PSG INSTITUTE OF TECHNOLOGY AND APPLIED RESEARCH

COIMBATORE – 641 062

(Autonomous Institution Affiliated to Anna University)



2025 Regulations

for

B.E. and B.Tech. Degree Programmes

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2025 REGULATIONS FOR FOUR-YEAR B.E. AND B.Tech. DEGREE PROGRAMMES

(for students admitted in academic year 2025 – 2026, and subsequently under Choice-Based Credit System) *****

NOTE: The regulations hereunder are subject to amendments as may be made by the academic council of the college from time to time. Any or all such amendments will be effective from such date, and to such batches of students (including those already undergoing the programme) as may be decided by the academic council.

1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

1.1. In the following regulations unless the context otherwise requires:

1.1.1. Programme means B.E./B.Tech. degree programme

1.1.2. Branch means specialisation or discipline of B.E./B.Tech. degree programmes, like Artificial Intelligence and Data Science, Civil Engineering, etc.

1.1.3. Course means a theory or laboratory-integrated theory or practical course that is normally studied in the semester

1.1.4. University means Anna University, Chennai

1.2. CONDITIONS FOR ADMISSION

Students for admission to the B.E./B.Tech. degree programme will be required to satisfy the conditions of admission prescribed by the University and Government of Tamilnadu.

2. DURATION OF THE PROGRAMME*

2.1. Minimum Duration: The programme will extend over a period of four years leading to the Degree of Bachelor Engineering (B.E.) / Bachelor of Technology (B.Tech.) of Anna University. The four academic years will be divided into eight semesters with two semesters per academic year. Each semester shall normally consist of 90 working days including examination days.

2.2. Maximum Duration: The student shall complete all the passing requirements of the B.E./B.Tech. degree programme within a maximum period of 7 years (6 years for lateral entry); these periods are reckoned from the commencement of the semester to which the student was first admitted to the programme.

***** *Provision is made for lateral entry of students in the third semester of the programme in all branches of study and they will be required to satisfy the conditions of admissions thereto prescribed by the Anna University and Government of Tamil Nadu*.

3. B.E./B.Tech. PROGRAMMES OFFERED

The following are the branches of study under B.E./B.Tech. degree programme:

B.E. Civil Engineering
B.E. Computer Science and Engineering
B.E. Electrical and Electronics Engineering
B.E. Electronics and Communication Engineering
B.E. Instrumentation and Control Engineering
B.E. Mechanical Engineering
B.E. Robotics and Artificial Intelligence
B.Tech. Artificial Intelligence and Data Science
B.Tech. Electronics Engineering (VLSI Design and Technology)

4. STRUCTURE OF PROGRAMMES

4.1. Course Work: The course work of the odd semesters will normally be conducted in odd semesters and that of even semesters, in even semesters.

4.2. Curriculum: The curriculum will comprise courses of study as given in *section 17* in accordance with the prescribed syllabi. The hours per week mentioned for each of the courses refers to periods per week. The curriculum consists of:

4.2.1. Basic Sciences (BS) courses include Mathematics, Physics, Chemistry, Biology, etc.

4.2.2. Humanities, Social Sciences and Management Courses (HSMC) include Professional English, Communication skills, etc.

4.2.3. Engineering Sciences (ES) courses include Engineering Practices, Engineering Graphics, Basics of Civil / Mechanical / Electrical / Electronics / Instrumentation / Computer Engineering, etc.

4.2.4. Professional Core (PC) courses include the core courses relevant to the chosen branch.

4.2.5. Professional Elective (PE) courses include the elective courses relevant to the chosen branch. Professional elective courses are offered under verticals (specialisation groups)

4.2.6. Open Elective (OE) courses include the courses offered by a branch to other branches, from the list specified in the respective curriculum of the B.E. / B. Tech. programmes

4.2.7. Employability Enhancement Courses (EEC) include mini-project, project work, internship, soft skills development / business and managerial communications / quantitative and reasoning skills/ problem solving courses, etc.

4.2.8. Mandatory Courses (MC)

4.2.9. Induction Programme (IP) and

4.2.10. AICTE Activity Point Programme

4.3. Electives: Every student shall opt for electives from the list of electives of the respective degree programme as given in *section 17*, in consultation with tutor, programme coordinator and the head of the department. A student shall study six professional elective courses and two open elective courses. The professional elective and open elective courses will be offered from the 4th semester to the 8th semester. The minimum number of credits to be earned for professional elective courses is 18 and the minimum number of credits to be earned for open elective courses is 6. The professional elective courses are offered by the department to the students of their own branch only, and open elective courses are courses offered by a department to students of other branches.

Students can opt out of a maximum of three elective courses (both professional and open elective courses put together), by studying online courses, self-directed learning courses and/or three one-credit courses (equivalent to one elective course). Only one elective course can be opted out in lieu of one-credit courses

4.4. Online Course (SWAYAM based NPTEL): Students can register and earn credits for NPTEL courses approved by the department committee consisting of the head of the department, the programme coordinator, and a faculty member who is a subject expert. The list of NPTEL courses is to be approved by the academic council on the recommendation of the chairperson of the respective board of studies before the beginning of the corresponding semester, or may be ratified in the subsequent academic council meeting, as approved by the head of the institution.

Students may pursue NPTEL courses from 4th semester to 7th semester for getting exemption for professional/open elective courses in the subsequent semester. Any NPTEL course studied by a student during break of study period shall not be considered for exempting a professional elective or an open elective course.

The NPTEL courses of duration 12 weeks will be considered as 3-credit courses. The mapping of the marks with the grades is given in Table 1.

Table 1 Grade Assignment based on NPTEL Mark

Letter Grade	Mark Range
S	91 - 100
A+	81 - 90
A	71 - 80
B+	66 - 70
B	61 - 65
C+	56 - 60
C	50 - 55
U	< 50

4.5. Self-Directed Learning Course: These courses are not text book-based courses but are based on various attempts made by researchers to solve a specific problem as available in quality journals. These courses will not have specific course titles. The course under this category will have three credits.

A student, under the guidance of a faculty member who has completed a PhD degree, can register for the self-directed learning course from the 3rd semester, after obtaining approval from the head of the institution for the recommendation made by the department committee consisting of the head of the department, programme coordinator, and a faculty member who is a subject expert. The student should choose a specific problem after conducting a literature survey and solve the problem. An article based on this work must be communicated for publication in journals that are indexed in both SCOPUS and/or SCI databases. The respective student and the guide shall be the first and second authors, and the maximum number of authors permitted is two. After the publication of the article, the student can seek exemption for one professional/open elective course in the subsequent semester (from the 5th semester to the 8th semester for B.E. and B.Tech. programmes. The grade will be awarded based on the quality of publication, as mentioned in Table 2.

Table 2 Grade Point Assignment for Self-Directed Learning Course

Category of Journal	Grade Point
Publication that is indexed in both SCOPUS and SCI databases	S
Publication that is indexed in SCOPUS or SCI database	A+

4.6. Project Work: Every student shall be required to undertake a suitable project in industry / research organisation / department in consultation with the head of the department and the faculty member guide, and submit the project report thereon at the end of the semester in which the student registered for the project work on date announced by the college/department. For B.E. and B. Tech. programmes students shall register for the mini-project I in 4th semester, mini-project II in the 6th semester, project work I in 7th semester and project work II in 8th semester.

4.7. Internship / Community project: For B.E. and B.Tech. programmes**,** every student has to earn credit by internship / community project in the 5th semester. Internship I / community project is to be carried out during the 4th semester vacation. The community project must provide a sustainable solution for a socially relevant problem. Additionally, every student shall earn one credit by internship in the 7th semester, by taking up Internship II during the 6th semester vacation. An internship / community project of one credit is equivalent to 40 hours of work.

4.8. Induction Programme: All students shall undergo an induction programme at the beginning of the first semester for a duration of three weeks as per the guidelines of All India Council for Technical Education (AICTE). A student completing the induction programme will be awarded a completed grade in the grade sheet, and only the students who complete the induction programme shall be considered as eligible for award of degree subject to satisfying other conditions. A student who does not complete the induction programme in the first semester shall redo the same in the subsequent semester.

4.9. AICTE Activity Point Programme: Every student is required to earn activity points by performing community service and allied activities, in addition to earning the required academic credits. The regular student, who is admitted to the 4-year degree programme, is required to earn a minimum of 100 activity points. The student entering the 4-year degree programme through lateral entry is required to earn a minimum of 80 activity points. Three hours of participation is equivalent to one activity point. From the 2nd semester (3rd semester for lateral entry) to the 6th semester, 20 activity points are to be earned every semester, by performing the activities during the weekends and/or holidays during the semester. These activities will be coordinated by NSS / NCC / Sports / Saansad Adarsh Gram Yojana (SAGY) coordinator / career development centre (CDC) and/or the student department.

Every student is required to prepare a file containing documentary proof of activities, done by him/ her. This file will be duly verified by NSS / NCC / Sports / Saansad Adarsh Gram Yojana (SAGY) coordinator / career development centre / department. The student will be provided a certificate from the concerned coordinator and head of the institution.

The student should earn all the specified activity points before he/she appears for his/her end semester examinations. However, there will be neither grades/marks for these activity points (these points will not be accounted for CGPA calculation). If a student fails to earn all the prescribed activity points, the 8th semester grade sheet shall be issued only after earning those activity points.

4.10. One-Credit Course: Students can also opt for one-credit industry-oriented courses, each of 15 hours duration for theory course, and 30 hours for practical course, offered by experts from industry / other institutions on specialized topics. Students can complete such one-credit courses during the 3rd semester to 7th semester, as and when these courses are offered by the departments. The student may also register for the one-credit courses offered by departments other than the student department, provided the student has fulfilled the necessary prerequisites of the course as prescribed by the department offering the course.

There is no limit on the number of one-credit courses a student can register and successfully complete. However, the number of professional/open elective courses for which the student seeks exemption for having studied one-credit courses shall not exceed one.

After completing the required number of one-credit courses, if a student wishes to avail exemption for a professional elective course, he/she can do so in writing to the respective head of the department, before the commencement of 5th or 6th or 7th or 8th semester. The grades of the students successfully completing the one-credit courses will be based on the absolute grading system.

The grades earned by the students for the one-credit courses which are not opted for conversion in lieu of a professional/open elective course, will not be included in the computation of CGPA.

4.11. Mandatory Courses: The student shall study the mandatory courses prescribed and the grade will be mentioned in the grade sheet. However, it will not be considered for computation of CGPA.

4.12. Course Enrollment and Registration:

4.12.1. Each student, on admission shall be assigned to a faculty mentor for the entire duration of the programme. During enrolment, the faculty mentor shall advise and counsel the student about the details of the academic programme and the choice of courses considering the student's academic background and career objectives.

4.12.2. Each student on admission shall register for all the courses prescribed in the curriculum in the student's first semester of study. In the case of lateral entry students, they shall register for all the courses prescribed in the curriculum in the third semester of study.

4.12.3. From third semester onwards (fourth semester in the case of lateral entry students), a student has the option to drop one theory course (except professional core courses) in a semester. The maximum number of credits the student can register in a particular semester cannot exceed 36 credits including courses registered for Honours / Minor Degree, and the course for which the student has registered for redo.

4.12.4. In case of a student dropping a course of study in any semester, he/she shall register for that course in the next given opportunity and also earn necessary attendance in that course to become eligible to appear for the end-semester examination in that course.

4.12.5. The courses to be offered in any semester for candidates who need to reappear or have attendance shortage, etc. will be decided by the head of the department.

4.12.6. After registering for a course, a student shall attend classes, satisfy the attendance requirements, earn continuous assessment marks, and appear for the end-semester examinations.

The enrolment for all the courses of the 2nd semester will commence 10 working days prior to the last working day of the 1st semester. The student shall confirm the enrollment by registering for the courses within the first 5 working days after the commencement of the 2nd semester. The enrollment for the courses of the 3rd semester to 8th semester will commence 10 working days prior to the last working day of the preceding semester.

The student shall enroll for the courses with the guidance of the faculty mentor. If the student wishes, the student may drop a course within 5 working days after the commencement of the corresponding semester and complete the registration process duly authorised by the faculty mentor.

4.13. Credit Assignment: Each course is assigned a certain number of credits based on Table 3.

Table 3 Contact Period per Week and Credits

Contact Period per Week	Number of Credits
One lecture period	1
One tutorial period	1
Two practical periods (laboratory course, project work, etc.)	1

4.14. Minimum Credits: The minimum number of credits to be earned through successful completion of the courses of study in the respective branch by a student to qualify for the award of degree, is provided in Table 4.

Table 4 Minimum Credits to be Earned for the Award of Degree

Programme	Minimum Number of Credits to be Earned for the Award of Degree	
	For entry at First Semester	For Lateral Entry at Third Semester
B.E. Civil Engineering	168	123
B.E. Computer Science and Engineering	168	122
B.E. Electrical and Electronics Engineering	168	120
B.E. Electronics and Communication Engineering	168	119
B.E. Instrumentation and Control Engineering	168	122
B.E. Mechanical Engineering	168	122
B.E. Robotics and Artificial Intelligence	168	119
B.Tech. Artificial Intelligence and Data Science	168	120
B.Tech. Electronics Engineering (VLSI Design and Technology)	168	119

Maximum number of credits is 172 and 127 for regular and lateral entry students respectively

4.15. Entrepreneurship and Innovation Startups: Student entrepreneurs may avail exemption from joining the courses at the beginning of 5th, 6th and 7th semesters for a maximum duration of 15 days in each of these semesters. This exemption period can be used for entrepreneurship related activities like attending entrepreneurship / innovation training programmes conducted by premier institutes, working with startups etc. The exemption can be availed by getting prior approval before the commencement of the respective semester from a committee constituted by the head of the department and approved by the head of institution. The students should demonstrate how productively their exemption period was utilised, through a presentation/viva voce to the committee, after the end of the exemption period in the respective semester.

4.16. Medium of instruction: English is the medium of instruction for examinations, project reports, etc. other than elective language courses.

5. REQUIREMENTS OF ATTENDANCE AND PROGRESS

5.1. A student will be qualified to appear for end-semester examination in a particular course of a semester only if he/she has satisfied the attendance requirements as per the norms given below:

5.1.2. Shall secure not less than 75% attendance in that course

5.1.3. If a student secures attendance 65% or more but less than 75% in any course in the current semester due to medical reasons (hospitalisation/accident/specific illness) or due to participation in the college/university/state/national/international level sports events with permission from the head of the institution, the student shall be given exemption from the prescribed attendance requirement and the student shall be permitted to appear for the end-semester examinations of that course.

5.1.4. His/her progress has been satisfactory and

5.1.5. His/her conduct has been satisfactory.

5.2. A student shall normally be permitted to appear for end-semester examinations of the course if the student has satisfied the attendance requirements and has registered for examination in those courses of that semester by paying the prescribed fee.

5.2.1. Students who do not satisfy sections under section 5.1 will not be permitted to appear for the end-semester examinations / evaluation of that course. The student has to register and redo that course in a subsequent semester when it is offered next, earn necessary attendance and continuous assessment marks and appear for end-semester examinations.

5.2.2. If the total number of redo courses (except mandatory courses) at the end of any semester is more than two, the student will not be eligible to register for next immediate semester courses. Such students will be permitted to register for those courses only when offered next, subject to fulfilment of the condition on the maximum number of redo courses.

5.2.3. If a student with more than two redo courses (except mandatory courses) is in the last batch of his/her current regulations, then he/she has to redo two equivalent courses from the next regulations when it is offered. If such equivalent courses are not available in the next regulations, he/she has to complete the redo courses in a self-study mode, by getting prior approval from the head of the department who will nominate a faculty member for the periodic monitoring and evaluation of the course.

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

5.2.5. In respect of students who complete a part of the academic programme either one or two semesters under the student exchange scheme in approved foreign universities, the transfer of credits of equivalent courses successfully completed by them in the foreign university will be approved. For the remaining courses of the respective semester(s) which they have not studied in the applicable regulation, they shall register for those courses within the next two or subsequent semesters on a self-study basis, and the scheme of evaluation applicable for those courses will be followed. Such an appearance of the student in those courses will be treated as the first appearance for the purpose of classification.

6. DISCIPLINE

6.1. Every student is required to observe discipline and decorum both inside and outside the college and not indulge in any activity which will bring down the reputation of the college. The head of the institution shall constitute a disciplinary committee to enquire into acts of indiscipline and notify the punishment.

6.2. If a student indulges in malpractice in any of the examinations, he/she shall be liable for punitive action as decided by the head of the institution.

7. PROCEDURE FOR REJOINING THE PROGRAMME

A student who desires to rejoin the programme after a period of discontinuation or who upon his/her own request is permitted by the authorities to study, may join the semester which he/she is eligible or permitted to join, only at the time of its normal commencement for a regular batch of students, and after obtaining the approval from the Commissioner of Technical Education and the University. No student will however be enrolled in more than one semester at any time.

8. ASSESSMENT AND PASSING REQUIREMENTS

8.1. Assessment: The assessment will comprise of end-semester examination (ESE) and/or continuous assessment (CA), carrying marks as specified in the scheme in *section 17*. The continuous assessment marks will be awarded by assessing the student continuously during the semester.

The assessment for all the courses will be done on absolute grading system. For the purpose of reporting the performance of a student, letter grades and grade points will be awarded as specified in *section 8.3*.

8.2. End-Semester Examinations: End-semester examinations will normally be conducted during October/November and during March/April of each year. Reappearance examinations may be conducted at such times as may be decided by the college. A student will be permitted to appear for the end-semester examination in a course, only if he/she has completed the study of that course.

8.3. Grade and Grade Point: Each student, based on his/her performance, will be awarded a letter grade and grade point as specified in *sections 8.3.1* for each course at the end of each semester by following the absolute grading system.

8.3.1 Absolute Grading System:

a) For all types of courses, the total mark M (i.e. the sum of continuous assessment marks and end-semester examination marks) is computed for every candidate.

b) Absolute grading system shall be followed for all categories of courses. The range of marks for corresponding grades is given below.

Mark Range	Letter Grade	Grade Point (g)
91 - 100	S (Outstanding)	10
81 - 90	A+ (Excellent)	9
71 - 80	A (Very Good)	8
66 - 70	B+ (Good)	7
61 - 65	B (Above Average)	6.5
56 - 60	C+ (Average)	6
50 - 55	C (Satisfactory)	5
< 50	RA (Re-appearance)	0
-	SA (Shortage of Attendance)	0
-	W (Withdrawal of Course)	0

c) If a student secures a mark as detailed below he/she declared as fail (RA) in that course.

Marks scored in ESE is less than 45% (or) M less than 50% of total marks	Grade: RA

RA denotes reappearance in a course

d) For the course with CA 100%, the passing minimum is 50%

8.3.2 For NPTEL online courses, the mark range, letter grade, and grade point applicable in case of credit transfer is given in Table 7.

Table 7 NPTEL Grade: Mark Range, Letter Grade and Grade Point

Mark Range	Letter Grade	Grade Point (g)
91 - 100	S	10
81 - 90	A+	9
71 - 80	A	8
66 - 70	B+	7
61 - 65	B	6.5
56 - 60	C+	6
50 - 55	C	5
< 50	U	0

8.3.3 Cumulative Grade Point Average: After the completion of the programme, the cumulative grade point average (CGPA) from the semester in which the student has joined first (first semester for regular and third semester for lateral entry students) to the final semester is calculated using the relationship:

$$CGPA = \frac{\sum g_i \times C_i}{\sum C_i}$$

where, g_i is grade point secured for ith course. C_i is credit allotted for the ith course.

8.3.4 Passing a course

A student shall be deemed to have passed a theory, laboratory, laboratory-integrated theory course and project work II with continuous assessment and end-semester examination components:

8.3.4.1. If he/she secures a minimum of 45% of total marks in the end-semester examination and

8.3.4.2. If he/she secures a minimum of 50% of total marks (continuous assessment + end-semester examination put together).

A student shall be deemed to have passed in any other course carrying only continuous assessment marks, if the total mark secured by him/her is at least 50% of total marks.

8.3.4.3. If a student fails to secure a pass in a theory, laboratory and laboratory-integrated theory course, the student shall register and appear only for the end-semester examination in the subsequent semester. In such cases, the continuous assessment marks obtained by the candidate in the first appearance shall be retained and considered valid for all subsequent attempts till the candidate secures a pass. However, from the third attempt (current semester's end-semester examination is considered as the first attempt) onwards if a candidate fails to obtain pass marks (continuous assessment + end-semester examination), then the candidate shall be declared to have passed the examination if he/she secure a minimum of 50% marks prescribed for the end-semester examinations alone.

8.3.4.4. If the course in which the student has failed is a professional elective or an open elective course, the student may be permitted to register for the same course and attend the end-semester examination or register for any other professional elective or open elective course respectively, in the subsequent semesters, and attend the classes and fulfil the attendance requirements as specified in *section 5.*

8.3.4.5. A student who after having earned necessary attendance is absent in the end-semester examination in any theory course (other than professional and open elective courses) has to register for the subsequent examination in that theory course when it is offered next time.

8.3.4.6. If the student after having earned necessary attendance is absent in the end-semester examination in any professional and open elective course, the student may be permitted to register for the same course and attend the end-semester examination or register for any other professional elective or open elective course respectively, in the subsequent semesters, and attend the classes and fulfil the attendance requirements as specified in *section 5.*

8.3.4.6.1. A student who after having earned necessary attendance is absent for end-semester examination or has failed in any other course such as laboratory course, mini-project work I, mini-project work II, etc. with continuous assessment and end-semester examination components will be solely assessed based on the end-semester examinations when it is offered next time.

8.3.4.6.2. For any course carrying only continuous assessment marks, if the student does not meet the attendance requirements or fails to secure at least 50% of total marks, the student must register in the subsequent semester when the course is offered and attend the class and fulfil the attendance requirements and pass the examinations.

8.3.4.6.3. A student who has earned necessary attendance in the course project work but does not submit the report on project work on or before the date specified by the college/department, he/she shall be deemed to have failed in the project work and will be awarded grade RA. He/she will have to register for the same at the beginning of the subsequent semester, redo and submit the project report at the end of that semester and appear for the end-semester examination, after earning the continuous assessment mark afresh.

8.3.4.6.4. A student who has earned necessary attendance in the course project work but whose project report is not accepted for reasons of incompleteness or other serious deficiencies will be treated as absent and will have to register for the same at the beginning of the subsequent semester, redo and submit the project report at the end of that semester and appear for the end semester examinations, after earning the continuous assessment mark afresh.

8.3.4.6.5. A student who has submitted the report on project work, but could not appear for the end-semester examination on the scheduled date, shall be deemed to have failed in the project work and awarded grade RA and will have to register for the same at the beginning of the subsequent semester, redo and submit the project report at the end of that semester and appear for the end-semester examination, after earning the continuous assessment mark afresh. The same shall be applicable also to candidates who fail to secure pass marks in the project work.

8.3.4.6.6. A student who is not eligible to write the end-semester examination in any course due to lack of attendance, will be awarded grade SA and the student has to register for that course again, when offered next, attend the classes and fulfil the attendance requirements as per *section 5*. If the course, in which the student has lack of attendance, is a professional elective or an open elective, the student may register for the same or any other professional elective or open elective course respectively in the subsequent semesters.

8.3.4.6.7. A student after registering for a course may withdraw his/her registration between first and second continuous assessment test for valid reasons.

8.3.4.6.8. In case of credit transfer while undergoing programme in other universities/institutions, as approved by the head of the institution, out of the required six professional electives to be studied, a student has to study a minimum of three professional electives from the list of professional electives prescribed in their scheme of courses of study The remaining three professional electives can be studied either from the list of electives prescribed in the scheme of study of the department or as online courses/special courses by obtaining equivalence or by studying the required number of one-credit courses.

If a student has studied more than six professional electives totally, the six courses with the next highest grade among all remaining courses will be considered for calculation of CGPA. The grades obtained in all other remaining courses will also appear in the grade sheet.

8.3.4.6.9. If a student has studied more than two open elective courses, then two open elective courses with highest grades alone will be considered for CGPA calculation. The grades obtained in other elective courses will also appear in the grade sheet.

8.3.4.6.10. If a student does not clear a one- credit course it will be treated as a course withdrawn by a student; One-credit courses will be evaluated by the course instructor / department faculty member concerned, and will carry a total of 100 marks for continuous assessment; out of which 75 marks will be for final test to be scheduled by the course instructor / department faculty concerned.

8.3.4.6.11. A student who is absent in the end-semester examination of a course after registering for the same will be considered to have appeared and failed in that examination and awarded grade RA.

8.3.5. Scheme of Evaluation

8.3.5.1. Theory Courses with Tutorial Component (CA: 40% + ESE: 60% Total: 100 Marks)

Evaluation Component	Internal Assessment Marks
Internal test – I (for 60 marks)	10
Internal test – II (for 60 marks)	10
Assessment tutorial - I (for 20 marks)	5
Assessment tutorial – II (for 20 marks)	5
Objective test (for 20 marks)	10
Total internal assessment marks	**40**

The end-semester examination is for 100 marks

For theory courses with tutorial components, a separate tutorial notebook for each course is to be maintained by the students. Assessment tutorial - I and II are of open book type, to be conducted as per schedule. During tutorial sessions, if requested the students may be guided by faculty member to solve problems.

8.3.5.2. Theory Courses without Tutorial Component (CA: 40% + ESE: 60% Total: 100 marks)

Evaluation Component	Internal Assessment Marks
Internal test – I (for 60 marks)	10
Internal test – II (for 60 marks)	10
Assignment – I (for 20 marks)	5
Assignment – II (for 20 marks)	5
Objective test (for 20 marks)	10
Total internal assessment marks	**40**

The end-semester examination is for 100 marks

Objective tests are to be conducted using LMS platform, as per schedule in the allotted halls. There will be one objective test for all the theory courses offered in the given semester, with ten questions from each course, and marks obtained course wise, will be considered for the respective courses.

8.3.5.3. Theory cum Laboratory Courses (CA: 50% + ESE: 50% Total: 100 marks)

S. No.	L-T-P	C	Continuous Assessments		
			Theory	Practical	Activities
1	1-0-4	3	10%	30%	10%
2	2-0-2	3	30%	10%	10%

Evaluation Component (1-0-4-3)	Internal Assessment Marks
Internal test – I Assignment/Tutorial/CCAT – I Assignment/Tutorial/CCAT – II	10 5 5
Models, drawings, study, seminar and record work – I	15
Models, drawings, study, seminar and record work – II	15
Total Internal Assessment Marks	**50**

The end-semester examination is for 100 marks with a duration of 3 hours, for Practical or Studio portion only.

Evaluation Component (2-0-2-3)	Internal Assessment Marks
Internal test – I Assignment/Tutorial/CCAT – I Assignment/Tutorial/CCAT – II	15 2.5 2.5
Internal test – II Assignment/Tutorial/CCAT – I Assignment/Tutorial/CCAT – II	15 2.5 2.5
Laboratory Observation/Record Model Examination	 5 5
Total Internal Assessment Marks	**50**

The end-semester examination is for 100 marks with a duration of 3 hours, for theory portion only.

8.3.5.4. Laboratory Courses (CA: 60% + ESE: 40% Total: 100 marks)

Evaluation Component	Internal Assessment Marks
Pre-laboratory work, observation and record work	40
Model examination	20
Total internal assessment marks	**60**
End semester examination Laboratory examination	30
Viva-voce	10
Total end semester examination marks	**40**

8.3.5.5. Internship / Community Project (CA: 60% + ESE: 40% Total Marks: 100)

Evaluation Component by Committee	Internal Assessment Marks
Presentation	30
Report	30
Viva-voce	40
Total internal assessment marks	**100**

For the internship, the end semester examination is to be conducted by the industry personnel where the student completed the internship, in the presence of the tutor. The industry personnel may be present online. For the community project, the end semester examination is to be conducted by an external examiner recommended by the head of the department.

8.3.5.6. Mini-project - I and Mini-project - II (CA: 60% + ESE: 40% Total Marks: 100)

Evaluation Component	Internal Assessment Marks
Presentation - I	
Guide	10
Committee	10
Presentation - II	
Guide	10
Committee	10
Report	
Guide	20
Total internal assessment marks	**60**
End semester examination	
Presentation	10
Viva-voce	10
Report evaluation	20
Total end semester examination marks	**40**

End semester examination is to be conducted by an industry personnel / external subject expert recommended by the head of the department, in the presence of the guide.

8.3.5.7. Project work I and Project work II (CA: 60% + ESE: 40% Total Marks: 100)

Evaluation Component	Internal Assessment Marks
Presentation - I	
Guide	10
Committee	10
Presentation - II	
Guide	10
Committee	10
Thesis Evaluation	20
Total internal assessment marks	**60**
End semester examination	
Presentation	10
Viva-voce	10
Report evaluation	10
Report evaluation by guide	10
Total End semester examination marks	**40**

End semester examination is to be conducted by an industry personnel / external faculty member recommended by the head of the department, in the presence of the guide.

8.3.5.8. One-Credit Course (CA: 40% + Final Examination (Internal): 60% Total: 100 Marks)

Evaluation Component	Internal Assessment Marks
Internal test – I (20 MCQ for 45 minutes)	20
Internal test – II (20 MCQ for 45 minutes)	20
Total internal assessment marks	**40**
Final examination (Internal) (2 hours)	**60**

8.3.5.9. Mandatory Courses I and II (CA: 100% Total Marks: 100)

Evaluation Component	Internal Assessment Marks
Internal test - I	50
Internal test - II	50
Total internal assessment marks	**100**

8.3.5.10. AICTE Activity Point Programme Courses (CA: 100%)

Evaluation Component	Internal Assessment Marks
Report - I	50
Report - II	50
Total internal assessment marks	**100**

Every student is required to prepare and submit a report with documentary proof of activities for each assessment component.

8.3.5.11. Workplace communication skills / Foundations of problem solving / Problem solving / Aptitude skills / Enhancing problem solving ability with code / Enhancing arithmetic problem solving (CA: 100% Total Marks: 100)

Evaluation Component	Internal Assessment Marks
Internal test - I	50
Internal test - II	50
Total internal assessment marks	**100**

8.3.5.12. Online courses (ESE: 100%)

For online courses, grading will be done as specified in *section 8.3.3.*

8.3.5.13. Self-directed learning courses

For self-directed learning courses, grading will be done as specified in *section 4.5.*

9. CONDUCT OF ACADEMIC AUDIT BY THE DEPARTMENT

All faculty members shall strive to improve the performance of students by assessing their performance in their respective internal assessment components and provide appropriate individual feedback to students for improvement. The head of the department shall nominate two senior faculty members as department's internal academic auditors. The internal academic auditors shall assess the academic activities of the department twice in a semester at appropriate intervals and submit the report to the head of the institution through the head of the department.

Similarly, the performance of the students in their end-semester examinations shall be evaluated after the publication of the result, in the department meeting, and appropriate feedback shall be given to the students by their respective faculty mentors.

The head of the department shall arrange to conduct another academic audit once every year for all the courses conducted through an external expert, recommended by the head of the department and approved by the head of the institution.

All academic audits shall cover verification of all the academic records pertaining to the regulation, attendance and assessment, attainment of course outcomes (and programme outcomes where applicable), and assessment of the overall teaching-learning process. Appropriate action shall be taken based on the audit reports, for improving the academic process. Academic documents should be available with the faculty member / department for 5 years.

10. QUALIFICATION FOR AWARD OF DEGREE

A student shall be declared to have qualified for the award of B.E./B.Tech. degree provided:

10.1. The student has successfully completed the course requirements and has passed all the prescribed courses of study of the respective programme.

10.2. No disciplinary action is pending against the student

11. CLASSIFICATION OF DEGREE

Classification of a student while awarding the degree will not be affected if the student has to redo courses which are mandatory in nature (i.e. having no credit but whose completion is compulsory for the award of degree).

11.1. First class with distinction

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

11.1.1. Should have passed the end-semester examination in all the courses of all the eight semesters (six semesters in the case of lateral entry) in his/her first appearance within five years (four years in the case of lateral entry), which includes authorised break of study of one year. The authorised withdrawal from examination will not be considered as an appearance.

11.1.2. Should have secured a CGPA of not less than 8.50.

11.1.3. One year authorised break of study (if availed) is included in the five years (four years in the case of lateral entry) for award of first class with distinction.

11.1.4. Should not have been prevented from writing end-semester examination due to lack of attendance in any of the courses.

11.2. First class

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

11.2.1. Should have passed the examination in all the courses of all eight semesters (six semesters in the case of lateral entry) within five years (four years in the case of lateral entry).

11.2.2. One year authorised break of study (if availed) or prevention from writing the end-semester examination due to lack of attendance (if applicable) is included in the duration of five years (four years in the case of lateral entry) for award of first class.

11.2.3. Should have secured a CGPA of not less than 6.5.

11.3. Second class

All other students who qualify for the award of the degree shall be declared to have passed the examination in second class.

11.4. B.E. /B.Tech. (honours) and B.E. /B.Tech. minor degree in another discipline

11.4.1. For B.E./B.Tech. with honours degree in the same discipline, students should have earned additionally a minimum of 18 credits from one or more verticals of the same programme, from 5th semester to 7th semester. He/she should have passed all the courses in the first attempt and should have earned a minimum CGPA of 8.50 for the award of degree in first class with distinction, or a minimum CGPA 7.50 for the award of degree in first class.

11.4.2. If a student decides not to opt for the honours degree, after completing a 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 of such courses than the number of professional elective courses required as per the curriculum, the courses with highest 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. 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.

11.4.3. For B.E./B.Tech. with minor degree, students should have earned additionally a minimum of 18 credits from one or more verticals of programme offered by the department other than the parent department, from 5th semester to 7th semester. He/she should have passed all the courses in the first attempt and should have earned a minimum CGPA of 8.50 for the award of degree in first class with distinction, or a minimum CGPA 7.50 for the award of degree in first class.

11.4.4. If a student decides not to opt for the minor degree, after completing a 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 of such courses than the number of open electives required as per the curriculum, the courses with highest 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. 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

12. WITHDRAWAL FROM EXAMINATION

12.1. A student may, for valid reasons, be granted permission to withdraw from appearing for the examination in any course or courses of only one semester if he/she does not have any history of reappearance courses at the time of request for withdrawal. Prior permission for withdrawal from semester examinations is to be obtained from the head of the institution. Only one application for withdrawal is permitted for end-semester examinations in which withdrawal is sought, for the entire duration of study whatever the reasons may be.

12.2. Withdrawal application shall be valid only if the student is otherwise eligible to write the examination and if it is made prior to the commencement of the examination in that course or courses, and also recommended by the head of the department.

13. TEMPORARY BREAK OF STUDY FROM THE PROGRAMME

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

13.2. A student is not normally permitted to temporarily break the study. However, if a student intends to temporarily discontinue the programme, the student has to apply to the head of the institution through the head of the department, not later than the last date of the first assessment period. Notwithstanding the requirement of mandatory first assessment period, applications for break of study for special cases viz., prolonged hospitalisation, accidents will be considered on the merit of the case

13.3. A student is permitted to rejoin the programme at the respective semester as and when it is offered after the break, subject to the approval of Commissioner of Technical Education and Anna University, Chennai, and shall be governed by rules and regulations in force at the time of rejoining.

13.4. The duration specified for passing all the courses for the purpose of classification shall be increased by the period of such break of study permitted.

13.5. The total period for completion of the programme reckoned from the commencement of the semester to which the student was first admitted shall not exceed the maximum period irrespective of the period of break of study in order that he/she may be qualified for the award of the degree.

13.6. If any student is detained for want of requisite attendance, progress and conduct, the period spent in that semester shall not be considered as permitted break of study and is not applicable for such cases.

14. FACULTY MENTOR

To help students in planning their courses of study and for general guidance for completing the academic programme and for possible career opportunities, the head of the student department will assign a group of students to a faculty member, who shall function as faculty mentor for the students throughout the period of study. The faculty mentor shall advise the mentees, monitor their attendance and progress, and counsel them periodically. If necessary, the faculty mentor may also discuss with or inform the respective parents about the progress of the mentees concerned, the number of students assigned to a faculty mentor will be decided by the head of the department, and the number, in general, shall not exceed 30.

14.1. The responsibilities of the faculty mentor shall be:

- To help students understand the regulations of study, and their rights and responsibilities.
- To inform code of conduct to be maintained in the campus.
- To inform the students about the various facilities and activities available to enhance the student's curricular and co-curricular activities.
- To guide students in choosing courses for registration.
- 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.
- To facilitate and collect students' feedback about the course and course instructor, and the programme's exit survey.
- To provide all the details of the academic programme including feedback, training, scholarship, placement and co-curricular and extra-curricular activities of the students to the department.

15. COURSE COMMITTEES

A theory course handled by more than one faculty member shall have a common course committee, composed of all the faculty members teaching that course. One of the senior faculty members shall be nominated as course coordinator by the head of the institution. The committee shall be constituted within 15 days from the commencement of the semester. The first meeting of the committee shall be held within fifteen days from the date of formation of the committee. The lesson plan, books and references to be followed shall be decided in the first meeting. Two or three subsequent meetings in a semester may be held at suitable intervals. In addition, the committee shall meet to ensure uniform evaluation of continuous assessments after arriving at a common scheme of evaluation for the assessments. 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 will be a common question paper.

16. CLASS COMMITTEES

The class committee shall comprise all the faculty members handling courses of a particular semester for the class, and a minimum of 6 students (with the proper mix of girls and boys, as applicable) from the class. One of the faculty mentors of the class, nominated by the head of the department as class advisor shall coordinate the class committee activities. The committee shall be constituted by the head of the department within 10 days from the commencement of semester. The class committee meeting will be chaired by the head of the department. The class advisor shall prepare the minutes of the meeting.

16.1. The functions of the class committee are as follows:

- The first meeting of the class committee shall be held within 10 days from the date of formation of the committee.
- Two or three subsequent meetings in a semester may be held at suitable intervals.
- During these meetings, the student members shall meaningfully interact and express their opinions and suggestions on behalf of all the students to improve the effectiveness of the teaching-learning process.