

**St. JOSEPH'S COLLEGE OF ENGINEERING**  
(An Autonomous Institution)  
**REGULATIONS 2025**

**CHOICE BASED CREDIT SYSTEM**

**Common to all M.E. / M.Tech. Full-Time Programmes**

(For the students admitted to M.E. / M.Tech. Programme from the Academic year 2025- 2026 onwards)

**1. DEFINITIONS AND NOMENCLATURE**

- i. **“Programme”** means Degree Programme e.g. M.E. / M.Tech. Degree Programme.
- ii. **“Specialization”** means discipline of the Post Graduate Degree Programme like Manufacturing Engineering, Power Electronics and Drives, etc.
- iii. **“Course”** means a Theory or Practical subject that is normally studied in a semester, like Applied Probability and Statistics, Advanced in Manufacturing Technology, Electronic System Design Lab., etc
- iv. **“Controller of Examinations”** means the Authority of the Institution who is responsible for all activities of the End Semester Examinations of the Institution.
- v. **“Head of the Institution”** means the Principal of the Institution.
- vi. **“Head of the Department”** means Head of the Department concerned.
- vii. **“University”** means ANNA UNIVERSITY, CHENNAI.

**2. ADMISSION PROCEDURE**

The candidates seeking admission to the two-year /five-year programme shall require satisfying the eligibility norms prescribed by the affiliating University and Government of Tamilnadu at the time of admission from time to time.

**2.1 Eligibility Criteria**

**M.E. :** A pass in the respective Engineering Bachelor’s Degree (or) equivalent from a recognized university as specified under qualification for admission as per the Tamil Nadu Common Admission (TANCA) criteria. Those who are awaiting their degree examination results may also apply.

**M. Tech (5 years):** Candidates for admission to the first semester of the Ten-semester Integrated M. Tech degree programme shall be required to have passed: The Higher secondary examination of the (10+2) curriculum Academic Stream or Vocational stream prescribed by the Government of Tamil Nadu, any other examinations of any other University or authority accepted by the University

(OR)

Any other qualification as prescribed by the University.

### **3. PROGRAMMES OFFERED AND MODE OF STUDY**

A student may be offered admission to any one of the programme of study approved by the University

#### **P.G. PROGRAMMES OFFERED**

- **M.E** (Computer Science & Engineering), Full Time (2 Years)
- **M.Tech** (Computer Science & Engineering), Full Time (5 Years)

#### **3.1 Mode of Study:**

Candidates applying for M.E./M.Tech. programme are admitted only under “Full-Time” and should be available in the College / Institution during the entire duration of working hours (From Morning to Evening on Full-Time basis) for the curricular, co-curricular and extra-curricular activities assigned to them.

The Full-Time candidates should not attend any other Full-Time programme (s) / course(s) or take up any Full-Time job / Part-Time job in any Institution or Company during the period of the Full-Time programme. Violation of the above rules will result in cancellation of admission to the PG programme.

### **4. STRUCTURE OF THE PROGRAMMES**

#### **4.1 Categorization of Courses**

Every Programme shall have a curriculum with syllabi comprising of Theory, Theory-cum-Practical and Practical courses with well-defined Programme Outcomes (PO) and Programme Educational Objectives (PEO) as per the Outcome Based Education (OBE) model prescribed by the respective Board of Studies from time to time. The content of each course is designed based on the intended Course Outcomes (CO). The courses shall include:

- Foundation Courses (FC)** which include Mathematics or other basic courses.
- Professional Core Courses (PCC)** which include the core courses relevant to the chosen

branch / specialization.

**iii) Professional Elective Courses (PEC)** which include the elective courses relevant to the chosen branch / specialization.

**iv) Research Methodology and IPR Courses (RMC)** to understand the importance and the process of creation of patents through research.

**v) Open Elective Courses (OEC)** offered by a department to the students of other departments across all the disciplines. The students can choose from list of courses categorized under open elective courses.

**vi) Employability Enhancement Courses (EEC)** which include project work, and /or Internship, seminar, professional practices, case study, value-added courses, audit courses, industrial/practical training, etc.

**vii) Audit Courses (AC)** expose the students to Unnat Bharath Abhiyan, Constitution of India, Essence of Indian Knowledge Traditional, Yoga, English for Research Paper Writing, Value education, Pedagogy Studies, Stress Management and Personality Development through Life Enlightenment Skills. Registration for any of these courses is optional to students.

#### 4.2 Courses per Semester

Curriculum of each semester shall normally have a blend of theory courses and practical courses including Employability Enhancement Courses. The online Courses may be accounted based on the regulation. Each course may have credits assigned as per **clause 4.3**. However, the total number of courses per semester shall not exceed 6 for M.E./ M. Tech (5 Year) and practical courses not exceeding 3 (including EEC). Pre-final semester may have 1 to 3 (2 Years), 1 to 6 (5 Years) theory courses, 1 to 2 practical courses (2 Years) and Project Work Phase I (2 & 5 Years). The final semester may have Project Work phase II.

#### 4.3 Credit Assignment

Each course is assigned certain number of credits based on Table 1. The Contact Periods per week for Practical can only be in multiples of 2. Credit for a course shall vary from 1 to 4.

**Table 1 – Credits for Contact Period(s)**

Contact Period per week	Credits
1 Lecture (L) Period	1
1 Tutorial (T) Periods	1
2 Practical Periods	1

- i. ONE credit is assigned to ‘Industrial training/ Internship’ for every ‘TWO WEEKS’ duration.
- ii. ONE credit is assigned to ‘SWAYAM / NPTEL courses for every ‘FOUR WEEKS’ duration.

#### **4.4 Project Work**

The project work consists of Phase-I and Phase-II for M.E./ M.Tech. programme. The Phase-I is to be undertaken during III semester (2 Years), IX semester (5 Years), Phase- II, which is a continuation of Phase-I is to be undertaken during IV semester (2 Years) , IX semester (5 Years) for M.E./ M.Tech.

In case, the students are not completing Phase-I of project work successfully, they can undertake Phase-I again in the subsequent semester. In such cases they can enroll for Phase-II, only after successful completion of Phase-I.

Project work shall be carried out under the supervision of a faculty member possessing PG degree with a minimum of 3 years of experience in teaching (or) Ph.D. degree.

A student may, however in certain cases, be permitted to work on the project in an Industrial / Research organization on the recommendation of the Head of the Department, with the approval of the Head of the Institution. In such cases, the project work shall be jointly supervised by a Faculty member (Supervisor) of the department and an Engineer / Scientist from the organization and the student shall be instructed to report the progress periodically and to attend the project reviews for evaluating the progress. These students will produce a certificate of attendance from the Industry / Research organization where the project is carried out.

Phase II of the Project work shall be pursued for a minimum of 16 weeks during the final semester.

The deadline for submission of final Project Report is 60 calendar days from the last working day of the semester in which project / thesis / dissertation is done. However, the Phase-I of the Project work shall be submitted within the last working day of the semester as per the academic calendar published by the Institution.

If the project report is not submitted on or before the specified deadline, an extension of time up to a maximum limit of two months will be given to the students for the submission of project work with due approval obtained from the Head of the Department.

#### **4.4 Online Courses**

Students will be permitted to do online courses during 1<sup>st</sup> to 3<sup>rd</sup> semesters for M.E. and 3<sup>rd</sup> to 8<sup>th</sup> Semesters for Integrated M. Tech with final certification exams (NPTEL) to earn up to a maximum of six credits (which are provided with certificate after evaluation of the performance) with the prior approval from the Head of the Department. The Head of the Department can constitute a committee, a team of senior faculty members (preferably three) to recommend the list of online courses. On successful completion of each online course, the student has to submit the copy of the certificate to the Head of the Department. The committee recommends the credit and the grade that should be awarded to the student by appropriately mapping the score earned by the student. The results can be sent to the Controller of Examinations after the due approval by the Head of the Department. On successful completion of online courses adding to six credits, the student can

obtain a waiver from doing either a Professional Elective or an Open Elective.

#### 4.5 Internship

The students may undergo Internship for a period as specified in the Curriculum during the summer / winter vacation. The students may undergo Internship at a Research organization / University / industry (after due approval from the Heads of the Departments) continuously for the entire period. If Internship is not prescribed in the curriculum, the student may undergo Internship optionally and the credits earned through the Internship shall be over and above the total credit requirement for the award of the degree. The credit distribution is based on Table 2.

**Table 2** Credit distribution for Internship

<b>Duration of Internship</b>	<b>Credits</b>
2 Weeks	1
4 Weeks	2

1 Week = 40 Internship Hours

#### 4.6 Value Added Courses

Students may optionally undergo value added courses and the credits earned through the value-added courses shall be over and above the total credit requirement prescribed in the curriculum for the award of the degree. The Head of the Department can constitute a committee, a team of senior faculty members (preferably three) to recommend the list of value added courses. One/two credit courses shall be offered by a department with the prior approval from the committee. The details of the syllabus, timetable and faculty may be sent to the controller of examinations after approval from the Head of the Department. Students can take a maximum of two “one credit courses” or one “two credit course”. They shall be allowed to take one/two credit courses offered in other departments with the permission of the head of the department offering the course.

#### 4.7 Off Campus Courses and Transfer of Credits

Students are permitted to optionally enroll and study a maximum of three off campus course and Department level Course Approval Committee (DAC) shall approve the Off Campus Courses towards attaining Industrial Employability and fulfilling the Curriculum Gap.

**4.7.1** Students are permitted to optionally 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. The number of credits and transfer of credits are based on the procedure explained in Table 3. DAC shall assign the grades to the students based on their relative performance, if the number of students enrolled is more than 30, else grades shall be assigned based on Table 4. The mapping of marks with grades is applicable only if the student passes the course as per the guidelines of NPTEL.

**Table 3: Duration of the course and Number of credits**

Sl. No.	No. of Weeks	No. of Credits
1.	4	1
2.	8	2
3.	12	3
4.	16	4

**Table 4: Mapping of Marks scored in NPTEL course and Credits earned**

Letter Grades	Marks
<b>O</b>	<b>88-100</b>
<b>A+</b>	<b>76-87</b>
<b>A</b>	<b>64-75</b>
<b>B+</b>	<b>52-63</b>
<b>B</b>	<b>40-51</b>

**4.7.2** Students are permitted to optionally enroll and study the courses in physical / hybrid / online modes offered by reputed Central / State funded Universities / Institutions which are in the top 100 positions in the latest NIRF ranking and also conducting examination towards award of marks and grades. (NIRF Ranking of any of the last three years with respect to the year in which course is to be registered; NIRF ranking is based on respective stream for professional elective courses and based on any stream for open elective courses). Students are also permitted to enroll and undergo such courses in Online mode at Universities abroad in top 500 in QS ranking in the last three years. Students are also permitted to study courses of a particular semester in a University / Institution abroad based on MoU. A learning agreement shall be evolved to map all the courses offered in the programme and the courses offered in university abroad as per the procedure outlined by the Academic Council. The credits earned by the students in the University abroad shall be transferred based on the decision of DAC and approved by the Head of the Institutions. Students can enroll for the courses with the approval of DAC only if the course is offered directly by Institution/University and not through the edutech platforms

#### **4.8 Audit Courses**

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

#### 4.9 Industrial Visit

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

#### 4.10 Medium of Instruction

The medium of instruction is English for all courses, examinations, seminar presentations and project/thesis/dissertations reports.

### 5. DURATION OF THE PROGRAMMES

The minimum and maximum period for completion of the P.G programmes are given in **Table 5**

**Table 5** Duration of PG Programme

<b>Programme</b>	<b>Min. No. of Semesters</b>	<b>Max. No. of Semesters</b>
<b>M.E. (Full- Time) (2 years)</b>	4	8
<b>M. Tech (Full- Time) (5 years)</b>	10	20

Each semester normally consists of 90 working days. In any contingent situation, the number of working days per semester shall not be less than 75 days. The Head of the Institution is given the discretionary powers to decide the number of working days in such contingencies.

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.

For regulations, the academic year has been divided into two semesters, the Odd semester normally spanning from July to November and the Even semester from January to May.

The First semester of M.E. / M. Tech (2 Year & 5 Years) Programme normally spans from August to December and Second semester from January to May.

The total duration for completion of the programme reckoned from the commencement of the first semester to which the student was admitted shall not exceed the maximum duration specified in Table 5, irrespective of the period of break of study (**vide clause 17**) or prevention (**vide clause 7.4**), in order that the student may be eligible for the award of the degree (**vide clause 14**).

## **6. COURSE REGISTRATION**

- i. Each student on regular admission has to register for all the courses prescribed in the first year of study.
- ii. A student has to earn the minimum number of total credits specified in the curriculum of the chosen programme of study in order to be eligible to obtain the degree. However, a student can earn more than the minimum number of credits, if he/she wish. In such cases, the minimum number of credits required for the completion of the programme alone would be considered for CGPA calculation.
- iii. The registration for the courses of the semesters II to IV & III to X will commence 10 working days prior to the commencement of classes of the current semester. The student shall register for the courses with the guidance of his faculty mentor. The student may also drop courses (**vide clause 6.1**) within 5 working days of the commencement of the concerned semester and complete the registration process.
- iv. For an elective to be offered, the department shall specify the minimum number of students required.
- v. After registering for a course, a student should attend classes, satisfy attendance requirements (**vide clause 7**), earn continuous assessment and appear for the End Semester Examinations.

### **6.1 Flexibility to Add or Drop courses**

A student has to earn the total number of credits specified in the curriculum of the respective programme of study in order to be eligible to obtain the degree. However, if the student wishes, the student is permitted to earn more than the total number of credits prescribed in the curriculum of the student's programme within the minimum duration of the programme.

From II to IV (2 years) & III to X (5 years) onwards, 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 (2 years) & 8 credits (5 years) for full time subject to a maximum of 2 courses. The dropping of courses shall be decided as per prerequisite requirements in consultation with the Head of the Department. The student can also register for courses in which the student had failed in the earlier semesters. In such cases the student shall do reappearance registration for those courses for which the attendance requirement is not compulsory. However, if a student has failed in a professional / open elective, he/she has the option to take up the same or some other professional / open elective.

### **6.2 Redoing a Course**

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

**6.2.1** If a student is prevented from writing end semester examination of any core course due to lack of attendance, the student has to register for that course again when offered next and redo the



course.

6.2.2. If a student is prevented from writing the end semester examination of any professional/open elective course due to lack of attendance, the student can opt to register for the same course again when offered next and redo the course, or he/she can opt to register for a different professional/open elective course when it is offered, attend classes, fulfill the attendance requirements as per clause 7, secure Continuous Assessment marks and appear for End Semester Examinations.

6.2.3 If a student fails to secure a pass in any theory or Laboratory course (including elective theory), he/she is given a maximum of three consecutive attempts to complete the course as per **Clause 11**. The internal assessment marks will be valid only for next three consecutive semesters. However during that period, the student shall have a choice to carry forward the internal assessment marks for reappearance, or can be allowed to redo the internal assessment if necessary.

6.2.4 If the course in which the student fails to secure a pass even after three arrear attempts is a professional/open elective course, then the student can opt for a different professional/ open elective course, register for the same when it is offered, attend classes, fulfill the attendance requirements as per clause 7, secure Continuous Assessment marks and appear for End Semester Examinations.

6.2.5 The student who fails in Project work shall register for the course again, when offered next, and redo the course. In this case, the student shall attend there views and fulfill the attendance requirements as per clause 7.

6.2.6 The student who fails in Seminar / Internship / Case Study and Creative and Innovative project shall register for the same in the subsequent semester and redo the course. In this case, the student shall attend the classes and fulfill the attendance requirements as per clause 7.

6.2.7 If a student 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-enroll for the same in a subsequent semester. This applies to both Phase–I and Phase–II of the Project Work for M.E./ M.Tech (2 Years & 5 Years).

6.2.8 If a student fails in the end semester examinations of Phase–I, he/she has to revise the Project Report and submit within 30 days from the date of declaration of the results. If he/she fails in the End semester examination of Phase–II of Project work for M.E./ M.Tech , he/she shall revise the Project Report and submit within 60 days from the date of declaration of the results. The submission of a revised project report and subsequent viva- voce examination will be considered as reappearance with payment of exam fee. For this purpose the same Internal and External examiners shall reassess the revised report.

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

A student who has fulfilled the following conditions (**vide clause 7.1 and 7.2**) shall be deemed to

have satisfied the attendance requirements for appearing for the end semester examination of a particular course.

- 7.1 Ideally every student is expected to attend all periods and earn 100% attendance. However, the student shall secure not less than 75% attendance, course wise, taking into account the number of periods required for that course, as specified in the curriculum.
- 7.2 If a student secures attendance between 65% and less than 75% in any course in the current semester, due to medical reasons (hospitalization / accident / specific illness) or due to participation in the College / University / State / National / International level Sports events, with prior permission from the Principal Competent Authority and Head of the Department concerned, the student shall be given exemption from the prescribed attendance requirement and the student shall be permitted to appear for the end semester examination of that course. In all such cases, the students should submit the required documents on joining after the absence to the Head of the Department through the Faculty Advisor.
- 7.3 A student shall normally be permitted to appear for the end semester examination of the course if the student has satisfied the attendance requirements (vide Clause 7.1 – 7.2) and has registered for the examination in those courses of that semester by paying the prescribed fee.
- 7.4 Students who do not satisfy clause 7.1 and 7.2 and who secure less than 65% attendance in a course will not be permitted to write the end semester examination of that course. The student has to register and redo the course when it is offered next as per Clause 6.2. If the course in which the student has been prevented is a professional/ open elective, the student can opt to redo the same course or opt for different professional/ open elective course.
- 7.5 If a student has shortage of attendance in all the registered courses, he/she would not be permitted to move to the higher semester and has to repeat the current semester in the subsequent year.
- 7.6 In the case of reappearance (Arrear) registration for a course, the attendance requirement as mentioned in Clauses 7.1 - 7.3 is not applicable. However, the student has to register for the examination in that course by paying the prescribed fee.
- 7.7 A student who has already appeared for a course in a semester and passed the examination is not entitled to reappear for the same course for improvement of letter grades /marks.

## **8. FACULTY ADVISOR**

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

The responsibilities of the faculty advisor shall be:

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

## **9. COURSE COMMITTEES**

### **9.1 Common Course Committee**

A theory course handled by more than one teacher shall have a "Common Course Committee", comprising of all teachers teaching that course. One of the teachers shall be nominated as Course Coordinator by the Head of the Department concerned.

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

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

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

### **9.2 Overall Monitoring Committee**

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

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

## **10. SYSTEM OF EXAMINATION AND ASSESSMENT PROCEDURE**

Performance in each course of study shall be evaluated based on

- i. Continuous internal assessment throughout the semester
- ii. End Semester Examinations (ESE) at the end of the semester.

Each course, both theory / integrated and practical including project work shall be evaluated for a maximum of 100 marks.

For all the End semester examinations, wherever necessary, the internal and external examiners shall be appointed by the Controller of Examinations.

Each course shall be evaluated for a maximum of 100 marks as detailed in **Table 6 & 7**

**Table 6 Mark Distribution (2 Years/5 Years)**

<b>S.No.</b>	<b>Category of course</b>	<b>Continuous Internal</b>	<b>End-Semester</b>
1.	Theory Courses	50 Marks / 40 Marks	50 Marks / 60 Marks
2.	Theory Courses with Laboratory	50 Marks / 40 Marks	50 Marks / 60 Marks
3.	Laboratory courses	50 Marks / 60 Marks	50 Marks / 40 Marks
4.	Project Work	50 Marks / 60 Marks	50 Marks / 40 Marks
5.	All other EEC Courses	100 Marks / 100 Marks	----
6.	Value added Courses	100 Marks / 100 Marks	----

There is no evaluation for Audit Courses. However, minimum attendance requirement as per clause 7 shall be satisfied.

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

### **10.1 Assessment for Theory Courses**

For Theory Courses including mandatory courses out of 100 marks, the maximum marks for Continuous assessment is fixed as 50/40 and the End Semester Examination carries 50/40marks. The End Semester Examination for theory courses including mandatory courses will be of 3 Hours duration and shall normally be conducted for a maximum of 100 marks between November /December during the Odd Semesters and between April/May during the Even Semesters. End semester

Examination is mandatory requirement for passing the Course.

To arrive the Continuous Assessment Mark, the guideline to be followed is provided in the Table 7.

**Table 7** Internal Assessment Mark Distribution

S.No.	Category Details	Marks
1.	<b>Assessment I</b>	20/15
2.	<b>Assessment II</b>	20/15
3.	Employability online Test/Mini Projects/ Scopus indexed publications/ Online MCQs/ Case studies/Tutorials/Innovative Projects idea generation/ Problem solving and Implementation	10/10
<b>Total</b>		50/40

In case a student misses the assessment due to medical reasons (hospitalization / accident / specific illness) or due to participation in the College / University / State / National / International level Sports events with prior intimation from the Head of the institution, a Reassessment may be given after getting approval from the Head of the Department through the concerned Faculty advisor.

### 10.2 Assessment for Theory Courses with Laboratory Component

The maximum marks for Internal Assessment shall be 50 in case of theory courses with Laboratory component.(i.e.) Each course shall be evaluated for a maximum of 100 marks as shown in **Table 8** below:

**Table 8** Internal Assessment Mark Distribution for theory courses

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

### 10.3 Assessment for Laboratory Courses

Each laboratory Courses shall be evaluated for a maximum of 100 marks. Every laboratory exercise / experiment shall be evaluated based on the student performance during the laboratory class and the student's record shall be maintained. The End Semester Examination will be conducted for 3 hours duration and shall normally be conducted for a maximum of 100 marks by **Examiner other than the**

concerned laboratory course handling faculty.

**Table 9** Mark Distribution for Laboratory Courses

Sl. No	Description	Marks
1	<b>Internal Assessment</b> Average mark awarded for Design and conduct of experiments (10 Marks), observation / coding / implementation (10 Marks), Results (10 Marks), Viva-Voce (10 Marks) and Record (10 Marks) in regular class works, Model Exam.	50/60
2	<b>End Semester Practical Examinations</b> conducted by <b>Internal Examiner appointed by Controller of Examinations.</b>	50/40
<b>Total</b>		100

Examination shall normally be conducted between October and December during the odd semesters and between April and June during the even semesters.

#### 10.4 Assessment for Project work

The evaluation of Project Work for Phase I and Phase II for M.E. / M.Tech done independently in the respective semesters and marks shall be allotted as per the Weightage given below,

The Project work shall be evaluated for a maximum of 100 marks of which 50 marks will be through internal assessment. The Head of the Department (HOD) shall assign a Project Coordinator and constitute a review committee consisting of supervisor, project coordinator and another faculty member from the Department. There should be three reviews for each phase in the case of M.E. / M.Tech. (Phase I and Phase II) to be conducted separately by the review committee with Internals 50 marks and External 50 marks. The marks are to be distributed as detailed below in Table 10 & 11.

**Table 10** Internal Assessment Mark Distribution for Project work (2 Years)

Project Work	Internal (50 Marks)						External (50 Marks)				
	Review - I		Review - II		Review - III		Project Evaluation (30 Marks)		Viva- Voce (20 Marks)		
Phase - I & Phase - II	Supervisor	Committee	Supervisor	Committee	Supervisor	Committee	Internal	External	Supervisor	Internal	External
		5	10	5	10	10	10	15	15	5	5

**Table 11** Internal Assessment Mark Distribution for Project work (5 Years)

Continuous Assessment 60 Marks (By supervisor and Committee Members)			End semester Examination 40 Marks		
Review I	Review II	Review III	Project Report Evaluation 20 marks	Viva-Voce 20 marks	
10	25	25	External	Internal	External
			20	10	10

**10.4.1** There shall be three assessments (each 100 marks) during the semester by a review committee. The student shall make presentation on the progress made before the committee. The total marks obtained in the three assessments shall be reduced to 50/60 marks and rounded to the nearest integer. The Project Report prepared according to approved guidelines and duly signed by the supervisor(s), Project Coordinator and the Head of the Department and shall be submitted to the Head of the Department.

The evaluation of the Project work Phase - I and Phase - II (M.E. / M.Tech.) shall be based on the project report submitted in each of the Phase – I and Phase - II semesters respectively and a Viva-Voce Examination by a team consisting of the supervisor, internal examiner (other than the supervisor) and External Examiner. The Project Coordinator shall act as Internal Examiner. The External examiner shall be appointed by the Chairman of the respective Faculty from the panel of examiners submitted by the HOD for Phase – I and Phase – II project evaluation in the case of M.E. / M. Tech.

**10.4.2.** If the student fails to obtain 50% of the internal assessment marks in the Phase–I and Phase–II in the case of M.E. / M.Tech., he / she will not be permitted to submit the report for that particular semester and has to re-enroll for the same in the subsequent semester.

**10.4.3** The deadline for submission of final Project Report is 60 calendar days from the last working day of the semester in which project / thesis / dissertation is done. However, the Phase-I of the Project report in the case M.E. / M.Tech. shall be submitted within a maximum period of 30 calendar days from the last working day of the semester as per the academic calendar published by the University or the Re-opening of next semester whichever is earlier.

**10.4.4.** If a student fails to submit the project report on or before the specified deadline, student is deemed to have failed in the Project Work and shall re-enroll for the same in a subsequent semester. This applies to both Phase-I and Phase-II in the case of M.E. / M.Tech. In case of students of M.E. / M.Tech. not completing Phase - I of Project work successfully, the students can undertake Phase - I again in the subsequent semester. In such cases, the students can enroll for Phase-II, only after successful completion of Phase I.

A copy of the approved project report after the successful completion of viva- voice examinations shall be kept in the library of the college /institution

### **10.5 Assessment for Seminar / Case Study/ Creative and Innovative project**

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

<b>Seminar Paper</b>	<b>Presentation</b>	<b>Viva-Voce</b>	<b>Total Marks</b>
40	40	20	100

### **10.6 Assessment for Internship**

The Industrial Training / Internship shall carry 100 marks and shall be evaluated through continuous assessment only as per Table 12. At the end of the Internship, the student shall submit a certificate from the organization where the student has undergone training and a brief report about the training. The evaluation will be made based on this report, presentation and a Viva-Voce Examination conducted internally by a three member Departmental Committee consisting of one coordinator and two members constituted by the Head of the Department. Certificates (issued by the Organization) submitted by the student shall be attached to the mark list and sent to the Controller of Examinations by the Head of the Department.

**Table 12** Internal Assessment Mark Distribution for Internship

<b>INTERNSHIP EVALUATION</b>		
<b>REPORT</b>	<b>PRESENTATION</b>	<b>VIVA – VOCE</b>
40	30	30



### **10.7 Assessment for Value Added Course**

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

### **10.8 Assessment for Online Course**

On successful completion of each online course, the student has to submit the copy of the certificate to the Head of the Department. The Head of the Department shall form a team of senior faculty members (preferably three) for recommending the credit and the grade that should be awarded to the student by appropriately mapping the score earned by the student. The results can be sent to the Controller of Examinations after the due approval by the Head of the Department. On successful completion of online courses adding to three credits, the student can obtain a waiver from doing either a Professional Elective or an Open Elective.

### **10.9 Assessment for Industry Oriented Course**

The evaluation of the Industry Oriented Courses are fully internal and shall be done by the course coordinator from the institution and the mentor from the firm.

(a) If the course involves certification from an identified firm/company, then 20% of the total marks will be included in the internal assessment marks, 30% will be included from the marks provided by the firm and 50% shall be evaluated by the respective Course Coordinators of the college by conducting appropriate theory and / or laboratory tests.

(b) If there is no certification from the firm/company, then 50% will be included from the marks provided by the firm and 50% shall be evaluated by the respective Course Coordinators of the college by conducting appropriate theory and / or laboratory tests.

<b>Category</b>	<b>Internal assessment marks</b>	<b>Firm</b>	<b>Course coordinators (theory and / or laboratory tests)</b>
<b>Certification</b>	<b>20%</b>	<b>30%</b>	<b>50%</b>
<b>No certification</b>	<b>-</b>	<b>50%</b>	<b>50%</b>

#### **10.9.1 Procedure to drop Professional Elective / Open Elective course(s) and computation of Grade point**

A student may accumulate up to 6 credits through such courses, and such credits will be considered in lieu of the Professional Elective and/or Open Elective courses. In this regard, a student is permitted to drop either 1 or 2 Professional Elective / Open Elective course(s) as per the procedure given below.

No. of Professional elective / open elective can be dropped	No. of credits considered for GPA / CGPA Calculation	No. of IOCs	Total No. of credits earned
1	3	2	3 (2 credits + 2 credits )
2	6	3	6 (3*2 credits)

- ❖ The credits earned by the student of the successfully completed Skill Based Courses shall be recorded in the grade sheet.
- ❖ If a student has not successfully completed the skill-based courses during the semesters VII, VIII and IX, then the same shall not be recorded in the grade sheet.
- ❖ If a student earns 2 credits in Semester VII and then enrolls for another 2 credits in Semester VIII, then he / she is permitted to drop one Professional elective/ open elective course in Semester VIII. Further, if the student earns 4 credits upto Semester VIII and enrolls for another 2 credits in Semester IX , then he/she is permitted to drop an additional professional elective/open elective course in the IX semester.

If the student has enrolled for Industry oriented courses but has not successfully earned 4 or 6 credits and also dropped 1 or 2 PE/OE courses in anticipation of pass, then he/she has to enroll the PE/OE (as the case may be) to meet the total credit requirements to earn the degree.

### **10.10 Conduct of Academic Audit by the Department**

Every department shall strive for a better performance of the students by conducting the continuous assessments as mentioned in Clause 10 and that is followed by the end semester examination, as the case may be. The Head of the Department shall arrange to conduct the Academic Audit once in every year for all the courses conducted in the respective semesters through external expert(s) approved by the Head of the Institution.

- In order to ensure the above, Academic Audit is to be done for every course taught during the semester.
- For the continuous assessments conducted for each course (as per details provided in Clause 10), the academic records shall be maintained for the activity based evaluation and assessment test question paper and answer script. Report of industrial training / internship shall also be maintained, if applicable. For laboratory courses the students' record and course coordinator's system of evaluation shall be maintained. Further, the attendance of all students shall be maintained as a record.
  - The academic audit shall include verification of all the academic records pertaining to the Regulation in- force, the attendance and assessment record, CO, PO attainment records, student's and course coordinators feedback of the courses, and the overall teaching-learning process based on Bloom's taxonomy. Action shall be taken by HOD based on audit report for continuous improvement. Academic documents of UG degree programmes should be available with the department for 3/6 years.

## **11 PASSING REQUIREMENTS**

11.1 The passing requirement for a student in a course is determined based on the marks obtained both in continuous assessment and end semester examinations. A student, who secures not less than 50% of total marks prescribed for the course [continuous Internal Assessment + End semester Examinations] earns a minimum of 6 grade points in a course subject to secure a minimum of 45% marks in the end semester examinations, wherever applicable, shall be declared to have successfully passed the course.

11.2 If a student fails to secure a pass in theory courses/ laboratory course in the current semester examination, he/she is allowed to write arrear examinations. The internal assessment marks will be valid only for the next three consecutive semesters. However during that period, the student shall have a choice to carry forward the internal assessment marks for reappearance, or can be allowed to redo the internal assessment, if necessary.

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

11.4 Double valuation is adopted for all the theory courses in order to overcome any subjectivity in single valuation in the end semester examinations. So the provision for revaluation does not arise. The marks whichever is higher, that will be considered for final mark of the student.

11.5 If the difference in the total marks awarded is greater than 15 between the first and second valuation, Third valuation will be carried out. Highest marks awarded in the two valuations having difference less than 15 marks, will be the final mark. However, if a student wants to appeal for review of the result in any subjects, he / she can submit a challenge review application to COE office. A committee consisting of the Head of the Department, concerned faculty advisor and a subject expert (Internal / External) nominated by the Head of the Institution will review and give its recommendations to the Controller of Examinations.

### **11.6 Supplementary Examinations**

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

## 12 AWARD OF LETTER GRADES

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

Range of Total Marks (TM) (Continuous assessment + End Semester Examinations)	Letter Grade	Grade Points
$91 \leq TM \leq 100$	O	10
$81 \leq TM \leq 90$	A+	9
$71 \leq TM \leq 80$	A	8
$61 \leq TM \leq 70$	B+	7
$50 \leq TM \leq 60$	B	6
$0 \leq TM < 50$	RA	0
Shortage of Attendance	SA	-
Absent	AB	0
Audit Course	AU	-
Course Withdrawal	W	-

As per the guidelines of Anna University, relative grading using a software, shall be followed for those students who passed the examination as per the passing requirements. The evolved relative grading method normalizes the results data using the BOX-COX transformation method and computes the grade range for each course separately and awards the grade to each student. For a given course if the student strength is greater than thirty, the relative grading method shall be adopted. However, if the student's strength is less than or equal to thirty, then the fixed grading shall be followed with the grade range as specified below

Letter Grade	O	A+	A	B+	B	C	U
Range of total marks	91-100	81-90	71-80	61-70	56 - 60	50 - 55	< 50
Grade point	10	9	8	7	6	5	0

For those students who have not passed "U" grade (re-appearance) shall be awarded.

- Fixed grading for Laboratory, Project work and pure internal courses.
- Award of Letter Grades - Six letter grade system instead of 5 letter grade system.

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

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

'W' indicates withdrawal from the course.

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

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

### 13 GPA AND CGPA CALCULATION

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

- The list of courses registered during the semester and the grades scored.
- The Grade Point Average (GPA) for the semester
- The Cumulative Grade Point Average (CGPA) of all courses registered from first semester onwards.

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

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

Where  $C_i$  - is the Credits assigned to the course

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

$n$  - is number of all Courses successfully cleared during the particular semester in the case of GPA and during all the semesters in the case of CGPA.

CGPA will be calculated in a similar manner, considering all the courses enrolled from first semester.

“RA” and “SA” grades will be excluded for calculating GPA and CGPA.

The credits earned through one / two credit courses shall not be considered for calculating GPA and CGPA.

If a student studies a greater number of electives (PEC/OEC) than required as per the student's programme curriculum, the courses with higher grades alone will be considered for calculation of CGPA.

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

A student shall be declared to be eligible for the award of the M.E. / M.Tech. Degree provided the student as,

- Successfully gained the required number of total credits as specified in the curriculum corresponding to the student's programme within the stipulated time.
- Successfully completed the course requirements, appeared for the End-Semester examinations and passed all the subjects prescribed in all the 4 semesters within a maximum period of 4 years reckoned from the commencement of the first semester to which the candidate was admitted.
- Successfully passed any additional courses prescribed by the Board of Studies.
- No disciplinary action is pending against the student.
- The award of Degree must have been approved by the Syndicate of the University.

## **15 CLASSIFICATION OF THE DEGREE AWARDED**

### **15.1 First Class with Distinction:**

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

- 15.1.1. Should have passed the examination in all the courses of all the four semesters in the student's first appearance within three years, which includes authorized break of study of one year. Withdrawal from examination will not be considered as an appearance.
- 15.1.2 Should have secured a CGPA of not less than 8.50.
- 15.1.3 Should not have been prevented from writing end semester examination due to lack of attendance in any of the courses.

### **15.2 First Class:**

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

- 15.2.1. Should have passed the examination in all the courses of all four semesters within three years which includes one year of authorized break of study (if availed) or prevention from writing the End Semester Examination due to lack of attendance (if applicable).
- 15.2.2 Should have secured a CGPA of not less than 7.00.

### **15.3 Second Class:**

All other students (not covered in clauses 15.1 and 15.2) who qualify for the award of the degree (vide Clause 14) shall be declared to have passed the examination in Second Class.

A student who is absent in the End Semester Examination in a course / project work after having registered for the same shall be considered to have appeared in that examination (except approved withdrawal from end semester examinations as per clause 16) for the purpose of classification.

## **16 PROVISION FOR WITHDRAWAL FROM EXAMINATION**

A student may, for valid reasons, (medically unfit / unexpected family situations / sports approved by Head of the Institution, and HOD) be granted permission to withdraw from appearing for the end semester examination in any course or courses in ANYONE of the semester examinations during the entire duration of the degree programme. The application shall be sent to the Head of the Institution through the HOD with the required documents.

Withdrawal application shall be valid only if the student is otherwise eligible to write the examination (Clause 7) and if it is made within TEN working days before the commencement of the end semester examination in that course or courses and also recommended by the Head of the Department.

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

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

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

Withdrawal is permitted for the end semester examinations in the final semester only if the period of study of the student concerned does not exceed 3 years for M.E. and 6 years for M. Tech with approval of **Controller of Examinations**

## **17 BREAK OF STUDY FROM A PROGRAMME**

A student is permitted to go on break of study for a fixed period of one year as a single break in the entire course of study.

When a student applies for break of study, the student shall apply to the Head of the Institution in advance. The application duly filled by the student shall be submitted through the Head of the Department.

The students permitted to rejoin the programme after break of study / prevention due to lack of attendance, shall be governed by the Curriculum and Regulations in force at the time of rejoining. The students rejoining in new Regulations shall apply to the Academic Council in the prescribed format through the Head of the Department at the beginning of the readmitted semester itself for prescribing additional/equivalent courses, if any, from any semester of the regulations in-force, so as to bridge the curriculum in-force and the old curriculum.

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

In case there is any period of break of study more than the permitted duration of break of study, the student shall be permitted to continue the programme only if the approval is obtained from the Director of Technical Education /University through the Head of Institution before the end of the semester in which the student has taken break of study.

If a student has not reported to the department for a period of two consecutive semesters without any intimation, the name of the student shall be deleted permanently from the college enrollment. Such students are not entitled to seek readmission under any circumstances.

## **18 PROCEDURE FOR USING SCRIBE**

If a candidate is physically handicapped (in case of accidents / ill health) at the time of examination, He / she may be permitted to use a scribe to write the examination. In such case 30 minutes extra time will be permitted for continuous assessment test and 60 minutes for end semester examination. The Scribe shall be a non-engineering student / graduate.

## **19 DISCIPLINE**

Every student is required to observe disciplined and decorous behavior both inside and outside the college and not to indulge in any activity which will tend to bring down the prestige of the institution.

In the event of an act of indiscipline being reported, the Head of the Institution shall constitute a disciplinary committee to enquire into act of indiscipline.

The Head of the Institution shall constitute a disciplinary committee consisting of the Head of the department to which the student concerned belongs, and the Heads of other department 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 by the Head of the Institution for taking a final decision.

If a student indulges in malpractice in any of the examinations, the student shall be liable for punitive action as prescribed by the institution from time to time.

## **20 REVISION OF REGULATIONS, CURRICULUM AND SYLLABI**

The Academic council of the college reserves the right to revise or change or amend the regulations, the scheme of examinations, the curriculum and the syllabi from time to time if found necessary.