COIMBATORE INSTITUTE OF TECHNOLOGY

(Government Aided Autonomous Institution Affiliated to Anna University, Chennai)

COIMBATORE - 641 014, TAMILNADU, INDIA

DIAMOND JUBILEE

(1956 - 2016)

REGULATIONS



REGULATIONS FOR M.C.A. DEGREE PROGRAMME

(For the students admitted from 2018 - 2019 onwards)

Under CHOICE BASED CREDIT SYSTEM

COIMBATORE INSTITUTE OF TECHNOLOGY

(Government Aided Autonomous Institution Affiliated to Anna University, Chennai)

COIMBATORE - 641 014, TAMILNADU, INDIA

REGULATIONS FOR M.C.A. DEGREE PROGRAMME

(For the students admitted from 2018 - 2019 onwards under Choice Based Credit System)

The regulations hereunder are effective from the academic year 2018-2019 and applicable to students admitted in Coimbatore Institute of Technology, affiliated to Anna University, Chennai and subject to amendments as may be made by the Academic Council of the Institution from time to time. Any or all such amendments will be effective from such date to such batches of students (including those already in the middle of the course) as may be decided by the Academic Council.

1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In this Regulation, unless the context otherwise specifies

- i) "Programme" means Degree Programme, i.e. MCA Degree Programme.
- ii) "Course" means a theory or practical subject like Data Structures, Computer System Architecture that is normally studied in a semester.
- iii) "University" means Anna University, Chennai.

2. CONDITIONS FOR ADMISSION

Students are admitted to M.C.A. Degree Programme as per the procedures and norms prescribed by the Government of Tamilnadu and Anna University, Chennai.

 Provision is made for lateral entry of students in the third semester of the programme and they will be admitted as per the procedure and norms prescribed by the University and Government of Tamil Nadu every year.

3. STRUCTURE OF THE PROGRAMME

3.1 Categorization of Courses

The curriculum shall comprise subjects of study consisting of theory and practical courses categorized as follows:

- Foundation (FC) Courses include Mathematics and other basic courses.
- ii. **Professional Core (PC) Courses** include the core courses relevant to computer applications.
- iii. **Professional Elective (PE) Courses** include elective courses relevant to computer applications.
- iv. **Open Elective (OE) Courses** include the courses a student can choose from the curriculum of M.E./M.Tech programmes offered as open electives by the respective departments.
- v. **Employability Enhancement (EEC) Courses** include Project Work and/or Internship, Seminar, Professional Practices, Case Study and Industrial/Practical Training.

3.2 Number of courses per semester

Curriculum of a semester shall normally have a blend of theory courses and practical courses including employability enhancement courses. Each course may have credits assigned as per clause 3.3.

3.3 Credit Assignment

Each course is normally assigned a certain number of credits

a) One Lecture period per week : 1 credit

b) Two tutorial periods per week : 1 credit

c) Two periods of laboratory practicals per week : 1 credit

d) Two periods of seminar/project work per week : 1 credit

3.4 Project Work

 Project work is an important component of Post-Graduate programmes. Mini project for MCA is undertaken in the fourth semester and full-time project work is undertaken in the sixth semester.

- ii) Project work shall be carried out under the supervision of a "qualified teacher" in the Department concerned. In this context "qualified teacher" means a faculty member possessing (i) PG degree with a minimum of 5 years of teaching experience, or (ii) Ph.D. degree.
- iii) A student may, however, in certain cases, be permitted to work on projects in an Industrial / Research Organization, on the recommendations of the Head of the Department. In such cases, the project work shall be jointly guided by a supervisor of the department and an expert as joint supervisor from the organization. The student shall be instructed to meet the supervisor periodically and to attend the project review committee meetings for evaluating the progress.

3.5 Industrial Training / Internship

The students may undergo Industrial Training 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 students may undergo internship at Research organization / University (after due approval from the Department Consultative Committee) for the period prescribed in the curriculum during summer / winter vacation, in lieu of industrial training. The student is only allowed to undergo a maximum of 6 weeks Industrial Training / Internship during the entire duration of study.

3.6 One Credit Courses: The student can also study one credit theory courses offered by the respective departments. Students can opt for these one credit courses from second to fifth semester as and when the one credit courses are offered. A student will be permitted to register for the one credit courses offered by other departments provided the student has fulfilled the necessary prerequisites of the course being offered and is approved by both the respective Heads of the Departments. The student can study a maximum of two, one credit courses. The credits earned through the one credit courses shall be over and above the total credit requirement prescribed in the curriculum for the award of the degree.

3.7 Online Courses

A student has the choice to study online courses conducted by State and Central Government Educational Institutions like IIT, Anna University etc. for which certificates are provided by the authority

offering the courses. A Department committee comprising of Head of the Department, and two subject experts will analyze the quality of the course and decide whether to consider the online course and assign credit value for the course. If required, the Committee will monitor the progress of the student and evaluate the student in continuous assessment pattern and recommend the grade. The student may opt for the online course from the third to fifth semesters and obtain certification. NPTEL online courses with credit of 2 will be considered as a 1 credit course. A student who completes online course successfully to a maximum of three credits may obtain exemption from studying one elective course and the credit points earned in the online course will be included for the calculation of CGPA. The student can opt for these online courses from second to fifth semester. If a student completes an online course of one or two credits, the credits earned through such courses shall be over and above the total credit requirement prescribed in curriculum for award of degree. The list of online courses to be considered may be approved by the Chairman, Academic Council on the recommendation of the Head of the Department at the beginning of each semester, subject to ratification in the next meeting to facilitate offering of the latest online courses, if necessary.

38 Self-study Courses: The student can opt for one self- study course, provided the student does not have current arrears and has earned a CGPA of 8 and above. The self-study course may be either from an open elective or professional elective and should not be a regular elective offered by the Department in that semester. The purpose of the self-study course is to permit the student to study an elective of the student's choice. The student shall study on their own under the guidance of a faculty member approved by the Head of the Department and no formal lectures will be delivered. The assigned faculty member shall be responsible for periodic monitoring of the progress of the student and internal assessment. The student can opt for the self-study course only during the fourth or fifth semester of the programme. The self- study course can be considered as equivalent to studying one open elective or professional elective course.

3.9 **Open Elective Courses:** The student may select **a maximum of two** open elective courses offered by other PG specializations in IV and V semester. A student cannot take more than one open elective in a semester.

3.10 Medium of Instruction

The medium of instruction for the entire programme is English.

4 DURATION OF THE PROGRAMME

4.1 The minimum and maximum period for the completion of the MCA Programme is given below:

Programme	Minimum	Maximum
Regular	6 Semesters (3 academic years)	12 Semesters (6 academic years)
Lateral	4 Semesters (2 academic years)	10 Semesters (5 academic years)

- 4.2 The total duration for completion of the programme reckoned from the commencement of the first semester to which the student was admitted shall not exceed the maximum duration specified in clause 4.1 irrespective of the period of break of study (vide clause 16) or prevention (vide clause 6 e) in order for the student to be eligible for the award of the degree.
- 4.3 For the award of degree, a student must earn certain number of credits specified in the curriculum of the respective branch of study. For regular students, the number of credits shall be between 124 and 129, and for lateral entry students the number of credits shall be between 82 and 89.

5 COURSE ENROLLMENT AND REGISTRATION

- 5.1. Each student will be assigned to a Faculty Advisor who shall advise and counsel the student about the details of the academic programme and the choice of courses considering the student's academic background and career objectives.
- 5.2. Enrollment for the elective courses of semesters III to V will commence twenty working days prior to the last working day of the preceding semester. The students shall enroll for the

courses with the guidance of the Faculty Advisor.

- 5.3 From third semester onwards, the student has the option to drop only one elective theory course offered in that semester. The student also has the option to study two theory courses additionally which shall be from open electives or professional electives. However, the maximum number of credits the student can register for in a particular semester cannot exceed 30 credits including the redo courses for which the student has registered.
- 5.4 A student after registering for an elective course can drop the course within a maximum of thirty days from the commencement of the semester with the approval of Faculty Advisor.

6. REQUIREMENTS OF ATTENDANCE AND PROGRESS

A student will be eligible to register for the examination of any course in a semester only if :

- a) He / She has put in not less than 75% of attendance in that course.
- b) If a student secures more than 65% but less than 75% attendance in any course.
- c) in the current semester due to medical reasons or due to participation in college/university/state/national/ international level sports/technical events with prior permission from the Head of the Department, the student will be given exemption from the prescribed attendance requirement and shall be permitted to appear for the end semester examination of that course.
- d) His / Her progress has been satisfactory.
- e) His / Her conduct has been satisfactory.
- f) A student who has less than 55% attendance in any course will not be permitted to appear for the end semester examination /evaluation of that course. The student has to register and redo that course in a later semester.

7. PROCEDURE FOR COMPLETING THE COURSE

a) A student who has the required attendance and is absent for the final end semester examination or has failed in the end semester examination in any theory course having internal assessment should register for the supplementary examination. For such students the internal assessment marks earned will be retained for the first two attempts only. After **two attempts**, the student has to appear for the end semester examination for maximum marks (100 %) and the student has to score 50% of the maximum marks for a pass in that course.

- b) A student who has the required attendance and has failed in any course of continuous assessment type shall register for the supplementary examination and be assessed solely by the performance in that examination for full marks (100%) of that course.
- c) For candidates with attendance shortage in a course, the registration for that course will be based on the system prevailing at that time. The student can register for that course with the Coordinator designated by the Head of the Department and continue to study, subject to the maximum limitation of credits for that semester.
- d) If the student has lack of attendance in an elective course, the student shall register for the same or any other elective course in subsequent semesters.
- e) If a student, who has registered for a one credit theory course, does not pass the course, it will be considered as an audited course.
- f) Project work viva-voce examination shall be jointly conducted by an internal and an external examiner. The internal and external examiners shall be appointed by the Controller of Examinations on the recommendation of the respective Head of the Department and with the approval of the Principal.
- g) A candidate shall not be permitted to appear for the project work viva - voce examination unless he/she has submitted the project report on or before the prescribed date as notified by the Controller of Examinations from time to time.

8. ASSESSMENT AND PASSING REQUIREMENTS

The assessment of various courses is carried out as follows:

a) Theory Courses: The assessment of theory courses comprises of both internal evaluation (sessional marks) and performance in the end semester examination. Sessional marks shall be awarded on the basis of continuous evaluation. The maximum marks for each theory course is 100, out of which 25 marks shall be for the internal assessment (sessional marks) and 75 marks for the end semester examination. A candidate who secures not less than 50% of the total marks prescribed for the courses with minimum marks specified for individual theory courses at the end semester examinations shall be declared to have passed the examination. The marks shall be converted into corresponding grade points as per the prevailing system.

- b) Practical Courses: Continuous assessment shall be carried out in laboratory practicals. The performance of the student shall be assessed throughout the semester. The maximum marks for each laboratory course is 100. The marks shall be converted into corresponding grade points as per the prevailing system.
- c) Mini Project work: The mini project work (2 credits, maximum marks 100) shall be carried out in the IV semester of the Programme and the examination will be carried out in the IV semester.
 - a. 40 marks for internal assessment.
 - b. 60 marks for report and viva voce examination
 - c. If the student does not meet the requirements of the internal assessment, the student will not be allowed to submit the project report, and the student has to undergo the internal assessment in the subsequent semester.
- d) Project Work and Viva Voce: The M.C.A. project work shall be carried out in the VI semester and the viva - voce examination will be conducted in the VI semester.
 - a. 100 marks for internal assessment.
 - b. 200 marks for report and viva voce examination (100 marks each by internal and external examiners)
- e) One credit courses will be evaluated by the course instructor or concerned faculty member under continuous assessment scheme.
- f) Employability Enhancement Courses (EEC) will be evalvated by the course instructor or concerned faculty member under continuous assessment scheme. A pass in the courses is required for the award of degree.
- g) Industrial Training/Internship: A student may undergo industrial

training/internship for a period as specified in the curriculum. In this case, the training has to be undergone continuously for the entire period. At the end of the training, the student has to submit a report on the training/internship undergone and a certificate from the organization concerned. A three member Departmental Committee constituted by Head of the Department will evaluate the report, conduct viva voce examination and award appropriate grades. If the student earns three credits in industrial training/ internship, the student may obtain exemption from studying one professional elective course. However, if the number of credits earned is 1 or 2, these credits shall not be considered for classification of the degree. Non - submission of the industrial training report shall be considered as reappearance.

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

- h) Improvement examination is not permitted for any course.
- 9. Self Study Courses will be evaluated by the course instructor under continuous assessment scheme. A candidate who secures less than 50% marks has to re-appear for the continuous assessment in the subsequent semester(s). REGULATIONS GOVERNING ELECTIVE COURSES
- a) If a student has studied more than the prescribed number of elective courses for that specialization, then only the prescribed number of elective courses with **highest grades** will be considered for CGPA calculation. The grades obtained in the other elective courses will also appear in the mark sheet.
- b) If a student has lack
- of attendance in a professional elective, the student shall register for the same or any other professional elective course in subsequent semesters.
- d) A student may be permitted to choose a maximum of 2 electives from other PG specializations with the approval of the Head of the Department offering such courses.

10. PROCEDURE FOR COMPLETING THE COURSE

a) Theory Courses:

A student who has the required attendance and passed the course with atleast B grade has passed the course.

b) Practical Courses:

A student who has the required attendance and has secured not less than B grade under continuous assessment scheme is deemed to have passed the course.

Project Work:

A student who has submitted the project report on or before the

prescribed date and has attended the viva-voce examination and has secured not less than B grade is deemed to have passed the course.

11. REGULATIONS FOR COMPLETING THE COURSE ON FAILING IN THE FIRST ATTEMPT

a) Theory Courses:

A student who has the required attendance and is absent for the final end semester examination or has failed in the end semester examination in any theory course having internal assessment should register for the supplementary examination. For such students the internal assessment marks earned will be retained for the **first two attempts** only. After two attempts, the student has to appear for the end semester examination for maximum marks (100%) and the student has to score 50% of the maximum marks for a pass in that course.

b) Practical Courses / Continuous Assessment Courses :

A student who has the required attendance and has failed in any course of continuous assessment type shall register for the supplementary examination and be assessed solely by the performance in that examination for full marks (100%) of that course.

c) Mini - Project Work and Project Work :

- (i) A candidate shall not be permitted to appear for the mini project work viva - voce examination or the final year project work viva voce examination unless he/she has submitted the project report on or before the prescribed date as notified by the Controller of Examinations from time to time.
- (ii) Candidates who fail to submit the final year project report on or before the due date shall submit the project report as advised by the Head of the Department in the subsequent examination.
- (iii) Candidates who have submitted the final year project report but failed to attend the viva - voce examination shall appear for the viva - voce examination only in the subsequent examination.

(iv) A candidate failing in final year project work and viva - voce examination for want of marks or due to absence shall register and appear as a supplementary candidate in the subsequent semester examination. For such supplementary candidate, the internal marks obtained in that subject shall be retained for the first two attemptsonly.

12. REGULATIONS GOVERNING ATTENDANCE SHORTAGE

For candidates with attendance shortage in a course, the re-registration for that course will be based on the system prevailing at that time. The student can register for that course with the approval of the Faculty Advisor designated by the Head of the Department and continue to study, subject to the maximum limitation of 30 credits for that semester. These courses will be considered as redo courses.

13. AWARD OF LETTER GRADES

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

Range of total marks	Letter Grade	Grade Points
90 to 100	O (Outstanding)	10
80 to 89	A + (Excellent)	9
70 to 79	A (Very Good)	8
60 to 69	B + (Good)	7
50 to 59	B (Above average)	6
0 to 49	RA (Reappearance)	0
Absent	AB	0
Incomplete		0
Withdrawal	W	0

[&]quot;RA" denotes reappearance and "AB" denotes absence and hence the result is fail in the subject.

[&]quot;I" denotes incomplete as per clause 7 and hence prevention from writing End - Semester examination.

"W" denotes withdrawal from appearing for the examination in the subject.

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

GPA is the ratio of sum of products of the number of credits and the points earned corresponding to the grades scored in all subjects registered and passed to the total number of credits of all subjects passed in the semester.

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

where C = Credits allotted for the subjects

GP = Grade Points earned.

CGPA will be calculated in a similar manner, considering all the subjects enrolled from first semester. "RA", "I" "AB" and "W" grades will be excluded for calculating GPA and CGPA.

14. PROVISION FOR WITHDRAWAL FROM EXAMINATION

- (i) A candidate may, for valid reasons, be permitted to withdraw from appearing in the semester examination in any subject or subjects only once during the entire duration of the degree programme. Also, only one application for withdrawal is permitted for that semester examination in which withdrawal is sought.
- (ii) Withdrawal application shall be valid only if the candidate is otherwise eligible to write the examination and if it is made prior to the commencement of the examination in that subject or subjects and also recommended by the respective Head of the Department and the Head of the Institution.
- (iii) Withdrawal shall not be construed as an appearance for the eligibility of a candidate for award of First Class with Distinction.

15. CLASSIFICATION OF THE DEGREE

a) 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 six semesters (four semesters for lateral entry students) in the student's First Appearance within four years (three years for lateral entry students), which includes authorized break of study of one year, if availed.
- Withdrawal from examination (vide clause 14) will not be considered as an appearance.
- Should have secured 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 of the courses.

b) 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 six semesters within four years. Lateral entry students should have passed the examination in all the courses of all the four semesters within three years. This includes one year of authorized break ofstudy (if availed) or prevention from writing the End Semester Examination due to lack of attendance (if applicable).
- Should have secured CGPA of not less than 7.00

c) Second Class:

All the other students (not covered in clauses 15.a and 15.b who qualify for the award of the degree shall be declared to have passed the examination in **Second Class**.

d) A student who is absent in End Semester Examination in a course /project work after having registered for the same shall be considered to have appeared for that examination (except approved withdrawal from end semester examinations as per clause 14) for the purpose of classification.

16. TEMPORARY BREAK OF STUDY FROM A PROGRAMME

a) A candidate is not normally permitted a temporary break of study. However, if a candidate intends to temporarily discontinue the programme in the middle for valid reasons (such as accident or hospitalization due to prolonged ill-health) and wishes to rejoin the programme in a later semester he / she shall apply to the Head of the Institution in advance as per the procedures and norms prescribed by the competent authority.

- b) The candidate permitted to rejoin the programme after the break shall be governed by the rules and regulations in force at the time of rejoining.
- c) The duration specified for passing all the subjects for the purpose of classification (vide Clause 15a and 15b) shall be extended if such break of study is approved by competent authorities
- d) 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 4.1 irrespective of the period of break of study in order that he / she may be eligible for the award of degree.
- e) If any student is detained for want of required attendance, progress or conduct, the period spent in that semester shall not be considered as permitted "Break of Study" and Clause 16c is not applicable for this case.

17. FACULTY ADVISOR

To help students in planning their courses of study, the Head of the Department / Senior Faculty Advisor will allot a certain number of students to a teacher of the department who shall function as Faculty Advisor for those students throughout their period of study. The Faculty Advisor will guide the student during enrollment, registration of courses, authorize the final registration of the courses at the beginning of each semester and monitor their attendance and counsel them periodically. If necessary, the Faculty Advisor may also inform the parents about the progress of the students.

18. DISCIPLINE

- Every student is required to observe discipline and maintain decorum both inside and outside the college and not indulge in any activity which lowers the prestige of the Institute.
- b) If a student indulges in any type of malpractice in any of the examinations he/she is liable for the punitive action as decided by the committee constituted to look into the malpractice in examinations.