ANNA UNIVERSITY : : CHENNAI - 600 025

UNIVERSITY DEPARTMENTS

REGULATIONS 2015

CHOICE BASED CREDIT SYSTEM

COMMON TO ALL POST GRADUATE PROGRAMMES

(For the students admitted to M.E./M.Tech. (Full-Time, Part Time), M.C.A., M.B.A. (Full Time, Part Time), M.Sc. (Full Time) (2 Years) Programmes at various University Departments from the Academic year 2015-2016 onwards)

1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In this Regulation, unless the context otherwise specifies:

- I. "Programme" means Degree Programme. e.g. M.E., M.Tech. Degree Programme
- II. **"Specialisation"** means a discipline of the Post Graduate Degree Programme like Structural Engineering, Engineering Design, etc.
- III. "**Course**" means a Theory or Practical subject that is normally studied in a semester, like Applied Mathematics, Advanced Thermodynamics, High Voltage Lab., etc.
- IV. "Director, Academic Courses" means the authority of the University who is responsible for all academic activities for the implementation of relevant rules and regulations.
- V. "Additional Controller of Examinations" means the Authority of the University who is responsible for all activities of the End Semester Examinations of the University Departments.
- VI. "Head of the Institution" means the Dean of the campus.
- VII. "Chairman" means Head of the Faculty.
- VIII. "Head of the Department" means Head of the University Department Concerned.
- IX. "University" means ANNA UNIVERSITY, CHENNAI.

2. ADMISSION PROCEDURE

- 2.1 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.
- 2.2 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.
- 2.3 Not withstanding 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.
- 2.4 Eligibility conditions for admission such as the marks, class obtained, the number of attempts in the qualifying examination and physical fitness will be as prescribed by the Syndicate of the University from time to time.

2.5 All Part-Time students should satisfy other conditions regarding experience, Sponsorship etc, prescribed by the Syndicate from time to time

3. PROGRAMMES OFFERED AND MODE OF STUDY

3.1 **PROGRAMMES OFFERED**

A student may be offered admission to any one of the following programme of study approved by the University and offered at various campuses of the University.

- 1. M.E. (Full Time / Part Time)
- 2. M. Tech. (Full Time / Part Time)
- 3. M.B.A. (Full Time / Part Time)
- 4. M.C.A (Full Time- Daytime & Evening)
- 5. M.Sc. (2 Years) (Full Time)

Details of Programmes currently being offered by the University are listed Faculty-wise in <u>Annexure - I</u>

3.2. MODES OF STUDY:

3.2.1 **Full-Time:**

Students admitted under 'Full-Time' should be available in the University departments 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.

3.2.2 Part-Time Mode:

In this mode of study, the students are required to attend classes conducted in the evenings and complete the course in three years.

3.2.3 Conversion from one mode of study to other is not permitted.

4. STRUCTURE OF THE PROGRAMMES

4.1 **Categorization of Courses**

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

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

Instead of two electives in the curriculum, the student may be permitted to choose a maximum of 2 courses from other PG programmes with the approval of the Head of the Department offering such courses

4.2 **Courses per Semester**

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:

Contact period per week	CREDITS
1 Lecture Period	1
2 Tutorial Periods	1
2 Practical Periods (Laboratory / Seminar / Project Work etc.)	1

The Contact Periods per week for Tutorials and Practical can only be in multiples of 2.

4.4 **Project Work**

The Project work is an important component of Post-Graduate programmes. The Project work for M.E. / M.Tech. consists of Phase – I and Phase – II. The Phase – I is to be undertaken during III semester (M.E. / M.Tech.(FT)) or during V semester (M.E. / M.Tech.(PT)). Phase – II, which is a continuation of Phase – I is to be undertaken during IV semester (M.E. / M.Tech.(FT)) or during VI semester (M.E. / M.Tech.(PT)). For all other programmes (M.C.A./ M.B.A. / M.Sc. – except M.Sc. Applied Mathematics (2 years)), the Project Work has to be undertaken in the final semester.

- 4.4.1 The Project work for M.C.A., M.B.A, M.E / M.Tech (for Phase II Project work) shall be pursued for a minimum of 16 weeks during the final semester. For M.Sc. (2 years) the Project work shall be pursued for a minimum of 16 weeks during the final semester, along with 2 or 3 elective courses as/if given in the curriculum.
- 4.4.2 The 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 3 years of teaching experience or (ii) Ph.D. degree.
- 4.4.3 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.

4.5. Industrial Training / Internship

4.5.1 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.

4.5.2 If Industrial Training / Internship is not prescribed in the curriculum, the student may undergo Industrial Training / Internship optionally and the credits earned will be indicated in the Mark Sheet. If the student earns three credits in Industrial Training / Internship, the student may drop one Professional Elective. In such cases Industrial Training / Internship needs to be undergone continuously from one organization only. However, if the number of credits earned is 1 or 2, these credits shall not be considered for classification of the degree. The student is only allowed to undergo a maximum of 6 weeks Industrial Training / Internship during the entire duration of study.

DURATION OF TRAINING / INTERSHIP	CREDITS
2 Weeks	1
4 Weeks	2
6 Weeks	3

4.6 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 Centre for Academic Courses. The details of the syllabus, time table and faculty may be sent to the Centre for Academic Courses after approval from the Departmental Consultative Committee concerned. Students can take a maximum of **two one credit courses or one Two credit course.** They shall be allowed to take one/two credit courses offered in other Departments with the permission of Head of the Department offering the course.

4.7 Online Courses

Students may be permitted to credit online courses (which are provided with certificate) with the approval of Departmental Consultative Committee and Centre for Academic Courses subject to a maximum of three credits. This online course of 3 credits can be considered instead of one elective course. The student needs to obtain certification or credit to become eligible for writing the End Semester Examination to be conducted by Anna University. In case of credits earned through online mode from a University approved by appropriate authorities of Anna University, the credits may be transferred after due approval procedures from Departmental Consultative Committee and Centre for Academic Courses.

4.8 Self Study Courses

- 4.8.1 Students may be permitted to credit atmost one Self Study course with the approval of Departmental Consultative Committee and Centre for Academic Courses.
- 4.8.2 The Department / Centre / Division may offer self study courses. The purpose of the course is to permit the student to study a course / topic of the student's choice. The students shall study on their own under the guidance of a faculty member. No formal lectures need be delivered. The syllabus of the course and mode of assessments shall be approved by the Departmental Consultative Committee and forwarded to the Centre for Academic Courses for the formal approval of the course by the academic bodies, preferably before the commencement of the semester. The self study course of 3 credits can be considered as one elective course. One Faculty member approved by the Head of the Department shall be responsible for the periodic monitoring and evaluation of the course.

4.9 Medium of Instruction

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

5. DURATION OF THE PROGRAMMES

5.1 The minimum and maximum period for the completion of the P.G. Programmes are given below:

Programme	Min. No. of Semesters	Max. No. of Semesters
M.E./M.Tech. (Full-Time)	4	8
M.E./M.Tech. (Part Time)	6	12
M.C.A (Full Time- Daytime & Evening)	6	12
M.B.A. (Full Time)	4	8
M.B.A. (Part Time)	6	12
M.Sc. (Full Time) (2 Years)	4	8

- 5.2 Each semester shall normally consist of 90 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 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 break 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 P.G. Programmes has been designed to have the credits in the range specified below for the various programmes for the award of the degree.

PROGRAMME	PRESCRIBED CREDIT RANGE
M.E. / M.Tech.	65 – 75
M.C.A.	113 - 120
M.B.A.	86 - 90
M.Sc. (2 Years)	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 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.
- 6.2 Every student has to do course enrollment and registration within the stipulated time.

- 6.3 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.
- 6.3.1 Each student on admission shall register for all the courses prescribed in the curriculum in the student's first Semester of study.
- 6.3.2 The enrollment for all the courses of the Semester II will commence 5 working days prior to the commencement of Semester II. The student shall confirm the enrollment by registering the courses within the first 5 working days from the commencement of the Semester II.
- 6.3.3 The enrollment for the courses from the III 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 or add courses (vide clause 6.5) 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. The student is allowed to register for courses for which the student has not enrolled, if these are the courses in which the student has failed.
- 6.3.4 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.

6.4 MINIMUM CREDITS TO REGISTER FOR PROJECT WORK

The Project work for M.E. / M.Tech. consists of Phase – I and Phase – II. The Phase – I is to be undertaken during III semester (M.E. / M.Tech.(FT)) or during V semester (M.E. / M.Tech.(PT)). Phase – II, which is a continuation of Phase – I is to be undertaken during IV semester (M.E. / M.Tech.(FT)) or during VI semester (M.E. / M.Tech.(PT)). For all other programmes, the Project Work has to be undertaken in the final semester.

PROGRAMME	MINIMUM NO. OF CREDITS TO BE EARNED
M.E. / M.Tech.	24 (for Phase – I)
M.C.A.	70
M.B.A.	50
M.Sc. (2 years)	40

TABLE – 1

Minimum credits shall be as follows:

6.4.1 If the student has not earned the requisite minimum credits, the student cannot enroll for the Project work (Phase I in the case of M. E / M. Tech.). In such a case, the student can enroll for the project work in a subsequent semester, after earning the minimum credits specified.

6.5 Flexibility to Add or Drop courses

- 6.5.1 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.
- 6.5.2 From the II to final semesters, the student has the option of registering for additional courses or dropping existing courses. The maximum number of credits the student can register in a particular semester cannot exceed 30 credits for PG (Full Time) programmes and cannot exceed 18 credits for PG (Part Time) programmes (including courses for which the student has done reappearance registration (vide clause 6.6) and the maximum number of credits the student can register in a particular semester cannot exceed 36 credits for MBA (Full Time) programmes and cannot exceed 21 credits for MBA (Part Time) programmes (including courses for which the student has done reappearance registration (vide clause 6.7). The Total number of credits that a student can drop is limited to 8, course to a maximum of 2 courses.
- 6.5.3 The student shall register for the Project work Phase I in the third semester (M.E. / M.Tech.(FT) / M.Sc. Applied Mathematics) or in the fifth semester (M.E. / M.Tech.(PT)) and for Project work phase II in the fourth semester (M.E. / M.Tech.(FT)) or sixth semester (M.E. / M.Tech.(PT)). In the case of, MBA and M.Sc (2 years) degree programmes the student shall register for project work in the fourth semester. In the case of MCA the student shall register for project work in the 6 semester. However, if a student has not earned the minimum number of credits as specified in Table 1, the student may be permitted to register for the project work (Phase I and Phase II for in the case of M.E. / M.Tech.) as and when the student earns the minimum number of credits.

6.6 Reappearance Registration

When the Student does Reappearance Registration, the student shall earn Continuous Assessment marks and attend end semester examination. The student may attend the classes for the reappearance registration courses, if the student wishes. However, the attendance requirement (vide clause 7) is not compulsory for such courses.

Reappearance Registration is applicable for the following cases:

- 6.6.1 If a student fails in a core theory course, the student shall do reappearance registration for that course in the subsequent semester when it is offered next.
- 6.6.2 If the theory course, in which the student has failed, is a professional elective or an open elective, and the student chooses to opt for the same professional elective or open elective course, the student shall do reappearance registration for that course(s) in the subsequent semester when it is offered next.
- 6.6.3 If a student has applied for withdrawal from writing end semester examination of a course (Theory / Laboratory / Elective) the student shall do reappearance registration for that course in the subsequent semester when it is offered next. Withdrawal shall not be considered as an appearance for deciding the eligibility of a student for First Class with Distinction.

6.7 Repeating the Course

When the Student repeats the course, the student shall attend the classes, satisfy the attendance requirements (vide clause 7), earn Continuous Assessment marks and appear for the End Semester Examinations.

Repeating the Course is applicable for the following cases:

- **6.7.1** The student who fails in any Laboratory Course/ Project work / Seminar and any other EEC course shall register for the same in the subsequent semester, when offered next, and repeat the course. In this case, the student shall attend the classes and fulfill the attendance requirements as per clause 7.
- **6.7.2** If a student is prevented from writing end semester examination of any course due to lack of attendance and that course is a core course (Theory / Laboratory), the student has to register for that course again, when offered next, and repeat the course. In this case, the student shall attend the classes and fulfill the attendance requirements as per clause 7. If the course is a Professional Elective or an Open Elective and the candidate opts for the same course the student has to register for that course again, when offered next, and repeat the course. In this case, the student shall attend the student has to register for that course again, when offered next, and repeat 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 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 less than 75% in any course in the current semester due to medical reasons (hospitalization / accident / specific illness) or due to participation in the College / University / State / National / International level Sports events with prior permission from the Chairman, Sports Board and Head of the Department concerned, the student shall be given exemption from the prescribed attendance requirement and 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 End semester examination of the course if the student has satisfied the attendance requirements (vide Clause 7.1 7.2) and has registered for 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 repeat this course in a subsequent semester when it is offered next (vide clause 6.7.2).
- 7.5 In the case of reappearance registration for a course (vide Clause 6.6), 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 in 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 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 for the faculty advisor shall be:

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

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 Faculty Chairman duly approved by the Director, Academic Courses.

The first meeting of the Common Course Committee shall be held within fifteen days from the date of commencement of the semester. 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 the whole batch.

In addition the "Common Course Committee" (without the student representatives) 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 (without the student representatives) 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

If a programme has in a semester, course(s) handled by a single teacher, there will be a "Multiple Courses Committee" comprising of all the above teachers and two student representatives from each course. One of the above teachers, nominated by the Head of the Department shall coordinate the activities of this committee. The functions of this committee is similar to that of the common course committee, which is as follows:

The first meeting of the Multiple Courses Committee shall be held within fifteen days

from the date of commencement of the semester. 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 a overall monitoring committee for each semester of a programme which comprises of (i) the Course Coordinators / Course teachers (as applicable), (ii) the Faculty Advisor of the programme and (iii) the Head of Department. 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 invite the students of the semester concerned for any of the committee meetings if necessary.

10 ASSESSMENT PROCEDURES FOR AWARDING MARKS

All PG (M.E. / M.Tech. (Full-Time, Part Time), M.C.A., M.B.A. (Full Time, Part Time), M.Sc. (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. For Theory Courses and Theory Courses with Laboratory Component, out of 100 marks, the maximum marks for Continuous Assessment is fixed as 50 and the End Semester Examination carries 50 marks. For Laboratory Courses out of 100 marks, the maximum marks for Continuous Assessment is fixed as 75 and the End Semester Examination carries 25 marks. The continuous assessment is 60 marks for the Project Work, and project report evaluation and viva-voce examination carries 40 marks. All other courses included under Employability Enhancement Courses are evaluated by Continuous Assessments only.

S.No	Category of course	Continuous Assessments	End-Semester Examinations
i.	Theory Courses/ Theory Courses with Laboratory Component	50 Marks	50 Marks
ii.	Laboratory Courses	75 Marks	25 Marks
iii.	Project Work	60 Marks	40 Marks
iv.	All other EEC Courses	100 Marks	-

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

Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD' for every semester which consists of attendance marked in each theory / Laboratory/EEC class, the assessment marks and the record of class work (topics covered), separately for each course handled by the 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. At the end of the semester, the record should be verified by the Head of the Department who shall keep this document in safe custody (for four years). The records of attendance and assessment of both current and previous semesters should be available for inspection.

10.1 ASSESSMENT FOR THEORY COURSES:

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

The University examinations (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 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.

Continuous Assessment comprises of two assessments of equal weightage, conducted by the course instructor / coordinator / department. The total marks obtained in the **2 assessments** put together shall be reduced to 50 marks and rounded to the nearest integer **One assessment would be conducted in a day (in the case of tests and they would be of one and a half hours durations each).** Students will have regular classes the assessment days of these tests. In case a student misses the assessment due to medical reasons (hospitalization / accident / specific illness) or due to participation in the College / University / State / National / International level Sports events with prior permission from the Chairman, Sports Board a **Reassessment** may be given at the end of the semester after getting approval from the Head of the Department through the concerned course instructor.

If a student has failed (vide clause 11.1) in a theory course, the continuous assessment marks the student has earned is no longer valid. The student on doing reappearance registration has to appear for the assessments along with the current batch of students and earn continuous assessment marks again.

10.2 ASSESSMENT FOR LABORATORY COURSES:

For Laboratory Courses out of 100 marks, the maximum marks for Continuous Assessment is fixed as 75 and the End Semester Examination carries 25 marks.

Every laboratory exercise / experiment shall be evaluated based on the student performance during the laboratory class and the student's records maintained. There shall be at least one assessment test. The criteria for arriving at the Continuous Assessment marks of 75 shall be decided at the respective course committee meetings.

The University 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.

The student who fails (vide clause 11.1) in the laboratory course shall register for the same in the subsequent semester, when offered next, and repeat the laboratory course again.

10.3 ASSESSMENT FOR THEORY COURSES WITH LABORATORY COMPONENT :

The maximum marks for Internal Assessment shall be 50 in case of theory courses with Laboratory component. For a theory course with Laboratory component, there shall be three assessments: the first two assessments (each with a maximum of 100 marks) will be from theory portions and the third assessment (maximum marks 100) will be for laboratory component. The sum of marks of all three assessments shall be reduced to 50 marks and rounded to the nearest integer.

10.4 ASSESSMENT FOR PROJECT WORK:

The evaluation of Project Work for Phase I and Phase II in the case M.E. / M.Tech shall be done independently in the respective semesters and marks shall be allotted as per the weightages given in Clause 10.4.1.

10.4.1 The Project work shall be evaluated for a maximum of 100 marks of which 60 marks will be through internal assessment. There should be three reviews for each phase in the case of M.E. / M.Tech. (Phase I and Phase II) to be conducted separately with Internals 60 marks and External 40 marks. For the M.Sc. (2 years) Applied Mathematics programme, the Project work Phase I shall be evaluated only through Internal Assessments. There shall be two Assessment tests (Reviews) for 60 marks and a Viva-voce Examination for 40 marks. The committee for the conduct of reviews and Viva-voce Examination shall be constituted by the Head of the Department. Similarly, there should be three reviews for the final year Project work of M.C.A. / M.B.A. / M.Sc. (2 years) to be conducted separately with Internals 60 marks and External 40 marks. The marks are to be distributed as detailed below.

Project work	Internal (60 Marks)		External (40 Marks)				
	Review I	Review II	Review III	Thesis Evaluation (External)		/iva – Voce (30 Marks) External	Internal
Phase – I &	20	20	20	10	10	10	10
Phase - II	20	20	20	10	10	10	10

- 10.4.2 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 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 60 marks and rounded to the nearest integer.
- 10.4.3 The Project Report prepared according to approved guidelines as given by Director, Academic Courses and duly signed by the supervisor(s), Project Co-ordinator and the Head of the Department and shall be submitted to the Head of the Department.
- 10.4.4 The evaluation of the Project work Phase I and Phase II (M.E. / M.Tech. will be based on the project report submitted in each of the Phase – I and Phase - II semesters respectively and a Viva-Voce Examination by a team consisting of the supervisor, internal examiner (other than the supervisor) and External Examiner. The external examiner shall be appointed by the Chairman of the respective Faculty from the panel of examiners submitted by the HOD for Phase – I and Phase – II project evaluation in the case of M.E. / M. Tech. and for the Final Project work of M.B.A. / M.C.A.

- 10.4.5 If the student fails to obtain 50% of the internal assessment marks in the Phase–I and Phase–II in the case of M.E. / M.Tech or the Final Project work of M.B.A. / M.C.A., 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.
- 10.4.6 The deadline for submission of final Project Report is 60 calendar days from the last working day of the semester in which project / thesis / dissertation is done. However, the Phase-I of the Project work in the case M.E. / M.Tech. shall be submitted within a maximum period of 30 calendar days from the last working day of the semester as per the academic calendar published by the University or the Re-opening of next semester whichever is earlier.
- 10.4.7 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. This applies to both Phase–I and Phase–II in the case of M.E. / M.Tech. and the Final Project work of M.B.A. / M.C.A.

In case of students of M.E. / M.Tech. not completing Phase - I of Project work successfully, the students can undertake Phase - I again in the subsequent semester. In such cases, the students can enroll for Phase-II, only after successful completion of Phase I.

10.4.8 A copy of the approved project report after the successful completion of viva-voice examinations shall be kept in the library of the college / institution.

10.5 ASSESSMENT FOR SEMINAR / PROFESSIONAL PRACTICES / CASE STUDY:

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 appointed by 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%).

10.6 ASSESSMENT FOR INDUSTRIAL / PRACTICAL TRAINING / INTERNSHIP / SUMMER PROJECT

- 10.6.1 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.
- 10.6.2 The Industrial / Practical Training shall carry 100 marks and shall be evaluated through continuous assessment only as per Table 1. 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 constituted by the Head of the Department. Certificates (issued by the Organization) submitted by the student shall be attached to the mark list and sent to Additional Controller of Examinations by the Head of the Department.
- 10.6.3 The Industrial / Practical Training which is not part of the curriculum (Clause 4.5.2), shall carry 100 marks and shall be evaluated through internal assessment only as per Table 1. At the end of Industrial / Practical training / internship / Summer Project, the student shall submit a certified report (evaluated out of 100 marks by a mentor/guide) from the organization where the student has undergone training. The Viva-Voce Examination will be conducted by a three member committee constituted by the Head of the Department.

The committee comprises of one expert from an industry/organisation and two members of the Department. Certificates (issued by the Organization) submitted by the student shall be attached to the mark list (with grade) and sent to Additional Controller of Examinations by the Head of the Department.

Table 1	
---------	--

INTERNINTERNSHIP / INDUSTRIAL TRAININGAINING				
EVALUATION				
REPORT PRESENTATION VIVA VOCE				
40	30	30		

10.7 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.

10.8 ASSESSMENT FOR ONLINE COURSE

Students may be permitted to credit online courses (which are provided with certificate) with the approval of Departmental Consultative Committee and Centre for Academic Courses subject to a maximum of three credits. This online course of 3 credits can be considered instead of one elective course. Departmental Consultative Committee will take a decision on the evaluation methodology for the online course. The Committee can decide whether to evaluate the online courses through Continuous assessment and End Semester Examination or through End Semester Examination only and same may be conveyed to the Director, Academic Courses at the beginning of the semester when the course is offered. The student needs to obtain certification or credit to become eligible for writing the End Semester Examination to be conducted by Anna University. The Head of the Department may identify a faculty member as coordinator for the course, who is responsible for evaluation process. The course shall be evaluated through the End Semester Examination only. A committee consisting of the Head of the Department, coordinator and a senior Faculty member nominated by the Head of the Department shall assign the grades to the students based on their relative performance.

In case of credits earned through online mode from a University approved by appropriate authorities of Anna University, the credits may be transferred and grades shall be assigned by a committee consisting of Chairman of the Faculty concerned, Head of the Department and Senior faculty member nominated by the Chairman.

10.9 ASSESSMENT FOR SELF STUDY COURSE

The Faculty member approved by the Head of the Department shall be responsible for periodic monitoring and evaluation of the course. The course shall be evaluated through Continuous Assessment (as decided by the Departmental Consultative Committee) and End Semester Examination. The evaluation methodology shall be the same as that of a theory course (vide clause 10.1). A committee consisting of the Head of the Department, the Faculty Member and another senior Faculty member nominated by the Head of the Department shall assign the grades to the students based on their relative performance.

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 a <50% of total marks then, the student will be awarded only RA (Reappearance) grade. All other grades will be decided by the faculty concerned. A student who earns a minimum of 6 grade points in a course is declared to have successfully passed the course.
- 11.1.1 If a student fails to secure a pass in a theory course (except electives), the student shall do reappearance registration only along with regular students for that course in the subsequent semester, when offered next, earn continuous assessment marks and attend the end semester examination.
- 11.1.2 If the course, in which the student has failed, is an elective, the student may be permitted to register for the **same course**, earn continuous assessment marks and attend the End Semester Examination or **any other** elective course in the subsequent semesters, attend the classes and fulfill the attendance requirements as per Clause 7.
- 11.1.3 If a student fails to secure a pass in a laboratory course, the student shall register for the course again, when offered next.
- 11.1.4 If a student fails to secure a pass in project work, the student shall register for the course again, when offered next.
- 11.2 The passing requirement for the courses which are assessed only through continuous assessment (EEC courses except project work), shall be determined statistically based on the marks obtained in continuous assessment tests.
- 11.3 If a student fails to secure a pass in theory and laboratory courses in the Pre-final and Final semesters examination, he/she is eligible to appear for a one time Supplementary Examination which shall be conducted at the end of Pre-final and Final semesters within 30 days from the date of declaration of the results. In case a student fails in the Supplementary Examinations reappearance registration along with the regular students alone is permitted in the subsequent semester, when offered next and attend the end semester examination.
- 11.4 A student can apply for revaluation of the student's semester examination answer paper in a theory course, within 2 weeks from the declaration of results, on payment of a prescribed fee along with prescribed application to the ACOE through the Head of Departments. The ACOE will arrange for the revaluation and the results will be intimated to the student concerned through the Head of the Department. Revaluation is not permitted for laboratory course and project work.

12 AWARD OF LETTER GRADES

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

Letter Grade	Grade Points
O (Outstanding)	10
A + (Excellent)	9
A (Very Good)	8
B + (Good)	7
B (Average)	6
RA (Reappearance Registration)	0
SA (Shortage of Attendance)	0

The range of marks for each grade is decided automatically by the system based on statistical methods.

'RA' denotes Reappearance registration is required for that particular course.

'SA' denotes shortage of attendance (as per Clause 7) and hence prevented from writing end semester examination.

12.2 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'. The other grades RA, SA will not figure in the mark sheet.

13. GPA AND CGPA CALCULATION

- 13.1 The Course Teacher shall handover the foil sheet, grade sheet and attendance sheet to the HOD concerned for onward transmission to the ACOE, UD for processing of results. 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.

$$GPA = \frac{\sum_{i=1}^{n} c_i GP_i}{\sum_{i=1}^{n} c_i}$$

Where C_i - is the Credits assigned to the course

- GP_i is the grade point corresponding to the letter grade obtained for each course n is number of all Courses successfully cleared during the particular semester
 - in the case of GPA and during all the semesters in the case of CGPA.

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

- 13.2 The credits earned through one credit courses shall not be considered for calculating GPA and CGPA.
- 13.3 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.

14 ELIGIBILITY FOR THE AWARD OF DEGREE

- 14.1. A student shall be declared to be eligible for the award of the PG Degree (M.E./ M.Tech., M.C.A., M.B.A., M.Sc.) provided the student has
 - i. Successfully gained the required number of total credits as specified in the curriculum corresponding to the student's programme within the stipulated time.

ii. a. M.E./ M.Tech., M.B.A., M.Sc. (2 years) (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.

b. M.E./ M.Tech., M.B.A.(Part Time) and M.C.A.(Full Time) Successfully completed the course requirements, appeared for the End-Semester examinations and passed all the subjects prescribed in all the 6 semesters within a maximum period of 6 years reckoned from the commencement of the first semester to which the candidate was admitted.

- iii. Successfully passed any additional courses prescribed by the Director, Academic Courses whenever readmitted under regulations other than R-2015 (vide clause 16.3)
- iv. No disciplinary action pending against the student.
- v. The award of Degree must have been approved by the Syndicate of the University.

14.2 CLASSIFICATION OF THE DEGREE AWARDED

14.2.1 **FIRST CLASS WITH DISTINCTION:**

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

M.E. / M.Tech., M.B.A., M.Sc. (2 years)(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 authorised break of study of one year. Withdrawal from examination (vide Clause 15) 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.

M.E. / M.Tech., M.B.A.(Part Time) and M.C.A (Full Time)

- Should have passed the examination in all the courses of all the six semesters in the student's First Appearance within **four** years, which includes authorised break of study of one year. Withdrawal from examination (vide Clause 15) 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.

14.2.2 FIRST CLASS:

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

M.E. / M.Tech., M.B.A., M.Sc. (2 years) (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**

M.E. / M.Tech., M.B.A.(Part Time) and M.C.A (Full Time)

- Should have passed the examination in all the courses of all six semesters within four 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**

14.2.3 SECOND CLASS:

All other students (not covered in clauses 14.2.1 and 14.2.2) who qualify for the award of the degree (vide Clause 14.1) shall be declared to have passed the examination in **Second Class**.

14.2.4 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 15) for the purpose of classification.

15 PROVISION FOR WITHDRAWAL FROM EXAMINATION:

- 15.1 A student may, for valid reasons, (medically unfit / unexpected family situations / sports approved by Chairman, sports board and HOD) be granted permission to withdraw from appearing for the end semester examination in any course or courses in **ANY ONE** of the semester examinations during the entire duration of the degree programme. The application shall be sent to Director, Academic Courses through HOD with required documents.
- 15.2 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.
- 15.3 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.
- 15.4 Withdrawal shall not be considered as an appearance for deciding the eligibility of a student for First Class with Distinction.
- 15.5 Withdrawal is permitted for the end semester examinations in the final semester only if the period of study the student concerned does not exceed 3 years for M.E. / M.Tech., M.B.A., M.Sc. (2 years) (Full Time) and does not exceed 4 years for M.E. / M.Tech., M.B.A. (Part Time) and M.C.A. as per clause 14.2.1.

16 BREAK OF STUDY FROM A PROGRAMME

- 16.1 A student is permitted to go on break of study for a maximum period of one year either as two breaks of one semester each or a single break of one year.
- 16.2 The student applies for break of study, the student shall apply to the Director, Academic Courses 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. In the case of short term employment/ training/ internship, the application for break of study shall be approved and forwarded by the Departmental Consultative Committee to the Director, Centre for Academic Courses.
- 16.3 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 Director, Academic Courses in the prescribed format through Head of the Department 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.
- 16.4 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 14).
- 16.5 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 Director, Academic Courses through the concerned Head of the Department before the end of the semester in which the student has taken break of study.
- 16.6 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 DISCIPLINE

- 17.1 Every student is required to observe disciplined and decorous behavior both inside and outside the college and not to indulge in any activity which will tend to bring down the prestige of the University. 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 University 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 Registrar of the University for taking final decision.
- 17.2 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.

18 REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

The University may from time to time revise, amend or change the Regulations, Curriculum, Syllabus and Scheme of examinations through the Academic Council with the approval of the Syndicate.

ANNEXURE – I

A student may be offered one of the following PG programmes of study approved by the University. A student of a programme should earn the credits specified against it to

enable the student to be eligible to be awarded the degree.

SL. No.	NAME OF THE PROGRAMME	CREDITS TO BE EARNED
FACULTY	OF CIVIL ENGINEERING	
1.	M.E. Structural Engineering	68
2.	M.E. Construction Engineering and Management	68
3.	M.E. Irrigation Water Management	69
4.	M.E. Hydrology and Water Resources Engineering	69
5.	M.E. Environmental Engineering	67
6.	M.E. Transportation Engineering	69
7.	M.E. Soil Mechanics and Foundation Engineering	68
8.	M.E. Environmental Management	66
9.	M.E. Remote Sensing & Geomatics	68
10.	M.E. Integrated Water Resources Management	68
11.	M. Tech. Coastal Management	67
	· · · · · · · · · · · · · · · · · · ·	
	OF MECHANICAL ENGINEERING	74
12.	M.E. Internal Combustion Engineering	71
13.	M.E. Energy Engineering	71
14.	M.E. Computer Integrated Manufacturing	69
15.	M.E. Thermal Engineering (with specialization in Refrigeration and Air Conditioning)	71
16.	M.E. Engineering Design	73
17.	M.E. Aeronautical Engineering	75
18.	M.E. Automobile Engineering	71
19.	M.E. Industrial Engineering	70
20.	M.E. Manufacturing Engineering	75
21.	M.E. Mechatronics	75
22.	M.E. Manufacturing Systems and Management	67
23.	M.E. Product Design and Development	71
24.	M.E. Quality Engineering and Management	70
25.	M.E. Computer Aided Design	71
26.	M.E. Printing and Packaging Technology	70
27.	M.E. Aerospace Technology	72
28.	M.E. Solar Energy	71
29.	M.E. Manufacturing Engineering	67
	(with specialization in Green Manufacturing Engineering)	
	OF ELECTRICAL ENGINEERING	
30.	M.E. Power Systems Engineering	70
31.	M.E. Power Electronics and Drives	68
32.	M.E. Embedded System Technologies	69
33.	M.E. High Voltage Engineering	67
34.	M.E. Control and Instrumentation Engineering	68
35.	M.E. Instrumentation Engineering	67
36.	M.E. Power Engineering and Management	70
FACULTY 37.	OF INFORMATION AND COMMUNICATION ENGINEERING M.E. Computer Science and Engineering	70
38.	M.E. Software Engineering	70
39.	M.E. Communication Systems	70
40.	M.E. VLSI Design	69
40.	M.E. Medical Electronics	71
41.	M.E. Multimedia Technology	72
42.	M.E. Biomedical Engineering	71
43.	M.E. Communication and Networking	71
44.		11

45.	M.E. Avionics		72
46.	M.E. Applied Electronics	69	
47.	M.Tech. Information Technology	74	
48.	M.Tech. Laser and Electro Optical Enginee		70
49.	M.E. Systems Engineering and Operations		71
50.	M.E. Computer Science and Engineering (Data Analysis)	(Specialization in Big	70
51.	M. E. Wireless Technologies		69
52.	M. E. VLSI Design & Embedded Systems		69
53.	M.C.A.		113
FACULTY	OF TECHNOLOGY		
54.	M.Tech. Chemical Engineering		71
55.	M.Tech. Textile Technology		66
56.	M.Tech. Ceramic Technology		69
57.	M.Tech. Petroleum Refining and Petrocher	micals	66
58.	M.Tech. Polymer Science and Engineering)	74
59.	M.Tech. Environmental Science and Techr	67	
60.	M.Tech. Biotechnology	73	
61.	M.Tech. Biopharmaceutical Technology		70
62.	M.Tech. Rubber Technology	68	
63.	M.Tech. Leather Technology	69	
64.	M.Tech. Footwear Science and Engineerin	70	
65.	M.Tech. Nanoscience and Technology	70	
66.	M.Tech. Food Technology		71
67.	M.Tech. Industrial Safety and Hazards Mar	67	
68.	M.Tech. Computational Biology		75
FACULTY	OF MANAGEMENT SCIENCES		
69.	MBA		86
70.	MBA (Tourism Management)		86
FACULTY	OF SCIENCE AND HUMANITIES		
71.	M.Sc. Applied Mathematics	(2 years)	81
72.	M.Sc. Materials Science	(2 years)	79
73.	M.Sc. Medical Physics	(2 years)	81
74.	M.Sc. Applied Chemistry	(2 years)	80
75.	M.Sc. Applied Geology	(2 years)	78
76.	M.Sc. Environmental Science	(2 years)	76
77.	M.Sc. Electronics Media	(2 years)	84

* * * * *