

**HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY,
COIMBATORE 641 032
(An Autonomous Institution Affiliated to Anna University, Chennai)
REGULATIONS 2020(Choice Based Credit System)
For
Master of Computer Applications (MCA)**

The regulations hereunder are effective from the academic year 2020-2021 and applicable to students admitted in Hindusthan college of Engineering and Technology, an Autonomous Institution 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. **Choice Based Credit System** : The choice based credit system provides a ‘cafeteria’ type approach in which the students can take courses of their choice, learn at their own pace, undergo additional courses and acquire more than the required credits, and adopt an interdisciplinary approach to learning.
- iii. **“Specialization”** means a discipline of Post Graduate like Programme MCA
- iv. **“Course”** means a theory or practical subject like Applied Mathematics, Advanced Thermodynamics, etc. that is normally studied in a semester.
- v. **“Head of the Institution “** and **“Chairman- Academic Council”** means the Principal of the College.
- vi. **“Head of the Department”- HoD** means Head of the Department concerned.
- vii. **“Controller of Examinations”- CoE** means the authority who is responsible for all activities of the End Semester Examinations.
- viii. **“University”** means **“Anna University”**, Chennai

2. ADMISSION PROCEDURE

- a. Students for admission to the first semester of the Post Graduate Degree Programme shall be required to have passed an appropriate qualifying Degree Examination of Anna University or any examination of any other University or Authority accepted by the Syndicate of Anna University, Chennai as equivalent thereto.
- b. The Syndicate of the University may decide to restrict admission in any particular year to students having the subset of qualifications prescribed at the time of admission.
- c. Notwithstanding the qualifying examination the student might have passed, he/she shall have a minimum level of proficiency in the appropriate Programme / courses as prescribed by the Syndicate of the University from time to time.
- d. Eligibility conditions for admission such as the marks, class obtained, the number of attempts in the qualifying examination and physical fitness shall be as prescribed by the Syndicate of the University from time to time.

3. PROGRAMMES OFFERED AND MODE OF STUDY

3.1 PROGRAMMES OFFERED

A student may be offered admission to the following full time Programme of study approved by the University

- 1 MCA (Full Time – 2 Years Duration)

3.2 MODES OF STUDY

3.2.1 Full Time:

- Students admitted under “Full Time” would be available in the college during the entire duration of working hours (from Morning to Evening on Full-Time basis) for the curricular, co-curricular and Extra Curricular Activities.
- The Full-Time students should not attend any other Full-Time Programme(s) / Course(s) or take up any Full – Time job / Part Time job during working hours in any Institution or Company during the period of Full-Time Programme. Violation of the above rules will result in cancellation of admission to the PG programme.

4. STRUCTURE OF THE PROGRAMMES

4.1 Categorization of Courses

Every Post Graduate Degree Programme will have a Curriculum with Syllabi consisting of Theory courses, Practical courses that shall be categorized as follows:

- i. **Foundation Courses (FC)** may include Mathematics or other basic courses.
- ii. **Program Core Courses (PCC)** courses include the core courses relevant to the chosen specialization/branch.
- iii. **Program Elective Courses (PEC)** courses include the elective courses relevant to the chosen specialization/ branch.
- iv. **Research Methodology and IPR Courses (RMC)** to understand the importance and the process of creation of patents through research.
- v. **Employability Enhancement Courses (EEC)** includes Project Work, Internship, Seminar, Professional Practices, Case Study and Industrial / Practical Training.
- vi. **Industry Core (IC)** may include core courses relevant to the industry standards.
- vii. **Audit courses (AC)** expose the students to Unnat Bharathi Abhiyan, Constitution of India, Disaster Management, Yoga, English for Research Paper Writing, Value Education, Pedagogy Studies, Stress Management, Sanskrit for Technical Knowledge and Personality Development through Life Enlightenment Skills, Registration for any of these courses is mandatory to students in I to III Semester

4.2 Courses Per Semester

The curriculum of a semester shall normally have a blend of lecture courses and practical courses including Employability Enhancement Courses. Each course may have credits assigned as per **clause 4.3**

4.3 Credit Assignment

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

S.No	Contact period per week	Credits
1	1 Lecture Hour / 1 Tutorial Hour	1
2	3 Practical hours (Laboratory)	1.5
3	2 Seminar Period / 2 Project Work Period	1

4.4 Project work:

- 4.4.1** The Project work for MCA is to be undertaken during the final (fourth) semester. Every student is required to undertake a suitable project work independently in Industry/ Department in consultation with the faculty guide and Head of the Department and submit the project report on dates specified by the Department.

- 4.4.2 Project work of MCA Programme shall be pursued for a minimum of 16 week during the final semester (whole semester). The deadline for submission of final Project Report for MCA is 30 calendar days from the last working day of the FINAL semester.
- 4.4.3 Project work shall be carried out under the supervision of a faculty having PG degree with at least THREE years of teaching experience / Ph.D. degree in the Department concerned.
- 4.4.4 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 and the student shall be instructed to meet the supervisor periodically and to attend the review committee meetings for evaluating the progress.
- 4.4.5 The students may be encouraged to publish his/her project work in a reputed National / International journal before the project viva voce examinations.

4.5 Internship / Industrial Training

- 4.5.1 A student may undergo Industrial Training/Internship for a period of not exceeding 4 weeks. The students may undergo Internship at a Research organization / University/ industry (after due approval from the Departmental Consultative Committee) for the period prescribed in the curriculum during the summer / winter vacation, in lieu of Industrial training.
- 4.5.2 On completion 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 and the credit points earned will depend on the duration of the Industrial Training/Internship.
- 4.5.3 Non submission of the Industrial Training report shall be considered as reappearance. Student is expected to complete his/ her internship during his/her summer vacation.

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

4.6 Additional Credits

A Student can earn a maximum of 10 extra credits over and above the total credits. This may be earned through 1 credit / 2 credit courses such as value added courses / Online courses / Self Study Courses / EEC.

4.7 Value Added Courses

- The Students may optionally undergo Value Added Courses and the credits earned through the Value Added Courses shall be over and above the total credit requirement prescribed in the curriculum for the award of the degree. One / Two credit courses shall be offered by a Department with the prior approval from the Head of the Institution/COE.
- The details of The Syllabus, Time Table and Faculty may be sent to the Controller of Examinations after approval from the Head of the Institution at least one month before the course is offered.

4.8 Online courses

- A student has a choice to study online courses conducted by agencies such as State and Central Government educational institutions like IIT, Anna University and other reputed Universities, Swayam for which certificates are provided by the agencies offering the courses.
- Students may be permitted to take online courses/Self Study Courses (which are provided with certificate) with the approval Departmental Consultative Committee, Dean Academics and Office of the Controller of Examinations. In case of credits earned through online mode from a NPTEL, MOOC and Edx shall be mentioned in the mark sheet over and above the credits considered for the award of the degree.
- A student has to do a self- study course in Semester II and Semester III.

4.9 Credit Transfer Courses

Students may be permitted to take upto 10% online courses (only theory) in II semester. The Students of MCA are permitted to undergo ONE Professional Elective Course in NPTEL/SWAYAM/MOOCs etc. with the prior approval of Departmental Consultative Committee, Dean Academics and Office of the Controller of examinations. The student shall take up Assessments and End Semester Examinations conducted by NPTEL/SWAYAM/ MOOCs and can transfer the grade credits on submission of marks and certificates to the Department Consultative committee.

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 The minimum and maximum period for the completion of the PG programmes are given below:

Programme	Minimum number of semesters	Maximum number of semesters
MCA (Regular)	4	8

5.2 Each semester will normally have 85 working days (including examination days). The Head of the Department shall ensure that every teacher imparts instruction as per the number of periods specified in the syllabus, covering the full content of the syllabus for the course being taught.

5.3 The total duration for the 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 5.1 irrespective of the period of study (vide clause 16) or prevention (vide clause 7.4) in order that the student may be eligible for the award of the degree (vide clause 14)

5.4 The curriculum of MCA programme has been designed to have the credits in the range specified below for the award of the degree

Programme	Prescribed Credit Range
MCA	75 - 85

6. COURSE ENROLLMENT AND REGISTRATION

6.1 Each student on admission, shall be assigned to a faculty advisor (vide clause 8), who shall advice and counsel the student about the details of the academic programme and the choice of courses, considering the student's academic back ground and career objectives.

6.2 After registering for a course, a student shall attend the classes, satisfy the attendance requirements earn Continuous Assessment marks and appear for the End Semester Examinations.

6.2.1 Each student on admission shall register for **all the courses prescribed in the curriculum** in the student's **First Semester of Study**.

6.2.2 The enrollment for the course from the II semester to Final semester will commence 5 working days prior to the commencement of the succeeding semester. If the student wishes, the student may drop add courses (vide clause 6.4) within **5** working days after the commencement of the concerned semester and complete the registration process duly authorized by the Faculty Advisor of the programme.

6.2.3 A student who has passed all the courses prescribed in the curriculum for the award of the degree shall not be permitted to re-enroll to improve the student's marks in a course or the aggregate marks / CGPA.

6.3 MINIMUM CREDITS TO REGISTER FOR PROJECT WORK

Minimum credits for MCA programmes shall be as follows.

Programme	Minimum Number of Credits to be Earned
MCA	30

6.3.1 If the student has not earned the requisite minimum credits, the student cannot enroll for the Project Work. In such a case, the student can enroll for the project work in a subsequent semester, after earning the minimum credits specified.

6.4 Flexibility to Add or Drop Courses

6.4.1 A student has to earn the total number of credits specified in the Curriculum of the respective programme of study in order to be eligible to obtain the degree. However, if the student wishes, the student is permitted to earn more than the total number of credits prescribed in the curriculum of the student's programme within the minimum duration of the programme.

6.4.2 From the First to Final Semesters, the student has the option of registering for additional courses or dropping existing courses. The total number of credits that a student can add or drop is limited to 10, subject to a maximum of 2 courses.

6.5 Redoing a Course

Redoing a course means reregistering for a course, attending all classes, fulfilling the attendance requirements as per clause 7, earning fresh Continuous Assessment Marks and appearing for End semester Examinations.

6.5.1 If a student is prevented from writing the end semester examination of any core course due to lack of attendance, the student has to register for that course again when offered next and redo the course.

6.5.2 If a student is prevented from writing the end semester examination of any professional elective course due to lack of attendance, the student can opt to register for the same course again offered next and redo the course, or she/he can opt to register for a different professional elective course when it is offered, attend classes, fulfill the attendance requirements as per clause 7, secure Continuous Assessment marks and appear for End Semester Examinations.

6.5.3 If a student fails to secure a pass in any Theory or Laboratory course(including elective theory), he/she is given a maximum of THREE attempts to complete the course as per Clause 11.2. If the student still fails to secure a pass, he/she shall register for the same when offered next and redo the course.

6.5.4 If the course in which the student fails to secure a pass even after Three attempts in a professional elective course, then the student can opt for a different professional elective course, register for the same when it is offered, attend classes, fulfill the attendance requirements as per clause 7, secure Continuous Assessment marks and appear for End Semester Examinations.

6.5.5 The student who fails in any Project Work / Seminar / Internship / Career Development Skills/ Professional Practices / Case Study and Industrial / Practical Training shall register for the same in the subsequent semester and redo the course. In this case, the student shall attend the classes and fulfill the attendance requirements as per clause 7.

7. REQUIREMENTS FOR APPEARING FOR THE END SEMESTER EXAMINATION OF A COURSE

A student who has fulfilled the following conditions (vide clause 7.1 and 7.2) shall be deemed to have satisfied the attendance requirements for appearing for the End Semester Examination of a particular course.

7.1 Ideally every student is expected to attend all periods and earn 100% attendance. However, the student shall secure not less than 75% attendance, course wise, taking into account the number of periods required for that course, as specified in the curriculum.

7.2 If a student secures attendance between 65% and 74% (both included) in any course, in the current semester due to medical reasons (Hospitalization / Accident / Specific Illness) or due to participation in University / District / State / National / International Level Sports or due

to participation in Seminar / Conference / Workshop / Training Programme / Voluntary Service / Extension Activities or similar programmes with a prior permission from the chairman, Sports Board and the Head of the Department concerned, the student shall be permitted to appear for the end semester examination of that course. In all such cases, the students should submit the required documents on joining after the absence to the Head of the Department through the Faculty Advisor.

7.3 A student shall normally be permitted to appear for the End Semester examination of the course if the student has satisfied the attendance requirements (vide clause 7.1-7.2) and has registered for the examination in those courses of that semester by paying the prescribed fee.

7.4 Students who do not satisfy clause 7.1 and 7.2 and who secure **less than 65%** attendance in a course will not be permitted to write the end semester examination of that course. The student has to register and redo the course when it is offered as per clause 6.5. If the course in which the student has prevented is a professional elective, the student can opt to redo the same course or opt different professional elective course as per clause 6.5.2. If a student has shortage of attendance in the entire registered course, he/she would not be permitted to move to the higher semester and has to repeat the current semester in the subsequent year.

7.5 In the case of reappearance (Arrear) registration for a course, the attendance requirement as mentioned in Clauses 7.1- 7.3 is not applicable. However, the student has to register for examination in that course by paying the prescribed fee.

7.6 A student who has already appeared for a course in a semester and passed the examination is not entitled to reappear for the same course for improvement of letter grades / marks

8. FACULTY ADVISOR

To help the students in planning their courses of study and for general advice on the academic programme, the Head of the Department of the students will attach 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 shall advise the students in registering and reappearance (Arrear) registering of courses, authorize the process, monitor their attendance and progress and counsel them periodically. If necessary, the Faculty Advisor may also discuss with or inform the parents about the progress / performance of the students concerned.

The responsibilities of the faculty advisor shall be:

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

9. COURSE COMMITTEES

9.1 COMMON COURSE COMMITTEE

A theory course handled by more than one teacher shall have a "Common Course Committee", comprising of all teachers teaching that course. One of the teachers shall be nominated as Course Coordinator by the Head of the Department, duly approved by the Dean, Academic Courses.

The first meeting of the Common Course Committee shall be held within fifteen days from the date of formation of the committee. The nature and weightage of the continuous assessments shall be decided in the first meeting, within the framework of the Regulations. Two or three subsequent meetings in a semester may be held at suitable intervals.

In addition the "Common Course Committee" shall meet to ensure uniform evaluation of continuous assessments after arriving at a common scheme of evaluation for the assessments (vide clause 10).

Wherever feasible, the common course committee shall prepare a common question paper for the continuous assessment tests also. The question paper for the end semester examination is common and shall be set by the Course Coordinator, in consultation with all the teachers.

9.2 MULTIPLE COURSES COMMITTEE

"Multiple Courses Committee" comprises of all teachers handling courses of a particular semester, including common course teachers and two student representatives from the course concerned. One of the above teachers, nominated by the Head of the Department shall coordinate the activities of this committee. The functions of this committee are as follows:

The first meeting of the Multiple Courses Committee shall be held within fifteen days from the date of formation of the committee. The nature and weightage of the continuous assessments shall be decided in the first meeting, within the framework of the Regulations. Two or three subsequent meetings in a semester may be held at suitable intervals. During these

meetings, the student members shall meaningfully interact and express their opinions and suggestions of all the students to improve the effectiveness of the teaching-learning process. It is the responsibility of the student representatives to convey the proceedings of these meetings to all the students.

9.3 OVERALL MONITORING COMMITTEE.

In addition, there shall be an overall monitoring committee for each semester of a programme, which comprises of (i) the Head of the department (convener), (ii) the Faculty Advisors of the programme and (iii) Multiple Course Coordinator. This overall monitoring committee shall meet periodically to discuss academic related matters, progress and status of the students of the semester concerned.

9.3.1 The overall monitoring committee can also invite some of the students of the semester concerned for any of the committee meetings if necessary.

10 ASSESSMENT PROCEDURES FOR AWARDING MARKS

The MCA (Full time) programmes consist of Theory Courses, Laboratory Courses and Employability Enhancement Courses. Employability Enhancement Courses include Project Work, Seminar, Professional Practices, Case Study and Industrial / Practical Training. Appearance in End Semester Examination is mandatory for all courses including Theory, Laboratory, Theory Courses with Laboratory Component and Project work.

Performance in each course of study shall be evaluated based on

- (i) Continuous assessments throughout the semester and
- (ii) End Semester Examination at the end of the semester. The evaluation shall be based on Outcome Based Education (OBE).

For Theory Courses and Theory Courses with Laboratory Component, out of 100 marks, the maximum marks for Continuous Assessment is fixed as 40 and the End Semester Examination carries 60 marks. For Laboratory Courses out of 100 marks, the maximum marks for Continuous Assessment is fixed as 50 and the End Semester Examination carries 50 marks. The continuous assessment is 50 marks for the Project Work, and project report evaluation and viva-voce examination carries 50 marks. All other courses included under Employability Enhancement Courses are evaluated by Continuous Assessments only. There is no evaluation for Audit Courses. However, minimum attendance requirement as per clause 7 shall be satisfied.

(i.e.) Each course shall be evaluated for a maximum of 100 marks as shown below:

S.No	Category of courses	CIA	ESE
1.	Theory Courses (FC, PC, PE & IC)	40	60
2.	Laboratory Courses	50	50
3.	Mini Project	50	50
4.	Project Work (EEC)	50	50
5.	Life Skill / Soft Skill / Mooc	100	----

Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD' for every semester, which consists of attendance marked in each theory / Laboratory/EEC/AC class, the assessment marks and the record of class work (topics covered), separately for each course handled by the teacher. 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 and date after due verification.

The Dean-Academic and his team shall check the syllabus covered attendance of the students and with his comments along with the log books are sent to the HOD of the concerned department. At the end of the semester, the record should be verified by an Audit team headed by Dean-Academics and return to Head of the Department who shall keep this document in safe custody (for four years). The records of attendance and assessment of both current and previous semesters should be available for any inspection at any time.

10.2 ASSESSMENT FOR THEORY COURSES

For Theory Courses out of 100 marks, the maximum marks for Continuous Assessment is fixed as 40 and the End Semester Examination carries 60 marks.

The End Semester Exams for theory courses will be of 3 hours duration and shall normally be conducted between October and December during the odd semesters and between April and June during the even semesters. End semester Examination is a mandatory requirement for passing the course and every student should appear for the examination for theory, theory course with laboratory, laboratory courses and project work.

Distribution of Marks

ASSESSMENT	THEORY COURSES	
	FC, PC, PE & IC courses	
Internal (40 Marks)	Internal tests (The TWO internal test marks are averaged to TEN marks and TEN marks for mid semester examination)	20
	Any 4 of the Internal Components each 5 Marks.	20
External (60 Marks)	Comprehensive Semester Exam : 100 Marks (Converted to 60 Marks)	
Total	100 Marks	

List of Internal Components

SNo	Description of the Component	SNo	Description of the Component
1.	Assignment	6.	Role play / Group Discussion
2.	Multiple choice questions	7.	Co-operative or Collaborative Learning
3.	Quiz / Gamification	8.	Mini Project
4.	Video Teach / flipped classroom	9.	Case Study
5.	UT – Unannounced Test	10.	Seminar

Question Paper pattern for Internal Test – MCA Programmes

Maximum Marks : 50
Part A : 6 x 2 = 12 marks
Part B : 2 x 14 = 28 marks (Either or Pattern)
Part C : 1 x 10 = 10 marks (Either or Pattern)

Question Paper pattern for Mid Semester / ESE – MCA Programmes

Maximum Marks : 100 (No. of Questions x Mark = Total marks)
Part A : 10 x 2 = 20 marks
Part B : 5 x 14 = 70 marks (Either or Pattern)
Part C : 1 x 10 = 10 marks (Either or Pattern with no sub division) (Application/Design/Analysis/Evaluation/Creativity/Case Study)

10.3 ASSESSMENT FOR LABORATORY COURSES

10.3.1 For Laboratory Courses out of 100 marks, the maximum marks for Continuous Assessment is fixed as 50 and the End Semester Examination carries 50 marks.

10.3.2 The performance of the student shall be continuously assessed throughout the semester based on Rubrics during laboratory Class and the student's records maintained. There shall be at least one assessment test. The ESE is conducted for 100 marks and scored mark is reduced for 50. A student who secures not less than 50% of total marks prescribed for the course (CIA + ESE) with a minimum of 50% of the marks prescribed for the ESE shall be declared to have passed in the examination.

Practical Courses

S. No.	Category	Maximum Marks
1.	Average marks of all experiments based on Rubrics	40
2.	Assessment Test marks (It should be conducted for 50marks and converted to 10 marks)	10
	Total	50

10.3.3The End Semester examinations for Laboratory courses will be of 3 hours duration and shall normally be conducted between October and December during the odd semesters and between April and June during the even semesters.

Mark distribution for End Semester Practical examination

Component	Experiment Preparation/ Program Structure	Process of the Experiment/ Program Coding & Execution	Result/ Output	Viva Voce	Total
Marks	20	50	20	10	100

10.4 ASSESSMENT FOR MINI PROJECTWORK

The Mini Project work shall be carried out in the V / VI semester of B.E / B.Tech. Programme and the evaluation will be done through Presentation and Viva - Voce examination. The Components of Evaluation are

- i. CIA - 50 marks
- ii. ESE - 50 marks

In CIA, three reviews are conducted by the THREE member department committee (which includes the supervisor as one of the members) constituted by the HoD and the mark is awarded by the supervisor based on the performance.

Review I (out of 10Marks)	Review II (out of 20 Marks)	Review III (out of 20 Marks)	Total 50 Marks

In ESE, the Report Evaluation and Viva - Voce examination will be conducted by a committee constituted by COE. The committee comprises of three faculty members - External Examiner, Supervisor & Internal examiner, but the assessment will be done by External and Internal Examiners.

End Semester Examination(50 Marks)		
Report Evaluation by the External examiner (30 Marks)	Viva – Voce(20 Marks)	
	External examiner (10 marks)	Internal examiner/ Supervisor (10 marks)

10.5 ASSESSMENT FOR PROJECTWORK

10.5.1The Project work shall be evaluated for a maximum of 100 marks of which 50 marks will be through internal assessment. There should be three reviews to be conducted separately with Internals 100 marks which shall be reduced to 50 marks. The committee for the conduct of reviews shall be constituted by the Head of the Department. The marks are to be distributed as detailed below.

Review I(30 Marks)		Review II(30 Marks)		Review III(40 Marks)	
Review Committee (Excluding Supervisor)	Supervisor	Review Committee (Excluding Supervisor)	Supervisor	Review Committee (Excluding Supervisor)	Supervisor
10	10	25	15	25	15

The components of assessment in the ESE are given in the following table.

Report Evaluation (40 Marks)	Viva – Voce (60 Marks)		
External Examiner	External Examiner	Internal Examiner	Supervisor
40	20	20	20

10.5.2 There shall be three assessments 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 consisting of supervisor, project coordinator and another faculty member from the Department for each branch of study. The total marks obtained in the three assessments shall be reduced to 50 marks and rounded to the nearest integer.

10.5.3 The Project Report shall be prepared according to approved guidelines as given by the Academic Courses, Anna University and duly signed by the supervisor(s), Project coordinator and the Head of the Department and shall be submitted to the Head of the Department.

10.5.4 The evaluation of the Project work shall be based on the project report submitted and a Viva-Voce Examination by a team consisting of the supervisor, internal examiner (other than the supervisor) and External Examiner. The Internal/External examiners will be appointed by the COE project evaluation.

10.5.5 If the student fails to obtain 50% of the Internal Assessment marks, he / she will not be permitted to submit the report for that particular semester and has to re-enroll for the same in the subsequent semester.

10.5.6 The deadline for submission of final Project Report is 20 calendar days from the last working day of the semester in which project / thesis / dissertation is done.

10.5.7 If a student fails to submit the project report on or before the specified deadline, student is deemed to have failed in the Project Work and shall re-enroll for the same in a subsequent semester.

10.5.8 A copy of the approved project report after the successful completion of viva-voce examinations shall be kept in the library of the College / Institution.

10.5.9 If a student fails in the ESE of Project work he/she shall resubmit the Project Report within 60 Calendar days from the date of declaration of the results and the same will be considered for assessment in the subsequent semester. The resubmission of a project report and subsequent viva-voce examination will be considered as reappearance with payment of exam fee.

10.6 ASSESSMENT FOR SEMINAR / PROFESSIONAL PRACTICES / CASESTUDY:

The seminar / Case study shall carry 100 marks and shall be evaluated through continuous assessment 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 consisting of one coordinator and two members appointed by the Head of 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 / report (40%), presentation (40%) and response to the questions asked during presentation (20%).

10.7 ASSESSMENT FOR INDUSTRIAL / PRACTICAL TRAINING / INTERNSHIP / SUMMER MINI PROJECT

10.7.1 Practical training / Industrial Attachment / Summer Project if specified in the Curriculum shall not exceed the maximum duration of 4 weeks and should be organized by the Head of the Department for every student.

10.7.2 The Industrial / Practical Training shall carry 100 marks and shall be evaluated through continuous assessment only as per Table given. At the end of Industrial / Practical training / Internship / Summer Project, the student shall submit a brief report on the training undergone and a certificate from the organization concerned. The evaluation will be made based on this Report and a Viva-Voce Examination, conducted internally by a three member Departmental Committee consisting of one coordinator and two members constituted by the Head of the Department. Certificates (issued by the Organization) submitted by the student shall be attached to the mark list (with grade) and sent to Controller of Examinations by the Head of the Department.

Table

INTERNSHIP / INDUSTRIAL TRAINING		
EVALUATION		
REPORT	PRESENTATION	VIVA VOCE
40	30	30

10.8 ASSESSMENT FOR VALUE ADDED COURSES

The one credit course shall carry 100 marks and shall be evaluated through continuous assessments only. Two Assessments shall be conducted during the semester by the Department concerned. The total marks obtained in the tests shall be reduced to 100 marks and rounded to the nearest integer. The Head of the Department may identify a faculty member as coordinator for the course. A committee consisting of the Head of the Department, staff handling the course (if available), coordinator and a senior Faculty member nominated by the Head of the Department shall monitor the evaluation process. The grades shall be assigned to the students by the above committee based on their relative performance.

10.9 ASSESSMENT FOR ONLINE COURSE from NPTEL, MOOC, Edx

Students may be permitted to credit online/self-study courses (which are provided with certificate) with the approval of Departmental Consultative Committee of the department. This online/self-study course credits can be considered over and above the credits for the award of degree. The Head of the Department may identify a faculty member as coordinator for the course, who is responsible for evaluation process. For the successful students the course details will be submitted to COE by the department consultative committee and it will be mentioned in the mark sheet under the heading additional credits.

11 PASSING REQUIREMENTS

11.1 The Passing requirement for a student in a course is determined based on the marks obtained both in Continuous Assessment and End Semester Examinations. If the student gets <50% of total marks then, the student will be awarded only RA (Reappearance) grade. All other grades will be decided by the faculty concerned. While fixing the grades, the mean mark shall be at the middle of the 'A' grade range. A student who earns a minimum of 6 grade points in a course is declared to have successfully passed the course.

11.2 If a student fails to secure a pass in theory courses and laboratory 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.

11.3 If a candidate fails in the end semester examinations of Phase II, he/she has to resubmit the Project Report within 30 days from the date of declaration of the results. The resubmission of the project report and the subsequent viva- voce examination will be considered as reappearance with payment of exam fee. In case if a student fails to resubmit the project report within the stipulated period and fails in the subsequent viva-voce examination, the student shall register for the course again, in the subsequent semester.

11.4 The passing requirement for the courses which are assessed only through continuous assessment (EEC courses except project work), shall be fixed as minimum 50% and rest of the grades are decided by the faculty concerned.

11.5 Supplementary Examinations

After the publication of FINAL Semester ESE and the corresponding revaluation results if a student has arrear in only one course for the entire programme, he/she will be permitted to take up the supplementary examination within one month after the publication of the revaluation results.

12 REQUEST FOR PHOTO COPY OF THE VALUED ANSWER SCRIPT / REVALUATION

A student can apply for viewing of valued answer script and / or revaluation of his / her semester examination answer paper in theory courses, within FIVE working days from the declaration of results, and on the dates specified by the Controller of Examinations on payment of a prescribed fee along with proper application to the Controller of Examinations. The Controller of Examinations shall arrange for viewing / revaluation and the revaluation result shall be published soon after the revaluation process is completed.

13. AWARD OF LETTER GRADES

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

Letter Grade	Range	Grade Points
O (Outstanding)	91 - 100	10
A + (Excellent)	81 - 90	9
A (Very Good)	71 - 80	8
B + (Good)	61 - 70	7
B (Average)	51 - 60	6
RA (Reappearance Registration)	< 50	0
WD(Withdrawal)	0	0
AB (Absent)	0	0

‘RA’ denotes Reappearance. Registration is required for that particular course.

‘W’ indicates withdrawal from the course.

‘AB’ indicates Absent in the course.

‘WH’ indicates malpractice of any kind (withheld).

13.2 The grades O, A+, A, B+, B obtained for the one credit course shall figure in the Mark sheet under the title ‘Value Added Courses’.

14. GPA AND CGPA CALCULATION

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

- the list of courses registered 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 registered from first semester onwards.

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

After the results are declared, grade sheet will be issued to each student which will contain the following details. Grade Point Average (GPA) of a Semester (SGPA) and Cumulative Grade Point Average (CGPA) of a programme are calculated as follows.

$$SGPA = \frac{\text{Sum of the product of the GP by the corresponding credits of the courses offered in that semester}}{\text{Sum of the credits of the courses of that semester}}$$

$$i.e., SGPA = \frac{\sum_i C_i GP_i}{\sum_i C_i}$$

$$CGPA \text{ of the entire programme} = \frac{\text{Sum of the product of the GPs by the corresponding credits of the courses offered for the entire programme.}}{\text{Sum of the credits of the courses of the entire semester}}$$

$$i.e., CGPA \text{ of the entire programme} = \frac{\sum_n \sum_i C_{ni} GP_{ni}}{\sum_n \sum_i C_{ni}}$$

Where,

C_i is the credit fixed for the course 'i' in the any semester

G_{Pi} is the grade point obtained for the course 'i' in any semester

n refers to the semester in which such courses are credited

Note: RA grade will be excluded for calculating GPA and CGPA

14.2 The credits earned through one / two credit courses shall not be considered for calculating GPA and CGPA.

14.3 If a student studies more number of electives than required as per the student's programme curriculum, the courses with higher grades alone will be considered for calculation of CGPA.

15 ELIGIBILITY FOR THE AWARD OF DEGREE

A student shall be declared to be eligible for the award of the PG Degree provided the student has successfully gained the required number of total credits as specified in the curriculum corresponding to the student's programme within the stipulated time in Master of Computer Applications (Full time).

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 reckoned from the commencement of the first semester to which the candidate was admitted.

- i. No disciplinary action pending against the student.
- ii. Successfully passed any additional courses.
- iii. The award of Degree must have been approved by the Syndicate of the University.

15.1 CLASSIFICATION OF THE DEGREE AWARDED

15.1.1 FIRST CLASS WITH DISTINCTION:

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

M.C.A, (Full Time)

- Should have passed the examination in all the courses of all the four semesters in the student's First Appearance within three years, which includes authorized break of study of one year. Withdrawal from examination 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.

15.1.2 FIRSTCLASS:

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

M.C.A, (Full Time)

- Should have passed the examination in all the courses of all four semesters within three years , which includes one year of authorized break of study (if availed) or prevention from writing the End Semester Examination due to lack of attendance (if applicable).
- **Should have secured a CGPA of not less than 7.00**

15.1.3 SECOND CLASS:

All other students (not covered in clauses 15.2.1 and 15.2.2) who qualify for the award of the degree (vide Clause 15.1) shall be declared to have passed the examination in Second Class.

15.1.4 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 in that examination (except approved withdrawal from end semester examinations as per clause 16) for the purpose of classification.

16 PROVISION FOR WITHDRAWAL FROM EXAMINATION:

16.1 A student may, for valid reasons, (medically unfit / unexpected family situations / sports approved by HOD/physical director) 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 COE through HOD with required documents.

16.2 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 working days before the commencement of the end semester examination in that course or courses and also recommended by the Head of the Department.

16.3 Notwithstanding the requirement of mandatory TEN working days' notice, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case.

16.4 If a student withdraws a course or courses from writing end semester examinations, he/she shall register the same in the subsequent semester and write the end semester examination(s).

16.5 Withdrawal shall not be considered as an appearance for deciding the eligibility of a student for First Class with Distinction.

16.6 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 for Master of Computer Applications.

17 BREAK OF STUDY FROM A PROGRAMME

17.1 A student is permitted to go on break of study for a fixed period of one year as a single break in the entire course of study.

17.2 The student applies for break of study, the student shall apply to the COE through HOD in advance, in any case, not later than the last date of the first assessment period. The application (downloaded from website) duly filled by the student shall be submitted through the Head of the Department.

17.3 The students permitted to rejoin the programme after break of study / prevention due to lack of attendance, shall be governed by the Curriculum and Regulations in force at the time of rejoining. The students rejoining in new Regulations shall apply to the COE through HOD in the prescribed format at the beginning of the readmitted semester itself for prescribing additional/equivalent courses, if any, from any semester of the regulations in-force, so as to bridge the curriculum in-force and the old curriculum.

17.4 The total period for completion of the programme reckoned from, the commencement of the first semester to which the student was admitted shall not exceed the maximum period specified in clause 5.1 irrespective of the period of break of study in order that the student may be eligible for the award of the degree (vide clause 15).

17.5 In case there is any period of break of study more than the permitted duration of break of study, the student shall be permitted to continue the programme only if the approval is obtained from the COE through Head of the Department before the end of the semester in which the student has taken break of study.

17.6 If a student has not reported to the department for a period of two consecutive semesters without any intimation, the name of the student shall be deleted permanently from the college enrollment. Such students are not entitled to seek readmission under any circumstances.

17.7 PROVISION OF SCRIBE:

- The Appointment of scribes for the students with disabilities shall be done by the Controller Office. In this connection the student shall submit her/his requisition through proper approval of HoD and Principal to CoE office well in advance prior to the examinations. (at least 15 days before the commencement of Examinations).

- However, students injured during the study holidays and in between the examination period and not able to write, on producing medical certificate from Civil Surgeon will be given Scribe.

18 FOR STUDENTS REJOINING THE PROGRAMME

A student who is required to repeat the study of any semester for want of attendance/ progress/conduct or who desires to rejoin the course after a period of discontinuance or who upon his/her own request is permitted by the authorities to repeat the study of any semester, may join the semester which he/she is eligible or permitted to join, only at the time of its normal commencement for a regular batch of students and after obtaining the approval from Directorate of Technical Education (DoTE) and Anna University, Chennai. No student will however be enrolled in more than one semester at any time.

In that case he/she has to come under the regulation which is being followed in that Academic year.

19 FOR TRANSFER STUDENTS

Students transferred from other Institutions may be admitted on obtaining the approval from DOTE and Anna University, Chennai. In that case he/she has to come under the regulation which is being followed in that Academic year and also should obtain equivalence from the Controller of Examinations.

20 DISCIPLINE

20.1 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 Institution/ Department. The Head of the Institution shall constitute a disciplinary committee consisting of Head of the Institution, Head of the departments to which the student concerned belongs, and the Head of another department to enquire into acts of indiscipline and notify the Institution about the disciplinary action recommended for approval. In case of any serious disciplinary action which leads to suspension or dismissal, then a committee shall be constituted by the COE of the college for taking final decision.

20.2 If a student indulges in malpractice in any of the examinations, the student shall be liable for punitive action as prescribed by the University from time to time.

21 REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

The college may from time to time revise, amend or change the Regulations, Curriculum, Syllabus and Scheme of Examinations through the Academic Council.

DEAN

PRINCIPAL

ADVISOR