

Adhiyamaan College of Engineering (Autonomous), Hosur 635130

REGULATIONS 2018

Common to all B.E. / B.Tech. Programmes

(For the students admitted to B.E. / B. Tech. Programme from the Academic year 2018-2019 onwards under Choice Based Credit System)

1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In this Regulation, unless the context otherwise specifies:

- I. "Programme" means Degree Programme (i.e.) B.E. / B.Tech. Degree Programme.
- II. "Discipline" means Branch or Specialization of B.E. / B.Tech. Degree Programme, like Civil Engineering, Bio Technology, etc.,
- III. "Course" means a Theory or Practical subject that is normally studied in a semester, like Mathematics, Physics, Engineering Graphics, etc.,
- IV. "BoS" means Board of studies
- V. "Head of the Institution" means the Principal of the College
- VI. "HoD" means Head of the Department
- VII. "CoE" means Controller of Examinations
- VIII. "DoTE" means Directorate of Technical Education, Chennai
- IX. "University" means Anna University, Chennai.

2. ADMISSION PROCEDURE

- 2.1 Students for admission to the first semester of the eight semester B.E. / B.Tech. Degree Programme shall be required to have a pass in Higher Secondary Examination (Academic 10 + 2) Curriculum or its equivalent examinations with Mathematics, Physics and Chemistry.
- 2.2 Students for admission to B.E / B.Tech Lateral Entry (Direct Second Year) shall be required to have passed in Diploma in Engineering / Technology or any B.Sc. (with Mathematics).
- 2.3 The eligibility criteria such as marks, number of attempts and physical fitness shall be as prescribed by DoTE and University from time to time.

3. STRUCTURE OF THE PROGRAMMES

3.1 Categorization of Courses

Every B.E. / B. Tech. Programme will have a curriculum with syllabi based on Choice Based Credit System (CBCS) consisting of theory and practical courses that shall be categorized as follows-

- i Humanities and Social Sciences (HS) courses include Technical English, Employability Skills, Professional Ethics and Human Values, Communication skills, Environmental Science and Engineering, Personality Development.
- ii. Basic Sciences (BS) courses include Mathematics, Physics, and Chemistry etc.
- iii Engineering Sciences (ES) courses include Engineering practices, Engineering Graphics, Basics of Electrical / Electronics / Civil / Mechanical / Computer Engineering, Instrumentation, Aero materials, Engineering Mechanics, etc.,
- iv. Professional Core (PC) courses include the core courses relevant to the chosen Specialization / Branch / Discipline.
- v. Professional Elective (PE) courses include the elective courses relevant to the chosen Specialization/ Branch.
- vi. Open Elective (OE) courses include the courses relevant to the chosen specialization / branch which a student can choose from the curriculum of other B.E. / B. Tech. / B. Arch. Programmes.
- vii. Employability Enhancement Courses (EEC) includes Project Work and/or Internship, Seminar, Case Study and Industrial/Practical Training.
- viii. Mandatory Learning Course (MLC) includes Disaster Mitigation and Management

3.2 Personality and Character Development

All students may enroll, on admission, in any one of the personality and character development programmes (NSS/ YRC/ RRC/ Yoga/ Fine Arts/ Sports) and undergo training / attend a camp.

National Service Scheme (NSS) Training shall include classes on hygiene and health awareness, training in first-aid and physical fitness. While the training activities will normally be during weekends, the camp will normally be during vacation period.

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

Red Ribbon Club (RRC) will have activities related to social awareness in and around College / Institutions.

3.3 Number of courses per semester

Curriculum of a semester shall normally have a blend of 6 or 7 theory courses and 2 or 3 laboratory courses. In addition, Employability Enhancement Course(s) may also be included. Each course may have credits assigned as per clause 3.4. However, the total number of courses per semester shall not exceed 10 (including EEC).

3.4 Credit Assignment

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

Contact periods per week	Credits
1 Lecture Period	1
2 Tutorial Periods	1
2 Practical periods (Lab)	1
Main Project Work	7

3.5 In Plant Training / Internship

The student may undergo Industrial Training / Internship optionally as per curriculum and the credits earned will be indicated in the Grade Sheet. The student is allowed to undergo Industrial Training / Internship during vacation.

3.6 Industrial Visit

The Heads of Departments make necessary arrangements for Industrial Visit to the students.

3.7 One Credit Courses

One credit courses like seminar/ case study/ practical training/ summer project, etc., may be offered by a Department. The credits earned through the one credit courses shall be over and above the total credit requirement prescribed in the curriculum for the award of the degree.

Also for the Co-curricular activities such as National Service Scheme (NSS), / Youth Red Cross (YRC)/ Red Ribbon Club (RRC) / Yoga / Fine Arts / Sports, a satisfactory / not satisfactory grading will appear in the grade sheet.

3.8 Medium of Instruction

The medium of instruction is English for all courses. Examinations, seminar presentations and project reports shall be in English only.

4. DURATION OF THE PROGRAMMES

4.1 A student is normally expected to complete the B.E. / B.Tech. Programme in 4 years, but in any case not more than 7 years for first year admitted. And for lateral entry students 3 Years, but in any case not more than 6 years.

- 4.2 Each semester consist of minimum 90 working days. The HoD shall ensure that every teacher imparts instruction as per the number of periods specified in the syllabus covering the full content of the syllabus for the course being taught.
- 4.3 The total duration for completion of the programme reckoned from the commencement of the first semester (3rd semester for Lateral Entry) 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 4) or prevention (vide clause 6) in order that the student may be eligible for the award of the degree (vide clause 12).

5. COURSE ENROLLMENT AND REGISTRATION

- 5.1. Each student, on admission shall be assigned to a Faculty Advisor/ Tutor (vide clause 7) who shall advice 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.
- 5.2 The enrollment for the courses of the Semesters II to VIII will commence Ten 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 Faculty Advisor/Tutor. If the student wishes, the student may drop or add courses (vide clause 5.4) within ten working days after the commencement of the concerned semester and complete the registration process duly authorized by the Faculty Advisor/Tutor and HoD.
- 5.3 After registering for a course, a student shall attend the classes, satisfy the attendance requirements, earn Continuous Assessment marks and appear for the Semester End Examinations.

5.4 Flexibility to Change courses

- 5.4.1 A student has to earn the total number of credits specified in the curriculum of the respective Programme of study in order to be eligible to obtain the degree. However, if the student wishes, then the student is permitted to earn more than the total number of credits prescribed in the curriculum of the student's programme.
- 5.4.2 On the recommendation / advice of the course instructor and Faculty adviser / Tutor, the student has the option to drop / change the course(s) within the stipulated period vide 5.2.
- 5.4.3 The student shall register for the project work in the VIII semester as per curriculum.

5.5 Reappearance Registration

- 5.5.1 If a student fails in a theory/ practical/ project work course, registration for that course in the subsequent semester is compulsory.
- 5.5.2 If a student has not registered for examinations or prevented from writing Semester End examinations due to lack of attendance, the student has to rejoin the programme in the same semester during the next academic year with the prior approval of DoTE and University.

6 REQUIREMENTS FOR APPEARING FOR THE SEMESTER END EXAMINATION

A student who has fulfilled the following conditions (vide clause 6.1 and 6.2) shall be deemed to have satisfied the attendance requirements for appearing for Semester End examination.

- 6.1 Every student is expected to attend all periods and earn 100% attendance. However, the student shall secure not less than 75% attendance taking into account the number of working days of that semester.
- 6.2 If a student secures attendance between 65% and less than 75% in the current semester due to medical reasons (hospitalization / accident / specific illness) or due to participation in the College / University / State / National / International level Sports events with prior permission from the HoD concerned and the Head of the Institution, the student shall be given condonation from the prescribed attendance requirement and the student shall be permitted to appear for the Semester End examinations.

In all such cases, the students should submit the required documents to the Principal through HoD for consideration of attendance condonation. However, the grant of condonation is at the discretion of the Principal and it is only once in the entire programme.

- 6.3 A student shall normally be permitted to appear for Semester End examinations if the student has satisfied the attendance requirements (vide Clause 6.1 - 6.2) and has registered for examinations of that semester by paying the prescribed Examination fee. However if a student fails to register for semester end examinations, will be treated as detained and has to rejoin as per clause 5.5.2.
- 6.4 Students who do not satisfy clause 6.1 and 6.2 and who secure less than 65% attendance in a semester will not be permitted to write the Semester End Examinations. The student has to rejoin as per clause 5.5.2.
- 6.5 A student who has already passed a course in the semester end examination is not entitled to reappear for improvement.

7. FACULTY ADVISOR / TUTOR

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

The responsibilities for the faculty advisor / tutor shall be:

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

8. ASSESSMENT PROCEDURES FOR AWARDING MARKS

8.1 Performance in each course of study shall be evaluated based on the maximum marks for Continuous Assessment is fixed as 50 and the Semester End Examination carries 50 marks. Seminars, Industrial visits/ Practical training/ In-plant training, Case Study etc., are evaluated by Continuous Assessment only. Every teacher is required to maintain an 'Attendance and Assessment Record' for every semester which consists of attendance marked in each class work (topics covered), separately for each course handled by the teacher. This should be submitted to the HoD and the principal periodically the records of assessment marks and attendance. The HoD will affix his/her signature after due verification. At the end of the semester, the record should be verified by the HoD who shall keep this document in safe custody for annual academic audit.

8.2 Assessment of Courses:

a. Continuous Assessment (CA)

Procedure of Continuous Assessment for each Theory course		Procedure of Continuous Assessment for each Practical course	
Item	Marks	Item	Marks
Unit Test (3 Tests)	30	Lab Performance	25
Motivated Study / Innovative Practice	10	Record Work	15
*Assignment	10	Viva Voce	10
Total	50	Total	50

**A minimum of two assignments shall be submitted by the students in each subject and total marks obtained in two assignments are scaled down to 10 marks*

b. End Assessment (EA)

The Semester End Examinations for theory / practical courses will be of 3 hours duration unless otherwise specified and shall normally be conducted during November / December in the odd semester and during April / May in the even semester. Semester End Examination is mandatory requirement for passing the course and every student should appear for the examination for theory, laboratory courses and project work.

8.3 Evaluation of project work

For CA, the HoD shall constitute a Review Committee consisting of minimum two senior faculty members along the guide from the concerned department. There shall be a minimum of three reviews of 100 Marks each for CA calculation. The student shall make presentation on the progress made by him / her and the committee will evaluate the performance to award CA marks.

EA, for the project work will be based on Viva-Voce conducted by a panel consisting of internal examiner and external examiner appointed by the CoE.

If any candidate fails to submit the project report on or before the date specified by the department, he/she is deemed to have failed in the project work.

8.4 Assessment for Seminar / Professional Practices

The seminar / Professional Practices shall be evaluated through continuous assessment only. Every student is expected to present a minimum of 2 seminars in any semester as per curriculum.

9. PASSING REQUIREMENTS

9.1 The Passing requirement for a student in a course is based on the analysis of the marks obtained both in Continuous Assessment (CA) and Semester End Examinations (EA).

Student will be declared pass, if a candidate secures 50% of marks in the End Assessment (EA) Examination and 50% marks in total (CA+EA), in theory / practical courses.

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 next semester; he/she should continue to register and reappear for the examination till he / she secures a pass. However, the Continuous Assessment marks (CA) obtained by the student in the first appearance shall be retained and considered valid for all subsequent attempts.

9.2 A student can apply for revaluation in a theory course, on payment of a prescribed fee along with application to the CoE through the HoD. The results will be intimated to the student concerned through the HoD. Revaluation is not permitted for laboratory course and project work.

9.3 A student can apply to get the photo copy of his / her answer booklet, after paying the prescribed fee (for theory only).

10. AWARD OF LETTER GRADES

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

Letter Grades	O	A ⁺	A	B ⁺	B	RA	AB
Grade Points	10	9	8	7	6	0	0
Absolute marks out of 100 (CA+EA)	90-100	80-89	70-79	60-69	50-59	Less than 50	Absent

`RA' denotes Reappearance (Fail).

11. GPA AND CGPA CALCULATION

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

$$\text{GPA} = \frac{\text{Sum of Weighted Grade points}}{\text{Total Credits}} = \sum \frac{(GP) \times C}{C}$$

Where, weighted grade points in each course

$$= \text{Grade Points (GP) multiplied by credits} = (GP) C$$

CGPA in a semester is the arithmetic average of GPA of previous semesters and current semester.

- 11.2 The credits earned through vide clause 3.7 shall not be considered for calculating GPA and CGPA.
- 11.3 Conversion of CGPA into Percentage of Marks

$$\text{Percentage of Marks} = \text{CGPA} \times 10$$

11.4 MALPRACTICE in Examination

If a student is involved in malpractice in EA examination and found guilty, the matter will be referred to the Malpractice Enquiry Committee. The committee will hold an enquiry and impose any of the following punishments:

- I Debarring from registering up to a maximum of ensuing two semesters.
- II Cancellation of all the subjects appeared in that semester.
- III Cancellation of the particular subject in which malpractice has occurred.
- IV. Penalty of Rs 2000 /- will be imposed in addition to any one of the above.

The decision of the Malpractice Enquiry Committee is final and binding.

12. ELIGIBILITY FOR THE AWARD OF DEGREE

A student shall be declared to be eligible for the award of the B.E. / B.Tech. Degree provided the student has

- I Successfully gained the required number of total credits as specified in the curriculum corresponding to the student's programme within the stipulated period.
- II Successfully completed the course requirements appeared for the Semester End examinations and passed all the subjects prescribed in all the 8 semesters (6 Semesters for Lateral Entry) within a maximum period of 7 years (6 Years for Lateral Entry) reckoned from the commencement of the first semester (third semester for Lateral Entry) to which the candidate was admitted.
- III Successfully passed the additional courses, prescribed by the BoS whenever readmitted / admitted through transfer, under prevailing regulations.
- IV. No disciplinary action pending against the student.

12.2 CLASSIFICATION OF THE DEGREE AWARDED

Description	Class
CGPA ≥ 8.5 , with no history of arrears and degree must be completed within the stipulated First Class with Period (4 Years for first year admitted & 3 Years Distinction for Lateral Entry).	First Class with Distinction
CGPA ≥ 7.0 and degree must be completed within the stipulated period / passed the examination in all the courses within the specified minimum number of semesters plus grace period of one year	First Class
All other successful candidates.	Second Class

13. PROVISION FOR WITHDRAWAL FROM EXAMINATION:

- 13.1 A student may, for valid reasons, (medically unfit / unexpected family situations / sports activities) approved by HoD and Principal be granted permission to withdraw from appearing for the Semester End examinations in any one of the semester examinations during the entire duration of the degree programme.
- 13.2 Withdrawal application shall be valid only if the student is otherwise eligible to write the examination (Clause 6) and if it is made within TEN working days before the commencement of the Semester End examinations and also recommended by the HoD.
- 13.3 Withdrawal shall not be considered as an appearance for deciding the eligibility of a student for First Class with Distinction.

14. BREAK OF STUDY FROM A PROGRAMME

- 14.1 A student is normally not permitted to temporarily break the study. However, if a candidate intends to temporarily discontinue the programme in the middle for valid reasons (such as prolonged illness or hospitalization etc.) and to rejoin the programme, he/she shall apply through HoD and Principal in advance in any case not later than two months prior to the commencement of ensuing semester in which break has occurred, to repeat that semester in the next academic year, subject to the approval of DoTE, Chennai and Anna University, Chennai.
- 14.2 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 CoE in the prescribed format through HoD at the beginning of the readmitted semester itself for prescribing additional/equivalent courses, if any, from any semester of the regulations in-force, so as to bridge the curriculum in-force and the old curriculum.
- 14.3 The total period of completion of the programme to which the candidate was first admitted, shall not exceed the maximum period specified (vide clause 4.1), irrespective of the period of the break of study in order that he/she may be qualified for the award of the degree.

15. CODE OF CONDUCT

Violation of code of conduct shall attract disciplinary action which may include punishment such as reprimand, disciplinary probation, penalty, debarring from the examination, withholding of grades/degree, cancellation of registration, withdrawal of placement services and even expulsion from the institution.

16. REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

The Institution may from time to time revise, amend or change the Regulations, Curriculum, Syllabus and Scheme of examinations with the approval of statutory committees.