

ANNA UNIVERSITY CHENNAI

FIVE YEAR INTEGRATED M.Sc. PROGRAMMES

REGULATION 2010 – CREDIT SYSTEM

(Effective from the academic year 2010-2011 and applicable to the students to be admitted to the UNIVERSITY DEPARTMENTS of Anna University Chennai)

1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In these Regulations, unless the context otherwise requires:

- i) **“Programme”** means the Five year (Ten Semester) Integrated M.Sc. Programme.
- ii) **“Branch”** means a specialization or discipline of M.Sc. Degree Programme like “Computer Science”, “Electronic Media”, etc.
- iii) **“Course”** means a theory or practical subject that is normally studied in a semester, like Discrete Mathematics, Visual Programming etc.
- iv) **“Director, Academic Courses”** means the authority of the University who is responsible for all academic activities of the University Departments for implementation of relevant rules of this Regulation.
- v) **“Head of the Institution”** means the Dean of the Campus.
- vi) **“Chairperson”** means Head of the Faculty concerned.
- vii) **“Head of the Department”** means Head of the concerned Department of the University
- viii) **“ACOE”** means Additional Controller of Examinations (University Departments)
- ix) **“University”** means ANNA UNIVERSITY CHENNAI.

2. PROGRAMME OFFERED, MODE OF STUDY AND ADMISSION REQUIREMENTS

2.1 Programmes offered:

- M.Sc. (Computer Science)
- M.Sc. (Information Technology)
- M.Sc. (Electronic Media)

2.2. Mode of study

Candidates admitted under ‘Full-Time’ should be available in the College/Institution/University during the complete working hours for curricular, co-curricular and extra-curricular activities assigned to them.

2.3. Admission requirements

2.3.1 Admission to M.Sc. (Computer Science) and to M.Sc. (Information Technology)

Candidates for admission to the first semester of the Ten-semester Integrated M.Sc. (Computer Science) / M.Sc. (Information Technology) degree programme shall be required to have passed:

The Higher secondary examination of the (10+2) curriculum (Academic Stream) prescribed by the Government of Tamil Nadu with Mathematics, Physics and Chemistry as three of the four courses of study prescribed under Part – III or any other examinations of any other University or authority accepted by the Syndicate of the University as equivalent thereto.

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

2.3.2 Admission to M.Sc. (Electronic Media)

Candidates for admission to the first semester of the Ten-semester Integrated M.Sc. (Electronic Media) degree programme shall be required to have passed:

The Higher secondary examination of the (10+2) curriculum prescribed by the appropriate authority of the Government of Tamil Nadu or any other examination of any other University or authority accepted by the Syndicate of the University as equivalent thereto.

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

3 DURATION AND STRUCTURE OF THE PROGRAMME

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

Programme	Min. No. of Semesters	Max. No. of Semesters
M.Sc. (Computer Science)	10	18
M.Sc. (Information Technology)	10	18
M.Sc. (Electronic Media)	10	18

3.2 Each semester shall normally consist of 90 working days or 450 periods of 50 minutes duration. The Head of the Department shall ensure that every teacher imparts instruction as per the number of periods specified in the syllabus and that the teacher teaches the full content of the specified syllabus for the course being taught. End-Semester Examination will be scheduled after the last working day of the semester.

3.3 The programme will consist of

- Core courses
- Elective courses
- Project work

The programme will also include seminars / practicals / design projects / planning projects / practical training, if they are specified in the curriculum.

3.4 Credits will be assigned to the courses for different modes of study as given below:

- One credit for each lecture period per week
- One credit for each tutorial period per week
- One credit for each seminar/practical session of two periods per week
- One credit for four weeks of practical training

- 3.5 The curriculum of programme shall be so designed that the minimum prescribed credits required for the award of the degree shall lie within the limits specified below:

<u>Programme</u>	<u>Prescribed credit Range</u>
M.Sc. (Computer Science)	215 – 225
M.Sc. (Information Technology)	215 – 225
M.Sc. (Electronic Media)	215 – 225

- 3.6 The number of credits to be earned for the successful completion of the programme shall be as specified in the curriculum of the respective Specialization of the Programme
- 3.7 The electives from the curriculum are to be chosen with the approval of the Head of the Department concerned.
- 3.8 A candidate may be permitted by the Head of the Department to choose electives from 5-Year M.Sc / P.G. Programmes either within a Faculty or from other Faculties of the University upto a maximum of 3 courses during the period of his/her study, provided the Head of the Department offering such courses also agrees and there is no clash in the time table for the lecture classes of both departments.
- 3.9 The curriculum and syllabi of all the 5-Year M.Sc Programmes shall be approved by the Academic Council of Anna University Chennai

4. Project Work

- 4.1 The duration of VII Semester and X Semester projects shall be for a period of sixteen weeks.
- 4.2 The VII and X Semester Projects of M.Sc (Computer Science) / M.Sc. (Information Technology) / M.Sc (Electronic Media), have to be carried out in an industrial / software / Media organization, coordinated by a faculty member of the department. In certain special cases, the candidates may be permitted by the Head of the Department to do the project within the institution.
- 4.3 The Project Report prepared according to approved guidelines and duly signed by the Supervisor(s) shall be submitted to the respective Head of the Department.
- 4.4 The deadline for submission of Project Report is 30 calendar days from the last working day of the semester in which Project work is carried out.
- 4.5 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 the same in a subsequent semester.
- 4.6 A student who has acquired the minimum number of total credits prescribed in the Curriculum for the award of the Masters Degree will not be permitted to register for more courses to improve his/her cumulative grade point average.

4.7 The medium of instruction, examination, seminar and project reports will be English. A copy of the approved project report should be made available in the Department Library.

4.8 **MINIMUM CREDIT REQUIREMENTS TO REGISTER FOR PROJECT**

Programme		Min. No. of Credits to be earned to enroll for Project Work
M.Sc. (Computer Science)	VII Sem.	90
M.Sc. (Computer Science)	X Sem.	130
M.Sc. (Information Technology)	VII Sem	90
M.Sc. (Information Technology)	X Sem.	130
M.Sc. (Electronic Media)	VII Sem	90
M.Sc. (Electronic Media)	X Sem	130

4.9 If a candidate has not earned the requisite minimum credits, he/she has to complete the arrears (at least to the extent of earning the minimum credits specified) and then enroll for the project work in the subsequent semester.

5 FACULTY ADVISER

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 student will identify a teacher of the Department who shall function as Faculty Adviser for those students throughout their period of study. Such Faculty Adviser shall advise the students and monitor the courses taken by the students; check the attendance and progress of the students attached to him/her and counsels them periodically. If necessary, the faculty adviser may also discuss with or inform the parents about the progress of the students.

6 CLASS COMMITTEE

6.1. A Class Committee for a semester consists of teachers of the concerned class, student representatives, Faculty Advisor and a Chairperson who is not teaching that particular class. It is like the 'Quality Circle' (more commonly used in industries) with the overall goal of improving the teaching-learning process. The functions of the class committee include

- Resolving academic issues experienced by students in the classroom and in the laboratories
- Clarifying the regulations of the degree programme and the details of rules therein
- Informing the student representatives the academic schedule including the dates of assessments, their dates and the syllabus coverage for each assessment
- Informing the student representatives the details of regulations, number of assessments and the weightages for each assessment. In the case of practical courses (laboratory / project work/ seminar etc.) the breakup of marks for each experiment/ exercise/ module of work, should be clearly discussed in the class committee meeting and informed to the students through class representatives
- Analyzing the performance of the students of the class after each test and finding the ways and means of improving the performance of students

- Identifying the weak students, if any, in any subject and requesting the teacher concerned to provide some additional help or guidance or coaching to such weak students as often as possible
- 6.2 The Class committee for a class is normally constituted by the Head of the department.
 - 6.3 The class committee shall be constituted within a week of commencement of a semester.
 - 6.4 At least 2 student representatives (usually 1 boy and 1 girl) shall be included in the class committee.
 - 6.5 The Head of the Department may participate in any class committee meeting of the Programme. The Chairperson of the concerned Faculty may participate in any Class committee meeting of the Programme as and when deemed necessary.
 - 6.6 The chairperson of the Class committee is required to prepare the Minutes of every meeting, submit the same to the Head of the Department/Institution within two days of the meeting and arrange to circulate among the students concerned and teachers. If there are some points in the Minutes requiring action by the University, the same shall be brought to the notice of the **Director, Academic Courses**, by the Head of the Department.
 - 6.7 The first meeting of the class committee shall be held within two weeks from the date of commencement of the semester in order to inform the students about the nature and weightage of assessments within the framework of the Regulations. Two or three subsequent meetings may be held at suitable intervals. During these meetings, the student members representing the entire class shall meaningfully interact and express the opinions and suggestions of the class students to improve the effectiveness of the teaching-learning process.
 - 6.8 The Head of the Department, with the approval of the Chairperson of the Faculty shall appoint Class Advisor, Faculty Advisor, Class Committee Chairperson, Internal and External Examiners and Review Committee etc.

7 COURSE COMMITTEE FOR COMMON COURSES

Each common theory course offered to more than one group of students shall have a "Course Committee" comprising all the teachers teaching the common course with one of them as nominated as Course Coordinator. The nomination of the course Coordinator shall be made by the Chairperson, depending upon whether all the teachers teaching the common course belong to a single department or to several departments. The 'Course committee' shall meet as often as possible and ensure a common scheme of evaluation for the tests/End Semester Examinations.

8 PROCEDURES FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

- 8.1. Internal Assessment is fixed as 50 marks (consisting of 45 marks for tests and 5 marks for attendance) in each course of study for all M.Sc Programmes. The student shall write End- Semester Examinations to score additional 50 marks (25 marks for practical courses).

8.2. Internal Assessment for Theory Courses:

The maximum marks for Internal Assessment shall be 50 marks in case of theory courses. Three tests each carrying 100 marks shall be conducted by the Department. The total marks obtained in the best 2 tests out of 3 put together should be reduced to 45 marks and rounded to the nearest integer. The remaining 5 marks shall be distributed for attendance as prescribed in clause 8.8.

8.3 Internal Assessment for Practical Courses:

The maximum marks for Internal Assessment shall be 75 in case of Practical courses. Every practical experiment shall be evaluated based on conduct of experiment and records maintained. There shall be at least one mid-semester test. The criteria for arriving at the internal assessment marks of 70 shall be decided (based on the recommendation of the class committee) by the Head of the Department and announced at the beginning of every semester. The remaining 5 marks shall be distributed for attendance as prescribed in clause 8.8.

8.4. Internal Assessment for Theory Courses with Laboratory component:

The maximum marks for Internal Assessment shall be 50 in case of theory courses with Laboratory component.

If there is a theory course with Laboratory component, there shall be three tests: the first two tests (each 100 marks) will be from theory portions and the third test (maximum mark 100) will be for laboratory component. The sum of marks of all three tests shall be reduced to 45 marks and rounded to the nearest integer. The remaining 5 marks shall be distributed for attendance as prescribed in clause 7.8

8.5. If seminar is prescribed in the curriculum, the same will be evaluated by a committee constituted by the Head of the Department through internal assessment only.

8.6 Internal Assessment for Project Work:

For VII semester and X semester projects, 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 branch of study. The total marks obtained in the three assessments shall be reduced to 45 marks and rounded to the nearest integer.

8.7. If the candidate fails to obtain 50% of the internal assessment marks in the VII or X semester Project, 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.

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-enroll for the same in a subsequent semester.

8.8. Attendance

The remaining 5 marks for attendance shall be awarded as given below:

Theory and Practical courses and Project Work	
76% to 80% of attendance	- 1 mark
81% to 85% of attendance	- 2 marks
86% to 90% of attendance	- 3 marks
91% to 95% of attendance	- 4 marks
96% to 100% of attendance	- 5 marks

9 REQUIREMENTS FOR COMPLETION OF A SEMESTER

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

Ideally every student is expected to attend all classes and earn 100% attendance. However in order to allow provision for certain unavoidable reasons such as hospitalization / accident / specific illness the student is expected to earn a minimum of 75% attendance.

Therefore he/she shall secure not less than 75% of overall attendance in that semester taking into account the total number of periods in all courses attended by the candidate as against the total number of periods in all courses offered during that semester.

- 9.2. However, a candidate who secures overall attendance between 65% and 74% in that current semester due to medical reasons (prolonged hospitalization / accident / specific illness / Participation in Sports events) may be permitted to appear for the current semester examinations subject to the condition that the candidate shall submit the medical certificate / sports participation certificate to the Head of the Department. The same shall be forwarded to the Additional Controller of Examinations, Anna University Chennai for record purposes.
- 9.3 Candidates who could secure **less than 65%** overall attendance and candidates who do not satisfy the clauses 9.1 & 9.2 will not be permitted to write the end-semester examination of that current semester and are not permitted to go to next semester. They are required to repeat the incomplete semester in the next academic year.

10. END-SEMESTER EXAMINATIONS

The examinations shall ordinarily be conducted between November - December during the odd semesters and between April and May in the even semesters. The maximum marks for each theory course shall be 100 comprising 50 marks for internal assessment and 50 marks for the end-semester examinations. For practical courses the maximum marks shall be 100 comprising 75 marks for internal assessment and 25 marks for the end-semester examinations.

- 10.1 There shall be one end-semester examination of 3 hours duration in each lecture based course.
- 10.2 The mini-project, if specified in the curriculum, will be evaluated based on a report and a viva-voce examination. The internal examiner and the external examiner shall be appointed by the Head of the department.

- 10.3 The evaluation of the VII Semester project work will be made based on the project report and a viva-voce examination, conducted internally by the departmental committee constituted by the Head of the Department with the approval by the Chairperson of the respective Faculty.
- 10.4 The evaluation of the X Semester Project work will be based on the project report and a Viva-Voce Examination by a team consisting of the supervisor, a internal examiner and an External Examiner. The internal examiner and the external examiner shall be appointed by the Chairperson of the respective Faculty from among the panel submitted by the HoD.
- 10.5 The evaluation of the credit based seminar will be based on a viva-voce examination conducted by an examiner nominated by the HoD at the end of the semester.
- 10.6 If a student indulges in Malpractice in any of the Examination, he / she shall be liable for punitive action as prescribed by the University from time to time.

11 REQUIREMENTS FOR APPEARING FOR END-SEMESTER EXAMINATION

A candidate shall normally be permitted to appear for the end semester examination of the current semester if he/she has satisfied the semester completion requirements (vide Clause 9) and has enrolled for examination in all courses of that semester.

12 PASSING REQUIREMENTS

- 12.1 A Candidate who secures not less than 50% of total marks (Internal Assessment and End-semester Examinations) prescribed for the courses with a minimum of 50 % of the marks prescribed for the end-semester examination in both Theory and Practical courses (including project works) shall be declared to have passed in the Examination.
- 12.2 If a candidate fails to secure a pass in a particular course, it is mandatory that he/she shall register and reappear for the examination in that course during the next semester when examination is conducted in that course; he / she should continue to register and reappear for the examination till he / she secures a pass.
- 12.3 The internal assessment marks obtained by the candidate in the first appearance shall be retained and considered valid for all subsequent attempts till the candidate secures a pass.

However, from the 3rd attempt onwards if a candidate fails to obtain pass marks (IA + End Semester Examination) as per clause 13.1 then the passing requirement shall be as follows:

The candidate should secure 50% and above in the university examinations alone.

13. WEIGHTAGES:

The following will be the weightages for different courses.

- (i) Lecture or Lecture cum Tutorial based course:

Internal Assessment	-	50%
End-Semester Examination	-	50%

(ii)	Laboratory based courses		
	Internal Assessment	-	75%
	End-Semester Examination	-	25%
(iii)	Project work		
	Internal Assessment	-	50%
	Evaluation of Project Report by		
	External examiner	-	20%
	Viva-Voce Examination	-	30%
(iv)	Seminar / Industrial Training / Summer Projects		
	Internal Assessment	-	100%

14 AWARD OF LETTER GRADES

14.1. All assessments of a course will 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 below:

Letter grade	Grade Points
S	10
A	9
B	8
C	7
D	6
E	5
RA	0
I	0
W	0

“RA” denotes **reappearance** is required for the examination in the course. (This grade will figure both in Marks Sheet as well as in Result Sheet)

“W” denotes **withdrawal** from the course.

The Grade “I” denotes inadequate attendance (as per clause 9) and hence prevention from writing the end-semester examination.

The Grade “I” and “W” will figure only in the Result Sheets.

The mark ranges for all the grades will be decided by the class committee, excluding the student members taking into account the above guide lines.

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 is the ratio of the sum of the products of the number of credits of courses enrolled and the 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.

$$\text{GPA} = \frac{\text{Sum of [C * GP]}}{\text{Sum of C}}$$

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

Whenever students, having arrear subjects, appear for the end semester examination during which there are no regular batch of students writing the same subjects, then, the letter grades for the arrears subjects shall be awarded based on the range of marks approved by the class committee immediately preceding end semester examination in which regular students wrote.

15. ELIGIBILITY FOR THE AWARD OF THE MASTERS DEGREE

- 15.1 A student shall be declared to be eligible for the award of the Degree if he/she has
- Successfully acquired the required credits as specified in the Curriculum corresponding to his/her programme within the stipulated time.
 - No disciplinary action is pending against him/her.
 - Successfully completed the field visit/ industrial training, if any, as prescribed in the curriculum.
- 15.2 The Syndicate must approve the award of the degree.

16 CLASSIFICATION OF THE DEGREE AWARDED

- 16.1 A candidate who qualifies for the award of the Degree (vide clause 16) having passed the examination in all the courses in his/her first appearance within the specified minimum number of semesters securing a **CGPA not less than 8.50** shall be declared to have passed the examination in **First Class with Distinction**. For this purpose the withdrawal from examination (vide clause 18) will not be construed as an appearance. Further, the authorized break of study (vide clause 19 (iii)) will not be counted for the purpose of classification.
- 16.2 A candidate who qualifies for the award of the Degree (vide clause 16) having passed the examination in all the courses within the sum of the specified minimum number of semesters plus one year, securing a CGPA not less than 6.50 shall be declared to have passed the examination in **First Class**. For this purpose the authorized break of study (vide clause 19.3) will not be counted for the purpose of classification.
- 16.3. All other candidates (not covered in clauses 17.1 and 17.2) who qualify for the award of the degree (vide Clause 16) shall be declared to have passed the examination in **Second Class**.
- 16.4. A candidate who is absent in semester examination in a course / project work after having enrolled for the same shall be considered to have appeared in that examination for the purpose of classification.

- 16.5. A candidate can apply for revaluation 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 Additional Controller of Examinations through the Head of Departments. The Additional Controller of Examination will arrange for the revaluation and the results will be intimated to the candidate concerned through the Head of the Department. Revaluation is not permitted for practical courses, seminars, practical training and for project work.

17 REVALUATION

A candidate can apply for revaluation 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 Additional Controller of Examinations through the Head of Departments. The Additional Controller of Examination will arrange for the revaluation and the results will be intimated to the candidate concerned through the Head of the Department. Revaluation is not permitted for practical courses, seminars, practical training and for project work.

18. PROVISION FOR WITHDRAWAL FROM EXAMINATION:

- 18.1 A candidate may, for valid reasons (medically unfit / unexpected family situations), be granted permission to withdraw from appearing for any course or courses of only one semester examination 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.
- 18.2 Withdrawal application shall be valid only if the candidate is, otherwise, eligible to write the examination and only if it is recommended by the HOD and submitted to the **Director, Academic Courses**, prior to the commencement of the examination in that course or courses.
- 18.3 Withdrawal shall not be construed as an appearance for the eligibility of a candidate for classification of degree under clause 16.1 & 16.2.
- (i) "Withdrawal application is to be made within TEN days prior to the commencement of the examination".
 - (ii) "Withdrawal is NOT permitted for arrears examinations of the previous semesters".
 - (iii) Notwithstanding the requirement of mandatory TEN days notice, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case.

19. AUTHORISED BREAK OF STUDY FROM A PROGRAMME

- 19.1. 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 rejoin the programme in a later

semester, permission may be granted based on the merits of the case provided he / she applies to the **Director, Academic Courses** 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 Department stating the reasons therefor and the probable date of rejoining the programme.

However, if the candidate has not completed the first semester of the programme, Break of Study will be considered only on valid medical reasons.

- 19.2 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. Such candidates may have to do additional courses as prescribed by the Director, Academic Courses if the Regulation is changed.
- 19.3 The authorized break of study will not be counted for the duration specified for passing all the courses for the purpose of classification. (vide Clause 16.1 and 16.2).
- 19.4 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 3 irrespective of the period of break of study in order that he/she may be eligible for the award of the degree (vide clause 15).
- 19.5 If any student is detained for want of requisite attendance, progress and good conduct, the period spent in that semester shall not be considered as permitted 'Break of Study' and Clause 19.3 is not applicable for this case.

20. INDUSTRIAL VISIT

Every student is required to undergo one Industrial visit for every theory course offered, starting from the third semester of the Programme, till sixth semester.

21. PERSONALITY AND CHARACTER DEVELOPMENT

All students shall enroll, on admission, in any one of the personality and character development programme (NSS/NSO/YRC) and undergo training for about 80 hours and attend a camp of about ten days. The training shall include classes on hygiene and health awareness and also training in first-aid.

National Service Scheme (NSS) will have social service activities in and around the College/Institution.

National Sports Organization (NSO) will have sports, Games, Drills and Physical exercises.

Youth Red Cross (YRC)

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

Every student shall put in a minimum on 75% attendance in the training and attend the camp compulsorily. The training and camp shall be completed during the first year of the programme. However, for valid reasons, the Head of the Institution may permit a student to complete this requirement in the second year.

22 DISCIPLINE

Every student is required to observe discipline 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.

23 REVISION OF REGULATION AND CURRICULUM

The University may from time to time revise, amend or change the Regulations, syllabi and scheme of examinations if deemed necessary.
