so as to ensure that the clustering, grading decisions have been made in a reasonable manner for all the courses.

12.2 The grades O, A+, A, B+, B obtained for the One Credit Course shall figure in the Mark sheet under the title '**Value Added Courses**'. The other grades RA, SA **will not figure in the Mark Sheet.**

12.3. Award of letter grades system for attendance

In this system letter grades are awarded for the attendance earned by the student for the individual courses as per the following table.

Attendance Grade:

Range of attendance %	95 and above	85 - 94	75-84	75
Letter Grade	VG	G	S	P
	Very Good	Good	Satisfactory	Poor (Condoned Category)

13. GPA AND CGPA CALCULATION

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

- the list of courses registered during the semester and the grades scored.
- the grade point average (GPA) for the semester and
- the cumulative grade point average (CGPA) of all courses registered from first semester onwards.

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

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

Where c_i - is the Credits assigned to the Course

GP_i - is the grade point corresponding to the letter grade obtained for each Course

n - is number of all Courses successfully cleared during the particular Semester in the case of GPA and during all the Semesters in the case of CGPA.

CGPA will be calculated in a similar manner, considering all the courses enrolled from first Semester. "RA" and "SA" grades will be excluded for calculating GPA and CGPA.

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

13.3 If a student studies more number of Electives (PE/OE) than required as per the programme of study, the Courses with higher grades alone will be considered for calculation of CGPA.

14. ELIGIBILITY FOR THE AWARD OF DEGREE

14.1. 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 programme of study within the stipulated time. Total minimum credits needed for each branch of study is as given below.

DETAILS OF TOTAL MINIMUM CREDITS

SL. NO.	BRANCH	TOTAL MINIMUM CREDITS NEEDED FOR SUCCESSFUL COMPLETION
1	B.E. CIVIL ENGINEERING	185
2	B.E. MECHANICAL ENGINEERING	182
3	B.E. ELECTRICAL AND ELECTRONICS ENGG.	184
4	B.E. ELECTRONICS AND COMMUNICATION ENGG.	176
5	B.E. PRODUCTION ENGINEERING	182
6	B.E. ELECTRONICS AND INSTRUMENTATION ENGINEERING	180
7	B.E. COMPUTER SCIENCE AND ENGG.	180
8	B.Tech. INFORMATION TECHNOLOGY	180
9	B.Tech. INDUSTRIAL BIOTECHNOLOGY	187

(ii) Successfully completed the Course requirements, appeared for the End-Semester Examinations and passed all the courses prescribed in all the 8 Semesters within a maximum period of 8 years reckoned from the commencement of the first Semester to which the candidate was admitted.

(iii) Successfully passed any additional courses prescribed by the Board of studies whenever readmitted under regulations other than Regulations 2016 (vide clause 16.3)

(iv) No disciplinary action pending against the student

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

14.2 CLASSIFICATION OF THE DEGREE AWARDED

14.2.1 FIRST CLASS WITH DISTINCTION:

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

i. Should have passed the examination in all the Courses of all the eight semesters in the student's First Appearance within **five** years, which includes authorized break of study of one year. Withdrawal from examination (vide Clause 15) will not be considered as an appearance.

ii. Should have secured a CGPA of not less than 8.00

iii. Should NOT have been prevented from writing End Semester examination due to lack of attendance in any of the Courses.

14.2.2 FIRST CLASS:

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

i. Should have passed the examination in all the courses of all eight semesters **within five 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).

ii. Should have secured a CGPA of not less than **7.00**.

14.2.3 SECOND CLASS:

All other students (not covered in Clauses 14.2.1 and 14.2.2) who qualify for the award of the degree (vide Clause 14.1) shall be declared to have passed the examination in **Second Class**.

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

15. PROVISION FOR WITHDRAWAL FROM EXAMINATION:

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

15.2 Withdrawal application shall be valid only if the student ***who has no history of arrears and*** is otherwise eligible to write the Examination (Clause 7) and if it is made within TEN working days before the commencement of the End Semester Examination in that Course or Courses and also recommended by the HOD.

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

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

15.5 Withdrawal is permitted for the End Semester Examinations in the final semester only if the Period of Study the student concerned does not exceed 5 years as per Clause 14.2.1.

16. BREAK OF STUDY FROM A PROGRAMME

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

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

- 16.3** The students permitted to rejoin the Programme after break of study / readmission due to lack of attendance, shall be governed by the Curriculum and Regulations in force at the time of rejoining. The students rejoining in new Regulations shall apply in the prescribed format through HOD at the beginning of the readmitted Semester itself for prescribing additional/equivalent Courses, if any, from any Semester of the regulations in-force, so as to bridge the Curriculum in-force and the old Curriculum.
- 16.4** The total period for completion of the programme reckoned from, the commencement of the first Semester to which the student was admitted shall not exceed the maximum period specified in Clause 5.1 irrespective of the period of break of study in order that the student may be eligible for the award of the Degree (vide Clause 14).
- 16.5** In case there is any period of break of study more than the permitted duration of break of study, the student shall be permitted to continue the Programme only if the approval is obtained from the Director of Technical Education / University through the concerned HOD / Principal before the end of the Semester in which the student has taken break of study.
- 16.6** If a student has not reported to the Department for a period of two consecutive Semesters without any intimation, the name of the student shall be deleted permanently from the college enrollment. Such students are not entitled to seek readmission under any circumstances.

17. RANK OF A STUDENT

A Candidate who qualifies for the Degree by passing the examination in all courses of the entire Programme in first attempt within a period of **Four or Five** consecutive academic years applicable for the students joined after permitted Break of Study from the date of admission to the Programme can be given his/her position in the class as rank. The Rank is determined from IIIrd Semester to VIIIth Semester end semester examination CGPA. **Students transferred from other institutions to GCT in IIIrd Semester and Lateral entry students are eligible for rank.** Students transferred from other institutions beyond IIIrd Semester to GCT **and students with history of arrears during the entire programme** are not eligible for rank.

18. PROCEDURE FOR USING SCRIBE

If a candidate is physically handicapped (in case of accidents / ill health) at the time of examination, he / she may be permitted to use a scribe to write the examination. In such case 30 minutes extra time will be permitted. The Scribe shall be a non-engineering student / graduate.

19. INDUSTRIAL VISIT

Every student is required to undergo one Industrial visit, starting from the third semester of the Programme. Every teacher shall take the students atleast for one industrial visit in a semester.

20. PERSONALITY AND CHARACTER DEVELOPMENT

All students shall enroll, on admission in any one of the personality and character development programmes (NCC / NSS / NSO / YRC). The training shall include classes on hygiene and health awareness and also training in first-aid.

- **National Cadet Corps (NCC)** will have about 20 parades.
- **National Service Scheme (NSS)** will have social service activities in and around the College / Institution.
- **National Sports Organization (NSO)** will have sports, Game, Drills and Physical exercises.
- **Youth Red Cross (YRC)** will have activities related to social services in and around the College / Institution.

While the training activities will normally be during weekends, the camp will normally be during vacation period.

21. DISCIPLINE

- 21.1** Every student is required to observe disciplined and decorous behaviour both inside and outside the College and not to indulge in any activity which will tend to bring down the prestige of the Institution. The Head of the Institution shall constitute a Disciplinary Committee to enquire into acts of indiscipline and notify the disciplinary action recommended for approval. In case of any serious disciplinary action which leads to suspension or

dismissal, then a committee shall be constituted by the Principal for taking final decision.

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

22. REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

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

SUMMARY OF CREDIT DISTRIBUTION

SL. NO.	COURSE WORK SUBJECT AREA	Credit range (AICTE Recommendation)	
		Min	Max
1	HS	5	10
2	BS	15	20
3	ES	15	20
4	PC	30	40
5	PE	10	15
6	OE	5	10
7	EEC	10	15