

S.A. ENGINEERING COLLEGE, CHENNAI – 600 077

(Autonomous)

Affiliated to Anna University, Chennai

**REGULATIONS 2020A
(With Amendments)**

CHOICE BASED CREDIT SYSTEM

TWO YEAR MCA DEGREE PROGRAMME

(For the Students admitted from the Academic Year 2021-2022 onwards)



VISION OF THE COLLEGE

To transform our institution into quality technical education centre imparting updated technical knowledge with character building.

MISSION OF THE COLLEGE

- To create an excellent teaching and learning environment for our staff and students to realize their full potential thus enabling them to contribute positively to the community.
- To significantly enhance the self-confidence level for developing creative skills of staff and students.

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The amendments to Regulations 2020 hereunder are effective from the Academic Year 2021-2022 and are applicable to students admitted to S.A. Engineering College (Autonomous), Chennai -600 077, from the Academic year 2021-2022 onwards. The regulations hereunder are subject to amendments as may be made by the Academic Council of the College from time to time. Any or all such amendments will be effective from such date and to such batches of students (including those already undergoing the programme) as may be decided by the Academic Council.

1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In the following Regulations, unless the context otherwise requires

- i) **“Programme”** means Degree Programme, that is **MCA Degree Programme**.
- ii) **“Course”** means a theory or practical course that is normally studied in a semester, like Mathematics, Data Structures, Operating Systems, etc.
- iii) **“Head of the Institution”** means the Principal of the College.
- iv) **“Head of the Department”** means head of the Department concerned.
- v) **“Controller of Examinations”** means the authority in the college who is responsible for all activities of the Assessment and Semester Examinations.
- vi) **“University”** means Anna University, Chennai.

2. ADMISSION

2.1 Candidates seeking admission to the first semester of the Four semester MCA. Degree Programme:

A pass in a recognized Bachelor's Degree of minimum 2 years duration with mathematics at 10 + 2 level or at Graduate level and obtained at least 50% (45% in the case of candidates belonging to reserved category) in the qualifying degree examination. (a) 10 + 2 + 3 / 4 Pattern (or) (b) 10 + 3 years Pattern

3. DURATION OF THE PROGRAMME

- i) **Minimum Duration:** The programme will extend over a period of Two years leading to the Degree of Master of Computer Applications of the Anna University. The Two academic years will be divided into four semesters with two semesters per year. Each semester shall normally consist of 90 working days including examination days.
- ii) **Maximum Duration:** The student shall complete all the passing requirements of the MCA degree programme within a maximum period of years (4 years); these periods reckoned from the commencement of the semester to which the student was first admitted to the programme.

4. STRUCTURE OF PROGRAMMES

4.1 Categorization of Courses

Every MCA Programme will have a curriculum with syllabi consisting of theory and practical courses that shall be categorized as follows:

- i. **Professional Core (PC)** courses include the core courses relevant to the chosen specialization/branch.
- ii. **Professional Elective (PE)** courses include the elective courses relevant to the chosen specialization/ branch.
- iii. **Employability Enhancement Courses (EEC)** include Project Work and/or Internship, Seminar, Professional Practices, Case Study and Industrial/Practical Training.
- iv. **Foundation Course (FC)**

4.2 Number of courses per semester

Each semester curriculum shall normally have a blend of lecture courses not exceeding 6 in the I and II Semester and not exceeding 7 in the III semester and Laboratory courses and Employability Enhancement Course(s) not exceeding 4. However, the total number of courses per semester shall not exceed 10.

4.3 Electives

Students shall opt for professional elective courses or open elective courses from Third semester onwards. Professional electives are courses offered by a department to the students of their own branches only. He/she shall opt for elective courses from the list provided in the curriculum of their department in consultation with the Faculty Advisor/Class Advisor/Head of the Department.

4.4 Credit Assignment

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

CONTACT PERIOD PER WEEK	CREDITS
1 Lecture Period	1
2 Tutorial Periods	1
2 Laboratory Periods (also for EEC courses like / Seminar / Project Work /Case study / etc.)	1

4.5 Industrial Training / Internship

i. The students may undergo Industrial Training for a period as specified in the Curriculum during the summer / winter vacation. In this case, the training has to be undergone continuously for at least two weeks in an organisation.

The students may undergo Internship at a Research organization / University/ Industry(after due approval from the Head of the Institution and a copy of the same shall be forwarded to the COE, for the period prescribed in the curriculum during the summer / winter vacation, in lieu of Industrial training. The attendance certificate shall be forwarded to COE, by the Head of the Department for processing results.

3.6.2 If Industrial Training/ Internship is not prescribed in the curriculum, the student may undergo Industrial Training/ Internship during Summer/Winter vacation 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 week and one four week programme, from one/two organizations. However, if the number of credits earned is 1 or 2, these credits shall not be considered for classification of the degree. Students shall get permission from the Head of the Institution for taking industrial training/internship and the Certificate of completion of Industrial Training / Internship shall be forwarded to COE.

DURATION OF TRAINING/INTERNSHIP	CREDITS
2 Weeks*	1
4 Weeks	2
6 Weeks	3

*1 Week = 40 Internship Hours

4.6 Value Added Courses

3.6 The Students may optionally undergo Value Added Courses (VAC) over and above the topics covered in the curriculum to obtain practical and industry specific knowledge. The credits earned through the Value Added Courses shall be over and above the total credit requirements prescribed in the curriculum for the award of the degree.

3.7 Online Courses

Students may be permitted to credit a maximum of two online courses, subject to a maximum of six credits, with the approval of the Head of the in lieu of open elective / professional elective courses. The Head of the Institution shall form a three member committee with members as HOD and a faculty member from the Department of the student, HOD of any other branch of the Institution to ensure that the student has not studied such courses and would not repeat it again as Professional Core/Professional Elective/Open Elective courses. Suitable online courses shall be chosen from the SWAYAM platform.

4.7 Industrial Visit

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

5 Project Work

Project work shall be carried out under the supervision of a “qualified teacher” in the Department concerned. In this context “qualified teacher” means the faculty member possessing (i) PG degree with

a minimum of 3 years experience in teaching or (ii) Ph.D. degree.

3.4.4 A student may, however, undergo Project Work in industry/academic institution of repute offering PG

programmes in Engineering/Technology /research institutions for a minimum of 16

weeks during the

final semester. In such cases, the students shall undergo the Project Work with the approval obtained

from the Head of the institution one month before the start of the industrial project.

If the Project Work carried out in industry/academic institution of repute/research institutions, the Project Work shall be jointly supervised by a supervisor of the department and an expert as a joint supervisor from the organization and the student shall be instructed to meet the supervisor periodically and to attend the review committee meetings for evaluating the progress. The review meetings, if necessary, may also be arranged in online mode with prior approval from the Head of the Institution and suitable record of the meetings shall be maintained.

4

6 DURATION OF THE PROGRAMME

6.1 A student is ordinarily expected to complete the MCA Programme in 4 semesters (two academic years) but in any case not more than 8 Semesters.

6.2 Each semester shall normally consist of 75 working days or 540 periods of 50 minutes each. The Head of the Institution shall ensure that every teacher imparts instruction as per the number of periods specified in the syllabus and that the teacher teaches the full content of the specified syllabus for the course being taught.

6.3 The Head of the Institution may conduct additional classes for improvement, special coaching, conduct of model test etc., over and above the specified periods.

7 COURSE ENROLLMENT AND REGISTRATION

7.1 A Faculty advisor/Class Advisor assigned from the department shall be responsible for the course enrollment and registration of students every semester as per the curriculum. They are also responsible to provide the details of courses offered by the department. The student can also register for courses for which he/she has failed in the earlier semesters.

7.2 The registration details of the candidates may be approved by the Head of the Institution and forwarded to the Controller of Examinations. 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 of any institution 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

7.2.1 Courses of the current semester

7.2.2 The core (Theory/Lab /EEC) courses that the student has not cleared in the previous semesters.

7.2.3 Elective courses which the student failed (either the same elective or a different elective instead).

7.2.4 The student shall register for the project work in the final semester only.

7.3 Flexibility to Drop courses

From the III to final semesters, the student has the option of dropping existing courses in a semester during registration. Total number of credits of such courses cannot exceed 6.

8 ATTENDANCE REQUIREMENTS FOR COMPLETION OF THE SEMESTER

8.1 A Candidate who has completed course registration shall be eligible to enroll for **examination of any course only if, he/she shall secure not less than 75% (after rounding off to the nearest integer) in that course.**

8.2 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 atleast 75% of the classes.**

8.3 However, a candidate who secures overall attendance between 65% and 74% in the current semester due to medical reasons (prolonged hospitalization / accident / specific illness) / **Participation in any Co curricular /Extra Curricular activities may be permitted to appear for the current semester examinations** subject to the condition that the candidate shall submit the medical certificate / participation certificate attested by the Head of the Institution. The same shall be forwarded to the Controller of Examinations for record purposes.

8.4 Candidates who **secure less than 65% attendance in all courses** shall not be permitted to write any examination at the end of the semester and not permitted to move to the next semester. They are required to repeat the incomplete semester in the next academic year, as per the norms.

9 CLASS ADVISOR

There shall be a class advisor for each class. The class advisor will be one among the (course-instructors) of the class. He / She will be appointed by the HoD 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 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.

FACULTY ADVISOR

There shall be a Faculty advisor for every 15-20 students. The faculty advisor may be one among the course-instructors of the class. He / She will be appointed by the HoD of the department concerned. The responsibilities for the faculty advisor shall be:

- To act as the channel of communication between the HoD and the parents of the respective student.
- To counsel/mentor the allotted students, guide and motivate them towards a successful career
- To collect and maintain various statistical details of students in proctor cards in regular intervals.
- To monitor the academic performance of the students
- To track the daily attendance of their respective students and if they found absent the reason to be recorded in the Students Leave Report available in the department office.

- To encourage the students to participate in extra and co-curricular activities.

10 CLASS COMMITTEE

- 10.1.1 Every class shall have a class committee consisting of faculty handling the subjects of the class concerned, student representatives and one chairperson who is not teaching the class. It is a part of IQAC with the overall goal of improving the teaching- learning process. Responsibilities of the class committee include
- 10.1.2 Solving problems experienced by students in the class room and in the laboratories.
- 10.1.3 Clarifying the regulations of the degree programme and the details of rules therein which should be displayed on college Notice-Board.
- 10.1.4 Informing the student representatives, the academic schedule including the dates of assessments and the syllabus coverage for each assessment.
- 10.1.5 Informing the student representatives the details of Regulations regarding weightage used for each assessment. In the case of practical courses (laboratory / drawing / 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 the students.
- 10.1.6 Analyzing the performance of the students of the class after each test and finding the ways and means of solving problems, if any.
- 10.1.7 Identifying the weak students, if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such weak students.
- 10.1.8 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.
- 10.1.9 The class committee shall be constituted within the first week of each semester.
- 10.1.10 At least 4 student representatives (usually 3 boys and 3 girls, as applicable to individual departments) shall be included in the class committee.
- 10.1.11 The Chairperson of the class committee may invite the Class advisor and the Head of the Department to the class committee meeting.
- 10.1.12 The Head of the Institution may participate in any class committee of the institution.
- 10.1.13 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 that to be addressed by the management, the same shall be brought to the notice of the Management by the Head of the Institution.
- 10.1.14 The first meeting of the class committee shall be held within one week from the date of commencement of the 7th 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 Chairman 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 8 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.

11 SYSTEM OF EXAMINATION

1 Performance in each course of study shall be evaluated based on (i) continuous internal assessment throughout the semester and (ii) Examination at the end of the semester.

11.2 Each course, both theory and practical (including project work & viva voce Examinations) shall be evaluated 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 examination will carry **60 marks**.

11.2.2 For all laboratory courses, the continuous internal assessment will carry **60 marks** while the End Semester examination will carry **40 marks**.

11.2.3 For project Work the continuous internal assessment will carry **40 Marks** while the End Semester examination will carry **60 marks**

11.3 End Semester examination (theory and practical) of 3 hours duration shall ordinarily be conducted between October and December during the odd semesters and between April and June during the even semesters.

11.4 End Semester examination for project work shall consist of evaluation of the final report submitted by the student 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 practical courses including project work the internal and external examiners shall be appointed by the Controller of Examinations of the institution and for theory courses, examiners for question paper setting shall be appointed by the Controller of Examinations of the institution.

12 PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

For all theory, laboratory and including project work the continuous assessment shall be

awarded as per the procedure given below:

12.1 Theory Courses

Two assessments shall be conducted during the semester by the Department / College concerned. The total marks obtained in all assessments put together out of 200, shall be proportionately reduced for 40 marks and rounded to the nearest integer.

Assessment I(100 Marks)		Assessment II(100 Marks)		Total
Individual Assignment / Case Study/ Seminar / Mini Project	Written Test	Individual Assignment / Case Study /Seminar / Mini Project	Written Test	Internal Assessment
40	60	40	60	200

Each internal assessment is to be considered for 100 marks and will have to be distributed in two parts viz., Individual Assignment/Case study/Seminar/Mini project and Written Test with each having a weightage of 40% and 60% respectively. The tests shall be in written mode. The total internal assessment marks of 200 shall be converted into a maximum of 40 marks and rounded to the nearest integer.

12.2 Laboratory Courses

The maximum marks for Internal Assessment shall be 60 marks in case of practical courses. Every practical exercise / experiment shall be evaluated based on conduct of experiment / exercise and records to be maintained. There shall be at least one test. The criteria for arriving the Internal Assessment marks of 60 are as follows: 75 marks shall be awarded for successful completion of all the prescribed experiments done in the Laboratory and 25 marks for the test. The total mark shall be converted into a maximum of **60 marks and rounded to the nearest integer.**

Internal Assessment(100 Marks)	
Evaluation of Laboratory Observation, Record	Model Lab Exam
75	25

a. THEORY COURSES WITH LABORATORY COMPONENT

If there is a theory course with laboratory component, there shall be three

assessments: the first assessment (maximum mark is 100) will be similar to assessment of theory course and the second assessment (maximum mark is 100) will be similar to assessment of laboratory course respectively. The weightage of first assessment shall be 40 % and the second assessment be 60 %. **The weighted average of these three assessments shall be converted into 50 marks and rounded to the nearest integer.**

Assessment I (20% weightage) (Theory Component)		Assessment II (50% weightage) (Laboratory Component)		Assessment III (30% weightage)	Total Internal Assessme nt
Individual Assignment /Case Study/ Seminar / Mini Project	Writte n Test	Evaluation of Laboratory Observation, Record	Lab Model Exam	Writte nTest	
40	60	75	25	100	300

*The weighted average shall be converted into 50 marks for internal Assessment.

10.4 OTHER EMPLOYABILITY ENHANCEMENT COURSES

- (a) The Seminar / Case study / Mini project course is to be considered as purely INTERNAL (with 100% internal marks only). 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. A three member committee appointed by Head of the Institution consisting of course coordinator and two experts from the Department, will evaluate the seminar and at the end of the semester the marks can be consolidated and taken as the final mark. The evaluation shall be based on the seminar paper (40%), presentation (40%) and response to the questions asked during presentation (20%).
- (b) The Industrial / Practical Training shall carry 100 marks and shall be evaluated through internal assessment only. At the end of Industrial / Practical training / Internship / Summer Project, the candidate shall submit an attendance

certificate from the organization where he / she has undergone training and a brief report. The evaluation will be made based on this report and a viva-voce Examination, conducted internally by a three member Departmental Committee constituted by the Head of the Institution consisting of course coordinator and two experts from the Department. The certificates submitted by the candidate shall be attached to the mark list sent by the Head of the Department.

- (c) For all the courses under Employability Enhancement Courses Category, except the Project Work, the evaluation shall be done with 100% internal marks and as per procedure described in 11.1 (iv) (a/b).

10.5 Assessment for Online courses

Students may be permitted to credit two online courses (which are provided with certificate), subject to a maximum of six credits. **The online course of 3 credits can be considered instead of one elective course.** These online courses shall be chosen from the SWAYAM platform, provided the offering organization conducts regular examination and provides marks. The credits earned shall be transferred and the marks earned shall be converted into grades and transferred, provided the student has passed in the examination as per the norms of the offering organisation. The details regarding online courses taken up by the student and marks/credits earned and the approval for the course from the Controller of Examinations, in the subsequent semester(s) along with the details of the elective(s) to be dropped.

12.2 WEIGHTAGE

The following will be the weightage for different courses:

i) Lecture or Lecture cum Tutorial based course:		
Internal Assessment	-	40%
End Semester Examination	-	60%
ii) Laboratory based courses		
Internal Assessment	-	60%
End Semester Examination	-	40%
iii) Project work		
Internal Assessment	-	40%
Evaluation of Project Report		
by external examiner	-	25%
Viva-Voce Examination	-	35%
iv) Industrial training/Internship/ Practical training / Summer project / Seminar (All Employability Enhancement Courses except Project Work)		
Internal Assessment	-	100%

12.3 Project Work

The student shall register for Project Work in final semester as prescribed in the curriculum. The project work shall be carried out by individual student. The evaluation of Project Work shall be done independently in the respective semesters and marks shall be allotted as per the weightages given in the Table below:

12.3.1 There shall be three assessments (each 100 marks) during the Semester by a review committee. The student shall make presentation on the progress made before the Committee. The Head of the department shall constitute the review committee for each programme. The review committee consists of supervisor, expert from the Department and a project coordinator from the Department. If the project coordinator/expert member happens to be the Supervisor then an alternate member shall be nominated.

12.3.2 The total marks obtained in the three assessments shall be reduced to 40 marks and rounded to the nearest integer (as per the Table given below). The project report shall carry a maximum of 20 marks. The project report shall be submitted as per the approved guidelines as given by the Head of the Institution. There will be a viva - voce Examination during End Semester Examinations conducted by a Committee consisting of the supervisor, one internal examiner and one external examiner. The internal examiner and the external examiner shall be appointed by the Controller of Examination. The viva-voce examination shall carry 40 marks. The distribution of marks for the internal assessment and End semester examination is given below:

13.1 PROJECT WORK

Project work may be allotted to a single student

The Head of the Institutions 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 first review carries 20 marks, second review carries 30 marks and the final review and demonstrations carries 50 marks. The total marks obtained in the three reviews shall be **reduced for 40 marks** and rounded to the nearest integer.

13.1.1 The project report shall carry a maximum 30 marks. The project report shall be submitted as per the approved guidelines as given by Dean, Academic Courses. Same mark shall be awarded to every student within the project group for the project report. The viva-voce examination shall carry 50 marks. Marks are awarded to each student of the project group based on the individual performance in the viva-voce examination.

13.1.2 Mark distribution for end semester Project examination shall be as follows, and the total marks obtained should be converted to 60 for final evaluation.

End semester Examinations							
Scope of the project	Presentation	Outcome					
			Contents of Thesis in the prescribed format (30)		Viva-Voce (50)		
5	7.5	7.5	Supervisor	External	Internal	External	Supervisor
			15	15	15	20	15

13.1.3 If a candidate fails to submit the project report on or before the specified deadline, he/she is deemed to have failed in the Project Work and shall re-register for the same in a subsequent semester.

13.2 OTHER EMPLOYABILITY ENHANCEMENT COURSES

(a) The seminar / Case study is to be considered as purely INTERNAL (with 100% internal marks only). 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 appointed by Head of the Institution 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%), presentation (40%) and response to the questions asked during presentation (20%).

13.8. Internal marks approved by the Head of the Institution shall be displayed by the respective HODs within 5 days from the last working day.

13.9 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 (topic covered), separately for each course. 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 test marks and attendance. The Head of the department will put his signature and date after due verification. At the end of the semester, the record should be verified by the Head of the Institution who will keep this document in safe custody (for five years). The University or any inspection team appointed by the University may verify the records of attendance and assessment of both current and previous semesters.

13.10 REQUIREMENTS FOR APPEARING FOR END SEMESTER EXAMINATIONS

A candidate shall normally be permitted to appear for the University 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.

14 PASSING REQUIREMENTS

- 14.1 A candidate who secures not less than 50% of total marks prescribed for the course [Internal Assessment + End semester University Examinations] with a minimum of 50% of the marks prescribed for the end-semester University Examination, 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).
- 14.2 If a student fails to secure a pass in theory courses in the current semester examination, he/she is allowed to write arrear examinations for the next three consecutive semesters and their internal marks shall be carried over for the above mentioned period of three consecutive semesters. If a student fails to secure a pass in a course even after three consecutive arrear attempts, the student has to redo the course in the semester in which it is offered along with regular students.
- 14.3 If a student fails to secure a pass in a laboratory course, **the student shall register** for the course again, when offered next.
- 14.4 If a student fails to secure a pass in project work, **the student shall register** for the course again in the subsequent semester.
- 14.5 The passing requirement for the courses which are assessed only through purely internal assessments (EEC courses except project work), is 50% of the internal assessment (continuous assessment) marks only.

15 AWARD OF LETTER GRADES

- 16 All assessments of a course will be evaluated on absolute marks basis. However, for the purpose of reporting the performance of a candidate, letter grades, each carrying certain number of points, will be awarded as per the relative grading principle.
- 17 The relative grading is applicable ONLY those students who have passed the examination as per the passing requirements enumerated above. For those students who have not passed the examination, U grade shall be awarded. For those students who have passed the course, the relative grading shall be done using the Software AURG developed by Anna University for relative grading.
- 18 The performance of a student shall be reported using letter grades, each carrying certain points as detailed below:

19

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

20

21 For a given course, if the students' strength is greater than 30, the relative grading method shall be adopted. However, if the students' strength is less than 30, then the fixed grading method shall be followed with the grade range as specified below.

22

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

23

24 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".

25 'SA' denotes shortage of attendance (as per clause 7.5) and hence prevented from writing the end semester examinations. 'SA' will appear only in the resultsheet.

26 "U" denotes that the student has failed to pass in that course. "W" denotes **withdrawal** from the exam for the particular course. The grades U and W will figure both in Marks Sheet as well as in Result Sheet). In both cases the student has to appear for the End Semester Examinations.

27

28 If the grade **U** is given to **Theory Courses/ Laboratory Courses** it is not required to **satisfy the attendance requirements** (vide clause 7), but has to appear for the end semester examination and fulfil the norms specified in clause 14 to earn a pass in the respective courses.

29 If the grade **U** is given to **EEC course (except Project Work), which are evaluated only through internal assessment**, the student shall register for the course again in the subsequent semester, fulfil the norms as specified in clause 14 to earn pass in the course. However, attendance requirement need not be satisfied.

30 15.2 The grades O, A+, A, B+, B, and C obtained for the one credit course shall figure in the Mark sheet under the title 'Value Added Courses'. The Courses for which the grades are U, SA will not figure in the mark sheet.

30.1 For the students admitted under non-computer-science background category, the grades obtained for the prescribed bridge courses will appear on the grade sheet, but will not be considered for GPA/CGPA calculation.

Grade sheet

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

- The college in which the candidate has studied
- The list of courses enrolled during the semester and the grade scored.
- The Grade Point Average (GPA) for the semester and
- The Cumulative Grade Point Average (CGPA) of all courses enrolled from first semester 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. RA grades will be excluded for calculating GPA and CGPA.

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

where C_i is the number of Credits assigned to the course

GP_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 GPA and during all the semesters in the case of CGPA.

31 ELIGIBILITY FOR THE AWARD OF THE DEGREE

- 31.1 A student shall be declared to be eligible for the award of the MCA. 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 time.
 - ii. Successfully completed the course requirements, appeared for the End-Semester examinations and passed all the subjects prescribed in all the 4 semesters within a maximum period of 4 years to which the candidate was admitted.
 - iii. No disciplinary action pending against the student.

iv. The award of Degree **must have been approved by the Affiliating University.**

31.2 CLASSIFICATION OF THE DEGREE AWARDED

16.2.1 FIRST CLASS WITH DISTINCTION

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

- Should have passed the examination in all the courses of all the 4 semesters in the student's First Appearance within **two** years from the date of joining of the programme and securing a CGPA of not less than **8.50**.
- Should NOT have been prevented from writing end semester examination due to lack of attendance in any semester.

16.2.2 FIRST CLASS:

A student 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 4 semesters in the student's First Appearance within **two** years from the date of joining of the programme and securing a CGPA of not less than **7.00**.
- Should NOT have been prevented from writing end semester examination due to lack of attendance in any semester.

16.2.3 SECOND CLASS:

All other students (not covered above) who qualify for the award of the degree shall be declared to have passed the examination in **Second Class**.

31.3 A candidate who have withdrawn from any end semester examination with prior approval will not eligible for the award of any rank.

31.4 Photocopy / Revaluation

A candidate can apply for photocopy of his/her semester examination answer paper in a theory course, within 2 weeks from the declaration of results, on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of Institutions. 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, the 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 candidate concerned through the Head of the Institutions. Revaluation is not permitted for practical courses and for project work.

A candidate can apply for revaluation of answer scripts for not exceeding 5 subjects at a time.

31.5 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 Institution.

Candidates applying for Revaluation only are eligible to apply for Review.

32 PROVISION FOR WITHDRAWAL FROM END-SEMESTER EXAMINATION

- 32.1 A student may, for valid reasons, (medically unfit / unexpected family situations / sports approved by Chairman, sports board and HOD) be granted permission to withdraw from appearing for the end semester examination in any course or courses in **ANY ONE** of the semester examinations during the entire duration of the degree programme. The application shall be sent to **Dean, Academic Courses** through the Head of the Institutions with required documents.
- 32.2 Withdrawal application is valid if the student is otherwise eligible to write the examination and if it is made within TEN days prior to the commencement of the examination in that course or courses and recommended by the Head of the Institution and approved by the Controller of Examinations.
- 32.3 Notwithstanding the requirement of mandatory 10 days notice, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case.
- 32.4 In case of withdrawal from a course / courses the course will figure both in Marks Sheet as well as in Result Sheet. **Withdrawal essentially requires the student to register for the course/courses** The student has to register for the course, fulfill the attendance requirements (vide clause 8), earn continuous assessment marks and attend the end semester examination. However, withdrawal shall not be construed as an appearance for the eligibility of a candidate for First Class with Distinction.
- 32.5 Withdrawal is permitted for the end semester examinations in the final semester only if the period of study the student concerned does not exceed 3 years as per clause 16.1.

18. PROVISION FOR AUTHORISED BREAK OF STUDY

- 18.1 A student is permitted to go on break of study for a maximum period of one year as a single spell.
- 18.2 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 applies to the Director, Student Affairs in advance, but not later than the last date for registering for the end semester examination of the semester in question, through the Head of the Institution stating the reasons therefore and the probable date of

rejoining the programme.

- 18.3 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 **Dean, Academic Courses** 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.
- 18.4 The authorized break of study would not be counted towards the duration specified for passing all the courses for the purpose of classification (vide Clause 16.2.1).
- 18.5 The total period for completion of the Programme reckoned from, the commencement of the first semester to which the candidate was admitted shall not exceed the maximum period specified in clause 6 irrespective of the period of break of study in order that he/she may be eligible for the award of the degree.
- 18.6 If any student is prevented for want of required attendance, the period of prevention shall not be considered as authorized 'Break of Study'

19. DISCIPLINE

- 19.1 Every student is required to observe disciplined and decorous behavior both inside and outside the college and not to indulge in any activity which will tend to bring down the prestige of the University / College. The Head of Institution shall constitute a disciplinary committee consisting of Head of Institution, Two Heads of Department of which one should be from the faculty of the student, to enquire into acts of indiscipline and **notify about the disciplinary action recommended for approval to Head of the Institution**. In case of any serious disciplinary action which leads to suspension or dismissal, then a committee shall be constituted including one representative from Anna University, Chennai. In this regard, the member will be nominated by the University on getting information from the Head of the Institution.
- 19.2 If a student indulges in malpractice in any of the End Semester / internal examination he / she shall be liable for punitive action as prescribed by the Institution from time to time.

20. 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 through the Board of Studies and Academic Council of the Institute.