

# VEL TECH MULTI TECH Dr RANGARAJAN Dr SAKUNTHALA ENGINEERING COLLEGE

(An Autonomous Institution Affiliated to Anna University)

## RULES AND REGULATIONS - 2023

**B.E. /B.Tech. Degree Programmes**

**(CHOICE BASED CREDIT SYSTEM)**

These rules and regulations are applicable to the students admitted from the academic year 2023-24 onwards

### **1.0 PRELIMINARY DEFINITIONS AND NOMENCLATURE**

In these regulations, unless the context otherwise requires:

- a. “Degree” means that academic award conferred upon a student on successful completion of a programme designed to achieve the defined attributes. It is referred to as Under-Graduate (UG) Degree, that is B.E./ B.Tech. Degree.
- b. “Programme” means cohesive arrangement of courses, co-curricular and extracurricular activities to accomplish predetermined objectives leading to the awarding of a degree. Also means its specialization or discipline of B.E. / B.Tech. Degree programme like Mechanical Engineering, Information Technology, etc.
- c. “Course” means a theory, practical studied in a semester, like Mathematics, Physics, etc.
- d. “Head of the Institution” means the Principal of the College.
- e. “Head of the Department (HOD)” means the Head of the Department concerned.
- f. “Controller of Examinations (COE)” means the authority of the University who is responsible for all activities of the University Examinations.
- g. “University” means ANNA UNIVERSITY.

### **2.0 QUALIFICATIONS FOR ADMISSION**

#### **2.1 Regular Admission**

Candidates seeking admission to the first semester of the eight semester B.E. / B.Tech. Degree Programme: Should have passed the Higher Secondary Examinations of (10+2) Curriculum (Academic Stream) prescribed by the Government of Tamil Nadu with Mathematics, Physics and Chemistry as three of the four subjects of study under Part-III or any examination of any other University or authority accepted by the Syndicate of Anna University 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 the Diploma in 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 corresponding to the branch of study.

(OR)

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

## 3.0 PROGRAMMES OF STUDY

B.E. Degree

Programme – I	: Biomedical Engineering
Programme – II	: Computer Science and Engineering
Programme – III	: Electronics and Communication Engineering
Programme – IV	: Electrical and Electronics Engineering
Programme – V	: Mechanical Engineering

B.Tech Degree

Programme – I	: Information Technology
Programme – II	: Artificial Intelligence and Data Science
Programme – III	: Computer Science with Business Systems

## 4.0 STRUCTURE OF PROGRAMMES

### 4.1 Categorization of Courses

Each programme shall have a curriculum comprising of Theory, Practical courses with well-defined Program Outcomes and Programme Educational Objectives (PEO) as per Outcome Based Education (OBE). The content of each course is designed based on the Course Outcomes (CO). The courses of a programme are categorized as follows:

- A. Foundation Courses
  - a. Humanities and Social Science (HSS)
  - b. Basic Science (BS)
  - c. Engineering Science (ES)
- B. Professional Core courses (PC) relevant to the chosen programme of study.
- C. Professional Elective Courses (PE)
- D. Open Elective Courses (OE)
- E. Employability Enhancement Courses (EEC) includes Project Work and/or Internship, Seminar, Professional Practices, Case Study and Industrial/Practical Training.
- F. Mandatory Courses (MC) prescribed by AICTE / UGC

The recommended distribution of credits for each category is given in Table 1.

Table1: Credit Distribution

S.No	Category	Credits (Regular)	Credits (Lateral)
A.	Professional Core Courses	51-69	48-64
B.	Professional Elective Courses	12-18	12-24
C.	Open Elective Courses	11-18	11-18
D.	Project, Seminar, Internship in industry & Employability Enhancement Courses(EEC)	11-14	11-14
E.	Mandatory Courses prescribed by AICTE/UGC (Not to be included for CGPA)	Non Credit	Non Credit
Total		160-165	117-121

Student has to earn the above credit points depending upon the programme of study.

BS : Basic Science

HSS : Humanities and Social Science

ES : Engineering Science

L : Lecture

T : Tutorial

P : Practical

Note:

1 Hour Lecture per week is equivalent to 1 credit

1 Hour Tutorial per week is equivalent to 1 credit

1 Hour Practical per week is equivalent to 0.5 credit

1 Hour Project per week is equivalent to 0.5 credit

#### **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.

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.

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 Ilakkiya Mandram' 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.

Students who enroll and take active participation in anyone of the above activities for 80 hours 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 Industrial Training / Internship**

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

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

#### **4.4 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.

#### **4.5 Value Added Courses**

The 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 of an institution with the prior approval from the Head of the Institution.

The details of the syllabus, time table and faculty may be sent to the Centre for Academic Courses and the Controller of Examinations after approval from the Head of the Institution concerned atleast one month before the course is offered. Students can take a maximum of two one credit courses / one two credit course during the entire duration of the Programme.

#### **4.6 Open Elective**

Open electives are courses offered by different departments. These courses do not have any prerequisites and could be chosen as electives by students of any programme. Students should opt for the courses offered from other departments only.

#### **4.7 Online Courses**

Students may be permitted to credit a maximum of two online courses, subject to a maximum of six credits, with the approval of the Head of the Institution and the Centre for Academic Courses, 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 shall be chosen from the SWAYAM platform.

4.8 The medium of instruction, examinations and project report shall be in English.

## 5.0 DURATION OF THE PROGRAMMES

5.1 A student is ordinarily expected to complete the B.E. / B.Tech. Programme in 8 semesters (four academic years) but in any case not more than 14 Semesters for HSC (or equivalent) candidates and not more than 12 semesters for Lateral Entry Candidates.

5.2 Each semester shall normally consist of 75 working days or 540 periods of 50 minutes each. The Head of the Institution shall ensure that every teacher imparts instruction as per the number of periods specified in the syllabus and that the teacher teaches the full content of the specified syllabus for the course being taught. The maximum hours a student should attend would be a total of 450 hours or equivalent to the number of L-T-P-C allocated for the courses of a particular semester all UG programmes.

5.3 The Head of the Institution may conduct additional classes for improvement, special coaching, conduct of model test etc., over and above the specified periods. But for the purpose of calculation of attendance requirement for writing the end semester examinations (as per clause 6) by the students, following method shall be used.

$$\text{Percentage of Attendance} = \frac{\text{Total no. of periods attended in all the courses per semester}}{(\text{No. of periods / week as prescribed in the curriculum}) \times 15 \text{ taken together for all courses of the semester}} \times 100$$

The End Semester Examination will ordinarily follow immediately after the last working day of the semester commencing from I semester as per the academic schedule prescribed from time to time.

5.4 The total period for completion of the programme reckoned from the commencement of the first semester to which the candidate was admitted shall not exceed the maximum period specified in clause 5.1 irrespective of the period of break of study (vide clause 18) in order that he/she may be eligible for the award of the degree (vide clause 16)

## 6.0 COURSE REGISTRATION

6.1 The Institution is responsible for registering the courses that each student is proposing to undergo in the ensuing semester. Each student has to register for all courses to be undergone in the curriculum of a particular semester (with the facility to drop courses to a maximum of 6 credits (vide clause 6.2)). The student can also register for courses for which the student has failed in the earlier semesters.

The registration details of the candidates may be approved by the Head of the Institution and forwarded to the

Controller of Examinations. This registration is for undergoing the course as well as for writing the End Semester Examinations. No Elective course shall be offered by any department of any institution unless a minimum 10 students register for the course. However, if the students admitted in the associated Branch and Semester is less than 10, this minimum will not be applicable.

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

- i. Courses of the current semester.
- ii. Courses dropped in the lower semesters and
- iii. Courses advanced to Semester VI and VII from Semester VIII (as per clause 4.10).

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

## 6.2 Flexibility to Drop Courses

6.2.1 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.

6.2.2 From the second to final semesters, the student has the option of dropping existing courses in a semester during registration. Total number of credits of such courses shall not exceed 6 per semester. The student is permitted to drop the course(s) within 30 days of the commencement of the academic schedule.

## 6.3 Reappearance Registration

If a student fails in a theory or a Practical course, the student shall do reappearance registration for that course in the subsequent semester by retaining the Continuous Assessment Marks already earned.

If a student is not eligible to appear for end semester examination of a course due to lack of attendance, the student has to register for that course again, when offered next. If the course, in which the student has lack of attendance, is an elective, the student may register for the same.

## 7.0 ATTENDANCE REQUIREMENT FOR THE COMPLETION OF THE SEMESTER

A Candidate who has fulfilled the following conditions shall be deemed to have satisfied the requirements for completion of a semester.

7.1 Ideally every student is expected to attend all classes of all the courses and secure 100% attendance. However, in order to give provision for certain unavoidable reasons such as Medical / participation in sports, the student

is expected to attend at least 75% of the classes. Therefore, he/she shall secure not less than 75% (after rounding off to the nearest integer) of overall attendance.

7.2 However, a candidate who secures overall attendance between 65% and 74% in the current semester due to medical reasons (prolonged hospitalization / accident / specific illness) / Participation in Sports events may be permitted to appear for the current semester examinations subject to the condition that the candidate shall submit the medical certificate / sports participation certificate attested by the Head of the Department. The same shall be forwarded to the Controller of Examinations for record purposes.

7.3 Candidates who secure less than 65% overall attendance and candidates who do not satisfy the clause 7.1 and 7.2 shall not be permitted to write the End-Semester examination at the end of the semester and not permitted to move to the next semester. They are required to repeat the incomplete semester in the next academic year, as per the norms prescribed.

## **8.0 CLASS ADVISOR**

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:

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

## **9.0 CLASS COMMITTEE**

9.1 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

- Solving problems experienced by students in the class room and in the laboratories.
- 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.
- Informing the student representatives, the academic schedule including the dates of assessments and the syllabus coverage for each assessment.
- 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.
- Analyzing the performance of the students of the class after each test and finding the ways and means of solving problems, if any.
- Identifying the weak students, if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such weak students.

9.2 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.

9.3 The class committee shall be constituted within the first week of each semester.

9.4 At least 4 student representatives (usually 2 boys and 2 girls) shall be included in the class committee.

9.5 The Chairperson of the class committee may invite the Class adviser(s) and the Head of the Department to the class committee meeting.

9.6 The Head of the Institution may participate in any class committee of the institution.

9.7 The chairperson is required to prepare the minutes of every meeting, submit the same to Head of the Institution within two days of the meeting and arrange to circulate it among the students and teachers concerned. If there are some points in the minutes requiring action by the management, the same shall be brought to the notice of the Management by the Head of the Institution.

9.8 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.

## **10.0 COURSE COMMITTEE FOR COMMON COURSES**

Each common theory course offered to more than one discipline or group, shall have a “Course Committee” comprising all the teachers teaching the common course with one of them nominated as Course Coordinator. The nomination of the Course Coordinator shall be made by the Head of the Department / Head of the Institution depending upon whether all the teachers teaching the common course belong to a single department or to several departments. The ‘Course committee’ shall meet in order to arrive at a common scheme of evaluation for the test and shall ensure a uniform evaluation of the tests. Wherever feasible, the course committee may also prepare a common question paper for the internal assessment test(s).

## **11.0 SYSTEM OF EXAMINATION**

**11.1** Performance in each course of study shall be evaluated based on (i) continuous internal assessment throughout the semester and (ii) End - Semester examination at the end of the semester.

**11.2** Each course, both theory and practical (including project work & viva voce Examinations) shall be evaluated for a maximum of 100 marks.

**11.2.1** For all theory courses, the continuous internal assessment will carry 40 marks while the End Semester University examination will carry 60 marks.

**11.2.2** For all theory courses with laboratory component, the continuous internal assessment will carry 50 marks while the End Semester University examination will carry 50 marks.

**11.2.3** For all laboratory courses, the continuous internal assessment will carry 60 marks while the End Semester University examination will carry 40 marks.

**11.2.4** For all theory courses with laboratory

**11.2.5** The continuous internal assessment for the project work will carry 40 marks while the End Semester University examination will carry 60 marks.

**11.3** Industrial Training and Seminar shall carry 100 marks and shall be evaluated through internal assessment only.

**11.4** The End - Semester examination (theory and practical) of 3 hours duration shall ordinarily be conducted between October and December during the odd semesters and between April and June during the even semesters.

**11.5** The End - Semester examination for project work shall consist of evaluation of the final report submitted by the student or students of the project group (of not exceeding 4 students) by an external examiner and an internal examiner, followed by a viva-voce examination conducted separately for each student by a committee consisting of the external examiner, the supervisor of the project group and an internal examiner.

**11.6** For the End - Semester examination in both theory and practical courses including project work the internal and external examiners shall be appointed by the Controller of Examinations.

## 12. PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

For all theory, laboratory courses, theory courses with laboratory component and project work the continuous assessment shall be awarded as per the procedure given below:

### 12.1 THEORY COURSES

Three assessments each carrying 100 marks shall be conducted during the semester by the Department / College concerned. The total marks obtained in all assessments put together out of 300, shall be proportionately reduced for 40 marks and rounded to the nearest integer (This also implies equal weightage to the three assessments).

Assessment I (100 Marks)		Assessment II (100 Marks)		Assessment III (100 Marks)		Total Internal Assessment
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	
<b>40</b>	<b>60</b>	<b>40</b>	<b>60</b>	<b>40</b>	<b>60</b>	<b>300*</b>

\*The weighted average shall be converted into 40 marks for internal Assessment.

Three internal assessments will be conducted as a part of continuous assessment. Each internal assessment is to be conducted for 100 marks and will have to be distributed in two parts viz., Individual

Assignment/Case study/Seminar/Mini project and Test with each having a weightage of 40% and 60% respectively. The tests shall be in written mode. The total internal assessment marks of 300 shall be converted into a maximum of 40 marks and rounded to the nearest integer.

## 12.2 LABORATORY COURSES

The maximum marks for Internal Assessment shall be 60 marks in case of practical courses. Every practical exercise / experiment shall be evaluated based on conduct of experiment / exercise and records to be maintained. There shall be at least one test. The criteria for arriving at the Internal Assessment marks of 60 is as follows: 75 marks shall be awarded for successful completion of all the prescribed experiments done in the Laboratory and 25 marks for the test. The total mark shall be converted into a maximum of 60 marks and rounded to the nearest integer.

Internal Assessment (100 Marks)*	
Evaluation of Laboratory Observation, Record	Test
75	25

\* Internal assessment marks shall be converted into 60 marks

## 12.3 THEORY COURSES WITH LABORATORY COMPONENT / LABORATORY COURSES WITH THEORY COMPONENT

Weightage of internal assessment and end semester examination marks will be 50% each. The distribution of marks for the theory and laboratory components in the internal assessments and end semester examination for different types of courses are provided in the table.

L	T	P	C	Internal		End semester examination
				Assessment 1	Assessment 2	
1	0	4	3	Laboratory (25%)	Theory (25%)	Laboratory only (50%)
1	0	2	2	Laboratory (25%)	Theory (25%)	Laboratory only (50%)
2	0	2	3	Theory (25%)	Laboratory (25%)	Theory (25%) Laboratory (25%)
3	0	2	4	Theory (25%)	Laboratory (25%)	Theory (35%) Laboratory (15%)
2	0	4	4	Theory (25%)	Laboratory (25%)	Theory (15%) Laboratory (35%)

The procedure for the conduct of internal assessments for theory and laboratory components shall be as per the clause 12.1 and 12.2 respectively\*.

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

\* Autonomous Colleges may adopt Theory courses with Laboratory component and Laboratory courses with Theory component with different L T P C formats and the weightage of marks for Theory and Laboratory components may be fixed in proportion to lecture and practical contact periods. However, the weightage for internal and end semester examination marks will remain as 50% each.

## **12.4 PROJECT WORK**

The student shall register for Project Work-I in pre-final semester and Project Work-II in final semester. Project work may be allotted to a single student or to a group of students not exceeding 4 per group. Project Work-II may/may not be a continuation of Project Work-I. If Project Work II is not a continuation of Project Work I, then the topic and constitution of the project team members need not be the same.

Project Work shall be carried out under the supervision of a “qualified teacher” in the Department concerned. In this context “qualified teacher” means the faculty member possessing (i) PG degree or (ii) Ph.D. degree

12.4.1 The Project Work-II carried out in industry/academic/research institutions need not be a continuation of Project Work-I. In such cases, the Project Work-II shall be jointly supervised by a supervisor of the department and an expert as a joint supervisor from the organization and the student shall be instructed to meet the supervisor periodically and to attend the review committee meetings for evaluating the progress. The review meetings, if necessary, may also be arranged in online mode with prior approval from the Head of the Institution and suitable record of the meetings shall be maintained.

12.4.2 The Head of the Institutions shall constitute a review committee for Project Work for each programme. The review committee consists of supervisor, an expert from the Department and a project coordinator from the Department. If the project coordinator/expert member happens to be the supervisor, then an alternate member shall be nominated. In the case of Industrial Project, the review committee shall have the supervisor, the coordinator from industry and the project coordinator from the Department

12.4.3 There shall be three reviews during the semesters VII and VIII by the review committee. The student shall make presentation on the progress made by him / her before the committee. The total marks obtained in the three reviews shall be reduced for 40 marks and rounded to the nearest integer (as per the scheme given in 12.4.4).

12.4.4 The project report shall carry a maximum of 20 marks. The project report shall be submitted as per the approved guidelines as given by the Director, Centre for Academic Courses. Same marks shall be awarded to every student within the project group for the project report. The viva-voce examination shall carry 40 marks. Marks are awarded to each student of the project group is based on the individual performance in the viva- voce examination.

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

Review I	Review II	Review III	End Semester Examinations				
			Project Report		Viva-Voce Examination		
10	15	15	Internal	External	Internal	External	Supervisor
			10	10	10	20	10

## 12.5 OTHER EMPLOYABILITY ENHANCEMENT COURSES

- (a) The Seminar / Case Study / Mini Project course is to be considered as purely INTERNAL (with 100% internal marks only). Every student is expected to present a minimum of 2 seminars per semester before the evaluation committee and for each seminar, marks can be equally apportioned. The three member committee appointed by the Head of the Institution, consisting of the course coordinator and two experts from the Department, will evaluate the seminar and at the end of the semester, the marks shall be consolidated and taken as the final mark. The evaluation shall be based on the seminar paper (40%), presentation (40%) and response to the questions asked during presentation (20%).
- (b) The Industrial / Practical Training, Summer Project, Internship, shall carry 100 marks and shall be evaluated through internal assessment only. At the end of Industrial / Practical Training / Internship / Summer Project, the student shall submit an attendance certificate from the organization where he / she has undergone training and a brief report. The evaluation will be made based on this report and a viva-voce Examination, conducted internally by a three member Departmental Committee constituted by the Head of the Institution consisting of the course coordinator and two experts from the Department. The certificates (issued by the organization) submitted by the students shall be attached to the mark list sent by the Head of the Institution to the Controller of Examinations.

- (c) For all the courses under Employability Enhancement Courses Category, except the Project Work, the evaluation shall be done with 100% internal marks and as per the procedure described in clause 12.5 (a) / (b).

## **12.6 ASSESSMENT FOR VALUE ADDED COURSES**

The one / two credit course shall carry 100 marks and shall be evaluated through continuous assessments only. Two Assessments as per the clause 12.1 or 12.2 shall be conducted by the Department concerned. The total marks obtained in the assessments shall be reduced to 100 marks and rounded to the nearest integer. A committee consisting of the Head of the Department, staff handling the course and a senior faculty member nominated by the Head of the Institution shall do the evaluation process. The list of students along with the marks and the grades earned shall be forwarded to the Controller of Examinations for appropriate action at least one month before the commencement of End Semester Examinations. The grades earned by the students for Value Added Courses will be recorded in the Grade Sheet, however the same shall not be considered for the computation of CGPA.

## **12.7 ASSESSMENT FOR ONLINE COURSES**

Students may be permitted to credit two online courses (which are provided with certificate), subject to a maximum of six credits. The online course of 3 credits can be considered instead of one elective course. These online courses shall be chosen from the SWAYAM platform, provided the offering organisation conducts regular examination and provides marks. The credits earned shall be transferred and the marks earned shall be converted into grades and transferred, provided the student has passed in the examination as per the norms of the offering organisation. The details regarding online courses taken up by the student and marks/credits earned and the approval for the course from Centre for Academic Courses shall be sent to the Controller of Examinations, Anna University in the subsequent semester(s) along with the details of the elective(s) to be dropped.

12.8 Internal marks approved by the Head of the Institution shall be displayed by the respective HODs within 5 days from the last working day.

## **12.9 Attendance Record**

Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD', which consists of attendance marked in each lecture or practical or project work class, the test marks and the record of class work (topic covered), separately for each course. This should be submitted to the Head of the Department periodically (at least three times in a semester) for checking the syllabus coverage and the records of test marks and attendance. The Head of the Department will put his/her signature and date after due

verification. At the end of the semester, the record should be verified by the Head of the Institution who will keep this document in safe custody (for five years).

#### 12.10 Conduct of Academic Audit by every Institution

Every educational institution shall strive for a better performance of the students by conducting the internal assessments as mentioned in Clause 12.

In order to ensure the above, Academic Audit is to be done for every course taught during the semester. For the internal assessments conducted for each course as per details provided in Clause 12, the academic records shall be maintained in the form of documentation for the individual assignments / case study report / report of mini project submitted by each student and assessment test question paper and answer script. Report of industrial training / internship shall also be maintained, if applicable. For laboratory courses students' record shall be maintained. Further, the attendance of all students shall be maintained as a record. The Head of the Institution shall arrange to conduct the Academic Audit for every course in a semester by forming the respective committees with an external course expert as one of the members drawn from a Technical institution of repute near the institute.

### **13 REQUIREMENTS FOR APPEARING FOR UNIVERSITY EXAMINATIONS**

A student shall normally be permitted to appear for the University Examinations for all the courses registered in the current semester (vide clause 6) if he/she has satisfied the semester completion requirements (as per clause 7).

Further, examination registration by a student is mandatory for all the courses in the current semester and all arrear(s) course(s) for the University examinations failing which, the student will not be permitted to move to the higher semester.

A student who has already appeared for any course in a semester and passed the examination is not entitled to reappear in the same subject for improvement of grades.

### **14. PASSING REQUIREMENTS**

- 14.1 A student who secures not less than 50% of total marks prescribed for the course [Internal Assessment + End semester University Examinations] with a minimum of 45% of the marks prescribed for the end-semester University Examination, shall be declared to have passed the course and acquired the relevant number of credits. This is applicable for both theory and laboratory courses (including project work).

- 14.2 If a student fails to secure a pass in a theory course / laboratory course (except electives), the student shall register and appear only for the end semester examination in the subsequent semester. In such case, the internal assessment marks obtained by the student in the first appearance shall be retained and considered valid for all subsequent attempts till the student secures a pass. However, from the third attempt onwards if a student fails to obtain pass marks (IA + End Semester Examination) as per clause 14.1, then the student shall be declared to have passed the examination if he/she secures a minimum of 50% marks prescribed for the University end semester examinations alone.
- 14.3 If the course, in which the student has failed, is a Professional Elective or an Open Elective course, the student may be permitted to complete the same course. In such case, the internal assessment marks obtained by the student in the first appearance shall be retained and considered valid for all subsequent attempts till the candidate secures a pass. However, from the third attempt onwards if a candidate fails to obtain pass marks (IA + End Semester Examination) as per clause 14.1, then the candidate shall be declared to have passed the examination if he/she secures a minimum of 50% marks prescribed for the University end semester examinations alone. If any other Professional Elective or Open Elective course is opted by the student, the previous registration is cancelled and henceforth it is to be considered as a new Professional Elective or Open Elective course. The student has to register and attend the classes, earn the continuous assessment marks, fulfil the attendance requirements as per clause 7 and appear for the end semester examination.
- 14.4 If a student is absent during the viva - voce examination, it would be considered as fail. If a student fails to secure a pass in Project Work-I, the student shall register for the course again in the subsequent semester and can do Project Work-I and II together.
- 14.5 The passing requirement for the courses which are assessed only through purely internal assessments (EEC courses except Project Work and laboratory), is 50% of the internal assessment (continuous assessment) marks only.
- 14.6 A student can apply for revaluation of the student's semester examination answer paper in a theory course, as per the guidelines of the COE on payment of a prescribed fee along with prescribed application to the COE through the Head of the Institution. The COE will arrange for the revaluation and the results will be intimated to the student concerned through the Head of the Institution. Revaluation is not permitted for laboratory course and EEC courses.

## 15. AWARD OF LETTER GRADES

15.1 The award of letter grades will be decided using relative grading principle. 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
C(Satisfactory)	5
RA (Re-appearance)	0
SA (Shortage of Attendance)	0
W (Withdrawal)	0

A student is deemed to have passed and acquired the corresponding credits in a particular course if he/she obtains any one of the following grades: “O”, “A+”, “A”, “B+”, “B”, “C”.

‘SA’ denotes shortage of attendance (as per clause 7.3) and hence prevented 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 the Grade Sheet as well as in the Result Sheet. In both cases, the student has to appear for the End Semester Examinations as per the Regulations.

If the grade RA is given to Theory Courses/ Laboratory Courses it is not required to satisfy the attendance requirements (vide clause 7), but has to appear for the end semester examination and fulfil the norms specified in clause 14 to earn a pass in the respective courses.

If the grade RA is given to EEC course (except Project Work), which are evaluated only through internal assessment, the student shall register for the course again in the subsequent semester, fulfil the norms as specified in clause 14 to earn pass in the course. However, attendance requirement need not be satisfied.

15.2 For the Co-curricular activities such as National Cadet Corps (NCC)/ National Service Scheme (NSS) / NSO / YRC / Science club / Literary Club/ Fine Arts Club, a ‘ completed’ remark will appear in the Grade Sheet on successful completion of the same. Every student shall put in a minimum of 75% attendance in the training and attend the camp or events of the clubs compulsorily. The training and camp or club events 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 subsequent years. Successful completion of any one of the above co-curricular activities is compulsory for the award of degree.

15.3 The grades O, A+, A, B+, B, C obtained for the one/two credit course (not the part of curriculum) shall figure in the Grade Sheet under the title 'Value Added Courses/Internship/Industrial training'. The courses for which the grades obtained are RA, SA will not figure in the Grade Sheet.

#### 15.4 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 student has studied
- The list of courses registered 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 acquired for courses and the corresponding points to the sum of the number of credits acquired for the courses in the semester. CGPA will be calculated in a similar manner, considering all the courses registered from first semester. RA grades will be excluded for calculating GPA and CGPA.

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

where

- $C_i$  is the number of Credits assigned to the course
- $GP_i$  is the point corresponding to the grade obtained for each course  $n$  is number of all courses successfully cleared during the particular semester in the case of GPA and during all the semesters in the case of CGPA.

## **16.0 ELIGIBILITY FOR THE AWARD OF DEGREE**

**16.1** 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 and 6 years in the case of Lateral Entry) reckoned from the commencement of the first (third in the case of Lateral Entry) semester to which the candidate was admitted.
- iii. Successfully completed the NCC / NSS / NSO / YRC requirements.
- iv. No disciplinary action pending against the student.

## **16.2 CLASSIFICATION OF THE DEGREE AWARDED**

### **16.2.1 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 (6 semesters in the case of Lateral Entry) in the student's First Appearance within five years (Four years in the case of Lateral Entry). Withdrawal from examination (vide Clause 20) will not be considered as an appearance.
- Should have secured a CGPA of not less than 8.50.
- One year authorized break of study (if availed of) is included in the five years (four years in the case of lateral entry) for award of First class with Distinction.
- Should NOT have been prevented from writing end semester examination due to lack of attendance in any semester.

**16.2.2 B.E. / B. Tech. (Hons) Specialisation in the same discipline, B.E. / B. Tech. (Hons) and B.E. / B. Tech. minor in other specialisation.**

(i) B.E./B.Tech. Honours (specialisation in the same discipline):

- a. The student should have earned additionally a minimum of 18 credits from a vertical of the same programme.
- b. Should have passed all the courses in the first attempt.
- c. Should have earned a minimum CGPA of 7.50.

(ii) B.E / B.Tech. Honours

- A. The students should have earned additional courses (minimum of 18 credits) from more than one vertical of the same programme.
- B. Should have passed all the courses in the first attempt.
- C. Should have earned a minimum CGPA of 7.50.

(iii) B.E./B.Tech. (Minor in other specialisation)

The student should have earned additionally a minimum of 18 credits in any one of the verticals of other B.E/B.Tech programmes or from any one of the following verticals

VERTICAL I: FINTECH AND BLOCK CHAIN

VERTICAL II: ENTREPRENEURSHIP

VERTICAL III: PUBLIC ADMINISTRATION

VERTICAL IV: BUSINESS DATA ANALYTICS

VERTICAL V: ENVIRONMENT AND SUSTAINABILITY

2. Students can earn maximum of 6 credits in online mode (SWAYAM platform), out of these 18 credits as approved by Centre for Academic Courses
3. B.E. / B. Tech. (Hons) Specialisation in the same discipline, B.E / B.Tech. Honors and B.E./B.Tech. Minor in other specialisation degree will be optional for students.
4. For the categories 1 (i) to 1(ii), the students will be permitted to register the courses from V Semester onwards provided the marks earned by the students until III semester should be of CGPA 7.50 and above and cleared all the courses in the first attempt.
5. For the category 1 (iii), the students will be permitted to register the courses from Semester V onwards provided the marks earned by the students until Semester III is CGPA 7.50 and above.

6. If a student decides not to opt for Honours, after completing certain number of additional courses, the additional courses studied shall be considered instead of the Professional Elective courses which are part of the curriculum. If the student has studied more number of such courses than the number of Professional Elective courses required as per the curriculum, the courses with higher grades shall be considered for the calculation of CGPA. Remaining courses shall be printed in the mark sheet, however, they will not be considered for calculation of CGPA.
7. If a student decides not to opt for Minor, after completing certain number of courses, the additional courses studied shall be considered instead of Open Elective courses which are part of the curriculum. If the student has studied more number of such courses than the number of open electives required as per the curriculum, the courses with higher grades shall be considered for calculation of CGPA. Remaining courses shall be printed in the mark sheet, however, they will not be considered for calculation of CGPA.

### 16.2.3 First Class with Distinction

Degree (i)	Duration of programme (ii)	Duration permitted (iii)	Additional credits above the requirement of curriculum (iv)	CGPA (v)	Pass in (vi)	Break of study (vii)	Prevention due to lack of attendance	Withdrawal from writing end semester examination (viii)
B.E./B.Tech. (Regular)	4 years	5 years	-	8.50	First attempt	One year authorised break of study included in the Duration permitted (iii)	Not permitted	Will not be considered as an attempt
B.E./B.Tech. (sandwich)	5 years	6 years	-	8.50	First attempt	One year authorised break of study included in the Duration permitted (iii)	Not permitted	Will not be considered as an attempt
B.E./B.Tech. Lateral Entry	3 years	4 years	-	8.50	First attempt	One year authorised break of study included in the Duration permitted (iii)	Not permitted	Will not be considered as an attempt
B.E./B.Tech. (Honours) <b>Specialisation</b> in the same discipline	3/4/5 years (Lateral entry, Regular, Sandwich respectively)	4/5/6 years (Lateral entry, Regular, Sandwich respectively)	18 credits from any one vertical of the same programme	8.50	First attempt	One year authorised break of study included in the Duration	Not permitted	Will not be considered as an attempt

						permitted (iii)		
B.E./B.Tech. (Honours)	3/4/5 years (Lateral entry, Regular, Sandwich respectively)	4/5/6 years (Lateral entry, Regular, Sandwich respectively)	18 credits from more than one verticals of the same programme	8.50	First attempt	One year authorised break of study included in the Duration permitted (iii)	Not permitted	Will not be considered as an attempt
B.E./B.Tech. minor in other specialisation	3/4/5 years (Lateral entry, Regular, Sandwich respectively)	4/5/6 years (Lateral entry, Regular, Sandwich respectively)	18 credits from any one vertical of the other programme	8.50	First attempt	One year authorised break of study included in the Duration permitted (iii)	Not permitted	Will not be considered as an attempt

#### 16.2.4 First Class

Degree (i)	Duration of programme (ii)	Duration permitted (iii)	Additional credits (iv)	CGPA (v)	Pass in (vi)	Break of study (vii)	Prevention due to lack of attendance	Withdrawal from writing end
B.E./B.Tech. (Regular)	4 years	5 years	-	6.50	-	One year authorised break of study included in the Duration permitted (iii)	Included in the Duration permitted (iii)	-
B.E./B.Tech. (sandwich)	5 years	6 years	-	6.50	-	One year authorised break of study included in the Duration permitted (iii)	Included in the Duration permitted (iii)	-

B.E./B.Tech. Lateral Entry	3 years	4 years	-	6.50	-	One year authorised break of study included in the Duration permitted (iii)	Included in the Duration permitted (iii)	-
B.E./B.Tech. (Honours) Specialisation in the same discipline	3/4/5 years (Lateral entry, Regular, Sandwich respectively)	4/5/6/ years (Lateral entry, Regular, Sandwich respectively)	18 credits from any one vertical of the same programme	7.50	First attempt	One year authorised break of study included in the Duration permitted (iii)	Not permitted	Will not be considered as an attempt
B.E./B.Tech. (Honours)	3/4/5 years (Lateral entry, Regular, Sandwich respectively)	4/5/6 years (Lateral entry, Regular, Sandwich respectively)	18 credits from more than one verticals of the same programme	7.50	First attempt	One year authorised break of study included in the Duration permitted (iii)	Not permitted	Will not be considered as an attempt
B.E./B.Tech. Minor in other specialisation	3/4/5 years (Lateral entry, Regular, Sandwich respectively)	4/5/6 years (Lateral entry, Regular, Sandwich respectively)	18 credits from any one vertical of the other programme	6.50	-	One year authorised break of study included in the Duration permitted (iii)	Included in the Duration permitted (iii)	-

## **Second Class**

### **16.2.5 SECOND CLASS:**

B.E./B.Tech. Regular, sandwich and lateral entry and B.E./B.Tech. minor in other specialisation degree students (not covered in clauses 16.2.3 and 16.2.4) who qualify for the award of the degree (vide Clause 16.1) shall be declared to have passed the examination in Second Class.

16.2.6. Student earned additional 18 credits as per Clause 16.2.2 (i) and (ii) but does not satisfy the conditions mentioned in 16.2.3 or 16.2.4 shall not be awarded B.E./B.Tech.Honours. In such cases the mark sheet will show the additional courses studied and those courses shall not be considered for CGPA computation. In such case if the student becomes eligible for First Class, while computing CGPA without taking into account the additional course studied, the student shall be awarded B.E. / B.Tech. in First Class only

### **16.4 Photocopy / Revaluation**

A student can apply for photocopy of his/her semester examination answer paper in a theory course, as per the guidelines of the COE, on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of the Institutions. The answer script is to be valued and justified by a faculty member, who has handled the subject and recommend for revaluation with the breakup of marks for each question. Based on the recommendation, the student can register for the revaluation through proper application to the Controller of Examinations. The Controller of Examinations will arrange for the revaluation and the results will be intimated to the student concerned through the Head of the Institutions. Revaluation is not permitted for practical courses and EEC courses.

A student can apply for revaluation of answer scripts for not exceeding 5 subjects at a time.

### **16.5 Review**

Students not satisfied with Revaluation can apply for Review of his/ her examination answer paper in a theory course, within the prescribed date on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of the Institution. Students applying for Revaluation only are eligible to apply for Review.

## **17.0 PROVISION FOR AUTHORISED BREAK OF STUDY**

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

17.2 Break of Study shall be granted only once for valid reasons for a maximum of one year during the entire period of study of the degree programme. However, in extraordinary situation the candidate may apply for additional break of study not exceeding another one year by paying prescribed fee for break of study. If a candidate intends to temporarily discontinue the programme in the middle of the semester for valid reasons, and to rejoin the programme in a subsequent year, permission may be granted based on the merits of the case provided he / she applies to the Controller of the Examination in advance, but not later than the last date for registering for the end semester examination of the semester in question, through the Head of the Institution stating the reasons therefore and the probable date of rejoining the programme.

17.3 The candidates 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 Controller of the Examination in the prescribed format through Head of the Institution at the beginning of the readmitted semester itself for prescribing additional courses, if any, from any semester of the regulations in-force, so as to bridge the curriculum in-force and the old curriculum.

17.4 The authorized break of study would not be counted towards the duration specified for passing all the courses for the purpose of classification (vide Clause 18.0).

17.5 The total period for completion of the Programme reckoned from, the commencement of the first semester to which the candidate was admitted shall not exceed the maximum period specified in clause 5.1 irrespective of the period of break of study in order that he/she may be eligible for the award of the degree.

17.6 If any student is prevented for want of required attendance, the period of prevention shall not be considered as authorized 'Break of Study' (Clause 19.1)

## **18.0 PROVISION FOR WITHDRAWAL FROM THE EXAMINATIONS**

18.1 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.

18.2 Withdrawal application is valid if the student is otherwise eligible to write the examination (Clause 7) and if it is made within TEN days prior to the commencement of the examination in that course or courses and recommended by the Head of the Institution and approved by the Controller of Examinations. For a student to withdraw from a course / courses, he/she should have registered for the course, fulfilled the attendance requirements (vide clause 7) and earned continuous assessment marks.

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

18.4 In case of withdrawal from a course / courses (Clause 13) the course will figure both in Marks Sheet as well as in Result Sheet. Withdrawal essentially requires the student to register for the course/courses the student has to register for the course, fulfill the attendance requirements (vide clause 7), earn continuous assessment marks and attend the end semester examination. However, withdrawal shall not be construed as an appearance for the eligibility of a candidate for First Class with Distinction.

18.5 If a student applies for withdrawal from Project Work, he/she will be permitted for the withdrawal only after the submission of project report before the deadline. However, the student may appear for the viva voce examination within 30/60 days after the declaration of results for Project Work I and II respectively and the same shall not be considered as reappearance.

18.6 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 18.1

## **19.0 DISCIPLINE**

19.1 Every student is required to observe discipline and decorous behavior both inside and outside the college and not to indulge in any activity, which will tend to bring down the prestige of the college. The Principal shall constitute a disciplinary committee to enquire into acts of indiscipline and notify the institution about the disciplinary action recommended for approval. In case of any serious disciplinary action which leads to suspension or dismissal, then a special committee shall be constituted by the Head of the Institution for taking the final decision.

19.2 If a student indulges in malpractice in any test/examinations, the student shall be liable for punitive action as prescribed by the Committee members of the College from time to time.