ANNA UNIVERSITY, CHENNAI

REGULATIONS 2014

CREDIT SYSTEM

AFFILIATED COLLEGES

DEGREE OF BACHELOR OF ENGINEERING / TECHNOLOGY

(PART-TIME - 7 SEMESTERS)

Effective for the students admitted in Engineering Colleges (Non-Autonomous) Affiliated to Anna University, Chennai from January 2014 onwards.

1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In these Regulations, unless the context otherwise requires:

- I) "Programme" means Degree Programme, that is B.E./B.Tech.(Part-Time 7 Semesters) Degree Programme.
- II) "Discipline" means the "Branch" of B.E. / B.Tech. (Part-Time -7 Semester) Degree Programme, like Mechanical Engineering, etc.
- III) "Course" means a theory or practical course that is normally studied in a semester, like Mathematics, Physics, Engineering Mechanics, etc.
- IV) "Director, Academic Courses" means the authority of the University who is responsible for all academic activities of the University for implementation of relevant Rules and Regulations.
- V) "Chairman" means Head of the Faculty.
- VI) "Head of the Institution" means the Principal of the College.
- VII) "Head of the Department" means Head of the concerned Department of the College.
- VIII) "Controller of Examinations" means the authority of the University who is responsible for all activities of the University Examinations.
- IX) "University" means ANNA UNIVERSITY, CHENNAI.

2. ADMISSION PROCEDURE

2.1 Candidates seeking admission to the first semester (also known as Bridge semester) of the B.E. / B.Tech. (Part-Time – 7 Semesters) degree programme shall be required to have passed the Diploma in Engineering / Technology in the relevant branch of specialization awarded by the State Board of Technical Education, Tamil Nadu or any other authority accepted by the Syndicate of the University as equivalent thereto.

2.2 ELIGIBILITY

Candidates seeking admission shall satisfy the following conditions:

- (i) Eligibility conditions such as class, marks and number of attempts and work experience shall be as prescribed by the Syndicate of the University from time to time.
- (ii) Notwithstanding the qualifying examination the candidate might have passed [**vide clause 2.1**], he/she has a minimum level of proficiency in Mathematics, Physics, Chemistry and the relevant branch of study as may be prescribed by the University.
- (iii) Shall have employment or work place within a radial zone of 90 Km from the Institution.
- (iv) Shall have to satisfy the conditions of physical fitness as prescribed by the Syndicate of the University.

3. DURATION OF THE PROGRAMME

- 3.1 A student is ordinarily expected to complete the B.E. / B.Tech. (Part-time 7 semesters) degree programmes in seven consecutive semesters (three and half academic years); but in any case he / she has to complete the course requirements successfully and has to pass the examinations in all the courses prescribed in the respective curriculum within a maximum period of 14 Semesters (7 academic years) reckoned from the commencement of the first semester to which the candidate was admitted. This maximum period shall be 16 semesters in the case of women candidates.
- 3.2 Each semester shall normally consist of 75 working days or 225 hours. The Head of the Institutions 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.
- 3.3 The Head of the Institution may conduct additional classes for improvement, special coaching, conduct of model test etc., over and above the specified periods. But for the purpose of calculation of attendance requirement for writing the end semester examinations (as per clause 6) by the students, following method shall be used.

The University Examination will ordinarily follow immediately after the last working day of the semester as per the academic schedule prescribed from time to time.

4. BRANCHES OF STUDY

A candidate may be offered, at the time of admission, one of the following branches of study.

- i) B.E. Civil Engineering
- ii) B.E Mechanical Engineering
- iii) B.E. Electrical and Electronics Engineering
- iv) B.E. Computer Science and Engineering
- v) B.E. Electronics and Communication Engineering

5. COURSES OF STUDY

The **Courses** of study shall include **theory** and **practical courses** as detailed in the respective curriculum.

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

5.1 The Curricula and Syllabi of all the U.G Part-Time Programmes shall be approved by the Academic Council of Anna University.

The number of credits to be earned for the successful completion of the Programme shall be as specified in the Curriculum of the respective Branch of U.G. Part-Time Programmes.

5.2 Each course is normally assigned certain number of credits with 1 credit per lecture period per week, 1 credit per tutorial period per week, 1 credit for 2 periods, 2 credit for 3 or 4 periods of laboratory or practical per week, 1 credit for 2 periods of seminar or project work per week.

6 REQUIREMENT FOR COMPLETION OF A SEMESTER

6.1 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 medical grounds, the student is expected to earn a minimum of at least 70% attendance.

Therefore, he/she shall secure not less than 70% 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 particular semester.

- 6.2 However, a candidate who secures overall attendance between 60% and 69% in the current semester due to medical reasons (prolonged hospitalization / accident / specific illness) may be permitted to appear for that particular semester examinations subject to the condition that the candidate shall submit the medical certificate to the Head of the Department immediately after joining class and the same attested by the Head of the Institution shall be forwarded to the Controller of Examinations, Anna University, Chennai for record purposes.
- 6.3 Candidates who could secure **less than 60%** overall attendance and candidates who do not satisfy the **clauses 6.1 & 6.2** will be prevented from writing the End-Semester Examinations of that current semester and are not permitted to go to subsequent academic session. They are required to repeat the incomplete semester in the subsequent academic year.

7. CLASS ADVISER

There shall be a class advisor for each class. The class advisor will be one among the (course-instructors) of the class. He / She will be appointed by the Head of the Department (HoD) concerned. The class advisor is the ex-officio member and the Convener of the class committee. The responsibilities for the class advisor shall be:

- To act as the channel of communication between the HoD and the students of the respective class.
- To collect and maintain various statistical details of students.
- To help the chairperson of the class committee in planning and conduct of the class committee meetings.
- To monitor the academic performance of the students including attendance and to inform the class committee.

To attend to the students' welfare activities like awards, medals, scholarships and industrial visits.

8. CLASS COMMITTEE

- 8.1. Every class shall have a class committee consisting of teachers of the class concerned, student representatives and a chairperson who is not teaching the 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:
 - Solving problems experienced by students in the class room and in the laboratories.
 - Clarifying the regulations of the degree programme and the details of rules therein particularly **clause 3 and 6** which should be displayed on college Notice-Board.
 - Informing the student representatives the academic schedule including the dates of assessments and the syllabus coverage for each assessment.
 - Informing the student representatives the details of Regulations regarding weightage used for each assessment. In the case of practical courses (laboratory / drawing / project work / seminar etc.) the break-up of marks for each experiment / exercise / module of work, should be clearly discussed in the class committee meeting and informed to the students.
 - Analyzing the performance of the students of the class after each test and finding the ways and means of solving problems, if any.
 - Identifying the weak students, if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such weak students.

The class committee for a class under a particular branch is normally constituted by the Head of the department. However, if the students of different branches are mixed in a class (like the first semester which is generally common to all branches), the class committee is to be constituted by the Head of the Institution.

The class committee shall be constituted within the first week of each semester.

At least 4 student representatives (usually 2 boys and 2 girls) shall be included in the class committee.

The Chairperson of the class committee may invite the Class adviser(s) and the Head of the Department to the meeting of the class committee.

The Head of the Institution may participate in any class committee of the institution.

The chairperson is required to prepare the minutes of every meeting, submit the same to Head of the Institution within two days of the meeting and arrange to circulate it among the students and teachers concerned. If there are some points in the minutes requiring action by the management, the same shall be brought to the notice of the management by the Head of the Institution.

The first meeting of the class committee shall be held within one week 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 in a semester at suitable intervals. The Class Committee Chairperson shall put on the Notice Board the cumulative attendance particulars of each student at the end of every such meeting to enable the students to know their attendance details to satisfy the clause 6 of this Regulation. During these meetings the student members representing the entire class, shall meaningfully interact and express the opinions and suggestions of the other students of the class in order to improve the effectiveness of the teaching-learning process.

9. SYSTEM OF EXAMINATION

- 9.1 Performance in each course of study shall be evaluated based on (i) continuous internal assessment throughout the semester and (ii) University Examinations at the end of the semester.
- 9.2 Each course, both theory and practical including project work shall be evaluated for a maximum of 100 marks.
- 9.2.1 For all theory and practical courses including project work, the continuous internal assessment will carry 20 marks while the University examination will carry 80 marks.
 - Project work may be allotted to a single student or to a group of students not exceeding 4 per group.
- 9.2.2 For project work, the continuous internal assessment will carry 20 marks while the University examination will carry 80 marks (see also 9.4.1).
- 9.3 The University examination (theory and practical) of 3 hours duration shall ordinarily be conducted between October and December during the even semesters and between April and June during the odd semesters.
- 9.4 The University examination for project work shall consist of evaluation of the final report submitted by the student or students of the project group (not exceeding 4 students) by an external examiner followed by a viva-voce examination conducted separately for each student by a committee consisting of an external examiner, the supervisor of the project group and an internal examiner.
- 9.4.1 The project report shall carry a maximum 30 marks (same mark shall be awarded for the report submitted to every student within the project group) while the viva-voce examination shall carry 50 marks. (Marks are awarded to each student of the project group based on the individual performance in the viva-voce examination).

Review	Review	Review	End semester Examinations				
I	II	III	Thesis Submission (30)		Viva-Voce (50)		
			Internal	External	Internal	External	Supervisor
5	7.5	7.5	15	15	15	20	15

9.5 For the University examination in both theory and practical courses including project work the internal and external examiners shall be appointed by the Controller of Examinations.

10. EVALUATION OF THE PERFORMANCE OF CANDIDATES

10.1 The maximum marks for each theory and practical course (subject) shall be 100 comprising 20 marks for continuous assessment and 80 marks for the end-semester examinations conducted by the University.

10.2 PROCEDURE FOR AWARDING MARKS FOR CONTINUOUS ASSESSMENT

10.2.1 INTERNAL ASSESSMENT FOR THEORY COURSES:

Three tests each carrying 100 marks shall be conducted during the semester by the Department / College concerned. The total marks obtained in all tests put together out of 300, shall be reduced for 20 marks and rounded to the nearest integer (This also implies equal weightage to all the three tests).

10.2.2 INTERNAL ASSESSMENT FOR PRACTICAL COURSES:

The maximum marks for Internal Assessment shall be 20 in case of practical courses. Every practical exercise / experiment shall be evaluated based on conduct of experiment / exercise and records maintained. There shall be at least one test. The criteria for arriving at the Internal Assessment marks of 20 is as follows: 75 marks shall be awarded for successful completion of all the prescribed experiments done in the Laboratory and 25 marks for the test. The total mark shall be reduced to 20 and rounded to the nearest integer.

10.2.3 THEORY COURSES WITH LABORATORY COMPONENT:

The maximum marks for Internal Assessment shall be 20 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 first two tests shall be reduced to 60 marks and the third test mark shall be reduced to 40 marks. The sum of these 100 marks may then be arrived at for 20 and rounded to the nearest integer.

10.2.4 PROJECT WORK:

Project work may be allotted to a single student or to a group of students not exceeding 4 per group.

The Head of the Institutions shall constitute a review committee for project work each branch of study. There shall be three reviews (each 100 Marks) during the semester by the review committee. The student shall make presentation on the progress made by him / her before the committee. The total marks obtained in the three reviews shall be **reduced for 20 marks** and rounded to the nearest integer (Scheme of evaluation as per clause 9.4.1).

The candidate is expected to submit the project report on or before the last working day of the 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 register for the same in the subsequent semester and re-do the project work.

10.2.5 Seminar:

The seminar is to be considered a purely INTERNAL (with 100% internal marks only). Every student is expected to present a minimum of 2 seminars per semester and for each seminar marks can be equally apportioned. Faculty incharge appointed by the Head of the Institution will evaluate the seminar and at the end of the semester the marks can be consolidated and taken as final mark.

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

10.2.7 Attendance Record

Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD' which consists of attendance marked in each lecture or practical or project work class, the test marks and the record of class work (topic covered), separately for each course. This should be submitted to the Head of the department periodically (at least three times in a semester) for checking the syllabus coverage and the records of test marks and attendance. The Head of the department will put his signature and date after due verification. At the end of the semester, the record should be verified by the Head of the Institution who will keep this document in safe custody (for five years). The University or any inspection team appointed by the University may verify the records of attendance and assessment of both current and previous semesters.

11 REQUIREMENTS FOR APPEARING END-SEMESTER EXAMINATION

- (a) 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 **6.1 & 6.2**) and has registered for examination in all the courses of that semester.
 - However, students having arrears of the previous semester courses must register for all the arrear courses of the pervious semesters along with the current semester courses, even if he / she happen to have prevented in the current semester for the lack of attendance.
- (b) A candidate shall be permitted to proceed from the current semester to the next higher semester, irrespective of the arrear courses he / she may have in the earlier semester only if.
 - i) He / She has satisfied all the semester completion requirements of the current semester and
 - ii) He / She has registered for the end semester examination in all the courses of the current semester and also in all arrears course, if any.

12. PASSING REQUIRMENTS

A Candidate who secures not less than 50% of total marks prescribed for the courses (Internal Assessment and End Semester Examinations) with a minimum of 45% of the marks prescribed for the end-semester examination in both theory and Practical courses (including project work) shall be declared to have passed in the Examination and acquired the relevant number of credits. This is applicable for both theory and practical courses (including project work).

- **12.1.1** 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 subsequent semester when examination is conducted in that course; he/she should continue to register and reappear for the examinations in the failed subjects till he / she secures a pass.
- 12.1.2 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 secure a pass. However, from the third attempt onwards if a candidate fails to obtain pass marks (IA + End Semester Examination) as per clause 12.1, then the candidate shall be declared to have passed the examination if he/she secure 50% and above the maximum marks prescribed for the course in the University End semester Examination alone.

13 WEIGHTAGE

- 13.1 The following will be the weightage for different courses.
 - i) Lecture or Lecture cum tutorial based course:

 Internal Assessment 20%

 University Semester Examination 80%
 - ii) Laboratory based courses

Internal Assessment - 20% University Semester Examination - 80%

iii) Project work

Internal Assessment - 20%
Evaluation of Project Report
by external examiner - 30%
Viva-Voce Examination - 50%

14. AWARD OF LETTER GRADES

14.1.1 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 number of points, will be awarded as per the range of total marks (out of 100) obtained by the candidate in each subject as detailed below:

Letter grade	Grade Points	Marks Range		
S	10	91 – 100		
Α	9	81 – 90		
В	8	71 – 80		
С	7	61 – 70		
D	6	57 – 60		
E	5	50 – 56		
U	0	< 50		
		(or 50 but not satisfying clause		
		12.1)		
W	0	,		

A student is deemed to have passed and acquired the corresponding credits in a particular course if he/she obtains any one of the following grades: "S", "A", "B", "C", "D", "E".

'SA' denotes shortage of attendance (as per clause 6.3) and hence prevention from writing the end semester examination. 'SA' will appear only in the result sheet.

"U" denotes Reappearance (RA) is required for the examination in the course.

"W" denotes **withdrawal** from the exam for the particular course. (The grades U and W will figure both in Marks Sheet as well as in Result Sheet)

Grade sheet

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

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

GPA for a semester is the ratio of the sum of the products of the number of credits for courses acquired and the corresponding points to the sum of the number of credits for the courses acquired in the semester.

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

where C_i - is the Credits assigned to the course

GP_i - is the point corresponding to the grade obtained for each course

 n - is number of all courses successfully cleared during the particular semester in the case of GPA and during all the semesters in the case of CGPA

15 ELIGIBILITY FOR THE AWARD OF THE DEGREE

A student shall be declared to be eligible for the award of the Degree if he/she has

- Successfully gained the required number of total credits as specified in the Curriculum corresponding to his/her Programme within the stipulated time.
- No disciplinary action is pending against him/her.
- The award of the degree must be approved by the Syndicate.
- Successfully completed any additional courses prescribed by the Director, Academic Courses, whenever any candidate is readmitted under Regulations other than R 2013 (clause 18.2).

16. CLASSIFICATION OF THE DEGREE AWARDED

16.1 FIRST CLASS WITH DISTINCTION

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

- Should have passed the End semester examination in all the courses of all the seven semesters in his/her First Appearance within three and half years. Withdrawal from examination (vide Clause 17) will not be considered as an appearance. One year authorized break of study (if availed of) is permitted in addition to three and half years for award of First class with Distinction.
- 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 semesters.

16.2 FIRST CLASS

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

- Should have passed the End semester examination in all the courses of all the seven semesters within four and half years. One year authorized break of study (if availed of) or prevention from writing the End Semester examination due to lack of attendance (if applicable) is included in the duration of four and half years for award of First class.
- Should have secured a CGPA of not less than 6.50.

16.3 SECOND CLASS

All other candidates (not covered in clauses 16.1 and 16.2) who qualify for the award of the degree (vide Clause 15) 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 registered for the same shall be considered to have appeared in that examination for the purpose of classification (subject to clause 17 and 18).

16.5 Photocopy / Revaluation

A candidate can apply for photocopy of his/her semester examination answer paper in a theory course, within 2 weeks from the declaration of results, on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of Institutions. The answer script is to be valued and justified by a faculty member, who handled the subject and recommend for revaluation with breakup of marks for each question. Based on the recommendation, the candidate can register for the revaluation through proper application to the Controller of Examinations. The Controller of Examinations will arrange for the revaluation and the results will be intimated to the candidate concerned through the Head of the Institutions. Revaluation is not permitted for practical courses and for project work.

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

16.6 Review

Candidates not satisfied with Revaluation can apply for Review of his/ her examination answer paper in a theory course, within the prescribed date on payment of a prescribed fee through proper application to Controller of Examination through the Head of the Institution.

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

17. PROVISION FOR WITHDRAWAL FROM END-SEMESTER EXAMINATION

- 17.1 A candidate, may for valid reasons and on prior application, be granted permission to withdraw from appearing for the examination of any one course or consecutive examinations of more than one course in a semester examination.
- 17.2 Such withdrawal shall be permitted **only once during the entire period** of study of the degree programme.
- 17.3 Withdrawal application is valid only if it is made within 10 days prior to the commencement of the examination in that course or courses and recommended by the Head of the Institution and approved by the Controller of Examinations.
- 17.3.1 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.
- 17.4 Withdrawal shall not be construed as an appearance for the eligibility of a candidate for First Class with Distinction.
- 17.5 Withdrawal from the End Semester Examination is **NOT** applicable to arrears subjects of previous semesters.
- 17.6 The candidate shall reappear for the withdrawn courses during the examination conducted in the subsequent semester.
- 17.7 Withdrawal shall not be permitted in the final semester examinations.

18. PROVISION FOR AUTHORISED BREAK OF STUDY

- 18.1 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 to rejoin the programme in a subsequent year, permission may be granted based on the merits of the case provided he / she applies to the Director, Student Affairs in advance, but not later than the last date for registering for the end semester examination of the semester in question, through the Head of the Institution stating the reasons therefore and the probable date of rejoining the programme.
- 18.2 The candidates permitted to rejoin the programme after break of study / prevention due to lack of attendance, shall be governed by the Curriculum and Regulations in force at the time of rejoining. The students rejoining in new Regulations shall apply to the Director, Academic Courses in the prescribed format through Head of the Institution at the beginning of the readmitted semester itself for prescribing additional courses, if any, from any semester of the regulations in-force, so as to bridge the curriculum in-force and the old curriculum.
- 18.3 The authorized break of study one year will not be counted towards the duration specified for passing all the courses for the purpose of classification (vide Clause 16.1). However, additional break of study granted will be counted for the purpose of classification.
- 18.4 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 3.2 irrespective of the period of break of study in order that he/she may be eligible for the award of the degree.

18.5 If any student is prevented for want of required attendance, the period of prevention shall not be considered as authorised 'Break of Study' (Clause 18.1)

19. DISCIPLINE:

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

20. 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 Syndicate.
