# Vel Tech High Tech
# Dr.Rangarajan Dr.Sakunthala Engineering College

**An Autonomous Institution**

**Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai**

## REGULATIONS 2021

### CHOICE BASED CREDIT SYSTEM

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

This Regulation is applicable to the students admitted to B.E/B.Tech. Programmes from the academic year 2021-2022 and onwards.

## 1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In this Regulation unless otherwise the context specifies,

I "**Programme**" denotes Degree Programme that is B.E./B.Tech. Degree Programme.

II "**Discipline**" refers specialization or branch of B.E./B.Tech. Degree Programme, like Mechanical Engineering, Information Technology, etc.

III **"Course"** refers a theory or practical subject that is conventionally studied in a semester, like Engineering Graphics, Circuit Theory, etc.

IV "**Dean - Academics**" represent the authority of the Autonomous Institution who is responsible for all academic activities of the institute, for implementation of relevant rules and regulations.

V **"Controller of Examinations"** represent the Authority of the Institution who is responsible for all activities of the Semester End Examinations of all Departments and hereafter called CoE.

VI **"Head of the Institution"** is the Principal of the College.

VII **"Head of the Department"** are the Head of the Department concerned.

VIII **" University"** refers ANNA UNIVERSITY, Chennai

## 2. ADMISSION

**2.1 a Candidates seeking admission to the first semester of the eight semesters B.E./B.Tech. Degree Programme:**

Should have passed the Higher Secondary Examinations of (10+2) Curriculum-Academic Stream as 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 approved by the Syndicate of Anna University as equivalent thereto.

(OR)

Should have passed the Higher Secondary Examination of (10+2) Curriculum-Vocational stream (Vocational groups in Engineering / Technology) as prescribed by the Government of Tamil Nadu.

**2.1 b 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 corresponding B.E. / B.Tech., 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 Chairman, Board of Studies.

## 3 UG PROGRAMMES OFFERED

A student may be offered admission to any one of the disciplines of study approved by AICTE, New Delhi and Anna University, Chennai. Details of disciplines of study currently being offered by the Institution are listed below:

1. B.Tech. Artificial Intelligence and Data Science
2. B.Tech. Biotechnology
3. B.Tech. Chemical Engineering
4. B.E. Civil Engineering
5. B.E. Computer Science and Engineering
6. B.E. Computer Science and Engineering (Artificial Intelligence and Machine Learning)
7. B.E. Electronics and Communication Engineering
8. B.E. Mechanical Engineering
9. B.Tech. Information Technology

## 4 STRUCTURE OF PROGRAMMES

**4.1 Categorization of Courses**

Every B.E./B. Tech. Programme will have a curriculum with syllabi consisting of theory and practical courses that shall be categorized as follows:

I. **Humanities, Social Sciences and Management courses (HSMC)** include Technical English, Engineering Ethics and Human Values, Communication skills, Environmental Science and Engineering.

II. **Basic Sciences Courses (BSC)** include Mathematics, Physics, Chemistry, Biology, etc.

III. **Engineering Sciences Courses (ESC)** include Engineering Practices, Engineering Graphics, Basics of Electrical / Electronics / Mechanical / Computer, etc.

IV. **Professional Core Courses (PCC)** include the core courses relevant to the chosen specialization/branch of study.

V. **Honours Courses (HC)** include 6 additional courses (18 credits) over and above the courses prescribed in the respective curriculum. These courses should cover advanced topics within their field or emerging areas.

VI. **Professional Elective Courses (PEE)** include the elective courses relevant to the chosen specialization/ branch of study.

VII. **Open Elective (OE) Courses** include the courses from other branches which a student can choose from the list specified in the B.E/B.Tech programmes Curriculum.

VIII. **PROJECT / Employability Enhancement Courses (PROJ/EEC)** include Project Work, Internship and/or Mini project, Technical Seminar, Professional Practices and Industrial/Practical Training.

IX. **Mandatory Courses (MC)** include Environmental Sciences and Indian Constitution, Essence of Indian Traditional Knowledge **(Non-Credit)**

### 4.2 Credit requirements

Students securing a total of 165-170 credits stipulated by their respective programme of study are eligible to get the Under Graduate degree in engineering.

### 4.3 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 / 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 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 camps will normally be during vacation period.

**Science club** shall organize activities of popularization 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** shall organize colorful 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.

### 4.4 Number of courses per semester

Each semester curriculum shall normally have a blend of theory courses which includes integrated courses not exceeding 7 and practical courses including Project/Employability Enhancement Course(s) not exceeding 4. Each course may have credits assigned as per Clause 4.5. However, the total number of courses per semester shall not exceed 10.

### 4.5 Credit Assignment

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

| CONTACT PERIOD PER WEEK | CREDITS |
|---|---|
| 1 Lecture Period | 1 |
| 1 Tutorial Period | 1 |
| 1 Practical Period-(Laboratory / Technical Seminar / Internship / Mini Project Work / Project Work) | 0.5 |

### 4.6 Internship

The students should undergo Internship at Research organization / University/Reputed firms satisfying prescribed qualifications set by the department for the minimum period of 15 days prescribed in the curriculum during summer / winter vacation (after due approval from the Head of the Institution). Internship needs to be undergone continuously in one organization only.

In special cases, some students may be allowed to do mini project, after due approval from the HoD for the period prescribed during summer / winter vacation, in lieu of Internship.

### 4.7 Industrial Training

Every student is expected to undergo at least an Industrial training for a period of two weeks during summer / winter vacation from the second year of the

programme. Such students should submit Industrial training report in the specified format prescribed by the department. Industrial training is to be undergone continuously for the entire duration continuously in one organization only.

**4.8 Industrial Visit**

Every student is required/ expected to go for at least one Industrial Visit every year. The HoD shall ensure that necessary arrangements are made in this regard.

**4.9 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 respective Board of Studies.

Students shall be allowed to take these courses offered in other Departments also, but with the permission of the Head of the Institution of student.

**4.10 Online courses**

Students may be permitted to enroll and study a maximum of three Online Course instead of Open Elective / Professional Elective course with the approval of respective Board of Studies. Online Course of 3 credits can be considered instead of one Open Elective Course / Professional Elective course. The approved list of online courses will be provided by the respective department from time to time.

Students are permitted to enroll and study these courses through SWAYAM - NPTEL platforms and credit transfer is to be done based on the marks and certificate provided by the NPTEL. Credit transfer is allowed only for 12 weeks' course offered by NPTEL which is equivalent to 3 credit course in curriculum.

The students satisfying the following conditions shall be permitted to carry out their final semester Project work for six months in industry/research organizations.

The student shall adjust their eighth semester courses by applying credit transfer from NPTEL courses.

**4.11 Mandatory courses**

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

**4.12 Medium of Instruction**

The medium of instruction is ENGLISH for all Courses, Examinations, Technical Seminar Presentations and Project Report.

**4.13 Honours Courses**

**(i) B.E / B.Tech. (Hons.)**

a. The students should have taken additional courses from a specified group of Professional Electives (vertical) or from any of the verticals of the same programme and earned a minimum of 18 credits.

b. Should have passed all the courses prescribed in the curriculum and additional courses in the first attempt.

c. Should have earned a minimum of 7.50 CGPA taking into account of all the courses prescribed in the curriculum and additional courses.

**(ii) B.E./B.Tech. Minor with specialization in another discipline**

The student should have earned additionally a minimum of 18 credits in any one of the verticals offered from Engineering Disciplines / Science and Humanities / Management

1. For these 18 credits students can optionally enroll and study a maximum of 6 credits in online mode from SWAYAM-NPTEL platform (in addition to the three online courses permitted for courses of curriculum), as approved by the Board of Studies.

2. B.E / B.Tech. (Hons.) and B.E./B.Tech. minor with specialization in another discipline will be optional for students and the students shall be permitted to select any one of them only.

3. For the categories 4.13 (i), the students, including Lateral Entry, shall be permitted to register for the courses from Semester V onwards provided the students have earned a minimum CGPA of 7.50 until Semester III and have cleared all the courses in the first attempt.

4. For the category 4.13(ii), the students, including Lateral Entry, 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.

5. B.E/B.Tech. (Hons.) or B.E./ B.Tech. Minor shall be offered by the Department irrespective of the number of students enrolled.

6. If a student decides not to opt for Honours, after completing certain number of additional courses, such 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 grade sheet however, they will not be considered for calculation of CGPA and the same shall be indicated in a foot note appropriately.

If the student has failed in the additional courses or faced shortage of attendance, they will not be printed in the grade sheet and will not be considered for CGPA calculation and classification of degree.

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 grade sheet, however, they will not be considered for calculation of CGPA and the same shall be indicated in a foot note appropriately.

If the student has failed in the additional courses or faced shortage of attendance, they will not be printed in the grade sheet and will not be considered for CGPA calculation and classification of degree.

The student has to enroll for these additional courses separately and pay a tuition fee for studying these six additional courses and pay additional exam fee.

## 5 DURATION OF THE PROGRAMME

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

**5.2** Each semester shall normally consist of 75 working days or 540 periods of 50 minutes each. The Head of the Institution shall ensure that every teacher imparts instruction as per the number of periods specified in the syllabus and that the teacher teaches the full content of the specified syllabus for the course being taught.

**5.3** The Head of the Institution may conduct additional classes for improvement, special coaching, conduct additional assessment 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.

$$\text{Percentage of attendance} = \frac{\text{Total no of periods attended in all the courses per semester}}{\text{Total no of periods allotted in that semester as per curriculum}} \times 100$$

The commencement of respective Semester End Examination will ordinarily follow immediately after the last working day of the 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 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 a facility to drop courses to a maximum of 6 credits (vide clause 6.2). The student shall 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 department and forwarded to the Controller of Examinations. This registration is for undergoing the course as well as for writing the Semester End Examinations. No Elective course shall be offered by any department unless a minimum 20 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. The core (Theory/ Practical /EEC) courses / Professional Elective / open elective/ mandatory course that the student has not cleared in the previous semesters.

### 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 III to VIII semesters, the student has the option of dropping existing courses in a semester during registration. Total number of credits of such dropped courses cannot exceed 6. The student is permitted to drop the course(s) within 30 days of the commencement of the academic schedule.

**6.2.3** The student shall register for the project work in the final semester only.

**6.2.4** From the V to VIII semesters, the student has the option of registering for additional courses in a semester. With regard to enrolling for B.E. / B. Tech. (Hons) or B.E. / B. Tech. Minor The total number of credits that a student can add in a semester is limited to 6, subject to a maximum of 2 courses. Maximum number of credits enrolled in a semester (Honours and Minor) shall not exceed 36. The online courses registered for B.E. / B. Tech. (Hons.) and B.E. / B. Tech. minor shall be over and above this 36 credits.

**6.2.5** For a professional elective course and open elective course, minimum number of student's enrolment permitted shall be 20. However, the minimum number is not applicable for students enrolling B.E. / B. Tech. (Hons) and B.E. / B. Tech. Minor. For the offer of each professional elective at least two choices shall be offered.

## 7 ATTENDANCE REQUIREMENTS FOR COMPLETION OF THE SEMESTER

**7.1** A Candidate who has fulfilled the following conditions shall be deemed to have satisfied the requirements for completion of a semester. Ideally every student is expected to attend all classes of all the courses and secure 100% attendance. However, 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 as calculated as per clause 5.3.

**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 approved by the Head of the department. The same shall be forwarded to the Controller of Examinations for documentation 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 semester end 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 in clause 7.4

**7.4** If a student is ineligible from writing semester end examination of a course due to lack of attendance, the student has to re-enroll/register for that course again, when offered next. However, the student has to rejoin the programme in the next academic year after getting readmission order.

## 8 CLASS ADVISOR

There shall be a class advisor for each class. He / She will be appointed by the Head 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

## 9 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

concerned class. Its objective is to improve 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 improving academic performance, if any.

vi. Identifying the slow learning students, if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such slow learning students.

**9.2** The class committee for a class under a particular branch is normally constituted by the Head of the Department.

**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 department

**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 & 7 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 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 formulate 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 SYSTEM OF EXAMINATIONS

**11.1** Performance in each course of study shall be evaluated based on (i) Continuous Internal Evaluation (CIE) throughout the semester and (ii) Semester End Examination (SEE) 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.

For all theory courses, practical courses, courses with theory and laboratory components and project work, the Continuous Internal Evaluation will carry 40% weightage while the Semester End Examination will carry 60 % weightage.

**11.3** Internship and Technical seminar shall carry 100 marks and shall be evaluated through Continuous Internal Evaluation only.

**11.4** The Semester End 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 Semester End 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 3 or 4 students) by an external examiner and an internal examiner, followed by a viva-voce examination conducted separately for each student group by a committee consisting of external examiner, supervisor of the project group and an internal examiner.

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

## 12 PROCEDURE FOR AWARDING MARKS FOR CONTINUOUS INTERNAL ASSESSMENT

For all theory and practical courses (including project work) the Continuous Internal Evaluation shall be for a maximum of 40 marks. The Continuous Internal Evaluation shall be awarded as per the procedure given below.

### 12.1 Assessment for Theory Courses

The maximum marks for Internal Assessment shall be 40 in case of theory courses. Three tests each mentioned below for CIE shall be conducted during the semester by the Department / College concerned. Three assignments shall be given to each subject. The total marks obtained in all tests and assignments put together, shall be proportionately reduced for 40 marks and rounded to the nearest integer.

**Continuous Internal Evaluation (CIE)**

| Assessment1(100 Marks) | | Assesment2 (100 Marks) | | CIE Mark Calculation |
|---|---|---|---|---|
| Assignment/ Mini Project/ case study/ seminar | **CIA1** First 2.5 Units (Time Duration: 2 hours) | Assignment/ Mini Project/ case study/ seminar | **CIA2** Last 2.5 Units (Time Duration: 2 hours) | Total Assessment Marks |
| **40** | **60** | **40** | **60** | **200*** |
| *** CIE Mark = Proportionately reduced for 40 marks** | | | | |

**Semester End Examination (SEE)**

| Units Covered | Time Duration | Total Marks |
|---|---|---|
| All Five Units | 3Hours | 100 |

**Grade sheet will contain**

| CIE | SEE | Total Marks |
|---|---|---|
| **40** | **60** | **100** |

### 12.2 Assessment for Practical Courses

The maximum marks for Internal Assessment shall be 60 in case of practical courses. Every practical exercise / experiment shall be evaluated based on conduct of experiment / exercise and records maintained. The criteria for arriving at the Internal Assessment marks of 60 is as follows:

The total marks obtained in all tests and record book put together, shall be proportionately reduced for 60 marks and rounded to the nearest integer.

**Continuous Internal Evaluation (CIE)**

| Assessment (100 Marks) | | Total Assessment Marks |
|---|---|---|
| Evaluation of Laboratory Observation, Record | Model Exam All Experiments 3 Hours | |
| 75 | 25 | 100* |
| *** CIE Mark = Proportionately reduced for 60 marks** | | |

**Semester End Examination (SEE)**

| Experiments Covered | Time Duration | Total Marks |
|---|---|---|
| All Experiments | 3Hours | 100 |

**Grade sheet will contain**

| CIE | SEE | Total Marks |
|---|---|---|
| **60** | **40** | **100** |

### 12.3 Assessment for Theory Courses with Laboratory Component (Integrated Courses)

For a theory course with Laboratory component, there shall be two assessments: the first assessment (maximum of 100 marks) will be from theory portions and the second assessment (maximum marks 100 marks) will be for laboratory component. The sum of marks of all two assessments and record book shall be reduced to 50 marks and rounded to the nearest integer.

**Continuous Internal Evaluation (CIE)**

| Assessment1(100 Marks) [Theory Component] | | Assesment2 (100 Marks) [Laboratory Component] | | Total Assessment Marks |
|---|---|---|---|---|
| Assignment/ Mini Project/ case study/ seminar | **CIA1** All five Units 2 Hours | Evaluation of Laboratory Observation, Record | **Model Exam** All Experiments 3 Hours | |
| 40 | 60 | 75 | 25 | 200* |
| ***CIE mark = weighted average of two assessments converted into 50 marks** | | | | |

**Semester End Examination (SEE)**

| | Units Covered | Time Duration | Total Marks |
|---|---|---|---|
| **SEE1** | All Five Units | 3Hours | 100 |
| **SEE2** | All Experiments | 3Hours | 100 |

**Grade sheet will contain**

| CIE | SEE | Total Marks |
|---|---|---|
| **50** | **50** | **100** |

### 12.4 Assessment for Project based Theory courses

For a Project based theory courses, there shall be four assessments: the first two assessments (each with a maximum of 50 marks) will be from theory portions and the third assessment (maximum mark of 100) will also be from theory portion. The fourth assessment will be based on project work (maximum mark of 30). The

sum of marks of all three assessments and project work shall be reduced to 40 marks and rounded to the nearest integer.

**Continuous Internal Evaluation (CIE)**

| Continuous Internal Evaluation(CIE) (60 Marks) | | | | Semester End Examination(SEE) (40 Marks) | | | |
|---|---|---|---|---|---|---|---|
| **Review I** | **Review II** | **Review III** | | **Report Evaluation(20)** | **Viva – Voce (80)** | | |
| Review Committee (excluding guide) | Review Committee (excluding guide) | Review Committee (excluding guide) | Guide | External Examiner | Guide | External Examiner | External Examiner |
| **10** | **20** | **25** | **5** | **20** | **20** | **30** | **30** |

**Grade sheet will contain**

| CIE | SEE | Total Marks |
|---|---|---|
| **60** | **40** | **100** |

**12.5 Assessment for Mini Project Work**

Two mini projects will be carried out (Mini Project-I in second year and Mini Project-II in third year) during B. E / B. Tech degree programme. Mini project work may be allotted to a single student or to a group of students not exceeding 3 per group. The Head of the department shall constitute a review committee for project work for each branch of study. There shall be three reviews during the semester by the review committee. The student shall make 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 below).

**Continuous Internal Evaluation (CIE)**

| Continuous Internal Evaluation(CIE) (60 Marks) | | | | Semester End Examination(SEE) (40 Marks) | | | |
|---|---|---|---|---|---|---|---|
| **Review I** | **Review II** | **Review III** | | **Report Evaluation(20)** | **Viva – Voce (80)** | | |
| Review Committee (excluding guide) | Review Committee (excluding guide) | Review Committee (excluding guide) | Guide | External Examiner | Guide | External Examiner | External Examiner |
| **10** | **20** | **25** | **5** | **20** | **20** | **30** | **30** |

**Grade sheet will contain**

| CIE | SEE | Total Marks |
|---|---|---|
| **60** | **40** | **100** |

**12.6** The project report shall carry a maximum 20 marks. The project report shall be submitted as per the approved guidelines as given by Dean-Academics. Same mark shall be awarded to every student within the project group for the project report. The viva-voce examination shall carry 80 marks. Marks are awarded to each student of the project group based on the individual performance in the viva-voce examination.

**Assessment for Project Work**

Project work will be carried out in two different phases. Phase-I will be carried out in seventh semester and Phase-II will be carried out in eighth semester. Project work may be allotted to a single student or to a group of students not exceeding 3 per group. The Head of the department shall constitute a review committee for project work for each branch of study. There shall be three reviews during the semester by the review committee. The student shall make 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 below).

The project report shall carry a maximum 20 marks. The project report shall be submitted as per the approved guidelines as given by Dean-Academics. Same mark shall be awarded to every student within the project group for the project report. The viva-voce examination shall carry 80 marks. Marks are awarded to each student of the project group based on the individual performance in the viva-voce examination.

**12.7**

| **Continuous Internal Evaluation (40 Marks)** | | | | **Semester End Examination (60 Marks)** | | | |
|---|---|---|---|---|---|---|---|
| Review I | Review II | Review III | | Report Evaluation(20) | Viva – Voce (80) | | |
| Review Committee (excluding guide) | Review Committee (excluding guide) | Review Committee (excluding guide) | Guide | External Examiner | Guide | External Examiner | Internal Examiner |
| 10 | 10 | 15 | 5 | 20 | 20 | 30 | 30 |

If a candidate fails to submit the project report on or before the specified deadline, he/she is deemed to have failed in the Project Work and shall re-register for the same in a subsequent semester.

**12.8 Assessment for Internship**

The Internship shall carry 100 marks and shall be evaluated through Continuous Internal Evaluation only. At the end of Internship, the student shall submit a detailed report on the Internship undergone and a certificate from the organization concerned. The evaluation shall be based on this report (40%),

presentation (30%) and a Viva-Voce Examination (30%) conducted internally by a three-member Committee constituted by the HoD.

A photo copy of the 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.

| Report | Presentation | Viva-voce | Total Marks |
|---|---|---|---|
| 40 Marks | 30 Marks | 30 Marks | 100 Marks |

### 12.9 Assessment for Technical Seminar

The technical seminar shall carry 100 marks and shall be evaluated though Continuous Internal Evaluation only. Every student is expected to present a minimum of 1 seminar before the evaluation committee and for each seminar, marks can be equally apportioned. The three-member committee constituted by HoD will evaluate the seminar and at the end of the semester the marks can be consolidated and taken as the final mark. The evaluation shall be based on the seminar content draft (40%), presentation (30%) and response to the questions asked during presentation (30%).

| Technical Write-up | Presentation | Viva-voce | Total Marks |
|---|---|---|---|
| 40 Marks | 30 Marks | 30 Marks | 100 Marks |

### 12.10 Assessment for Online Courses

Students may be permitted to earn a maximum of three credits by completing Online Courses (which are provided with certificate) duly approved by Board of Studies. This Online Course of 3 credits can be considered as equal as one open Elective Course. The student needs to obtain certification to become eligible for writing the Semester End Examination to be conducted by the Institution. The scores obtained during online certification will be considered for Continuous Internal Evaluation.

### 12.11 Assessment for Value Added Courses

The students may **optionally undergo Value-Added Courses** and the credits earned shall be over and above the total credit requirement as prescribed in the curriculum. The credits earned through the value-added courses shall not be used for CGPA calculation. One / Two credit courses shall be offered by a Department of an institution with the prior approval from the respective Board of Studies. The minimum duration of one (two) credit value-added courses is 15 (30) periods of theory or a combination of theory and Laboratory may be offered (2 periods of laboratory = 1 period of theory).

The value-added courses shall carry 100 marks and shall be evaluated through internal assessments only.

a. Two Assessments shall be conducted preferably one in the middle and the other at the end of the course by the Department concerned.

b. The duration of assessment is one hour each.

c. The total marks obtained in the tests shall be reduced to 100 marks and rounded to the nearest integer.

d. A committee consisting of the Head of the Department, staff handling the course and a senior Faculty member nominated by the Head of the Department shall monitor the evaluation process. The grades shall be assigned to the students by the above committee based on their relative performance.

**12.12** Internal Marks approved by the CoE shall be displayed by the respective HoDs before the commencement of Semester End Examinations.

**12.13 Attendance and Assessment Record**

Every faculty member is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD' which consists of attendance marked for 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 verifying the syllabus coverage and the records of test marks and attendance. The Head of the department will affix his / her signature and date after due verification. At the end of the semester, the record should be verified by the Head of the Institution. The record must be kept in safe custody for a period of five succeeding years.

## 13. REQUIREMENTS FOR APPEARING FOR SEMESTER END EXAMINATIONS

A candidate shall normally be permitted to appear for the Semester End Examinations for all the courses registered in the respective current semester (vide clause 6) if he/she has satisfied the semester completion requirements (subject to Clause 7).

A candidate who has already appeared for any subject 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 candidate who secures not less than 50% of total marks prescribed for the course [Continuous Internal Evaluation + Semester End Examinations] with a

minimum of 45% of the marks prescribed for the Semester End Examination, shall be declared to have passed the course and secured / earned the relevant number of credits. This is applicable for both theory and practical courses (including project based courses, integrated courses, mini-project and project work).

**14.2** If a student fails to secure a pass in theory courses in the current semester examination, he/she is allowed to write arrear examinations in the subsequent semesters and their internal marks shall be carried over for consecutive semesters.

**14.3** The passing requirement for the courses which are assessed only through purely internal assessments (Internship / Technical seminar), is 50% of the Continuous Internal Evaluation (CIE) marks only.

**14.4** A student can apply for revaluation of the student's Semester End Examination answer paper in a theory course, within 2 weeks from the declaration of results, on payment of a prescribed fee along with prescribed application to the CoE through the Head of the Department. The CoE will arrange for the revaluation and the results will be intimated to the student concerned through the Head of the Department. Revaluation is not permitted for other courses.

**14.5 Assessment For Mandatory Courses**

For all mandatory courses (except Induction program and Personality and character development) Continuous Internal Evaluation (CIE) and Semester End Examination (SEE) will be similar to theory examination as per clause vide 12.

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

Mandatory 2-week long induction program WITHOUT ASSESSMENT for the UG students entering the institution will be conducted. Normal classes start only after the induction program is over. Its purpose is to make the students feel comfortable in their new environment, open them up, set a healthy daily routine, create bonding in the batch as well as between faculty and students, develop awareness, sensitivity and understanding of the self, people around them, society at large, and nature.

## 15. AWARD OF LETTER GRADES

All assessments of a course will be evaluated on absolute marks basis. However, for the purpose of reporting the performance of a candidate, letter grades, each carrying certain number of points, will be awarded as per the range

of total marks (out of 100) obtained by the candidate in each course as detailed below:

| Letter Grade | Grade Points | Marks Range |
|---|---|---|
| O (Outstanding) | **10** | **91 – 100** |
| A + (Excellent) | **9** | **81 – 90** |
| A (Very Good) | **8** | **71 – 80** |
| B + (Good) | **7** | **61 – 70** |
| B (Average) | **6** | **50 – 60** |
| RA (Failed in a course) | 0 | **<50** |
| SA (Short of Attendance) | 0 | |
| W (Withdrawal from Exam) | 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".

'SA' denotes shortage of attendance (as per clause 7.3) and hence ineligible for 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 appear for the End Semester Examinations in the subsequent semesters. 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 PROJ/EEC course, the attendance requirements (vide clause 7) should be satisfied.

**15.2** For the Co-curricular activities such as National Cadet Corps (NCC)/ National Service Scheme (NSS) / NSO / YRC, a satisfactory / not satisfactory grading will appear in the mark sheet. Every student shall put in a minimum of 75% attendance in the training and attend the camp compulsorily. The training and camp shall be completed before the second year end of the programme. A satisfactory grade in the above co-curricular activities is compulsory for the award of degree.

**15.3** **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 grades earned.
- 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.

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

where

$\boldsymbol{C_i}$ is the number of Credits assigned to the $i^{th}$ course

$\boldsymbol{GP_i}$ is the point corresponding to the grade earned in $i^{th}$ course

$\boldsymbol{n}$ 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 ELIGIBILITY FOR THE AWARD OF THE 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 secured 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 Semester end examinations and passed all the courses prescribed in all the 8 semesters within a maximum period of 7 years and 6 years in the case of Lateral Entry reckoned from the commencement of the first (third in the case of Lateral Entry) semester to which the candidate was admitted.

III. Successfully passed any additional courses prescribed by the Board of Studies, whenever readmitted under regulations R 2025 (vide clause 18.3)

IV. Successfully completed the NCC / NSS / NSO / YRC requirements.

V. No disciplinary action pending against the student.

VI. The award of Degree must have been approved by the Academic Council.

### 16.2 CLASSIFICATION OF THE DEGREE AWARDED

#### 16.2.1 First Class with Distinction

A student who satisfies the following conditions shall be awarded with the degree in **First class with Distinction**:

- Should have passed the examination in all the courses of all the eight

semesters and 6 semesters in the case of Lateral Entry in the student's First Appearance within **Five** years and **Four** years in the case of Lateral Entry. Withdrawal from examination (vide Clause 17) 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 and 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 First Class**

A student who satisfies the following conditions shall be awarded with the degree in **First class**:

- Should have passed the examination in all the courses of all eight semesters within six years (should have passed 6 semesters within five years in the case of Lateral Entry)
- One-year authorized break of study (if availed of) or prevention from writing the End Semester examination due to lack of attendance (if applicable) is included in the duration of six years for award of First class
- Should have secured a CGPA of not less than **7.00.**

**16.2.3 Second Class**

All other students (**not covered in clauses 16.2.1 and 16.2.2)** who qualify for the award of the degree **(vide Clause 16.1)** shall be awarded with the degree in Second Class.

A candidate who is absent in semester end examination in a course / project work after having registered for the same shall be considered to have appeared in that examination for the purpose of classification. (Subject to clause 17 and 18)

**16.3 Photocopy / Revaluation**

A candidate can apply for photocopy of his/her semester examination answer paper in a theory course, within 2 weeks from the declaration of results, on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of Department. The answer script is to be valued and justified by a faculty member, who handled the subject and recommend for revaluation with breakup of marks for each question. Based on the recommendation, the candidate 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 candidate

concerned through the Head of the Department. Revaluation is not permitted for other courses.

A candidate can apply for revaluation of answer scripts for not exceeding 5 courses at a time.

**16.4 Review**

Candidates not satisfied with Revaluation results 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 CoE through the Head of the Department.

**Candidates applying for Revaluation only are eligible to apply for Review.**

## 17 PROVISION FOR WITHDRAWAL FROM SEMESTER END EXAMINATION

**17.1** A student may, for valid reasons, (prolonged hospitalization / accident / specific illness medically unfit / unexpected family situations / sports approved by Chairman, sports board and HOD) shall be granted permission to withdraw from appearing for the end semester examination in any course or courses in ANY ONE of the semester examinations during the entire duration of the degree programme. The application shall be sent to Principal through the Head of the Department with required documents.

**17.2** 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 HoD and duly approved by the Principal.

**17.3** 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.

**17.4** In case of withdrawal from a course / course (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 semester end examination. However, withdrawal shall not be construed as an appearance for the eligibility of a candidate for First Class with Distinction.

**17.5** Withdrawal is permitted for the end semester examinations in the final semester only if the period of study the student concerned does not exceed 5 years as per clause 16.2.1

## 18 PROVISION FOR AUTHORISED BREAK OF STUDY

**18.1** A student is permitted to go on break of study for a maximum period of one

year as a single spell.

**18.2** 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 Principal in advance, but not later than the last date for registering for the semester end examination of the semester, through the HoD stating the reasons therefore and the probable date of rejoining the programme.

**18.3** 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 the Principal in the prescribed format through Head of the Department at the beginning of the readmitted semester itself for prescribing additional courses, if any, from any semester of the regulations in-force, so as to bridge the curriculum in-force and the old curriculum.

**18.4** 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 16.2).

**18.5** 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.

**18.6** If any student is prevented for want of required attendance, the period of prevention shall not be considered as authorized 'Break of Study' (Clause 18.1)

## 19 DISCIPLINE

**19.1** Every student is required to exhibit disciplined and decorous behavior both inside and outside the college and not to indulge in any activity which will tend to bring down the prestige of the College. The Head of Institution shall constitute a disciplinary committee consisting of Head of Institution, two Heads of Department of which one should be from the faculty of the student, to enquire into acts of indiscipline and notify the Head of the Institution about the disciplinary action recommended for approval. In case of any serious disciplinary action which leads to suspension or dismissal, then a committee shall be constituted including one representative from Anna University, Chennai. In this regard, the member will be nominated by the University on getting information from the Head of the Institution.

**19.2** If a student indulges in malpractice in any of the semester or internal

examination, he / she shall be liable for punitive action as prescribed by the Institution from time to time.

## 20 SPECIAL CASES

In the event of any clarification in the interpretation of the above rules and regulations, they shall be referred to the Academic Appeals Board. The Academic Appeals Board will offer suitable interpretations/ clarifications / amendments required for special case on such references and get them ratified in the next meeting of the Academic Council. The decision of the Academic Council will be final.

## 21 REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

The institution may from time to time revise, amend or change the Regulations, Curriculum, Syllabus and scheme of examinations through the Academic Council.