# P. A. COLLEGE OF ENGINEERING AND TECHNOLOGY, POLLACHI— 642 002 (AN AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY) REGULATIONS 2022

#### **CHOICE BASED CREDIT SYSTEM**

COMMON TO ALL B.E. / B. TECH FULL-TIME PROGRAMMES (FOR THE STUDENTS ADMITTED TO B.E./B. Tech PROGRAMMES FROM THE ACADEMIC YEAR 2022 - 2023 ONWARDS)

#### 1. DEFINITIONS and NOMENCLATURE

In this Regulations, unless the context otherwise specified:

- i. "University" means ANNA UNIVERSITY, Chennai
- ii. "College" means P. A. COLLEGE OF ENGINEERING AND TECHNOLOGY
- iii. "Programme" means B.E./B.Tech. Degree Programme
- iv. "Branch" means specialization or discipline of B.E. Degree Programme like Civil Engineering, Computer Science and Engineering etc.
- v. "Course" means a theory or practical course that is normally studied in a semester like Mathematics, Physics etc.
- vi. "Credit" means a numerical value allocated to each course to describe the candidate's workload required per week
- vii. "Grade" means the letter grade assigned to each course based on the marks range specified
- viii. "Grade point" means a numerical value (0 to 10) allocated based on the grade assigned to each course
- ix. "Principal" means Chairman, Academic Council of the College and Head of the Institution
- x. "Controller of Examinations" means authorized person who is responsible for examinations of the College and hereafter called COE
- xi. "Head of the Department" means Head of the concerned Department of the College and hereafter called HOD.

#### 2. ADMISSION PROCEDURE

2.1 The candidates seeking admission to the first semester of the eight semester Degree of Bachelor of Engineering (B.E) Programme should have passed the Higher Secondary Examination (10 + 2) in the academic stream with Mathematics, Physics and Chemistry as three of the four subjects of study under Part –III Subjects of the

study conducted by the Government of Tamil Nadu or any examination of any other University or authority accepted by the Syndicate of Anna University, Chennai as equivalent thereto.

(OR)

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

## 2.2 Lateral Entry Admission

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

(OR)

The candidates who possess a B.Sc. degree (10+2+3 stream) with mathematics as one of the subjects at the B.Sc. level from a recognized University are eligible to apply for Lateral entry admission to the third semester of B.E. Such candidates shall undergo two additional Engineering courses in the third and fourth semesters as prescribed by the College.

#### 3. PROGRAMMES AND 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 as follows:

- 1. B.E. Computer Science and Engineering
- 2. B.E. Electronics and Communication Engineering
- 3. B.E. Electrical and Electronics Engineering
- 4. B.E. Mechanical Engineering
- 5. B.Tech. Artificial Intelligence and Data Science
- 6. B.Tech. Information Technology

#### 4. STRUCTURE OF PROGRAMMES

# 4.1 Categorization of Courses

Every Programme shall have a curriculum with syllabi comprising of both theory and practical courses in each semester that have been approved by the respective Board of Studies and Academic Council of the College. The courses shall be categorized as

#### follows:

- i Humanities and Social Sciences including management (HS) Courses include Technical English, Communication skills, Humanities and Management. (12 Credits) \*
- ii **Basic Sciences (BS)** Courses include Mathematics, Physics, Chemistry, Biology, etc. (25 Credits) \*
- Engineering Sciences (ES) Courses include Engineering Practices, Engineering Graphics, Basics of Electrical / Electronics / Mechanical / Computer, etc. (24 Credits) \*
- iv **Professional Core (PC)** Courses include the core courses relevant to the chosen specialization/branch of study. (48 Credits) \*
- v **Professional Elective (PE) Courses** include the elective courses relevant to the chosen specialization/ branch of study. (18 Credits) \*
- vi Open Elective (OE) Electives from other technical and/or emerging courses are given as a separate list of Elective Courses offered by the Engineering / Science Departments and a student can choose a Course as an Open Elective from the given list of Courses. (18 Credits) \*
- vii **Employability Enhancement Courses (EEC)** include Project Work and/or Internship, Seminar, Professional Practices, Case Study and Industrial/Practical Training. (15 Credits) \*
- viii **Audit courses** (**AC**) include Environmental Science and Engineering, Induction training, Indian Constitution, Essence of Indian traditional knowledge. (**0 Credit**) \*
  - \*Minor variations are allowed as per the need of the respective discipline.

# 4.2 Personality and Character Development

All students shall enroll, on admission, in any one of the personality and character development programmes NSS/YRC/RRC and undergo training / conduct activities 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. Alternately, activities of science, literature and arts also help for personality and character development. So, students shall conduct and participate actively in Science club/Literary Forum/Fine Arts activities for 80 hours and participate in at least ONE event.

**National Service Scheme (NSS)** will have social service activities in and around the College / Institution.

**Youth Red Cross (YRC)** will have activities related to social services in and around College/Institution.

**Red Ribbon Club (RRC)** is a voluntary on-campus intervention implemented at creating awareness about the high risk perception and preventing various syndromes as well as promoting voluntary blood donation among the students.

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

**Science club** shall organise activities of popularisation of science and scientific temper through activities related to astronomy, works of great scientists from India and abroad, observing National Science Day, etc.

**Literary Club** like Tamil Mandram and English club shall be formed, which shall organise colourful literary events to propagate good humanist values, morals and ethics reflected in the literature.

**Fine Arts Club** like music, painting and documentary films with social themes shall be encouraged.

**Renewable Energy Club** Students who enroll and take active participation in anyone of the above activities and participate at least one event/programme will be given a certificate by the Head of the Institution and the copy of the same shall be forwarded to the Controller of Examinations for the purpose of record and scrutiny. No fee shall be charged for all these activities.

# 4.3 Number of Courses per semester

Curriculum of the semester shall normally have a blend of not exceeding 7 theory and 3 laboratory/practical courses. In addition, Employability Enhancement Courses (EEC) may be included. Each EEC may have credits assigned as per clause 4.4. However, the total number of courses shall not exceed 9 (including EEC).

# 4.4 Credit Assignment

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

Contact period per week	Credits
1 Lecture / Tutorial Period	1
1 Practical / Project Work / Seminar	0.5
Periods / etc.	

# 4.5 Range of Credits

A range of credits from 155 to 165 for a regular student and from 117 to 127 for lateral entry students are eligible to get Under Graduate degree in Engineering.

#### 4.6 Value Added Courses

Value Added courses shall be offered by a Department with prior approval from the respective Board of Studies. If the total credit earned is three or more, then one open elective course may be exempted.

## 4.7 Online Courses / Self Study Courses

Students may be permitted to acquire a maximum of six credits, with the approval of the Head of the Institution and the COE, in lieu of open elective / professional elective courses. The Head of the Institution shall form a three member committee with members as HOD and a faculty member from the Department of the student, HOD of any other branch of the Institution to ensure that the student has not studied such courses and would not repeat it again as Professional Core/Professional Elective/Open Elective courses. Suitable online courses relevant to respective branches shall be chosen from the SWAYAM platform.

<b>Duration of online Course</b>	Credits
4 Weeks	1
8 Weeks	2
12 Weeks	3

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 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. There will not be any formal lecture. One Faculty member assigned

by the HOD shall be responsible for the periodic monitoring and assessment of the student in that course. The Self-Study Course or Online Course of 6 credits can be considered instead of one Professional Elective Course.

# 4.8 Industrial Training / Internship

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 a period of atleast two weeks in organization.

The students may undergo Internship at a Research organization / University/ Industry (after due approval from the Head of the Institution) for the period prescribed in the curriculum during the summer / winter vacation, in lieu of Industrial training. Attendance Certificate mentioning the period of Industrial Training / Internship and signed by the competent authority of the industry, as per the format provided by the COE shall be submitted to the Head of the Institution. The attendance certificate shall be forwarded to the COE, by the Head of the Institution for processing results.

#### 4.9 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.

#### 4.10 Medium of Instruction

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

#### 4.11 Audit Courses

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

#### 5. DURATION OF THE PROGRAMME

5.1 A candidate is normally expected to complete the B.E. Degree Programme in 8 consecutive semesters, (6 consecutive semesters in case of lateral entry candidates) but in any case, not more than 16 semesters. (Not more than 12 semesters in the case of lateral entry candidate). Each semester shall consist of a minimum of 90 working days including Continuous assessment test period.

5.2 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 REGISTRATION FOR THE EXAMINATION

- 6.1 Each student shall be assigned to a Student Counsellor (vide clause 8) who shall advice and counsel the student about the details of the academic Programme and the choice of courses considering the student's academic background and career objectives.
- 6.2 Every student shall enroll for 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 publication of results of the previous semester examinations.
- 6.3 The student shall confirm the enrollment by registering for the courses within the first ten working days after the publication of results including revaluation results of the previous semester examinations.
- **6.4** Students shall attend the classes, satisfy the attendance requirements, earn Continuous Assessment marks and appear for the End Semester Examinations.

The commencement of each semester concerned and complete the registration process duly authorized by the Faculty Advisor and HOD.

# 6.5 Flexibility to Add 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 III to VII semesters, the student has the option of registering for one additional theory course with the approval of Faculty Advisor and HOD. Total number of credits of such Courses should not exceed 3.

# 6.6 Re-enrollment Registration

- **6.6.1** If a student fails in a theory/Practical course, the student shall re-enroll for that course in the subsequent semester and attend end semester examination.
- **6.6.2** 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.
- 6.6.3 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 when offered next. However, if the overall average attendance of all the courses is below 70%, the student has to rejoin the Programme in the next academic year after getting re-admission order from DOTE/University. The student shall attend the classes and fulfill 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 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** Every student is expected to attend all periods and earn 100% attendance. However, the student shall not secure less than 80% of attendance overall as well as in each course.
- 7.2 (i) If a student secures 70% 80% 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 before the last working day of the respective semester with prescribed condonation fee payable per course. If the student claims medical reasons, the student should submit the medical certificate. The condonation should be decided by a condonation recommendation committee consisting of the Head of the

Department of the student, Academic coordinator of the student, Student Counsellor, Faculty incharge of the course and an Assistant Controller of Examinations. The committee scrutinizes the genuity of the "Condonation application Form A" and conduct of the student and recommend it to the Principal and Chairman to grant the condonation after satisfying the requirements specified in clause.

- (ii) In such cases, his / her conduct has been certified to be satisfactory by the Faculty Advisor / Student Counsellor concerned and the HOD.
- (iii) The student applied for condonation, has to compensate the shortfall periods to 80% by attending the contact classes scheduled by the Course Incharge (One week before the commencement of the 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 70 % attendance in a Course will not be permitted to write the End-Semester Examination of that course.
- 7.5 However, if the overall average attendance of all the courses is below 70%, the student has to rejoin the Programme in the next academic year after getting readmission order from DOTE/University. The overall attendance may be calculated by taking two sessions per day and accounting absence of one session when a student is absent for even in one period of the respective session.
- **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. Faculty Advisor / Students Counsellor

There shall be a Class Advisor for each class. The class advisor will be one among the (course-instructors) of the class. He / She will be appointed by the HOD of the department concerned. The Class Advisor is the ex-officio member and the Convener of the class committee.

The responsibilities for the Class Advisor shall be:

- i To act as the channel of communication between the HOD and the students of the respective class.
- ii To collect and maintain various statistical details of students.
- iii To help the chairperson of the class committee in planning and conduct of the class committee meetings.
- iv To monitor the academic performance of the students including attendance and to inform the class committee.
- v To motivate the students to participate and win awards and medals in cocurricular and extra-curricular activities.
- vi To accompany the students during Industrial Visits.

#### 9 Class Committee

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

- (i) Solving problems experienced by students in the class room and in the laboratories.
- (ii) Clarifying the regulations of the degree Programme and the details of rules therein particularly (clause 5 and 7) which should be displayed on college Notice-Board.
- (iii) Informing the student representatives, the academic schedule including the dates of assessments and the syllabus coverage for each assessment.
- (iv) Informing the student representatives, the details of Regulations regarding weightage used for each assessment. In the case of practical courses (laboratory / drawing / project work / seminar etc.) the breakup of marks for each experiment / exercise / module of work, should be clearly discussed in the class committee meeting and informed to the students.
- (v) Analyzing the performance of the students of the class after each test and finding the ways and means of solving problems, if any.
- (vi) Identifying the Slow learners, if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such weak students.

- (vii) The class committee for a class under a particular branch is normally constituted by the Head of the Department. However, if the students of different branches are mixed in a class (like the first semester which is generally common to all branches), the class committee is to be constituted by the Head of the Institution.
- (viii) The class committee shall be constituted within the first week of each semester.
- (ix) At least 4 student representatives (usually 2 boys and 2 girls) shall be included in the class committee.
- (x) The Chairperson of the class committee may invite the Class Advisor(s) and the Head of the Department to the class committee meeting.
- (xi) The Head of the Institution may participate in any class committee meeting of the institution.
- (xii) The chairperson is required to prepare the minutes of every meeting, submit the same to Head of the Institution within two days of the meeting and arrange to circulate it among the students and the teachers concerned. If there are some points in the minutes requiring action by the management, the same shall be brought to the notice of the Management by the Head of the Institution.
- (xiii) The first meeting of the class committee shall be held within one week from the date of commencement of the semester, in order to inform the students about the nature and weightage of assessments within the framework of the Regulations. Two or three subsequent meetings may be held in a semester at suitable intervals. The Class Committee Chairman shall put on the Notice Board the cumulative attendance particulars of each student at the end of every such meeting to enable the students to know their attendance details to satisfy the clause 6 of this Regulation. During these meetings, the student members representing the entire class, shall meaningfully interact and express the opinions and suggestions of the other students of the class in order to improve the effectiveness of the teaching-learning process.

#### 10. Course Committee

Each common theory course offered to more than one discipline or group shall have a "Course Committee" comprising all the teachers teaching the common course with one of them nominated as Course Co-ordinator. The nomination of the Course Co-ordinator shall be made by the Head of the Department / Head of the Institution depending upon whether

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

#### 11. ASSESSMENT PROCEDURES FOR AWARDING MARKS

All B.E. 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
- (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 40 and the End Semester Examination carries 60 marks. For Laboratory Courses, out of 100 marks, the maximum marks for Continuous Assessment is fixed as 40 and the End Semester Examination carries 60 marks. The continuous assessment is 40 marks for the Project Work, and Project Report evaluation and Viva-Voce examination carries 60 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	<b>End-Semester</b>	
5.110.	Category of Course	Assessment	Examinations	
1.	Theory Courses	40 Marks	60 Marks	
2.	Laboratory Courses	60 Marks	40 Marks	
3.	Project Work	40 Marks	60 Marks	
4.	Online Courses/Self Study Courses	40 Marks	60 Marks	
	(Optional)	40 Marks	oo wars	
5.	All EEC Courses (Except Laboratory		60 Marks	
<i>J</i> .	Courses and Project Work)	40 Marks	00 Warks	
6.	Value Added One Credit Courses*	100 Marks	_	
	(Optional)	100 Warks	-	
7.	Audit Courses (Except Induction		100 Marks	
/.	Program <sup>#</sup> )	_	100 Warks	

\*Value added courses and Audit Courses – not included for CGPA calculation #No assessment for induction program

Every teacher is required to maintain a "PERSONAL LOG BOOK" 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.

#### 11.1 ASSESSMENT FOR THEORY COURSES INCLUDING AUDIT COURSES

For Theory Courses including audit courses out of 100 marks, the maximum marks for Continuous assessment is fixed as 40 and the End Semester Examination carries 60 marks. The End Semester Examination for theory courses including audit courses will be of 3 Hours duration and shall normally be conducted for a maximum of 100 marks between November / December during the Odd Semesters and between April/May during the Even Semesters. End semester Examination is audit requirement for passing the Course and every Student should appear for the End Semester Examination for Theory including audit courses, Laboratory Courses and Project Work.

Continuous Assessment is based on the performance of the Students in tests, assignments and tutorial or objective type tests. Three assessments of equal weightage will be conducted by the Controller of Examinations. The total marks obtained in the assessments put together shall be reduced to 40 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 handling faculty.

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

S.No.	Category Details	CA Marks
1.	Test (3 Nos) {each test is to be	30
	conducted for 50 marks}	30
2.	Assignment (Average of 3 Nos)	5
3.	Quiz/Seminar/Online test/MCQs	5
	Total	40

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.

#### 11.2 ASSESSMENT FOR LABORATORY COURSES

For Laboratory Courses out of 100 marks, the maximum marks for Continuous Assessment is fixed as 60 and the End Semester Examination carries 40 marks. Every laboratory exercise / experiment shall be evaluated based on the student performance during the laboratory class and the student's record shall be maintained. There shall be at least one assessment test. The criteria for arriving at the Continuous Assessment marks of 60 shall be decided at the respective laboratory classes.

Internal Assessment (60 Marks)			
Evaluation of laboratory observation,	Model Test		
Record			
50	10		

The End Semester examinations for Laboratory Courses will be of 3 hours duration and shall normally be conducted for a maximum of 100 marks.

#### 11.3 ASSESSMENT FOR PROJECT WORK

The Project work shall be carried out under the supervision of a Faculty member 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 40 and the End Semester Examination (Project Report evaluation and Viva-Voce examination) carries 60 marks. Project work may be assigned to a single student or to a group of students not exceeding 4 per group.

There shall be three assessments (each 100 marks) during the semester by a Review Committee. The student shall make presentation on the progress made before the Committee. The 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 three Reviews shall be 40 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.

Review	Review	Review		End sen	nester Exami	nations	
I	II	II Keview		Thesis Submission (20)		a-Voce (4	0)
10 15	15	15 15	Internal	External	Supervisor	Internal	External
	10		10	10	10	10	20

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.

# 11.4 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.

#### 11.5 ASSESSMENT FOR VALUE ADDED 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 Co-ordinator for the Course. A committee consisting of the HOD, staff handling the course (if available), Programme Co-ordinator and a Senior Faculty member nominated by the HOD shall monitor the evaluation process.

#### 11.6 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.

#### 11.7 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 11).

# 12. PASSING REQUIREMENTS

12.1 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 secure a minimum of 45% marks in the end semester examinations, wherever applicable, shall be declared to have successfully passed the course.

If a student fails to secure a pass in theory courses, students are allowed to write the supplementary examination for maximum of 2 courses in the current semester.

If a student fails to secure a pass in a theory course, the student shall re-register for that course in the subsequent semester and attend the end semester examination.

If a student fails to secure a pass in a laboratory course, the student shall re-register for that course in the subsequent semester and attend the end semester examination (vide clause 6.6.1 and 6.6.2).

If a student fails to secure a pass in project work, the student shall re-register for the course in the subsequent semester/when offered next.

12.2 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.

# Valued Answer Script review by the students

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

#### Revaluation

A student can apply for revaluation 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.

## **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.

#### 13. AWARD OF LETTER GRADES

Marks Range	Letter grade	Grade Point
91 to 100	O (Outstanding)	10
81 to 90	A+ (Excellent)	9
71 to 80	A (Very Good)	8
61 to 70	B+ (Good)	7
56 to 60	B (Average)	6
50 to 55	C (Satisfactory)	5
<50	RA (Re-Appearance)	0
	SA (Shortage of Attendance)	0
	W (Withdrawal)	0

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

'SA' denotes shortage of attendance (as per clause 7.3) and hence prevention from writing the end semester examinations. 'SA' will appear only in the result sheet.

"RA" denotes that the student has failed to pass in that course. "W" denotes withdrawal from the exam for the particular course. The grades RA and W will figure both in Marks Sheet as well as in Result Sheet. In both cases, the student has to earn Continuous Assessment marks and appear for the End Semester Examinations.

If the grade W is given to course, the attendance requirement need not be satisfied.

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

**13.2** For the Co-curricular activities such as National Service Scheme (NSS), RRC, YRC, etc., 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.

13.3 The grades O, A+, A, B+, B, C obtained for the one credit course shall figure in the Mark sheet under the title 'Value Added Courses'. The Courses for which the grades are RA, SA will not figure in the mark sheet.

#### **Grade sheet**

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

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

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

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

$$\frac{\displaystyle\sum_{i=1}^{n} CiGPi}{\displaystyle\sum_{i=1}^{n} Ci}$$

$$GPA / CGPA = \sum_{i=1}^{n} Ci$$

where

C<sub>i</sub> is the number of Credits assigned to the course

GPiis the point corresponding to the 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.

#### 14. ELIGIBILITY FOR THE AWARD OF DEGREE

**14.1** (i) A student shall be declared to be eligible for the award of the B.E. Degree provided the student has:

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**

S.No	Branch	Total Minimum Credits Needed for Successful Completion
1	B.E. Computer Science and Engineering	165
2	B.E. Electronics and Communication Engineering	166
3	B.E. Electrical and Electronics Engineering	166
4	B.E. Mechanical Engineering	164
5	B.Tech. Artificial Intelligence and Data Science	163
6	B. Tech. Information Technology	165

- (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 2022 (vide clause 16)
- (iv) No disciplinary action pending against the student
- (v) Award of Degree approved by the Anna University.

#### 14.2 CLASSIFICATION OF THE DEGREE AWARDED

#### 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 and four years in case of lateral entry, 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 8.50
- (iii) Should NOT have been prevented from writing End Semester examination due to lack of attendance in any of the Courses.

#### **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 and six semesters within four years in case of lateral entry, 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.

#### **SECOND CLASS:**

All other students (not covered in Clauses 14.2) 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. 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

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.

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 10 working days before the commencement of the End Semester Examination in that Course or Courses and also recommended by the HOD.

Notwithstanding the requirement of mandatory 10 working days notice, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case.

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

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 14.1.

#### 16. BREAK OF STUDY FROM A PROGRAMME

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

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.

The students permitted to rejoin the Programme after break of study / re-admission 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.

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).

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.

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 re-admission 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 III Semester to VIII Semester end semester examination CGPA. Students transferred from other institutions to PACET in III Semester and Lateral entry students are eligible for rank. Students transferred from other institutions beyond III Semester to PACET 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 for continuous assessment test and 60 minutes for end semester examination. The Scribe shall be a non-engineering student / graduate.

#### 19 DISCIPLINE

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 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.

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.

# 20. REVISION OF REGULATIONS, CURRICULA 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.