

UNIVERSITY DEPARTMENTS

REGULATIONS 2019

CHOICE BASED CREDIT SYSTEM

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

(For the students admitted to B.E. / B.Tech. Programme at various University Departments  
from the Academic year 2019 - 2020 onwards)

**1. PRELIMINARY DEFINITIONS AND NOMENCLATURE**

In this Regulation, unless the context otherwise specifies:

- I. **“Programme”** means Degree Programme (i.e) B.E. / B.Tech. Degree Programme.
- II. **“Discipline”** means Branch 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 Mathematics, Physics, Engineering Graphics, etc.,
- IV. **“Director, Academic Courses”** means the authority of the University who is responsible for all academic activities for the implementation of relevant rules and regulations.
- V. **“Additional Controller of Examinations (UD)”** means the Authority of the University who is responsible for all activities of the End Semester Examinations of the University Departments.
- VI. **“Head of the Institution”** means the Dean of the campus.
- VII. **“Chairperson”** means Head of the Faculty.
- VIII. **“Head of the Department”** means Head of the University Department concerned.
- IX. **“University”** means ANNA UNIVERSITY, CHENNAI.

**2. ADMISSION PROCEDURE**

- 2.1 Students for admission to the first semester of the eight semester 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 Mathematics, Physics and Chemistry.
- 2.2. The eligibility criteria such as marks, number of attempts and physical fitness shall be as prescribed by the Syndicate of the University from time to time.
- 2.3 **Lateral entry admission**  
Candidates who possess Diploma in Printing Engineering / Technology awarded by the State Board of Technical Education, Tamilnadu or its equivalent are eligible to apply for Lateral entry admission to the third semester of B.E. / B.Tech. in the branch of B.E. Printing Technology.

### 3. PROGRAMMES OFFERED

A student may be offered admission to any one of the programme of study approved by the University and offered at various campuses of the University. The recommended credit range for each programme is 165 – 170.

Details of programmes currently being offered by the University are listed Faculty-wise in **Annexure - I**

### 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 including Management Courses (HSMC)** include Technical English, Employability Skills, Engineering Ethics and Human Values, Communication skills and Management courses.
- ii. **Basic Science Courses (BSC)** include Mathematics, Physics, Chemistry, Biology, Environmental Sciences, etc.
- iii. **Engineering Science Courses (ESC)** include Engineering Practices, Engineering Graphics, Basics of Electrical / Electronics / Mechanical / Computer Engineering, Instrumentation etc.
- iv. **Professional Core Courses (PCC)** include the core courses relevant to the chosen specialization/branch.
- v. **Professional Elective Courses (PEC)** include the elective courses relevant to the chosen specialization/ branch.
- vi. **Open Elective Courses (OEC)** shall provide an opportunity to study a course from any discipline that includes the courses relevant to the chosen specialization, the courses that enhance soft and managerial skills, the courses a student can choose from the curriculum of other B.E. / B. Tech. / B. Arch. programmes and the courses offered by the Departments under the Faculty of Science and Humanities.
- vii. **Employability Enhancement Courses (EEC)** include Project Work, Internship, Career Development Skills, Creative and Innovative Project, Seminar, Professional Practices, Case Study and Industrial/Practical Training.
- viii. **Audit Courses (AC)** expose the students to Unnat Bharath Abhiyan, Constitution of India, Essence of Indian Knowledge Traditional, Yoga, English for Research Paper Writing, Value education, Pedagogy Studies, Stress Management and Personality Development through Life Enlightenment Skills. Registration for any of these courses is optional to students.

There shall be a certain minimum of Core courses and sufficient number of Elective courses that can be opted by the students. The blend of different courses shall be so designed that the student, 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.

## 4.2 Personality and Character Development

All students shall enroll, on admission, in any one of the personality and character development programmes (NCC/NSS/NSO/YRC) and undergo training for about 80 hours and attend a camp of about seven days. 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. The activities will include practical projects on recycling and reusing biodegradable and dry waste.

**National Sports Organization (NSO)** will have sports, games, drills and physical exercises.

**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.

## 4.3 Mandatory Two Week Induction Programme

The students are expected to undergo a mandatory two week induction programme comprising of physical activity, creative arts, universal human values, proficiency modules, lectures by eminent people, visits to local areas and familiarization to department/branch & innovations immediately after admission.

## 4.4 Number of courses per semester

The Curriculum of a semester shall normally have a blend of 4 to 6 lecture courses, except the pre-final and final semesters, and laboratory courses, not exceeding 2. In addition, Employability Enhancement Course(s) may also be included. Each course may have credits assigned as per clause 4.5. However, the total number of courses per semester shall not exceed 10 (including EEC). Pre-final semester may have 4 to 6 lecture courses, Project 1 and laboratory courses not exceeding 2. The final semester may have a blend of 2 or 3 lecture courses and Project 2.

## 4.5 Credit Assignment

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

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

The Contact Periods per week for laboratory can only be in multiples of 2.

## 4.6 Industrial Training / Internship

**4.6.1** The students may undergo Industrial training for a period as specified in the Curriculum during the summer / winter vacation. In this case, the training has to be undergone continuously for the entire period.

The students may undergo Internship at a Research organization / University / industry (after due approval from the Department Consultative Committee) for the period prescribed in the curriculum during the summer / winter vacation, in lieu of Industrial training.

- 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 Mark Sheet. If the student earns three credits in Industrial Training / Internship, the student may drop one Professional Elective. In such cases, Industrial Training / Internship need to be undergone continuously from one organization only. However, if the number of credits earned is 1 or 2, these credits shall not be considered for classification of the degree. The student is allowed to undergo a maximum of 6 weeks Industrial Training / Internship during the entire duration of study.

<b>DURATION OF TRAINING / INTERSHIP</b>	<b>CREDITS</b>
2 Weeks	1
4 Weeks	2
6 Weeks	3

**4.7 Industrial Visit**

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

**4.8 Value Added Courses**

Students may optionally undergo Value Added Courses and the credits earned through the Value Added Courses shall be over and above the total credit requirement prescribed in the curriculum for the award of the degree. One/Two credit courses shall be offered by a Department with the prior approval from the Centre for Academic Courses. The details of the syllabus, time table and faculty may be sent to the Centre for Academic Courses after approval from the Departmental Consultative Committee concerned. Students can take a maximum of two 'one credit courses' or one 'two credit course'. They shall be allowed to take one/two credit courses offered in other Departments with the permission of the Head of the Department offering the course.

**4.9 Online Courses**

- 4.9.1** Students may be permitted to credit only one online course with the approval of the Departmental Consultative Committee and Centre for Academic Courses.

- 4.9.2** Students may be permitted to credit online courses (which are provided with certificate) with the approval of the Departmental Consultative Committee and Centre for Academic Courses, subject to a maximum of three credits. The student needs to obtain certification or credit to become eligible for writing the End Semester Examination to be conducted by Anna University. In case of credits earned through online mode from a University approved by appropriate authorities of Anna University, the credits may be transferred after due approval procedures from the Departmental Consultative Committee and Centre for Academic Courses.

- 4.9.3** The online course of 3 credits can be considered instead of one elective course.

#### **4.10 Medium of Instruction**

The medium of instruction is English for all courses, (except Tamil Medium batches of B.E. Civil Engineering and Mechanical Engineering programmes), examinations, seminar presentations and project reports.

The medium of instruction is Tamil for Tamil Medium batches of B.E. Civil Engineering and B.E. Mechanical Engineering.

### **5. DURATION OF THE PROGRAMMES**

- 5.1** 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 7 years (14 Semesters).
- 5.2** Each semester shall normally consist of 90 working days (including examination days). The Head of the Department shall ensure that every teacher imparts instruction as per the number of 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).

### **6. COURSE ENROLLMENT AND REGISTRATION**

- 6.1** Each student, on admission, shall be assigned to a Faculty Advisor (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** 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.
  - 6.2.1** Each student on admission shall register for **all the courses prescribed in the curriculum in the student's first Semester of study.**
  - 6.2.2** The enrollment for all the courses from the Semesters II to VIII will commence 5 working days prior to the commencement of the succeeding semester. The student shall enroll for the courses with the guidance of the student's Faculty Advisor. If the student wishes, the student may drop or add courses (vide clause 6.3) within 5 working days after the commencement of the concerned semester and complete the registration process duly authorized by the Faculty Advisor.
- 6.3 Flexibility to Add or Drop courses**
  - 6.3.1** 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 the student wishes, then the student is permitted to earn more than the total number of credits prescribed in the curriculum of the student's programme within the minimum duration of the programme.
  - 6.3.2** From the III to VIII semesters, the student has the option of registering for additional courses or dropping existing courses. The total number of credits that a student can add or drop is limited to 8, subject to a maximum of 2 courses.
  - 6.3.3** The student shall register Project-1 in VII Semester and Project-2 in VIII Semester.

## **6.4 Redoing a Course**

Redoing a course means reregistering for a course, attending all classes, fulfilling the attendance requirements as per clause 7, earning fresh Continuous Assessment marks and appearing for End Semester Examinations. A student has to redo a course in the following conditions.

- 6.4.1 If a student is prevented from writing end semester examination of any core course due to lack of attendance, the student has to register for that course again when offered next and redo the course.
- 6.4.2 If a student is prevented from writing the end semester examination of any professional/open elective course due to lack of attendance, the student can opt to register for the same course again when offered next and redo the course, or he/she can opt to register for a different professional/open elective course when it is offered, attend classes, fulfill the attendance requirements as per clause 7, secure Continuous Assessment marks and appear for End Semester Examinations.
- 6.4.3 If a student fails to secure a pass in any theory or Laboratory course (including elective theory), he/she is given a maximum of three arrear attempts to complete the course as per Clause 11.2. If the student still fails to secure a pass, he/she shall register for the same when offered next and redo the course.
- 6.4.4 If the course in which the student fails to secure a pass even after three arrear attempts is a professional/open elective course, then the student can opt for a different professional/ open elective course, register for the same when it is offered, attend classes, fulfill the attendance requirements as per clause 7, secure Continuous Assessment marks and appear for End Semester Examinations.
- 6.4.5 The student who fails in any Project work (Project 1 / Project 2) shall register for the course again, when offered next, and redo the course. In this case, the student shall attend the reviews and fulfill the attendance requirements as per clause 7.
- 6.4.6 The student who fails in Seminar / Internship / Case Study and Industrial / Practical Training and Creative and Innovative project shall register for the same in the subsequent semester and redo the course. In this case, the student shall attend the classes and fulfill the attendance requirements as per clause 7.

## **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 the end semester examination of a particular course.

- 7.1** Ideally every student is expected to attend all periods and earn 100% attendance. However, the student shall secure not less than 75% attendance, course wise, taking into account the number of periods required for that course, as specified in the curriculum.
- 7.2** If a student secures attendance between 65% and less than 75% 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 Chairman, Sports Board and Head of the Department concerned, the student shall be given exemption from the prescribed attendance requirement and the student shall be permitted to appear for the end semester examination of that course. In all such cases, the students should submit the required documents on joining after the absence to the Head of the Department through the Faculty Advisor.

- 7.3** A student shall normally be permitted to appear for the end semester examination of the course if the student has satisfied the attendance requirements (vide Clause 7.1 – 7.2) and has registered for the examination in those courses of that semester by paying the prescribed fee.
- 7.4** Students who do not satisfy clause 7.1 and 7.2 and who secure **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 redo the course when it is offered next as per Clause 6.4. If the course in which the student has been prevented is a professional/ open elective, the student can opt to redo the same course or opt for different professional/ open elective course as per Clause 6.4.2.
- 7.5** If a student has shortage of attendance in all the registered courses, he/she would not be permitted to move to the higher semester and has to repeat the current semester in the subsequent year.
- 7.6** In the case of reappearance (Arrear) registration for a course, the attendance requirement as mentioned in Clauses 7.1 - 7.3 is not applicable. However, the student has to register for the examination in that course by paying the prescribed fee.
- 7.7** A student who has already appeared for a course in a semester and passed the examination is not entitled to reappear for the same course for improvement of letter grades / marks.

## **8. FACULTY ADVISOR**

To help the students in planning their courses of study and for general advice on the academic programme, the Head of the Department of the students will attach a certain number of students to a teacher of the Department, who shall function as Faculty Advisor for those students throughout their period of study. The Faculty Advisor shall advise the students in registering and reappearance (Arrear) registering of courses, authorize the process, monitor their attendance and progress and counsel them periodically. If necessary, the Faculty Advisor may also discuss with or inform the parents about the progress / performance of the students concerned.

The responsibilities of the faculty advisor shall be:

- To inform the students about the various facilities and activities available to enhance the student's curricular and co-curricular activities.
- To guide student enrollment and registration of the courses.
- To authorize the final registration of the courses at the beginning of each semester.
- To monitor the academic and general performance of the students including attendance and to counsel them accordingly.
- To collect and maintain the academic and co-curricular records of the students.

## **9. COURSE COMMITTEES**

### **9.1 COMMON COURSE COMMITTEE**

A theory course handled by more than one teacher shall have a "Common Course Committee", comprising of all teachers teaching that course. One of the teachers shall be nominated as Course Coordinator by the Faculty Chairman, duly approved by the Director, Academic Courses.

The first meeting of the Common Course Committee shall be held within fifteen days from the date of formation of the committee. The nature and weightage of the continuous assessments shall be decided in the first meeting, within the framework of the Regulations. Two or three subsequent meetings in a semester may be held at suitable intervals.

In addition the "Common Course Committee" shall meet to ensure uniform evaluation of continuous assessments after arriving at a common scheme of evaluation for the assessments (vide clause 10).

Wherever feasible, the common course committee shall prepare a common question paper for the continuous assessment tests also. The question paper for the end semester examination is common and shall be set by the Course Coordinator, in consultation with all the teachers.

## **9.2 MULTIPLE COURSES COMMITTEE**

“Multiple Courses Committee” comprises of all teachers handling courses of a particular semester, including common course teachers and two student representatives from the course concerned. One of the above teachers, nominated by the Head of the Department shall coordinate the activities of this committee. The functions of this committee are as follows:

The first meeting of the Multiple Courses Committee shall be held within fifteen days from the date of formation of the committee. The nature and weightage of the continuous assessments shall be decided in the first meeting, within the framework of the regulations. Two or three subsequent meetings in a semester may be held at suitable intervals. During these meetings, the student members shall meaningfully interact and express their opinions and suggestions of all the students to improve the effectiveness of the teaching-learning process. It is the responsibility of the student representatives to convey the proceedings of these meetings to all the students.

## **9.3 OVERALL MONITORING COMMITTEE**

**9.3.1** In addition, there shall be an overall monitoring committee for each semester of a programme, which comprises of (i) the Head of the Department (convener), (ii) the Faculty Advisors of the programme and (iii) Multiple Course Coordinator. This overall monitoring committee shall meet periodically to discuss academic related matters, progress and status of the students of the semester concerned.

**9.3.2** The overall monitoring committee can also invite some of the students for any of the committee meetings if necessary.

## **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, Professional Practices, 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. The evaluation shall be based on Outcome Based Education (OBE). 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 75 and the end semester examination carries 25 marks. The continuous assessment is 60 marks for the project work, and project report evaluation and viva-voce examination carries 40 marks. All other courses included under Employability Enhancement Courses are evaluated by Continuous Assessments only. There is no evaluation for Audit Courses. However, minimum attendance requirement as per clause 7 shall be satisfied.



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

S.No	Category of course	Continuous Assessments	End-Semester Examinations
i.	Theory Courses / Theory Courses with Laboratory	50 Marks	50 Marks
ii.	Laboratory Courses	75 Marks	25 Marks
iii.	Project Work	60 Marks	40 Marks
iv.	All other EEC Courses	100 Marks	-

Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD' for every semester, which consists of attendance marked in each theory / Laboratory/EEC/AC 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 Head of the Department periodically (at least three times in a semester) for checking the syllabus coverage and the records of assessment marks and attendance. The Head of the Department will affix his/her signature and date after due verification. At the end of the semester, the record should be verified by the Head of the Department who shall keep this document in safe custody (for five years). The records of attendance and assessment of both current and previous semesters should be available for inspection.

#### 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 University examinations (End Semester Exams) for theory courses will be of 3 hours duration and shall normally be conducted between October and December during the odd semesters and between April and June during the even semesters. End semester Examination is a mandatory requirement for passing the course and every student should appear for the examination for theory, laboratory courses and project work.

Continuous Assessment comprises of two assessments of equal weightage, conducted by the course instructor / coordinator / department. The total marks obtained in the **2 assessments** put together shall be reduced to 50 marks and rounded to the nearest integer. One assessment would be conducted in a day, in the case of tests, and they would be of one and a half hours durations each. Students will have regular classes on the assessment days 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 Chairman, Sports Board, only one **Reassessment** may be given at the end of the semester after getting approval from the Head of the Department by the concerned course instructor.

#### 10.2 ASSESSMENT FOR THEORY COURSES WITH LABORATORY COMPONENT

The maximum marks for Internal Assessment shall be 50 in case of theory courses with Laboratory component.

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

Sl. no	Category of Courses	Assessment for Theory (T)	Assessment for Laboratory (L)	End Semester
1	Theory Integrated with Practical	30 (T) (Two assessments)	20 (L) (One assessment)	50 (T)
2	Practical Integrated with Theory	20 (T) (One assessment)	30 (L) (Two assessments)	50 (T/L)

The sum of marks of all three assessments shall be reduced to 50 marks and rounded to the nearest integer.

### 10.3 ASSESSMENT FOR LABORATORY COURSES

For Laboratory Courses out of 100 marks, the maximum marks for Continuous Assessment is fixed as 75 and the End Semester Examination carries 25 marks.

Every laboratory exercise / experiment shall be evaluated based on the student's performance during the laboratory class and the student's records maintained. There shall be at least one assessment test. The criteria for arriving at the Continuous Assessment marks of 75 shall be decided at the respective course committee meetings.

The University examinations for Laboratory courses will be of 3 hours duration and shall normally be conducted between October and December during the odd semesters and between April and June during the even semesters.

### 10.4 ASSESSMENT FOR PROJECT WORK

For Project work out of 100 marks, the maximum marks for Continuous Assessment is fixed as 60 and the End Semester Examination (project report evaluation and viva-voce examination) carries 40 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 Head of the Department shall constitute a review committee for each programme. There shall be a minimum of three members in the review committee. The committee shall consist of the guide, project co-ordinator and one of the faculty members. The total marks obtained in the two Reviews shall be reduced to a maximum of 60 marks.

The student(s) is expected to submit the project report on or before the last working day of the semester. The University examination for the project work shall consist of the evaluation of the final project report submitted by the student or students of the project group by an external examiner, followed by a viva-voce examination conducted separately for each student by a committee consisting of the external examiner and an internal examiner (other than supervisor). The project co-ordinator shall be the internal examiner. The Head of the Department with the approval of the Chairman of the Faculty shall appoint the External Examiner for the End Semester Examinations of the Project Work.

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

Continuous Assessment 60 Marks						End Semester Examination 40 Marks		
Review I (30 Marks)			Review II (30 Marks)			Report Evaluation (20 Marks)	Viva – Voce (20 Marks)	
Project Co-ordinator	Member	Guide	Project Co-ordinator	Member	Guide	External Examiner	External Examiner	Internal Examiner
10	10	10	10	10	10	20	10	10

**10.4.1** If the project report is not submitted on or before the specified deadline, an extension of time up to a maximum limit of 30 days may be given for the submission of project work with due approval obtained from the Head of the Department. If the project report is not submitted even beyond the extended time, then the student(s) is deemed to have failed in the Project Work.

**10.5 ASSESSMENT FOR SEMINAR / PROFESSIONAL PRACTICES / CASE STUDY/ CREATIVE AND INNOVATIVE PROJECT**

The **Seminar / Case study / Creative and Innovative Project** shall carry 100 marks and shall be evaluated through continuous assessment only. Every student is expected to present a minimum of 2 presentations / demonstration per semester before the evaluation committee and for each presentation / demonstration, marks can be equally apportioned. The three member committee consisting of one co-ordinator and two members appointed by the Head of the Department will evaluate the seminar and at the end of the semester, the marks can be consolidated and taken as the final mark. The evaluation shall be based on the seminar paper / report (40%), presentation / demonstration (40%) and response to the questions asked during presentation / demonstration (20%).

**10.6 ASSESSMENT FOR INDUSTRIAL / PRACTICAL TRAINING / INTERNSHIP / SUMMER PROJECT**

10.6.1 The Industrial / Practical Training shall carry 100 marks and shall be evaluated through continuous assessment only as per Table. At the end of the Industrial / Practical training / internship / Summer Project, the student shall submit a certificate from the organization where the student has undergone training and a brief report about the training. The evaluation will be made based on this report, presentation and a Viva-Voce Examination conducted internally by a three member Departmental Committee consisting of one co-ordinator and two members constituted by the Head of the Department. Certificates (issued by the Organization) submitted by the student shall be attached to the mark list and sent to the Additional Controller of Examinations by the Head of the Department.

10.6.2 The Industrial / Practical Training **which is not part of the curriculum (Clause 4.6.2)**, shall carry 100 marks and shall be evaluated **through internal assessment only** as per Table. At the end of Industrial / Practical training / internship / Summer Project, the student shall submit a certified report (evaluated out of 100 marks by a mentor/guide) from the organization where the student has undergone training. The viva-voce examination will be conducted by a three member committee constituted by the Head of the Department. The committee comprises of one expert from an industry/organisation and two members (a co-ordinator and a member) from the Department. Certificates (issued by the Organization) submitted by the student shall be attached to the mark list (with grade) and sent to Additional Controller of Examinations by the Head of the Department.

Table

INTERNSHIP / INDUSTRIAL TRAINING		
EVALUATION		
REPORT	PRESENTATION	VIVA VOCE
40	30	30

### 10.7 ASSESSMENT FOR VALUE ADDED COURSE

The one/two credit course shall carry 100 marks and shall be evaluated through **continuous assessments only**. Two Assessments shall be conducted during the semester by the Department concerned. The total marks obtained in the tests shall be reduced to 100 marks and rounded to the nearest integer. The Head of the Department may identify a faculty member as coordinator for the course. A committee consisting of the Head of the Department, staff handling the course (if available), coordinator and a senior Faculty member nominated by the Head of the Department shall monitor the evaluation process. The grades shall be assigned to the students by the above committee based on their relative performance.

### 10.8 ASSESSMENT FOR ONLINE COURSE

Students may be permitted to credit online courses (which are provided with certificate) with the approval of the Departmental Consultative Committee and Centre for Academic Courses, subject to a maximum of three credits. This online course of 3 credits can be considered instead of one elective course. The student needs to obtain certification or credit to become eligible for writing the End Semester Examination to be conducted by Anna University. The Head of the Department may identify a faculty member as coordinator for the course, who is responsible for the evaluation process. The course shall be evaluated through the End Semester Examination only. The evaluation methodology shall be the same as that of a theory course. (vide clause 10.1).

In case of credits earned through online mode from a University approved by the appropriate authorities of Anna University, the credits may be transferred and grades shall be assigned by a committee consisting of the Chairman of the Faculty concerned, Head of the Department and a senior faculty member nominated by the Chairman.

## 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. If the student gets <50% of total marks, then the student will be awarded only RA (Reappearance) grade. All other grades will be decided by the faculty concerned. While fixing the grades, the mean mark shall be at the middle of the 'A' grade range. A student who earns a minimum of 6 grade points in a course is declared to have successfully passed the course.

**11.2** If a student fails to secure a pass in theory courses and laboratory course in the current semester examination, he/she is allowed to write arrear examinations for the next three consecutive semesters and their internal marks shall be carried over for the above mentioned period of three consecutive semesters. If a student fails to secure a pass in a course even after three consecutive arrear attempts, the student has to redo the course in the semester in which it is offered along with regular students.

That is, the students should have successfully completed the courses of (n minus 4)<sup>th</sup> semester to register for courses in n<sup>th</sup> semester.

Based on the above, the following prerequisites shall be followed for completing the degree programme:

- i. To enter into Semester V, the student should have no arrear in Semester I. Failing which the student shall redo the Semester I course/courses along with the regular students.
- ii. To enter into Semester VI, the student should have no arrear in Semester II. Failing which the student shall redo the Semester II course/courses along with the regular students.
- iii. To enter into Semester VII, the student should have no arrear in Semester III. Failing which the student shall redo the Semester III course/courses along with the regular students.
- iv. To enter into Semester VIII, the student should have no arrear in Semester IV. Failing which the student shall redo the Semester IV course/courses along with the regular students.

In case, if he/she has not successfully completed all the courses of semester V at the end of semester VIII, he/she shall redo the Semester V courses along with regular students. For the subsequent semesters of VI, VII and VIII, the same procedure shall be followed, subject to the maximum permissible period for this programme.

**11.3** If a candidate fails in the seventh semester examinations of Project 1, he/she has to resubmit the Project Report within 30 days from the date of declaration of the results. If he / she fails in the End semester examination of Project 2 of B.E. / B.Tech. or the Final Project work of B.E. / B.Tech, he/she shall resubmit the Project Report within 60 days from the date of declaration of the results. The resubmission of the project report and the subsequent viva-voce examination will be considered as reappearance with payment of exam fee. In case a student fails in the resubmission of a project report and subsequent viva-voce examination, the student shall register for the course again, when offered next.

**11.4** The passing requirement for the courses which are assessed only through continuous assessment (EEC courses except project work), shall be fixed as minimum 50% and the rest of the grades are decided by the faculty concerned.

**11.4.1** If a candidate fails in the Creative innovative project (EEC course), he/she has to resubmit the Project Report within 30 days from the date of declaration of the results. The resubmission of the project report and subsequent viva-voce examination will be considered as reappearance with payment of exam fee. In case a student fails in the resubmission of the project report and the subsequent viva-voce examination, the student shall register for the course in the subsequent semester.

### **11.5 Supplementary Examinations**

If a student fails to secure a pass in theory course(s) of VIII semester examination, he/she is eligible to appear for a one time Supplementary Examination which shall be conducted at the end of VIII semester, for the subjects of VIII semester alone within 30 days from the date of declaration of the results.

### **11.6 End semester valuation clarification day**

For a theory course where there is an end semester examination, a valuation clarification day shall be conducted within 10 - 15 days from the date of the last examination. The date of the clarification day for each course shall be announced by the Head of the Department concerned. On this day, the students can view their end semester answer papers in the presence of the course instructor and get any clarifications / corrections done. In cases of dispute, where the student is not satisfied with the clarifications / corrections, the matter can

be referred to a committee, consisting of the Head of the Department of the courses concerned / HOD nominee, concerned course instructor and a subject expert. In case a student does not attend the valuation clarification day on the specified date, no further clarifications will be entertained. The results will be published after the end semester valuation clarification day.

## 12 AWARD OF LETTER GRADES

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

Letter Grade	Grade Points
O (Outstanding)	10
A + (Excellent)	9
A (Very Good)	8
B + (Good)	7
B (Average)	6
RA (Reappearance Registration)	0
SA (Shortage of Attendance)	0
W (Withdrawal)	0

'RA' denotes Reappearance registration is required for that particular course.

'SA' denotes shortage of attendance (as per Clause 7) and hence prevented from writing end semester examination.

'W' indicates withdrawal from the course.

12.2 For the Co-curricular activities such as NCC / NSS / NSO / YRC, a satisfactory / not satisfactory grading will appear in the mark sheet. Every student shall put in a minimum of 75% attendance in the training and attend the camp compulsorily. The training and camp shall be completed during the first year of the programme. However, for valid reasons, the Head of the Institution may permit a student to complete this requirement in the second year. **A satisfactory grade in the above co-curricular activities is compulsory for the award of degree.**

12.3 The grades O, A+, A, B+, B obtained for the one/two 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.**

## 13. GPA AND CGPA CALCULATION

13.1 The Course Teacher shall handover the foil sheet and grade sheet to the HOD concerned for onward transmission to the ACOE (UD) for processing of 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 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, to the sum of the number of credits of all the courses in the semester.

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

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 one / two credit courses shall not be considered for calculating GPA and CGPA.

**13.3** If a student studies more number of electives (PEC/OEC) than required as per the student's programme curriculum, 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 student's programme within the stipulated time.
- ii. Successfully completed the course requirements, appeared for the End-Semester examinations and passed all the subjects prescribed in all the 8 semesters within a maximum period of 7 years reckoned from the commencement of the first semester to which the candidate was admitted.
- iii. Successfully passed any additional courses prescribed by the Director, Academic Courses.
- iv. Successfully completed the NCC / NSS / NSO / YRC requirements.
- v. No disciplinary action is pending against the student.
- vi. The award of Degree must have been approved by the Syndicate of the 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:

- 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.

- Should have secured a CGPA of not less than 8.50.
- 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**:

- 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).
- 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 the 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 Chairman, sports board and HOD) be granted permission to withdraw from appearing for the end semester examination in any course or courses in **ANY ONE** of the semester examinations during the entire duration of the degree programme. The application shall be sent to the Director, Academic Courses through the HOD with the required documents.

**15.2** Withdrawal application shall be valid only if the student 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 Head of the Department.

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

**15.4** If a student withdraws a course or courses from writing end semester examinations, he/she shall register the same in the subsequent semester and write the end semester examination(s).

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

**15.6** Withdrawal is permitted for the end semester examinations in the final semester only if the period of study of 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 fixed period of one year as a single break in the entire course of study.



- 16.2** When a student applies for break of study, the student shall apply to the Director, Academic Courses in advance, in any case, not later than the last date of the first assessment period. The application (downloaded from website) duly filled by the student shall be submitted through the Head of the Department.
- 16.3** The students permitted to rejoin the programme after break of study / prevention due to lack of attendance, shall be governed by the Curriculum and Regulations in force at the time of rejoining. The students rejoining in new Regulations shall apply to the Director, Academic Courses in the prescribed format through the Head of the Department 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, Academic Courses through the concerned HOD 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. DISCIPLINE**
- 17.1** Every student is required to observe disciplined and decorous behavior both inside and outside the college and not to indulge in any activity which will tend to bring down the prestige of the University / Department. The Head of the Institution shall constitute a disciplinary committee consisting of the Head of the Institution, Head of the department to which the student concerned belongs, and the Head of another department to enquire into acts of indiscipline and notify the University about the disciplinary action recommended for approval. In case of any serious disciplinary action which leads to suspension or dismissal, then a committee shall be constituted by the Registrar of the University for taking a final decision.
- 17.2** 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.
- 18. REVISION OF REGULATIONS, CURRICULUM AND SYLLABI**  
The University may from time to time revise, amend or change the Regulations, Curriculum, Syllabus and Scheme of examinations through the Academic Council with the approval of the Syndicate.

## ANNEXURE – I

A student may be offered one of the following programmes of study approved by the University. A student of a programme should earn the credits specified against it to enable the student to be eligible to be awarded the degree.

SL. NO.	NAME OF THE PROGRAMME	CREDITS TO BE EARNED
<b>1. FACULTY OF CIVIL ENGINEERING</b>		
i)	B.E. Civil Engineering (Tamil & English Medium)	168
ii)	B.E. Geoinformatics	167
<b>2. FACULTY OF MECHANICAL ENGINEERING</b>		
i)	B.E. Mechanical Engineering(Tamil & English Medium)	168
ii)	B.E. Aeronautical Engineering	168
iii)	B.E. Automobile Engineering	168
iv)	B.E. Industrial Engineering	166
v)	B.E. Manufacturing Engineering	168
vi)	B.E. Mining Engineering	168
vii)	B.E. Printing and Packaging Technology	168
viii)	B.E. Production Engineering	167
ix)	B.E. Materials Science & Engineering	168
<b>3. FACULTY OF ELECTRICAL ENGINEERING</b>		
i)	B.E. Electrical and Electronics Engineering	168
ii)	B.E. Electronics and Instrumentation Engineering	168
<b>4. FACULTY OF INFORMATION AND COMMUNICATION ENGINEERING</b>		
i)	B.E. Electronics and Communication Engineering	168
ii)	B.E. Biomedical Engineering	168
iii)	B. Tech. Information Technology	167
<b>5. FACULTY OF TECHNOLOGY</b>		
i)	B. Tech. Chemical Engineering	170
ii)	B. Tech. Food Technology	165
iii)	B. Tech. Pharmaceutical Technology	168
iv)	B. Tech. Industrial Bio-Technology	169
v)	B. Tech. Rubber and Plastics Technology	170
vi)	B. Tech. Textile Technology	170
vii)	B. Tech. Leather Technology	168
viii)	B. Tech. Ceramic Technology	167
ix)	B. Tech. Apparel Technology	170
x)	B.Tech. Petroleum Engineering and Technology	170

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