



AL-AMEEN ENGINEERING COLLEGE

(Autonomous)

(Accredited by NAAC with “A” Grade :: An ISO Certified Institution)

(Affiliated to Anna University, Chennai & Approved by AICTE, New Delhi)

Karundevanpalayam, Nanjai Uthukkuli Post, Erode – 638 104, Tamilnadu, INDIA.

UG REGULATIONS 2020

(For Students Admitted from 2021-22 onwards)

Approved in the Fourth Academic Council Meeting

CHOICE BASED CREDIT SYSTEM

Common to all Under Graduate Programmes

Applicable to the Students admitted to B.E. / B.Tech. Programmes from the AY 2021-22 onwards

Institution Vision

To be a multi-disciplinary institute for academic excellence in Engineering, Technology and allied fields for uplifting the under-privileged and rural; inculcating brotherhood and positivism among its students.

Institution Mission

To groom confident, wholesome students with social consciousness and values, by endeavoring experiences for the ever-changing world of work.

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COMMON TO ALL UNDER GRADUATE PROGRAMMES

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

1 Preliminary Definitions and Nomenclature

In these Regulations, unless the context otherwise requires:

- i) **“Programme”** means Under Graduate Degree Programme that is, B.E. / B.Tech. Degree Programme.
- ii) **“Discipline”** means Branch or specialization of B.E./B.Tech. Degree Programme, like B.E. Civil Engineering, B.Tech., Information Technology, etc.
- iii) **“Course”** means a theory or practical subject that is normally studied in a semester, like Mathematics, Physics, Engineering Graphics, Circuit Theory etc.
- iv) **“Chairperson, Academic Council”** means the authority of the Autonomous Institution who is responsible for all academic activities of the Institute/Departments for implementation of relevant Rules and Regulations.
- v) **“Controller of Examinations (COE)”** means the authority of the Institution who is responsible for all Examination related activities of the Institution.
- vi) **“Head of the Institution (HOI)”** means the Principal of the Institution.
- vii) **“Chairperson, BoS”** means Chairperson of Board of Studies of each Board.
- viii) **“Head of the Department (HOD)”** means Head of the Department concerned.
- ix) **“Credit”** means a numerical value allocated for each course to describe the student’s workload required per week.
- x) **“Grade”** means the letter grade assigned to each course based on the range of marks specified.
- xi) **“Grade Point”** means a numerical value (0 to 10) allocated based on the grade assigned to each course.
- xii) **“Institution”** means Al-Ameen Engineering College
- xiii) **“University”** means Anna University, Chennai.
- xiv) **“LE”** means Lateral Entry Scheme.

2 Admission Procedure

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

Should have passed the Higher Secondary Examinations of (10+2) Curriculum (Academic Stream) prescribed by the Government of Tamilnadu 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)

Should have passed the Higher Secondary Examination of Vocational stream (Vocational groups in Engineering / Technology) as prescribed by the Government of Tamilnadu.

2.2 Lateral Entry admission

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 Lateral entry admission to the third semester of B.E./B.Tech. as per the rules fixed by Government of Tamil Nadu.

(OR)

The candidates who possess the Degree in Science (B.Sc.,) (10+2+3 stream) with Mathematics as a subject at the B.Sc. level are eligible to apply for Lateral entry admission to the third semester of B.E./B.Tech. In addition, any other conditions as notified by the Government of Tamil Nadu will be followed.

2.3 The eligibility criteria such as marks, number of attempts and physical fitness shall be as prescribed by the Syndicate of the University from time to time.

3 Programmes Offered

A candidate may be offered admission to any one of the B.E./B.Tech. programme / discipline of study approved by AICTE & Anna University.

4 Structure of Programmes

4.1 Categorization of Courses

Every B.E./B.Tech. Programme will have a curriculum with syllabi consisting of the theory and practical courses such as:

- i. **Humanities, Social Sciences and Management Courses (HS)** include Technical English, Communication Skills, Professional Ethics, Management Courses, etc.

- ii. **Basic Sciences Courses (BS)** include Mathematics, Physics, Chemistry, etc.,
- iii. **Engineering Sciences Courses (ES)** include Engineering Practices, Engineering Graphics, Basics of Electrical / Electronics / Mechanical / Computer Engineering, Instrumentation etc.,
- iv. **Professional Core Courses (PC)** include the core course relevant to the chosen specialization / branch.
- v. **Professional Elective Courses (PE)** include the elective courses relevant to the chosen specialization / branch.
- vi. **Open Elective Courses (OE)** 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.
- vii. **Employability Enhancement Courses (EEC)** include Project Work, Internship, Seminar, Professional Practices, Case Study and Industrial / Practical Training etc.
- viii. **Mandatory Courses (MC)** include Environmental Sciences, Constitution of India, Universal Human Values 2: Understanding Harmony, Career Guidance etc and courses prescribed by AICTE / Anna University from time to time.

4.2 Personality and Character Development

All students shall enrol, on admission, in any one of the personality and character development programmes (NSS/YRC/Sports/Yoga) and undergo training for about 40 hours (20 hours for lateral entry). 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 Institution.

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

Sports will have Games, Drills and Physical exercises.

Yoga will have physical activity, breathing techniques, etc to develop harmony in the body and environment.

While the training activities will normally be during weekends, the camp will normally be during vacation period.

- 4.3** Each semester curriculum shall normally have a blend of lecture courses not exceeding **7** Theory courses and Theory Courses with Laboratory Components and **4** Employability Enhancement Courses and Laboratory Courses. However, the total number of courses per semester shall not exceed **10**. Each Courses shall have credits assigned as per clause 4.4.

4.4 Credit Assignment

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

Contact period per week	Credit
1 Lecture / Tutorial Period	1
2 Laboratory Periods (Also, for EEC courses like Mini Project / Project Work etc.)	1

4.5 Industrial Training / Internship

- 4.5.1 The students may undergo Industrial Training / Internship for a period as specified in the Curriculum during summer / winter vacation. In this case the training has to be undergone continuously for the entire period.

The student may undergo Internship at a Research organization / University / Industry (after due approval from the Head of the Department) for the period prescribed in the curriculum during the summer / winter vacation, in lieu of Industrial training. Attendance Certificate mentioning the period of Industrial training / Internship and signed by the competent authority, as per the format provided by the Institution shall be submitted to the Head of the Department. The Head of the Department shall forward the attendance certificate to the COE through the Head of the Institution.

- 4.5.2 If Industrial Training / Internship is not prescribed in the curriculum, the student may undergo Industrial Training / Internship optionally and the credits earned will be indicated in the Grade Sheet. If the student earns three credits in Industrial Training / Internship, the student may drop one Professional Elective (only one professional elective can be dropped). In such cases, Industrial Training / Internship need to be undergone continuously from one organization or with a combination one two weeks and one four weeks from one/two organizations. However, if the number of credits earned is 1 or 2, then these credits shall not be considered for classification of the degree. Students shall get permission from the Head of the Department for taking Industrial Training / Internship and the Certificate of completion of Industrial Training / Internship shall be forwarded to the COE through the Head of the Institution.

Duration of Industrial Training / Internship	Credits
2 Weeks	1
4 Weeks	2
6 Weeks	3

1 Week = 40 Internship Hours

4.6 Industrial Visit

Every student is required to go for at least one Industrial Visit every year starting from the second year of the programme. The Head of Department shall ensure that necessary arrangements are made in this regard.

4.7 Value Added Courses

A Student can opt for the Value Added Courses offered by the various Departments, based on their areas of interest from Semester II to VI. All the students should undergo and get passed in at least two value added courses before their Project Work Phase I. Each value added course instructor shall firm the assessment methods of course and should get approval from BoS through the HoD. HoD shall submit the list of such courses, duly approved / ratified by the Academic Council, to the Controller of Examinations to administer the examination process. Securing a pass in at least two value added courses is mandatory, before the commencement of VII Semester to undergo Project Work Phase I.

4.8 Online Courses

Students may be permitted to register for online courses (which are provided with certificate after evaluation of the performance) such as NPTEL, SWAYAM, IIT Spoken Tutorial, MOOC, etc., during third to seventh semester of his/her study with the approval of Head of the Department. The list of online courses and method of evaluation shall be approved by the BoS. On successful completion of the course, he/she has to submit the copy of the certificate to the Head of the Department for exemption from registering for an elective course. Based on the recommendation by the team of faculty members nominated by the HoD, the grade will be awarded and submitted to the Controller of Examinations. For every 3 credits earned through online courses, one elective course of 3 credits shall be exempted subject to the maximum of two elective courses for the entire duration of the programme.

4.9 Advancement of Courses:

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

The student should not have arrears and shall have CGPA of 7.50 and above.

The student shall undergo the eighth semester courses in the sixth and seventh semesters. The Head of Department, in consultation with the faculty handling the said courses shall forward the proposal to the Controller of Examinations for approval at least 1 week before the commencement of the sixth semester classes of the programme for approval.

4.10 Medium of Instruction

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

5 Duration of the Programme

- 5.1 A student is ordinarily expected to complete the B.E. / B.Tech. Programme in 8 semesters (four academic years) but in any case, not more than 14 Semesters for HSC (or equivalent) candidates and not more than 12 semesters for Lateral Entry Candidates.
- 5.2 Each semester shall normally consist of 75 working days or 450 periods of 50 minutes each. The Head of the Department shall ensure that every teacher imparts instruction as per the number of periods specified in the syllabus and that the teacher teaches the full content of the specified syllabus for the course being taught.
- 5.3 However, special theory / practical classes may be conducted for students who require additional coaching over and above the number of periods normally specified, as decided by the class committee.
- 5.4 For the purpose of calculation of attendance requirements for writing the End Semester Examinations (as per clause 7) by the students, all the periods from commencement of classes till last working day as prescribed in the academic schedule shall be taken into account.
- 5.5 The total period for completion of the programme reckoned from the commencement of the first semester (third semester in case of LE) to which the candidate was admitted shall not be exceed the maximum period specified in clause 5.1 irrespective of the period of break of study (vide clause 19) in order that he/she may be eligible for the award of the degree (vide clause 17).

6 Course Registration

- 6.1 Each student has to register for all the courses to be undergone in the curriculum of a particular semester. The student can also register for courses for which the student has failed in the earlier semesters. In such cases the student shall do reappearance registration for those courses for which the attendance requirement is not compulsory. This registration is for undergoing the course as well as for writing the End Semester Examinations. No Elective course shall be offered by any department unless a minimum 10 students register for the course. However, if the students admitted in the associated Branch and Semester is less than 10, this minimum will not be applicable.

The courses that a student registers in a particular semester may include

- i. All courses of the current semester.
- ii. All the courses that the student has not cleared in the previous semesters.

Candidates who **fail to register their courses as mentioned above** shall not be permitted to write that End Semester Examinations of all the courses and not permitted to move to the next semester. Candidates who do not qualify to appear for End Semester Examinations of any semester due to non-registration of courses have to register for and repeat that semester at the next available opportunity subject to the approval of Directorate of Technical Education, Tamil Nadu and Anna University Chennai.

6.2 Flexibility to Drop courses

Students can be permitted to drop one or two courses (not exceeding 6 credits) in a semester from 3rd to 7th for B.E. / B.Tech. programmes. Students shall register for the dropped courses in the subsequent semesters. Such students shall complete all the courses and earn the total credits prescribed for the programme within the stipulated duration (vide Clause 5). Dropped courses, when registered again, shall not be considered as an attempt for the purpose of classification in that semester. The dropped course should not be a prerequisite for the courses in the subsequent semesters.

7 Attendance Requirements for Completion of a Semester

- 7.1 A Candidate who has fulfilled the following conditions shall be deemed to have satisfied the requirements for completion of a semester.

Ideally every student is expected to attend all classes of all the courses and secure 100% attendance. However, in order to give provision for certain unavoidable reasons such as Medical / participation in sports, the student is expected to attend at least 75% of the classes.

Therefore, he/she **shall secure not less than 75%** (after rounding off to the nearest integer) of overall attendance as calculated as per clause 5.4.

- 7.2 However, a candidate who secures overall attendance between 65% and 74% in the current semester due to medical reasons (prolonged hospitalization / accident / specific illness) or due to participation in extra-curricular and co-curricular activities with prior permission from the Head of the Department concerned may be permitted to appear for the current semester examinations, if the student shall apply for condonation before the last working day of the respective semester with prescribed condonation fee along with necessary certificates. The condonation should be decided by a condonation recommendation committee consisting of the Head of the Department, Class Advisor and Mentor of the student and Deputy Controller of Examinations. The committee scrutinizes the genuity of the "Condonation Application" and conduct of the student and recommend it to the Controller of Examinations and Principal to grant the condonation after satisfying the requirements specified in clause. However, during the entire programme of study, a student can avail such Condonation in any two semesters only (regardless the number of courses).

- 7.3 Candidates who **secure less than 65% overall attendance and candidates who do not satisfy the clause 7.1 and 7.2** shall not be permitted to write the End Semester Examinations of that semester courses and not permitted to move to the next semester. Candidates who do not qualify to appear for End Semester Examinations of any semester for want of attendance and / or progress and / or character and conduct have to register for and repeat that semester at the next available opportunity subject to the approval of Directorate of Technical Education, Tamil Nadu and Anna University Chennai. However, the candidate has to register for the courses which he/she has not cleared in the previous semesters.

- 7.4 The re-admitted candidates have to follow the curriculum and syllabus as existing at the time of re-admission. The readmission committee will decide the courses that he/she has to undergo in the new curriculum considering the equivalent courses that he/she has gone through in the old curriculum, so as to bridge the curriculum in-force and the old curriculum. The courses recommended by the committee shall be taken under a faculty mentor and appear for the examination as specified by the college.

8 Faculty

8.1 Class Advisor

There shall be a class advisor for each class. The class advisor will be one among the faculty members of the class. He/She will be appointed by the Head of the department concerned. The class advisor is the ex-officio member and the Convener of the class committee. The responsibilities for the class advisor shall be:

- To act as the channel of communication between the HoD and the students of the respective class.
- To collect and maintain various statistical details of the students.
- To help the chairperson of the class committee in planning and conduct of the class committee meetings.
- To monitor the academic performance of the students including attendance and to inform the class committee.
- To attend to the students welfare activities like awards, medals, scholarships and industrial visits.

8.2 Mentor

The Mentor shall advise and guide their Mentee students in registering of courses, reappearance of courses, monitor their attendance and progress and counsel them periodically. The Mentor also discusses/informs with the parents about the progress/performance of the students concerned.

9 Class Committee

- 9.1 Every class shall have a class committee consisting of teachers of the class concerned, student representatives and a chairperson who is not teaching the class. It is like the "Quality Circle" (more commonly used in industries) with the overall goal of improving the teaching learning process. The functions of the class committee include:

- Solving problems experienced by students in the classroom and in the laboratories. Clarifying the Regulations of the degree programme and the details of rules therein.
- Informing the student representatives, the academic schedule including the dates of assessments and the syllabus coverage for each assessment.

- Informing the student representatives, the details of Regulations regarding weightage used for each assessment. In the case of practical courses (laboratory / project work / seminar etc.) the breakup of marks for each experiment / exercise / module of work, should be clearly discussed in the class committee meeting and informed to all the students.
 - Analyzing the performance of the students of the class after each test and finding ways and means of solving problems, if any.
 - Identifying the slow learners, if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such 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** Maximum of 6 student representatives shall be included in the class committee.
- 9.5** The Chairperson of the class committee may invite the Class Advisor(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 Institution.
- 9.7** The chairperson is required to prepare the minutes of every meeting, submit the same to Head of the Institution within two days of the meeting and arrange to circulate it among the students and teachers concerned. If there are some points in the minutes requiring action by the management, the same shall be brought to the notice of the Management by the Head of the Institution.
- 9.8** The first meeting of the class committee shall be held within two weeks from the date of commencement of the semester, in order to inform the students about the nature and weightage of assessments within the framework of the Regulations. Two or three subsequent meetings may be held in a semester at suitable intervals. The Class Committee Chairperson shall put on the Notice Board the cumulative attendance particulars of each student at the end of every such meeting to enable the students to know their attendance details to satisfy the clause 7 of this Regulation. During these meetings the student members representing the entire class, shall meaningfully interact and express the opinions and suggestions of the other students of the class in order to improve the effectiveness of the teaching - learning process.

10 Course Committee for Common Courses

Each common theory course offered to more than one discipline or group, shall have a "Course Committee" comprising all the teachers teaching the common course with one of them nominated as Course Coordinator. The nomination of the Course Coordinator shall be made by the Head of the Department / Head of

the Institution depending upon whether all the teachers teaching the common course belong to a single department or to several departments. The "Course committee" shall meet in order to 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 Continuous Assessment Tests (CAT).

11 System of Examination

- 11.1** Performance in each course of study shall be evaluated based on
(i) Continuous Internal Assessments (CIA) throughout the semester and
(ii) End Semester Examinations (ESE) at the end of the semester.
- 11.2** Each course, both theory and practical (including project work & viva voce examinations) shall be assessed for a maximum of 100 marks.
- 11.2.1** For all **theory courses**, the Continuous Internal Assessment will carry **40 marks** while the End Semester Examinations will carry **60 marks**.
- 11.2.2** For all **theory courses with laboratory components**, the Continuous Internal Assessment will carry **50 marks** while the End Semester Examinations will carry **50 marks**.
- 11.2.3** For all **laboratory courses**, the Continuous Internal Assessment will carry **60 marks** while the End Semester Examinations will carry **40 marks**.
- 11.2.4** The Continuous Internal Assessment for the **project work** will carry **40 marks** while the End Semester Examinations will carry **60 marks**.
- 11.2.5** For all the remaining courses (not covered vide clause 11.2.1 to 11.2.4), Continuous Internal Assessment will carry **100 marks**.
- 11.3** The End Semester Examinations (theory and laboratory) of 3 hours duration for maximum of 100 marks shall ordinarily be conducted between October and December during the odd semesters and between April and June during the even semesters.
- 11.4** The End Semester Examinations 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 guide of the project group and an internal examiner.
- 11.5** For the End Semester Examinations of laboratory courses and project work, maximum of 100 marks shall be conducted and evaluated based on the rubrics in 3 hours duration with the internal and external examiners appointed by the Controller of Examinations.
- 11.6** For the End Semester Examinations of theory courses with laboratory components, maximum of 100 marks (Theory 40 marks and Laboratory components 60 marks) shall be conducted and evaluated based on the rubrics in 3 hours duration with the internal and external examiners appointed by the Controller of Examinations.

12 SCHEME OF ASSESSMENT

For all B.E./B.Tech. Programmes, assessment scheme of 100 marks for each course are mentioned below.

S.No.	Category of course	Continuous Internal Assessments (CIA)	End Semester Examinations (ESE)
1.	Theory Courses	40 Marks	60 Marks
2.	Theory Courses with Laboratory Components	50 Marks	50 Marks
3.	Laboratory Courses	60 Marks	40 Marks
4.	Project Work	40 Marks	60 Marks
5.	Mandatory Courses	100 Marks	---
6.	Other Employability Enhancement Courses (EEC)	100 Marks	---
7.	Value Added Courses (VAC)	100 Marks	---

13 Awarding of Continuous Internal Assessment (CIA) and End Semester Examination (ESE) Marks

13.1 Theory Courses

Assessment		Maximum Marks	Total Marks	Converted to
CIA	Continuous Assessment Test I (CAT I)	100 marks	240	40
	Continuous Assessment Test II (CAT II)	100 marks		
	Other Assessment <i>Assignment, Seminar, Mini Project report, Open book test, Cooperative learning report, Journal paper review, Group Presentation, Poster preparation, etc. (any one applicable).</i>	40 marks		
ESE	End Semester Examinations	100 marks	100	60
Total Marks				100

13.2 Theory Courses with Laboratory Components

Assessment		Maximum Marks	Total Marks	Converted to	
CIA	CAT I (Theory Component)	100 marks	100	40	50
	CAT II (Laboratory Component)	80 marks	100	60	
	Laboratory Record	20 marks			
ESE	End Semester Examinations (Theory 40 marks, Laboratory 60 marks)	100 marks	100	50	50
Total Marks					100

13.3 Laboratory Courses

Assessment		Maximum Marks	Total Marks	Converted to
CIA	Model Examinations	80	100	60
	Laboratory Record	20		
ESE	End Semester Examinations	100	100	40
Total Marks				100

13.4 Project Work Phase I & Project Work Phase II

Assessment					Converted to
CIA	Review I	Review II	Review III	Total Marks	
	25	30	35	100	40
ESE	End Semester Examinations			100	60
Total Marks					100

13.5 Mandatory Courses (Internal Mode)

Assessment		Maximum Marks	Total Marks	Converted to
CIA	Continuous Assessment Test I (CAT I)	100 marks	240	100
	Continuous Assessment Test II (CAT II)	100 marks		
	Other Assessment <i>Assignment, Seminar, Mini Project report, Open book test, Cooperative learning report, Journal paper review, Group Presentation, Poster preparation, etc. (any one applicable).</i>	40 marks		
Total Marks				100

13.6 Industrial Training / Internship (Internal Mode)

Continuous Internal Assessments	Maximum Marks
Assessment by Industry	30
Viva-voce	20
Presentation	25
Case Study / Report	25
Total Marks	100

13.7 Course Diary

Every faculty is required to maintain '**COURSE DIARY**' for every semester which consists of attendance marked in each theory / Laboratory / EEC class, the assessment marks and the record of class work (topics covered), separately for each course handled by the faculty. This should be submitted to the Head of the Department periodically (at least three times in a semester) for checking the syllabus coverage and the records of assessment marks and attendance. The Head of the Department will affix his/her signature with date after due verification. At the end of the semester, the record should be verified by the Head of the Department who shall keep this document in safe custody (for five years). The Course Diary of both current and previous semesters should be available for Academic Audit.

14 Requirements for Appearing End Semester Examinations

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

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

15 Passing Requirements

- 15.1** A candidate who secures not less than 50% of total marks prescribed for the course [Continuous Internal Assessment + End Semester Examinations] with a minimum of 45% 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).

- 15.2** If a candidate fails to secure a pass in a particular course, it is mandatory that he/she shall register and appear only for the end semester examination in the subsequent semester. In such case, the CIA marks obtained by the student in the first appearance shall be retained and considered valid for all subsequent attempts till the student secures a pass. However, from the third attempt onwards if a student fails to obtain pass marks (CIA + ESE) as per clause 15.1, then the student shall be declared to have passed the examination if he/she secures a minimum of 50% marks prescribed for the End Semester Examinations alone.
- 15.3** The passing requirement for the courses which are assessed only through Continuous Internal Assessments is 50 marks (out of total converted CIA 100 marks). If a candidate fails to secure a pass in a particular course, it is mandatory that he/she shall appear for the Continuous Internal Assessments (CIA) during the subsequent semester when it is conducted in that course; till he / she secures a pass.
- 15.4** In order to complete the programme within 4 years, **Supplementary Examinations** are conducted for immediate passing out students of all B.E. / B.Tech. programmes satisfying following norms.
- Students having arrears in the 7th and 8th semester courses alone (after publication of their revaluation results) are only permitted to register.
 - Revaluation is permitted for the supplementary examinations.
 - Those who availed this opportunity are also permitted to register for the subsequent ESE.

16 Award of Letter Grades

- 16.1** The award of letter grades will be decided using relative grading principle. The performance of a student will be reported using letter grades, each carrying certain points as detailed below:

Letter Grade	Grade Points
O (Outstanding)	10
A+ (Excellent)	9
A (Very Good)	8
B+ (Good)	7
B (Average)	6
C (Satisfactory)	5
U	0
AB (Absent)	0
SA (Shortage of Attendance)	0
W (Withdrawal)	0

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

"U" denotes that the student has failed to pass in that course. Reappearance is required for the examination in that particular course. The grade U will figure both in Marks Sheet as well as in Result Sheet.

"AB" denotes that the student is "ABSENT" for that course. Reappearance is required for the examination and the attendance requirement need not be satisfied. The grade AB will figure both in Marks Sheet as well as in Result Sheet.

"SA" denotes shortage of attendance (as per clause 7.3) and hence prevention from writing the end semester examination. The grade SA will appear only in the result sheet.

"W" denotes withdrawal from the particular course. The grade W will figure in Marks Sheet. For this case the student has to earn Continuous Internal Assessment marks and have to register for the End Semester Examinations.

For those students who have passed the course (theory course, theory with laboratory components), the relative grading shall be done. The marks of those students who have passed only shall be inputted in the software developed for relative grading. The evolved relative grading method normalizes the result data using the BOX-COX transformation method and computes the grade range for each course separately and awards the grade to each student. If the students' strength is greater than 30, the relative grading method shall be adopted.

For all the courses, If the students' strength is less than or equal to 30 then the absolute grading procedure shall be followed as given in the table.

For the project work / Internship and Laboratory courses, absolute grading procedure shall be followed as given in the table.

Table – Grade range for Absolute Grading

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

- 16.2** For the Personality and Character Development programmes such as NSS / YRC / Sports / Yoga, a "**Satisfactory / Not Satisfactory**" grading will appear in the Statement of Grades. Every student shall put in a minimum of 75% attendance in the. The training and camp shall be completed during the first and second year of the programme. A satisfactory grade in the above co-curricular activities is compulsory for the award of degree.

16.3 For the Value Added Courses a “**Passed / Not Cleared**” grading will appear in the Statement of Grades. The Courses for which the grades are U, SA will not figure in the Statement of Grades. A Passed grade in at least two Value Added Courses is compulsory for the award of degree.

16.4. GPA and CGPA Calculation - Grade Sheet

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

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

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

CGPA will be calculated in a similar manner, considering all the courses registered from first semester. “U”, “AB”, “SA” & “W” grades will be excluded for calculating GPA and CGPA.

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

where,

C_i - Credits assigned to each course.

GP_i - Grade point corresponding to the letter grade obtained for each course.

n - Number of all courses successfully PASSED during the particular semester in the case of GPA and during all the semesters in the case of CGPA.

17 Eligibility for the Award of Degree

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

- i. The student has successfully gained the required number of total credits as specified in the curriculum corresponding to student's programme within the stipulated time.
- ii. The student has successfully completed the course requirements, appeared for the End Semester Examinations and has passed all the courses prescribed in all the 8 semesters (six semesters in case of LE) within a maximum period of 7 years (six years in case of LE) reckoned from the commencement of the first semester (third semester in case of LE) to which the candidate was admitted.
- iii. The student has successfully completed any additional courses prescribed by the Chairperson, Academic Council whenever, any candidate is readmitted under regulations other than AEC-UG-R-2020 (vide clause 19.3)
- iv. Successfully completed the Industrial Visits, In-Plant Training / Internship requirements.
- v. Successfully completed the Mandatory courses requirements.
- vi. The student has no disciplinary action pending against him/her.
- vii. The award of Degree shall be approved by the Syndicate of the University.

17.2 Classification of the Degree Awarded

17.2.1 First Class with Distinction:

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

- Should have passed the examination in all the courses of all the eight semesters (six semesters in case of LE) in his/her First Appearance **within five years (four years in case of LE)**. Withdrawal from examination (vide Clause 18) will not be considered as an appearance.
- Should have secured a **CGPA of not less than 8.50**.
- One-year authorized break of study (if availed of) is included in the five years (four years in case of LE) for award of First class with Distinction.
- Should NOT have been prevented from writing end semester examination due to lack of attendance in any semester.

17.2.2 First Class:

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

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

semesters (six semesters in case of LE) **within five years (four years in case of LE)**. Withdrawal from examination (vide Clause 18) will not be considered as an appearance.

- Should have secured a **CGPA of not less than 6.50**.
- One-year authorized break of study (if availed of) or prevention from writing End semester examination due to lack of attendance is included in the duration of five years (four years in case of LE) for the award of First Class.

17.2.3 Second Class:

All other candidates (not covered in clauses 17.2.1 and 17.2.2) who qualify for the award of the degree (vide Clause 17.1) shall be declared to have passed the examination in **Second Class**.

17.3. Honours & Minor Degree

17.3.1 B.E. / B.Tech. Honours (Specialization in the Same Discipline)

- The student should have earned additionally a minimum of **18 credits from a vertical of the same programme**.
- Should have passed the examination in all the courses of all the eight semesters (six semesters in case of LE) in his/her First Appearance **within five years (four years in case of LE)**. Withdrawal from examination (vide Clause 18) will not be considered as an appearance.
- One-year authorized break of study (if availed of) is included in the five years (four years in case of LE).
- Should NOT have been prevented from writing end semester examination due to lack of attendance in any semester.
- For **First Class with Distinction**, should have secured a **CGPA of not less than 8.50**.
- For **First Class**, should have secured a **CGPA of not less than 7.50**.

17.3.2 B.E. / B.Tech. Honours

- The student should have earned additionally a minimum of **18 credits from more than one vertical of the same programme**.
- Should have passed the examination in all the courses of all the eight semesters (six semesters in case of LE) in his/her First Appearance **within five years (four years in case of LE)**. Withdrawal from examination (vide Clause 18) will not be considered as an appearance.
- One-year authorized break of study (if availed of) is included in the five years (four years in case of LE).
- Should NOT have been prevented from writing end semester examination due to lack of attendance in any semester.

- For **First Class with Distinction**, should have secured a **CGPA of not less than 8.50**.
- For **First Class**, should have secured a **CGPA of not less than 7.50**.

17.3.3 B.E. / B.Tech. (Minor in Other Specialisation)

- The student should have earned additional a minimum of **18 credits from any one of the vertical of other B.E. / B.Tech. programmes**.
- One-year authorized break of study (if availed of) is included in the five years (four years in case of LE).
- Should NOT have been prevented from writing end semester examination due to lack of attendance in any semester.
- For **First Class with Distinction**, should have passed the examination in all the courses of all the eight semesters (six semesters in case of LE) in his/her First Appearance **within five years (four years in case of LE)**. Withdrawal from examination (vide Clause 18) will not be considered as an appearance. Should have secured a **CGPA of not less than 8.50**.
- For **First Class**, should have passed the examination in all the courses of all the eight semesters (six semesters in case of LE) in **within five years (four years in case of LE)**. Withdrawal from examination (vide Clause 18) will not be considered as an appearance. Should have secured a **CGPA of not less than 6.50**.

17.3.4 Students can earn maximum of 6 credits in online mode (SWAYAM platform), out of these 18 credits as approved by Board of Studies.

17.3.5 B.E. / B. Tech. (Honours - Specialization in the same discipline), B.E. / B.Tech. Honors and B.E. / B.Tech. (Minor in Other Specialisation) degree will be optional for students.

17.3.6 For the clauses **17.3.1 & 17.3.2**, the student will be permitted to register the courses from Semester V onwards provided the marks earned by the students until III semester should be of CGPA 7.50 and above and passed all the courses in the first attempt.

17.3.7 For the clause **17.3.3**, the student will be permitted to register the courses from Semester V onwards provided the marks earned by the students until Semester III is CGPA 7.50 and above.

17.3.8 If a student decides not to opt for Honours, after completing certain number of additional courses, the additional courses studied shall be considered instead of the Professional Elective courses which are part of the curriculum. If the student has studied more number of such courses than the number of Professional Elective courses required as per the curriculum, the courses with higher grades shall be considered for the calculation of CGPA. Remaining courses shall be printed in the grade sheet, however, they will not be considered for calculation of CGPA.

17.3.9 If a student decides not to opt for Minor, after completing certain number of courses, the additional courses studied shall be considered instead of Open

Elective courses which are part of the curriculum. If the student has studied more number of such courses than the number of open electives required as per the curriculum, the courses with higher grades shall be considered for calculation of CGPA. Remaining courses shall be printed in the grade sheet, however, they will not be considered for calculation of CGPA.

- 17.4** A candidate who is absent in end 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 18 and 19).

17.5 Photocopy / Revaluation

A candidate can apply for photocopy of his/her end semester examinations answer paper in a theory course, within two weeks from the declarations of results on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of the Department. The answer script is to be valued and justified by a faculty member, who handled the subject and recommend for revaluation with breakup of marks for each question. Based on the recommendation, candidate can register for the revaluation through proper application to the Controller of Examinations. The Controller of Examinations will arrange for the revaluation and the results will be intimated to the candidates concerned through the Head of the Department. Revaluation is not permitted for practical courses and for project work. A candidate can apply for revaluation of answer scripts for not exceeding 5 courses at a time.

17.6 Review

Candidates not satisfied with Revaluation can apply for Review of his/ her examination answer paper in a theory course, within the prescribed date on payment of a prescribed fee through proper application to Controller of Examination through the Head of the Department. Candidates applying for Revaluation only are eligible to apply for Review.

17.7 Ranks Awarded to Students

Ranks are awarded for each programme based on the following criteria.

- The number of ranks awarded for each programme is 5% of the student's intake in that programme.
- The rank of a student is determined from CGPA. However, students who have scored less than 7.50 CGPA will not be eligible for a rank.
- Students should have passed the End Semester Examination in all the courses of all the eight semesters (six semesters in case of LE) in his/her First Appearance without any break of study.

18 Provision for Withdrawal from End Semester Examinations

- 18.1** A student may, for valid reasons, (medically unfit / unexpected family situations / participation in sports approved by the Head of the Institution) be granted permission to withdraw from appearing for the end semester examination in any course or courses in **ANY ONE** of the semester examination during the entire duration of the degree programme.
- 18.2** Withdrawal application shall be valid only if the student is otherwise eligible to write the examination (Clause 7) and if it is made within TEN days prior to the commencement of the examination in that course or courses and also recommended by the Head of the Department and approved by the Head of the Institution with intimation to the COE.
- 18.2.1** Notwithstanding the requirement of mandatory TEN days notice, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case.
- 18.3** In case of withdrawal from a course / course (Clause 14) the course will figure in Statement of Grades. Withdrawal essentially requires the student to register for the course/courses. The student has to register for the course, fulfil the attendance requirements (vide clause 7), earn continuous assessment marks and attend the end semester examination. However, Withdrawal shall not be construed as an appearance for deciding the eligibility of a candidate for First Class with Distinction and First Class.
- 18.4** Withdrawal is permitted for the end semester examinations in the final semester only if the period of study the student concerned does not exceed 5 years (four years in case of LE) as per clause 17 .2.1.
- 18.5** Withdrawal is NOT permitted for arrears examinations of the previous semesters.
- 18.6** Candidates shall appear, for the courses withdrawn, during the examination conducted in the subsequent semester.

19 Provision for Authorized Break of Study from a Programme

- 19.1** A student is permitted to go on break of study for a maximum period of one year as a single spell.
- 19.2** Break of Study shall be granted only once for valid reasons for a maximum of one year during the entire period of study of the degree programme. However, in extraordinary situation the candidate may apply for additional break of study not exceeding another one year by paying prescribed fee for break of study. If a candidate intends to temporarily discontinue the programme in the middle of the semester for valid reasons, and to rejoin the programme in a subsequent year, permission may be granted based on the merits of the case provided he / she should apply in advance to the COE, but not later than the last date for registering for the end semester examination of the semester in question, through the Head of the Department stating the reasons therefore and the probable date of rejoining the programme.

- 19.3** The candidates permitted to rejoin the programme after break of study / prevention due to lack of attendance, shall be governed by the Curriculum and Regulations in force at the time of rejoining. The students rejoining in new Regulations shall apply to the Head of the Department in the prescribed format 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.
- 19.4** 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 17.1).
- 19.5** The total period for completion of the programme reckoned from, the commencement of the first semester (third semester in case of LE) to which the candidate was admitted shall not exceed the maximum period specified in clause 5.1 irrespective of the period of break of study in order that he / she may be eligible for the award of the degree.
- 19.6** If any student is prevented for want of required attendance, the period of prevention shall not be considered as authorized "Break of Study" (Clause 19.1).
- 19.7** If the candidate has not reported back to the department, even after the extended Break of Study, the name of the candidate shall be deleted permanently from the college enrolment. Such candidates are not entitled to seek readmission under any circumstances.

20 Discipline

Every student is required to observe disciplined and decorous behaviour both inside and outside the college and not to indulge in any activity which will tend to bring down the prestige of the Institution. The Head of Institution shall constitute a disciplinary committee consisting of Head of Institution, Two Heads of Department of which one should be students department, to enquire into acts of indiscipline.

If a student indulges in malpractice in any of the End semester examination / internal examination, he / she shall be liable for punitive action as prescribed by the Institution from time to time.

Ragging is strictly prohibited. Punitive actions will be taken against the students involved in ragging as per the government norms.

21 Revision of Regulations and Curriculum

The Institution may from time-to-time revise, amend or change the Regulations, Curriculum, Syllabus and scheme of examinations if found necessary.