

**PAAVAI ENGINEERING COLLEGE,
(AUTONOMOUS)
NAMAKKAL – 637 018**

Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai

Accredited by NBA, New Delhi and by `NAAC with “A” Grade

ACADEMIC REGULATIONS 2019

(CHOICE BASED CREDIT SYSTEM)

B.E./B.Tech. PROGRAMMES

(Approved in the 5th Academic Council Meeting 25-05-2019,

Amended in the 6th Academic Council Meeting 19-09-2020

Amended in the 7th Academic Council Meeting 04-09-2021 &

Amended in the 9th Academic Council Meeting 03-11-2022)

(Applicable for the students admitted during academic year 2019-2020 onwards)

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)

1.0 PRELIMINARY DEFINITIONS AND NOMENCLATURE

In these Regulations, unless the context otherwise requires:

- I. **“Programme”** means Degree Programme,(i.e) B.E./B.Tech. Degree Programme offered by the college and approved by the University.
- II. **“Discipline”** means specialization or branch of B.E./B.Tech. Degree Programme such as Civil Engineering, Computer Science and Engineering etc.
- III. **“Course”** means a theory, practical or theory and practical integrated subject that is normally studied in a semester such as Computer Programming, Engineering Graphics, etc.
- IV. **“University”** means ANNA UNIVERSITY, CHENNAI.
- V. **“College”** means **Paavai Engineering College, Namakkal**, an Autonomous Institution affiliated to Anna University Chennai and approved by AICTE, New Delhi.
- VI. **“Head of the Institution”** means the Principal of the college who is responsible for the academic administration of the college.

- VII. **“Dean Academics”** means the authority of the college who is responsible for all academic activities of the institution and the implementation of relevant rules of these Regulations pertaining to the academic programmes.
- VIII. **“Controller of Examinations”** means the authority of the college who is responsible for all activities pertaining to the examinations conducted by the institution under the autonomous scheme.
- IX. **“Head of the Department”** means authority of the department concerned and is responsible for the all academic activities and administration of the department.
- X. **“Curriculum”** refers to the various components / courses studied in each programme that provide appropriate outcomes (knowledge skills and attitude/behavior) in the chosen branch of study
- XI. **“L-T-P-C”** refers to Lecture, Tutorial, Practical and Credits respectively.
- XII. **“Board of Studies”** means the academic body of the department in the college responsible for framing the curriculum and syllabi of the programme concerned.
- XIII. **“Credit”** refers to the numerical weightage given to each and every course of study based on the depth of teaching – learning process of that course.
- XIV. **“Grade”** means the alphabet assigned to each course based on the range of marks secured by the student.
- XV. **“Grade Point”** means a numerical value (0 to 10) assigned based on the grade secured.
- XVI. **“Department Advisory Committee” (DAC)** consists of the Principal, the HoD, a senior faculty member(s), a member from an industry and the class coordinator of the department concerned.

2.0 ADMISSION

- 2.1 Candidates seeking admission to the **first semester** of the **B.E. / B.Tech. Degree Programme** through TNEA Counselling conducted by the Government of Tamil Nadu. Candidates should have passed the Higher Secondary Examinations of (10+2) Curriculum (Academic Stream) prescribed by the Government of Tamil Nadu with Mathematics, Physics and Chemistry as three of the four subjects of study under Part-III or any examination of any other University or authority accepted by the Syndicate of Anna University as equivalent thereto.

(OR)

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

2.2 LATERAL ENTRY ADMISSION

- (i) The candidates who possess the **Diploma in Engineering / Technology** awarded by the State Board of Technical Education, Tamil Nadu or its equivalent are eligible to apply for admission to the third semester of B.E. / B.Tech. programmes under Lateral Entry Scheme (LES) corresponding to their branch of study. Such candidates, if needed shall undergo two/three bridge courses in Humanities and Social Sciences (HS), Basic Sciences (BS) and Engineering Sciences (ES) either in the third or fourth semester of the period of study.

(OR)

- (ii) The candidates who possess the **Degree in Science (B.Sc.)** (10+2+3 stream) with Mathematics as a subject at the B.Sc .level are eligible to apply for admission to the third semester of B.E. / B.Tech. programmes under LES. Such candidates shall undergo two/three additional engineering subjects in the third and fourth semester of the period of study as prescribed by the college.

3.0 PROGRAMMES OFFERED

A student may be offered one of the programme(s) in any one of the branches of study in the college approved by AICTE and affiliated to Anna University, Chennai. A student of a programme should earn the total minimum credits specified to enable him to be eligible to be awarded the degree. Normally it is recommended that the total range of credits for the B.E./B.Tech. programmes shall be fixed between 160-165credits. In case of students admitted to the B.E / B.Tech. programme under Lateral Entry Scheme, the credit range is fixed (120-125).

S. No.	Degree	Branch of Study
1.	B.E.	Aeronautical Engineering
2.	B.E.	Agriculture Engineering
3.	B.E.	Biomedical Engineering
4.	B.E.	Civil Engineering
5.	B.E.	Computer Science and Engineering
6.	B.E.	Computer Science and Engineering(AI & ML)
7.	B.E.	Computer Science and Engineering(IoT)
8.	B.E.	Cyber Security
9.	B.E.	Electronics and Communication Engineering
10.	B.E.	Electrical and Electronics Engineering
11.	B.E.	Mechanical Engineering
12.	B.E.	Mechatronics
13.	B.E.	Medical Electronics
14.	B.E.	Robotics and Automation
15.	B.E.	Safety and Fire Engineering
16.	B. Tech.	BioTechnology
17.	B. Tech.	Chemical Engineering
18.	B. Tech.	Food Technology
19.	B. Tech.	Information Technology
20.	B. Tech.	Pharmaceutical Technology

4.0 DURATION OF THE PROGRAMME

- 4.1** A student is expected to complete the B.E. /B.Tech. Programme in 8 semesters (four academic years) but in any case not more than 14 semesters (**seven academic years**) for HSC (or equivalent) student and not more than 12 semesters (**six academic years**) for Lateral Entry student as per the university guidelines.
- 4.2** Each semester shall normally consist of 90 working days or the number of periods specified in the curriculum with each period of 50 minutes duration. The Head of the Institution shall ensure that every faculty member deliver the full content of the specified syllabus.
- 4.3** The Head of the department may advise / instruct the faculty members concerned to conduct additional classes for improvement, special and remedial coaching, conduct of model test etc., over and above the specified periods. But for the purpose of calculation of attendance requirement for writing the end semester examinations by the students, the attendance requirement as per Clause 7 should be followed.
- 4.4** The End Semester Examinations will ordinarily follow immediately after the last working day of the semester as per the academic schedule prescribed by the college from time to time.
- 4.5** The total duration for completion of the programme reckoned from the commencement of the first semester to which the student was admitted shall not exceed the maximum duration specified in Clause 4.1 irrespective of the period of break of study (vide Clause 18.4) in order that he/she may be eligible for the award of the degree (vide Clause 17.1).

5.0 STRUCTURE OF THE PROGRAMMES

The curriculum, syllabi and course contents under Regulations 2019 are designed and prepared in accordance with the Outcome Based Education (OBE) to meet out the Program Educational Objectives (PEOs), Program Outcomes (POs) and Course Outcomes (COs).

- 5.1** Every Programme will have a curriculum with syllabi consisting of theory and practical courses (as decided by the respective Board of Studies) such as:

- 5.1.1 **Humanities and Social Sciences (HS)** courses include English Communication, Humanities and Management etc.
- 5.1.2 **Basic Sciences (BS)** courses include Mathematics, Physics, Chemistry and Biology etc.
- 5.1.3 **Engineering Sciences (ES)** courses include Engineering Practices, Engineering Graphics, Basics of Electrical / Mechanical / Computer etc.
- 5.1.4 **Professional Core Courses (PC)** include the core courses relevant to the chosen branch of study.
- 5.1.5 **Professional Elective Courses (PE)** include the courses relevant to the chosen branch offered and registered by the student for specialization.
- 5.1.6 **Open Elective Courses (OE)** include the courses offered by any engineering / science departments of the college. The student can choose and study two courses offered by other departments as open elective courses. The open elective courses may be offered from 5th semester onwards. The open elective courses should not have any pre-requisite courses.
- 5.1.7 **Employability Enhancement Courses (EE)** include courses such as Project, Seminar, Career Development Lab and In-plant training/ Internship.
- 5.1.8 **Mandatory Courses (MC)** include Environmental Science /Engineering, Value Education and Induction Programme (0 Credits)
- 5.1.9 **Progress Norms:** The student admitted to the B.E./ B.Tech. programme (s) should undergo **ANY** three non-credit courses as provided in a separate list given in clause 5.3.

5.2 ONE CREDIT COURSES (OC)

One Credit Courses are optional. The courses shall be provided from second semester onwards, either by industry/other academic institution /parent institution / through online courses with the approval of Board of Studies of the department concerned and a maximum of six one credit courses can be opted during his/her period of study. The duration of the theory course is 15 hours, integrated theory and practical is 20 hours, practical course is 30 hours and for online courses, it shall be a minimum of 4 weeks. The students shall be exempted from any one open elective course provided in the curriculum upon the successful completion of the three one credit courses and the same has to be approved by the respective department concerned. The grades earned by the students for the one-credit courses which are not opted for conversion into an open elective, shall not be included in the computation of CGPA. However, they shall be considered as additional credits earned in the grade sheet. Core courses cannot be replaced/ exempted by any on-line courses like NPTEL etc. The department advisory committee shall submit the necessary equivalent grades for the marks obtained in the online one credit courses to the COE Office

5.3 PROGRESS NORMS COURSES

5.3.1 Every student shall be made to undergo any three non-credit courses such as co-curricular, extra-curricular and club activities listed in the table. The participation and involvement (provided with certificate) in the listed non-credit courses from approved institutions/organizations/industries shall be considered in the progress norms and will not be indicated by grades and counted for the computation of SGPA/ CGPA. He / she shall complete the 3 non-credit courses before the end of 7th semester. The list of courses shall be revised / modified time to time based on the academic and industry needs and are subject to amendments.

Category	Code	Details of Non-Credit Courses
Associated Skills (Minimum 2)	PN101	Online course certification (Skill Development/Soft Skills) of minimum 4 weeks duration from MOOC.
	PN102	Industry In-plant Training / Internship (minimum 2 weeks during the entire duration of the course)
	PN103	Publication in Scopus indexed / SCI/ UGC/AICTE/ Anna University Annexure Journals
	PN104	Workshops / Seminars / Development Programmes – (minimum 7 days during the entire duration of the Programme)
	PN105	Any one foreign language certification through Centre for Foreign Language of the college
Personality and Self-Character Development	PN201	Participation in district / state / national level cultural competition conducted by recognized agencies.
	PN202	Valid certificate from the Anna University Sports Board/ Inter-state / Inter University / National level competition.
	PN203	Participation in social responsible activities in and around the college through NSS/YRC/Yoga /Meditation for 1 week duration.
	PN204	Participation in state / national level republic /independence day parades and integration camps.

5.4 CREDIT ASSIGNMENT

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

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

5.5 COURSES PER SEMESTER

The curriculum for each semester shall normally has a blend of theory courses not exceeding 5 to 6, practical courses not exceeding 2 to 4 and integrated theory and practical courses not exceeding 5. However, the total number of courses per semester shall not exceed 7 to 9. The maximum number of credits assigned per semester shall not exceed 25, excluding one credit, on-line and reappearance courses.

5.6 INDUSTRIAL TRAINING/INTERNSHIP

The students may undergo Industrial training / internship for a period as specified in the Curriculum during the summer / winter vacation. In this case, the training has to be undergone continuously for the entire period. The students may undergo Internship at a Research organization / University / industry of State/National and International level (after due approval from the Department Advisory Committee) for the period prescribed in the curriculum during the summer / winter vacation. In lieu of Industrial training/Internship, students may be permitted to travel International Universities with the approval of Principal, HoD and DAC for internships. Credits are awarded as per AICTE's Internship policy i.e. 40 – 45 hours of internship work merits 1 credit.

If Industrial Training / Internship is not prescribed in the curriculum, the student shall undergo Industrial Training / Internship optionally in any Research organization / University / industry of State/National and International eminence (after due approval from the Department Advisory Committee).

In lieu of Industrial training/ Internship, the students may be permitted to travel International Universities. The credits for such Industrial training/ Internship are awarded as per AICTE's Internship policy i.e 40 -45 hours of internship work merits 1 credit.

On the successful completion of the Industrial Training / Internship, if the student earns three credits in Industrial Training / Internship, he/she may drop one equivalent professional elective in the curriculum. In such cases, Industrial Training / Internship need to be undergone continuously from one organization only for the entire period.

However, if the credits earned through Industrial Training / Internship does not meet the requirement of exempting one professional elective course, then such Industrial Training / Internship shall be considered as value added course and the respective credits earned

will be indicated in the grade sheet and not computed for CGPA calculation or shall be considered for progress norms requirement. The student is allowed to undergo a maximum of 6 weeks Industrial Training / Internship during the entire duration of study.

DURATION OF TRAINING / INTERSHIP CREDITS	
Duration	Credits
2 Weeks / 40 - 45 hours	1
4 Weeks / 80 - 90 hours	2
6 Weeks / 120 - 135hours	3

MoU with foreign universities

To provide international exposure for meritorious students, MoUs are signed by Paavai Engineering College with foreign universities. Students can utilize the opportunity of undergoing industrial training/Internship in foreign universities and shall transfer the credits of such industrial training/Internship done in foreign universities for exemption of courses.

Assessment for Industrial Training / Internship

Industrial Training/Internship which is the part of the curriculum / not part of the curriculum shall be evaluated through internal assessment only and carry 100 marks. At the end of Industrial Training/Internship, the candidate shall submit a certificate from the organization where he / she had undergone training along with a brief report. The evaluation shall be made based on the report submitted along with the presentation and a Viva voce Examination, conducted internally by a three member Departmental Committee constituted by the Head of the Institution. The certificates (issued by the organization) submitted by the students along with the marks obtained by the students based on the evaluation shall be sent to the Controller of Examinations by the Head of the Institution. The marks shall be awarded to each student based on the individual performance.

Category	Mark
Report	40
Presentation	30
Viva Voce	30

5.7 INDUSTRIAL VISIT

Every student is expected to undergo one industrial visit every year starting from the second year of the programme, subject to the approval of the HoD and the Principal. The Heads of the department shall ensure that necessary arrangements are made in this regard.

5.8 ONLINE COURSES

5.8.1 The students may be permitted to undergo one online course of 3 credits weightage between 5th-7th semester (which are provided with certificate after evaluation of the performance) for a minimum of 12 weeks duration for those courses listed as professional electives with the approval of respective Boards of Studies concerned.

5.8.2 After the successful completion of one online course, the students may obtain exemption from studying one Professional Elective and in such case the marks obtained in online course shall be converted to equivalent grade and included for calculation of Cumulative Grade Point Average (CGPA). The department Advisory Committee shall submit the necessary equivalent grades for the marks obtained in the online courses to the respective BoS for approval and then to the COE Office.

5.9 MEDIUM OF INSTRUCTION

The medium of instruction is English for all courses, examinations, seminar presentations and project / thesis / dissertation reports except for the courses on language other than English.

5.10 FAST TRACK MODE

Fast Track Mode is available to the students to undergo a semester-long internship or special training in industry or project work in department/industry. A student who secures

a minimum CGPA of 8.50 up to 4th semester (1st semester to 4th semester for Regular category / 3rd semester & 4th semester for Lateral Entry Scheme) and with no standing arrears as on date, shall be eligible to opt for Fast Track Mode and should maintain the CGPA of minimum of 8.50 till 6th semester without any arrears. Such student is required to complete the courses available in the 8th Semester except project work satisfactorily in the earlier semesters (maximum one per semester or evenly distributed in the 5th semester to 7th semester) as additional courses within the completion of 7th Semester, provided that the prerequisite of the courses should be fulfilled.

- 5.11** Every student shall be required to carry out the project work in the department / industry or by exercising Fast Track Mode during 8th semester on a full time basis in consultation with the faculty guide and submit the project report, in the prescribed format, at the end of the 8th semester for the valuation.

5.12 INDUSTRY ORIENTED COURSES (IOC)

Industry oriented courses are optional. The courses are offered from fifth semester to seventh semester by the industry relevant to the specialization of the study. The students can opt maximum of six credits, each course of three credit weightage. The syllabus shall be approved by the respective Board of Studies. The courses shall be theory, practical and integrated theory cum practical mode. The duration and evaluation pattern of the courses shall be, as per the regulations followed. In such cases, the student shall be exempted from the equivalent professional elective courses offered in the respective semester of the curriculum with the approval from the DAC, and the same shall be forwarded to the COE within one week of the commencement of the classes. The credits earned by the students for IOC which are not opted for exemption shall be considered as additional credits earned in the grade sheet.

5.13 VALUE ADDED COURSES

Value added courses are optional. It is offered from the first semester onwards. A student can opt for maximum of eight courses. Value added course offered should not be a course listed in the curriculum of the programme.

Course Structure

The request for approval of syllabus along with the schedule for the value added course should be communicated to Dean Academics and Controller of the Examinations prior to the commencement of the course. The Syllabus (minimum 30 hours), schedule and the details of faculty handling the course should be approved by the Head of Institution.

The value added courses may be also conducted during weekends/vacation period. Industry experts / eminent academicians from other Institutes / parent institutions are eligible to offer the value

Assessment

The value added courses shall carry 100 marks and shall be evaluated through internal assessments only. Two Assessments shall be conducted preferably one in the middle and the other at the end of the course by the department concerned. The duration of assessment is one hour each. The total marks obtained in the tests shall be converted to 100 marks and rounded to the nearest integer. The passing requirement for value added courses shall be 50% of the total marks and 75% of attendance. Those students who satisfy the above norms are eligible to get a certificate

6.0 COURSE REGISTRATION

- 6.1 Each student, on admission shall be assigned to a Class Coordinator (vide Clause 8) who shall advise / counsel the student about the details of the academic programme and the choice of courses considering the student's academic background and career objectives.
- 6.2 Every student shall enroll for the courses of the succeeding semester, in the current semester (as per Clause 6.3.2). However, the student shall confirm the enrollment by registering for the courses within the first five working days after the commencement of the semester concerned.
- 6.3 After registering for a course, a student shall attend the classes, satisfy the attendance requirements, earn Continuous Internal Assessment marks and appear for the End Semester Examinations.
 - 6.3.1 Each student on admission to the programme shall register for **all the courses specified in the curriculum** in the **first semester of study (3rd semester** for the students admitted under **lateral entry scheme**).

- 6.3.2 The enrollment for all the courses of the 2nd semester will commence 10 working days prior to the last working day of 1st semester. The student shall confirm the enrollment by registering for the courses within the first five working days after the commencement of the 2nd semester. In case, if a student fails in a course, he/she may be permitted to register the course for examination purpose in the subsequent semester or when it is offered.
- 6.3.3 The enrollment for the courses of the 3rd to 8th semesters 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 student's Class Coordinator. If a student wishes, the student may drop or add courses (vide clause 6.4) within **five** working days after the commencement of the semester concerned and complete the registration process duly authorized by the Class Coordinator and HoD.
- 6.3.4 In any department, the preference for registration shall be given to the students of that department for whom the course is a professional core course. The registration for any course shall be on first come first served basis, provided the students fulfill the prerequisite for that course, if any. The number of students to be registered shall be based on the classroom and laboratory capacity. Every effort shall be made by the department/centre to accommodate as many students as possible.
- 6.3.5 No course shall be offered by a department unless a minimum of 30 students are registered for that course. However, if the student admitted is less than 30, this minimum will not be applicable.

6.4 FLEXIBILITY TO ADD OR DROP COURSES

- 6.4.1 A student has to earn the minimum total number of credits specified in the curriculum of the respective programme of study in order to be eligible to obtain the degree. However, if a student wishes, the student is permitted to earn more than the total number of credits prescribed for the semester in the curriculum by opting for additional courses.
- 6.4.2 From 3rd to 8th semesters (from 4th to 8th semesters in the case of lateral entry students), the student has the option of registering for additional courses provided

that the prerequisite of the courses should be fulfilled or by dropping the elective courses. Total number of credits of such courses should not exceed 6 credits. However the maximum number of credits that a student can register in a particular semester shall not exceed 30 credits. In such cases, the attendance requirement as stated in Clause 7 is mandatory.

6.4.3 The student shall register for the project work in the 8th semester only.

6.5 REAPPEARANCE REGISTRATION

6.5.1 If a student fails in a course, the student shall do reappearance registration for that course in the subsequent semester or when it is offered next. The registration of reappearance courses in the subsequent semester is mandatory.

6.5.2 On registration, a student may attend the classes for the reappearance registration courses, if he/she wishes. However, the attendance requirement (vide Clause 7) is not compulsory for such courses provided that the student has secured required attendance in the previous registration.

6.5.3 If the theory course, in which the student has failed, is a professional elective or an open elective, or a mandatory course, or an integrated course (Theory & Practical) the student may register for the same in the subsequent semesters.

6.5.4 The student who fails in project work / seminar other than practical courses shall register for the same in the subsequent semester and reappear for the End Semester Examination.

6.5.5 If a student is prevented from writing the End Semester Examination for the course(S) available in that semester due to lack of attendance, the student has to re-register for that course again, when offered next, attend the classes and fulfill the attendance requirements as per Clause 7. 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(s) respectively in the subsequent semesters and appear for the examination as per Clause 7.

7.0 REQUIREMENTS FOR ATTENDANCE AND PROGRESS NORMS

7.1 ELIGIBILITY NORMS

A student who has fulfilled the following conditions shall be deemed to have satisfied the attendance requirements for completion of a semester. Ideally every student is expected to attend all classes and secure 100% attendance for the specified hours. However, the student should **secure not less than 75%** (after rounding off to the nearest integer) of overall attendance for the prescribed hours.

The student's academic progress should be satisfactory for each and every semester and is ascertained through the appearance and performance in the Continuous Internal Assessment Tests.

The student's character / conduct should be satisfactory.

- 7.2** However, a student who **secures overall attendance between 65% and 74%** in the current semester for the prescribed hours due to medical reasons (prolonged hospitalization / accident / specific illness)/participation in sports events may be permitted to appear for the current semester examinations to a maximum of TWO times during the period of study. In such case, the student shall submit the medical certificate/sports participation certificate attested by the Head of Department and approved by the Principal during the period of medical leave and in advance for participation in sports. The same shall be forwarded to the Controller of Examinations for record purposes.

7.3 PROGRESS NORMS

Students who do not satisfy the requirement of undergoing the non-credit courses viz. any of the **THREE** non-credit courses listed within **Seventh** semester will not be allowed / permitted to register for **Eighth** semester. Such students are permitted to register for the **Eighth** semester only after completing the above mentioned requirements. The satisfactory completion of the non-credit courses to meet the progress norms will be mentioned in the grade sheet as **COMPLETED**.

- 7.4** Students who **secure less than 65% overall attendance and students who do not satisfy the Clause 7.1 and 7.2** and or qualify the norms for progress specified in **Clause**

7.3 shall not be permitted to write the End Semester Examination at the end of the semester and to move to the next semester. They are required to repeat the incomplete semester in the next academic year, as per the norms prescribed by the Directorate of Technical Education, Chennai and Anna University, Chennai. The student will however be readmitted not more than once during the period of study. However, under specific circumstances, second readmission is permitted for the students on valid medical reasons.

8.0 CLASS COORDINATOR

The class coordinator will be one among the faculty members who are handling the respective classes. He / She will be appointed by the Head of the Department concerned. The responsibilities for the class coordinator shall be:

- To act as the channel of communication between the Head of the Department and the students of the respective class.
- To collect and maintain various academic and non-academic records of students.
- To help the chairperson of the class committee in planning and conducting class committee meetings.
- To monitor the academic performance of the students including attendance periodically and to inform the Head of the Department and parents about the student's progress.

9.0 CLASS COMMITTEE

9.1 Every class shall have a class committee consisting of teachers of the class concerned, student representatives and a chairperson should be the senior faculty of the department who is not teaching the class. The overall goal of the class committee is to improve the teaching-learning process. The functions of the class committee include:

- Solving problems encountered by students in the classroom and in the laboratories.
- **Displaying the Regulations of the degree programme on the notice board and explaining the details of the rules particularly clause 5, 6 and 7**

- Informing the student representatives about the academic schedule including the dates of assessments and the syllabus coverage for each assessment.
- Informing the student representatives about the details of Regulations regarding mark details of each assessment. In the case of practical courses, the breakup of marks for each experiment / exercise / module of work should be clearly discussed in the class committee meeting and informed to the students.
- Analyzing the performance of the students of the class after each test and finding the ways and means of solving problems, if any.
- Identifying the weak students, if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such weak students.

9.2 The class committee for a class under a particular branch is normally constituted by the Head of the Department. However, if the students of different branches are mixed in a class (like the first semester which is generally common to all branches), the class committee is to be constituted by the Head of the Institution.

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

9.4 At least 6 student representatives (usually 3 boys and 3 girls) shall be included in the class committee.

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

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

9.7 The Chairperson is required to prepare the minutes of every meeting, submit the same to Head of the Department within two days of the meeting and arrange to circulate it among the students and teachers concerned and a copy of the minutes of meeting should be submitted to the Head of the Institution. If there are some points in the minutes requiring remedial action to be taken by the management, the same shall be brought to the notice of the management by the Head of the Institution for further action.

9.8 The first meeting of the class committee shall be held within one week from the date of commencement of the semester, in order to inform the students about the nature and assessment process within the framework of the Regulations. Three subsequent meetings may be held in a semester at suitable intervals. During these meetings the student members representing the entire class, shall meaningfully interact and express the

opinions and suggestions of the other students of the class in order to improve the effectiveness of the teaching-learning process.

10.0 COURSE COMMITTEE FOR COMMON COURSES

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

11.0 SYSTEM OF EVALUATION

11.1 Performance in each course of study shall be evaluated based on

- (i) Continuous Internal Assessment and
- (ii) End Semester examination at the end of the semester.

11.2 Each theory course including mandatory courses shall be evaluated for a maximum of 100 marks with **40 marks** as Internal marks based on the Continuous Internal Assessment and **60 marks** as External marks based on the End Semester Examination. Similarly, each practical course (including Project Work & Viva Voce Examination) shall be evaluated for a maximum of 100 marks with **50 marks** as Internal marks based on the Continuous Internal Assessment and **50 marks** as External marks based on the End Semester Examinations.

11.3 The End Semester Examination (theory including mandatory courses and practical) of 3 hours duration shall ordinarily be conducted between October and December during the odd semester and between April and June during the even semester.

11.4 The End Semester Examination for Project Work shall consist of evaluation of the final report submitted by the student or students of the project group (of not exceeding 4

students) by an external examiner and an internal examiner, followed by a viva-voce examination conducted separately for each student by a committee consisting of the external examiner, the supervisor of the project group and an internal examiner.

11.5 For the End Semester Examination in both theory and practical courses including project work, the internal and external examiners shall be appointed by the Controller of Examinations.

12.0 ASSESSMENT SCHEME

12.1 THEORY & PRACTICAL COURSES

Theory Courses		Practical Courses	
Continuous Internal Assessment	40 Marks	Continuous Internal Assessment	50 Marks
End Semester Examination	60 Marks	End Semester Examination	50 Marks
Total	100 Marks	Total	100 Marks
Internal Assessment		Internal Assessment	
Continuous Internal Assessment Test 1	7 Marks	Preparation & Conduct of Experiment	20
Continuous Internal Assessment Test 2	7 Marks	Observation & Results	10
Continuous Internal Assessment Test 3	10 Marks	Record	05
Attendance	05 Marks	Viva	05
Practices adopted by the student (Seminar Presentation / Assignment)	05 Marks	40 Marks for each experiment as specified above will be averaged as the Internal Assessment Marks 40 Marks	
Innovative practices	06 Marks		
		Model Practical Examinations	10 Marks
Total	40 Marks	Total	50 Marks
End Semester Examination		End Semester Examination	
Examination Duration : 3 Hours Max. Marks : 100 (Converted to 60 marks)		Examination Duration : 3 Hours Max. Marks : 100 (Converted to 50 marks)	

The assigned 05 marks for attendance in the continuous internal assessment process are detailed below.

Range of Attendance	Marks
75 % - 84 %	03
85 % - 89 %	04
90 % - 100 %	05

12.2 INTEGRATED THEORY AND PRACTICAL COURSES

Three tests will be conducted for assigning internal marks. First two tests will be from the theory portions and the third test will be on practical content. The sum of first two test will be converted to 20 marks, each test will be contributing to the weightage of 10. The third test will be converted to 10 marks. The practical experiment marks are averaged to 10. The attendance marks for both theory and practical is summed up to 5. The assignment carries 5 marks either from theory or practical content. For end semester examination the theory and practical examinations are conducted for 100 marks and converted to 50 marks, with the constraint that the student shall obtain a minimum of 50% from each theory and practical exams.

INTERNAL 50 MARKS		EXTERNAL 50 MARKS	
Continuous Internal Assessment Test1- Theory(70)	10	Practical	- 100
Continuous Internal Assessment Test2-Theory(70)	10	Theory	- 100
Model Practical Examinations -	10		
Average marks for Laboratory Experiment	10	Converted to 50 marks	
Attendance	5		
Assignment	5	Minimum 50% each	

12.3 Courses such as Technical Seminar / Case study are to be considered as purely **INTERNAL MODE**. Every student is expected to present a minimum of 2 seminars per semester before the evaluation committee and for each seminar, marks can be equally apportioned. The three member committee of various cadres appointed by Head of the Institution/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 (40 marks), presentation (40 marks) and response to the questions asked during presentation (20 marks).

12.4 ASSESSMENT FOR INDUSTRIAL TRAINING / INTERNSHIP

Industrial Training/Internship/Summer Project which is the part of the curriculum / not part of the curriculum shall be evaluated through internal assessment only and carry 100 marks. At the end of Industrial Training/Internship, the candidate shall submit a certificate from the organization where he / she had undergone training along with a brief report. The evaluation shall be made based on the report submitted along with the presentation and a Viva voce Examination, conducted internally by a three member Departmental Committee constituted by the Head of the Institution. The certificates (issued by the organization) submitted by the students along with the marks obtained by the students based on the evaluation shall be sent to the Controller of Examinations by the Head of the Institution. The marks shall be awarded to each student based on the individual performance.

Category	Mark
Report	40
Presentation	30
Viva Voce	30

12.5 The evaluation process for theory based one credit courses shall be of 40 % internal assessment and 60 % external assessment, for integrated theory & practical and practical oriented one credit courses; it shall be of 50 % internal assessment and 50 % external assessment and for online one credit courses, the assessment shall be conducted by the respective certification authority and its marks shall be made grade equivalents by the respective advisory committee. The question papers for the one credit courses have to be provided by the expert concerned who handle the practical/ theory course to the COE office. The duration of examination for one credit courses may be of 1½ hours for 50

marks. The students have to appear for One Continuous Internal Assessment and an End Semester examination.

12.6 ASSESSMENT FOR ONLINE COURSE (MOOC)

On successful completion of any MOOC, the student shall submit the digitally signed / verified certificate (after performance evaluation) to the Head of the department. The grade equivalence shall be approved by DAC and forwarded to the Controller of Examinations.

12.7 PROJECT WORK

Project work may be allotted to a single student or to a group of students not exceeding 4 per group.

12.7.1 The Head of the Institution shall constitute a Review committee for project work for each branch of study. There shall be three reviews during the semester by the Review committee. The student shall make presentation on the progress made by him / her before the committee. The project report shall be submitted as per the approved guidelines of Anna University, Chennai. The total marks obtained in the three reviews and the marks for the project report submission shall be **converted as Internal marks (50 marks)** and rounded to the nearest integer. The marks shall be awarded to every student based on the individual performance within the project group for the project report.

Review I	Review II	Review III	Project Submission & Assessment by the Supervisor	Total Marks
10	20	30	40	100

12.7.2 The End Semester Viva Voce Examination shall carry 100 marks. Marks are awarded to each student of the project group based on the individual performance in the Viva-Voce examination and **converted as external End Semester Examination marks (50 marks)** and rounded to the nearest integer.

End Semester Examinations				
Project Evaluation (60)		Viva-Voce (40)		Total Marks
Internal	External	Internal	External	
30	30	20	20	100

12.7.3 If a student fails to submit the project report on or before the submission date, he/she is deemed to have failed in the Project Work and shall re-enroll for the same in the subsequent semester.

12.7.4 Internal marks approved by the Head of the Institution shall be displayed in the notice board by the respective HoDs within 5 days from the last working day.

12.8 ATTENDANCE RECORD

Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD' which consists of attendance marked in each lecture or practical or project work class, the test marks and the record of class work (topics covered), separately for each course. This should be submitted to the Head of the Department periodically (15 days once to a maximum of 5 times per semester) for checking the syllabus coverage and the records of test marks and attendance. The Head of the Department will sign with date after due verification. At the end of the semester, the record should be verified by the Head of the Institution and submitted to the Controller of Examinations who will keep this document in safe custody (for five years). The inspection team appointed by the College / University may verify the records of attendance and assessment of both current and previous semesters.

12.9 MALPRACTICE

If a student indulges in malpractice in any of the End Semester / Internal Examinations, he / she shall be liable for punitive action as prescribed by the university from time to time.

13.0 REQUIREMENTS FOR APPEARING AND PASSING THE EXAMINATIONS

13.1 APPEARING REQUIREMENTS

13.1.1 A student shall normally be permitted to appear for the End Semester Examinations of the current semester if he/she has satisfied the semester completion requirements (subject to Clause 7) and has registered for examination in all courses of the semester.

13.1.2 Registration is mandatory for current semester examinations as well as arrear examinations.

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

13.2 PASSING REQUIREMENTS

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

13.2.2 If a student fails to secure a pass in a particular course, it is mandatory that he/she shall register and reappear for the examination in that course during the subsequent semester when examination is conducted in that course; he/she should continue to register and reappear for the examinations in the failed subjects till he/she secures a pass.

13.2.3 The internal assessment marks obtained by the student in the first appearance shall be retained and considered valid for all subsequent registration for the courses till the student secures a pass. However, from the third registration onwards if a student fails to obtain pass marks (Internal Assessment + End Semester Examination) as per clause 13.2.1, then the student shall be declared to have passed the examination if he/she secures a minimum of 50% marks prescribed for end semester examination alone.

13.2.4 The passing requirement is essential for completing mandatory courses which are assessed by internal and external assessments.

14.0 AWARD OF GRADES

All assessments of a course will be done on absolute marks basis. However, for the purpose of reporting the performance of a student , letter grades, each carrying certain number of points, will be awarded as per the range of total marks (out of 100) obtained by the student in each course as detailed below:

Range of Marks	Letter Grade	Grade Point	Description
90 -100	O	10.0	Outstanding
80 - 89	A+	9.0	Excellent
70 -79	A	8.0	Very Good
60 - 69	B+	7.0	Good
50 - 59	B	6.0	Average
0-49	RA	0.0	Fail
	SA	0.0	Shortage of Attendance
	RA*	0.0	Absent
	W	0.0	Withdrawal
	SATISFACTORY	0.0	Pass in mandatory non-credit course
	NOT SATISFACTORY	0.0	Fail in mandatory non-credit course

Non-credit courses shall be indicated as COMPLETED or NOT COMPLETED instead of the grades and this will not be counted for the computation of SGPA/ CGPA.

Mandatory courses shall be indicated as “SATISFACTORY” or “NOT SATISFACTORY” instead of grades as a students is deemed/ registered to get satisfactory in the mandatory course, in order to be declared for eligible for the award of the degree.

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

‘SA’ denotes **shortage of attendance** (as per 7.4) and hence prevented from writing the End Semester Examination. ‘SA’ will appear only in the result sheet.

“RA*” denotes absent for which reappearance is required for the examination in the course.

“W” denotes withdrawal from the exam for the particular course. (The grades RA and RA* will figure both in Grade Sheet as well as in Result Sheet)

Grade Sheet

After the declaration of results, grade sheet will be issued to each student which will contain the following details:

- The college in which the student has studied
- The list of courses enrolled during the semester, grade scored and Grade points earned.
- The Semester Grade Point Average (SGPA) for the semester and
- The Cumulative Grade Point Average (CGPA) of all courses enrolled from first semester onwards.

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

CGPA will be calculated in a similar manner, considering all the courses registered from the first semester to the eighth semester. “W” grade will be excluded for calculating GPA and CGPA.

The SGPA / CGPA will be available in the grade sheets only if the student has passed all the courses registered for that particular semester.

$$\text{SGPA / CGPA} = \frac{\sum_{i=1}^n C_i G_i}{\sum_{i=1}^n C_i}$$

Where

C_i is the Number of Credits assigned to the course

G_i is the point corresponding to the grade obtained for each course

n is number of all courses successfully cleared during the particular semester in the case of SGPA and during all the semesters in the case of CGPA.

The Equivalent marks to the CGPA will be printed in the grade sheet.

15.0 AWARD OF THE DEGREE – ELIGIBILITY & CLASSIFICATION

20.1 ELIGIBILITY

A student shall be declared to be eligible for the award of the Degree if he/she has

- passed the End Semester Examinations for all the courses of all the eight semesters (six semesters in the case of lateral entry)
- Successfully gained the required number of total credits as specified in the Curriculum corresponding to his/her programme within the stipulated time.
- No disciplinary action pending against him/her.
- Been recommended by the Academic Council of the college to the University, which in turn shall award the degree.
- Successfully completed the progress norms and mandatory courses
- Successfully completed any additional courses prescribed by the Dean Academics of the college, whenever any student is readmitted under Regulations other than Regulations 2019 based on the recommendations of the Academic Council.

15.2 CLASSIFICATION OF THE DEGREE AWARDED

15.2.1 FIRST CLASS WITH DISTINCTION

A student shall be declared to have passed the examination in **First class with Distinction** under the following conditions.

- Should have passed the End Semester Examinations in all the courses of all the eight semesters (six semesters in the case of lateral entry) in his/her **FIRST APPEARANCE** within four years (three years in the case of lateral entry). Withdrawal from examination (vide Clause 17) will not be

considered as an appearance. One year authorized break of study (if availed of) is permitted in addition to four years (three years in the case of lateral entry) for award of First Class with Distinction.

- Should have secured a CGPA of not less than 8.50

15.2.2 FIRST CLASS

A student who satisfies the following conditions shall be declared to have passed the examination in **First Class** if she/he satisfies the following conditions.

- Should have passed the End Semester Examinations in all the courses of all the eight semesters (six semesters in the case of lateral entry) within five years (four years in the case of lateral entry). One year authorized break of study (if availed of) or prevention from writing the End Semester Examinations 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.
- Should have secured a CGPA of not less than 7.0

15.2.3 SECOND CLASS

All other students (not covered in Clauses 15.2.1 and 15.2.2) who qualify for the award of the degree (vide Clause 15) shall be declared to have passed the examination in **Second Class**.

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

16.0 REVALUATION

- 16.1** A student can apply for photocopy of his/her semester examination answer script in a theory course, within 1 week from the declaration of results on payment of a prescribed fee through proper application to the Controller of Examination through the Head of Institution. The answer script is to be valued and justified by a faculty member, who

handled the course and recommend for revaluation with breakup of marks for each question. Based on the recommendation, the candidate can register for the revaluation through proper application to the Controller of Examination. The Controller of Examination will arrange for the revaluation and the results will be intimated to the student concerned through the Head of the institution. Revaluation is not permitted for practical courses and for project work.

- 16.2** A student can apply for revaluation of answer scripts for not exceeding 5 courses at a time.

17.0 WITHDRAWAL FROM END SEMESTER EXAMINATION

- 17.1** A candidate may be granted permission to withdraw from appearing for the examination of any regular course(s) of only one semester examinations. Such withdrawal is permitted only once during the entire period of study of the degree programme.

- 17.2** 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 in normal circumstances and also recommended by the Head of the Department, otherwise the applications shall not be considered. In case of accidents or unforeseen circumstances, the withdrawal will be considered even after the conduct of examinations; however the application is made within a week time after the date of examination subject to the approval of the Head of Institution.

- 17.3** Withdrawal shall not be construed as an appearance for the eligibility of a student for First Class with Distinction. Withdrawal from the End Semester Examinations is **NOT** applicable to arrear subjects of previous semesters. The student shall reappear for the withdrawn courses during the examination conducted in the subsequent semester. Withdrawal shall not be permitted in the Eighth End Semester Examinations.

18.0 AUTHORISED BREAK OF STUDY

- 18.1** Break of Study shall be granted only once for valid reasons for a maximum of one year during the entire period of study of the degree programme. If a student intends to temporarily discontinue the programme in the middle of the semester for valid reasons, and to rejoin the programme in a subsequent year, permission may be granted based on

the merits of the case provided he/she applies to the Dean Academics of the college in advance, but not later than the last date for registering for the End Semester Examinations of the semester through the Head of the Institution stating the reasons therefore and the probable date of rejoining the programme.

- 18.2** 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 Dean Academics of the college in the prescribed format through Head of the Institution at the beginning of the readmitted semester itself for prescribing additional courses, if any, from any semester of the regulations in-force, so as to bridge the curriculum in-force and the old curriculum and the same may be approved by the Dean Academics of the college.
- 18.3** The authorized break of study will not be counted towards the duration specified for passing all the courses for the purpose of classification (vide Clause 15.2).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 4.1 irrespective of the period of break of study in order that he/she may be eligible for the award of the degree.
- 18.4** If any student is prevented for want of required attendance, the period of prevention shall not be considered as authorized 'Break of Study' (Clause 18.1)

19.0 CO-CURRICULAR DEVELOPMENT

Every student being admitted to any undergraduate degree programme should undergo and involve in any of the co-curricular activities / events during the period of study.

In plant Training will equip the students with the latest ongoing trends in the industries.

Technical Workshops / Seminars / Skill Development Courses will enhance the skills and knowledge of the students.

Publications in National and International level conferences and symposiums will improve higher order thinking and presentation skills.

20.0 PERSONALITY AND CHARACTER DEVELOPMENT

All students shall enroll, on admission, in any of the personality and character development programmes (NSS / YRC) and undergo training for stipulated hours and in

case of NSS, a special camp for about seven days. The training shall include classes on hygiene and health awareness and also training in first-aid.

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

Youth Red Cross (YRC) will have activities related to social services in and around college.

Sports & Games activities will include preparation for inter-collegiate sports events.

Yoga for training the body and mind.

Club Activities initiate the Corporate Social Responsibility.

The training activities will normally be conducted during the weekends and the camp will normally be during the vacation period.

21.0 DISCIPLINE

Every student is required to observe discipline and decorous behavior both inside and outside the college and not to indulge in any activity which will tend to bring down the prestige of the college. The Head of Institution shall constitute a disciplinary committee consisting of the Heads of Department of which one should be from the faculty of the student to enquire into acts of indiscipline and notify to the Head of the Institution about the disciplinary action recommended for approval.

22.0 REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

The college may from time to time revise, amend or change the Regulations, Curriculum, Syllabus and Scheme of examinations, if deemed necessary, based on the approval of Academic council of the college.

23.0 AUDITS ON THE EXAMINATION SYSTEM

An audit on the examination system such as verification of the standard of question papers prepared by the examiners, valuation of answer scripts and methods adopted in awarding marks will be conducted by the team of expert members from IIT/NIT/Government Engineering Colleges and reputed autonomous engineering colleges, appointed by the Head of the Institution, after the completion of all the End Semester Examinations activities of the semester.

ANNEXURE –I

AMENDMENTS

(For the students admitted during the academic year 2021-2022 onwards)