ANNA UNIVERSITY :: CHENNAI - 600 025

REGULATIONS 2013

CREDIT SYSTEM

UNIVERSITY DEPARTMENTS

B.E./ B.TECH. (PART TIME) PROGRAMMES

This Regulation is applicable to the students admitted to all B.E. / B.Tech. Degree (7– Semester) Part-Time Programmes of University Departments from the academic year 2013-2014.

1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In these Regulations, unless the context otherwise requires:

- I) "Programme" means Degree Programme, that is, B.E. / B.Tech. Degree Programme.
- II) "Discipline" means Branch or specialization of B.E. / B.Tech. Degree Programme, like Civil Engineering, Information Technology, etc.,
- III) **"Course**" means a theory or practical subject that is normally studied in a semester, like Mathematics, Physics, Engineering Graphics, 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 and Regulations.
- V) **"Controller of Examinations"** means the authority of the University who is responsible for all activities of the End semester Examinations of the University.
- 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 Candidates seeking for admission to the first semester of the seven semesters B.E. / B.Tech.(Part-Time) Degree Programme shall be required to have passed the Qualifying Diploma examination in Engineering / Technology in the relevant branch of specialization conducted by the State Board of Technical Education, Tamil Nadu or other state or any other equivalent examination recognized by Anna University.

2.2 ELIGIBILITY

Candidates seeking admission shall satisfy the following conditions:

- (i) Eligibility conditions such as class obtained, marks, 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 shall have a minimum level of proficiency in Mathematics, Physics, Chemistry and the relevant branch of study as may be prescribed by the University from time to time.
- (iii) Shall have employment or work place within a radial zone of 90 Km from the University Campus.
- (iv) Shall have to satisfy the conditions of physical fitness as prescribed by the Syndicate of the University.

3. PROGRAMMES OFFERED

- 1. B.E. Civil Engineering
- 2. B.E. Mechanical Engineering
- 3. B.E. Manufacturing Engineering
- 4. B.E. Automobile Engineering
- 5. B.E. Industrial Engineering
- 6. B.E. Production Engineering
- 7. B.E. Printing Technology
- 8. B.E. Electrical And Electronics Engineering
- 9. B.E. Electronics and Instrumentation Engineering
- 10. B.E. Electronics and Communication Engineering
- 11. B.E. Computer Science and Engineering
- 12. B.Tech. Information Technology
- 13. B.Tech. Chemical Engineering
- 14. B.Tech. Textile Technology
- 15. B.Tech. Leather Technology

4. STRUCTURE OF THE PROGRAMMES

4.1 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.

4.2 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 work per week, 1 credit for 2 periods of seminar or project work per week.

5. DURATION OF THE PROGRAMME

5.1 The duration of the programme shall be seven consecutive semesters, spread over 3.5 academic years, (one academic year consisting of 2 semesters). Each semester shall have a minimum of 75 working days, (evening) excluding the days of the end-semester examinations. 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.

5.2 A student is ordinarily expected to complete the B.E. / B.Tech. (Part-time) degree programmes in seven 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.

6. REQUIREMENTS 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, etc., 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 <u>secures overall attendance between 60% and 69%</u> in one particular semester due to medical reasons (prolonged hospitalization / accident / specific illness) may be permitted to appear for that particular semester examinations. The candidate shall submit the medical certificate to the Head of the Department immediately after joining class and the same attested by the HOD shall be forwarded to the Dean of the Campuses 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** are to be declared as 'Prevented' and will not be permitted to write the end-semester examinations of that particular semester and are not permitted to go to the subsequent academic semester. They are required to repeat the semester in which he / she is prevented during the subsequent academic year.

7 CLASS ADVISOR

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

A class committee consists of teachers of the class concerned, student representatives and a chairperson who does not handle any subject for 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 classroom and in the laboratories in consultation with Head of the Department / Dean.
- 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 and the syllabus coverage for each assessment.
- Informing the student representatives, the details of Regulations regarding weightage used for each assessment.
- Discussing in the class committee meeting, the breakup of marks for each experiment / exercise / module of work, in case of practical courses (laboratory / drawing / project work / seminar, etc.) and informing the students.
- Analyzing the performance of the students of the class after each test and finding ways and means of improving the performance of the students.
- Identifying the students who are low achievers or weak in their subjects if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such students.

The class committee is normally constituted by the Head of the Department. However, if the students of different branches are mixed in each class, the class committee is to be constituted by the Chairman of the Faculty. The class committee shall be constituted within a week from the date of commencement of a semester. At least 4 student-representatives from the respective class (usually 2 boys and 2 girls) shall be included in the class committee. The Chairperson of the class committee may invite the Class Advisor(s) and the Head of the Department to the meeting of the class committee. The Chairman of Faculty may also be invited to participate in any class committee meeting. The chairperson of the class committee is required to prepare the minutes of every meeting, submit the same to the Head of the Department within two days of the meeting and arrange to circulate the same among 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.

The first meeting of the class committee shall be held within fifteen days from the date of commencement of the semester. The nature of internal assessments shall be decided in the first meeting, within the framework of the Regulations and the same shall be communicated to the students. Two or three subsequent meetings in a semester may be held at suitable intervals. During these meetings the student members representing the entire class, shall meaningfully interact and express their opinions and suggestions of the class students to improve the effectiveness of the teaching-learning process.

9. COURSE COMMITTEE FOR COMMON COURSES

Each common theory course offered to more than one discipline or group of disciplines, shall have a "Common Course Committee" comprising all the teachers teaching the common course with one of them nominated as Common Course Coordinator. The nomination of the Course Coordinator shall be made by the HOD/Faculty Chairman depending upon whether all the teachers teaching the common course belong to a single department or to several departments. The "Common Course Committee" shall meet as often as possible and ensure uniform evaluation of internal assessments after arriving at a common scheme of evaluation for the tests. Wherever feasible, the common course committee shall prepare a common question paper for the test(s).

10. EVALUATION OF THE PERFORMANCE OF CANDIDATES

10.1 The maximum marks for each theory shall be 100 comprising 20 marks for continuous assessment and 80 marks for the end-semester examinations conducted by the University. The maximum marks for each practical course and project work shall be 100 comprising 40 marks for continuous assessment and 60 marks for the end-semester examinations. The examinations shall ordinarily be conducted in November / December or in April / May depending on odd or even semesters. For practical examinations (including Project Work), both internal and external examiners shall be appointed by the Additional Controller of Examinations, Anna University, Chennai.

10.2 PROCEDURES FOR AWARDING MARKS FOR INTERNAL ASSESSMENT (IA)

For all B.E. / B.Tech. Programmes, out of 100 marks for each paper, the maximum marks for Internal Assessment (continuous assessment) is fixed as 20 for Theory Courses and Theory Courses with lab components and 40 for Practical Courses and Project Work. The weightage for end semester examinations is 80 for Theory Courses, Theory Courses with lab components and 60 for Practical Courses and Project Work.

10.2.1 INTERNAL ASSESSMENT FOR THEORY COURSES:

The maximum marks for Internal Assessment shall be 20 in case of theory courses. Three assessments, carrying 100 marks each shall be conducted by the Department. The total marks obtained in two best out of the three assessments should be reduced to 20 marks and rounded to the nearest integer.

10.2.2 INTERNAL ASSESSMENT FOR THEORY COURSES WITH LABORATORY COMPONENT:

The maximum marks for Internal Assessment shall be 20 in case of theory courses with laboratory component. There shall be three tests: the first two tests (each 100 marks) will be from theory portion and the third test (100 marks) will be from the laboratory portion. The sum of the marks of the first two tests shall be reduced to 10 marks and the third test mark shall be reduced to 10 marks and total sum of these two rounded to the nearest integer is the internal marks out of 20.

10.2.3 INTERNAL ASSESSMENT FOR PRACTICAL COURSES:

The maximum marks for Internal Assessment shall be 40 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 40 is as follows: 60 marks shall be awarded for successful completion of all the prescribed experiments done in the laboratory and 40 marks for the test. The total mark shall be reduced to 40 and rounded to the nearest integer.

10.3 INTERNAL ASSESSMENT FOR PROJECT WORK:

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

There shall be three assessments of weightage 10 marks, 15 marks and 15 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. There shall be three members in the review committee, the supervisor, the faculty-in-charge of the programme and another faculty member of the department. The weightage for Review I is 10 marks and the weightage for Reviews II and III is 15 marks each. The total marks obtained in the three reviews, rounded to the nearest integer is the internal marks out of 40.

There shall be a viva-voce examination for End-Semester Examination conducted by one internal examiner, one external examiner and the supervisor concerned and the marks for Project Work and the Viva-Voce Examination will be distributed as indicated below. The project report shall carry a maximum 20 marks. The project report shall be submitted as per the approved guideless as given by Director, Academic Courses. Same mark shall be awarded to every student within the project group for the project report. The viva-voce examination shall carry 40 marks. Marks are awarded to each student of the project group based on the individual performance in the viva-voce examination. The external examiner shall be appointed by the Chairman of the respective Faculty from the panel of examiners submitted by the HOD.

Continuous Assessment 40 Marks			End Semester Examination 60 Marks			
Review I (10 Marks)	Review II (15 Marks)	Review III (15 Marks)	Report Evaluation (20 Marks)	Viva – Voce (40 Marks)		
Committee	Committee	Committee	External Examiner	Super visor	External Examiner	Internal Examiner
10	15	15	20	10	20	10

10.3.1 The candidate is expected to submit the project report as per the guidelines as given by Director, Academic Courses 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 should get an extension of time up to a maximum limit of 30 days for the submission of project work from the Head of the Department. If he / she fails to submit the project work even beyond the extended time, then 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 after obtaining permission from the Director, Academic Courses.

10.4 Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD' for every semester which consists of attendance marked in each lecture or practical or project work class, the test 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 test 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 will keep this document in safe custody (for five years). The University or any inspection team appointed by the University may inspect the records of attendance and assessment of both current and previous semesters.

11 EXAMINATIONS

Performance in each course of study shall be evaluated based on (i) Continuous internal assessment throughout the semester and (ii) University examination at the end of the semester.

Each course, both theory and practical shall be evaluated for a maximum of 100 marks. The project work shall be evaluated for a maximum of 100 marks.

The University end semester examination (theory and practical) of 3 hours duration shall ordinarily be conducted between October and December during the odd semesters and between April and June during the even semesters.

The University examination for project work shall consist of evaluation of the final report submitted by the student or students of the project group (of not exceeding 4 students) by an external examiner followed by a viva-voce examination conducted separately for each student by a committee consisting of the external examiner, the guide of the project group and an internal examiner.

The question paper setter and the examiner for the theory courses, internal and external examiners for practical courses shall be appointed by Additional Controller of Examinations, Anna University, Chennai.

12. REQUIREMENTS FOR APPEARING FOR THE END-SEMESTER EXAMINATION

A candidate shall normally be permitted to appear for End semester examination of the current semester if he / she has satisfied the semester completion requirements (vide Clause 6) and has registered for examination in all courses of that semester by paying the prescribed fee.

However, for students having arrear courses of the previous semester(s), in order to write the current end semester examination, the registration is mandatory for the examination of all the courses of that semester and all arrear courses of the pervious semester(s) by paying the prescribed fee, failing which, the candidates will not be permitted to move to the higher semester.

A candidate who has already appeared for any subject in a semester and passed the examination is not entitled to reappear in the same subject for improvement of letter grades / marks.

13. PASSING REQUIRMENTS

- **13.1** A candidate who secures not less than 50% of total marks prescribed for the courses (Internal Assessment + End semester examination) with a minimum of 50% of the marks prescribed for the end-semester Examination in theory, theory with practical components and practical courses (including Project work), shall be declared to have passed in the Examination.
- **13.1.1** 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 next semester when examination is conducted in that course. It is mandatory that he / she should continue to register and reappear for the examination till he / she secures a pass.
- **13.1.2** 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 secures a pass as per clause 13.1.1. However, from the third attempt onwards if a candidate fails to obtain pass marks (IA + End Semester Examination) as per clause 13.1, then the candidate shall be declared to have passed the examination if he/she secure 50% and above the maximum marks prescribed for the university end semester examinations alone.

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
А	9	81 – 90
В	8	71 – 80
С	7	61 – 70
D	6	57 – 60
E	5	50 – 56
U	0	< 50
		(or \geq 50 but not satisfying
		clause 13.1)
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".

"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.

$$\begin{array}{c} n \\ \sum \\ i=1 \end{array} \quad C_i \operatorname{GP}_i \\ \hline \\ GPA / CGPA = & ------ \\ n \\ \sum \\ i=1 \end{array} \quad C_i \\ \end{array}$$

- 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

16 ELIGIBILITY FOR THE AWARD OF DEGREE

- **16.1.** A student shall be declared to be eligible for the award of the B.E. / B.Tech. Degree provided the student has
 - i) Successfully gained the required number of total credits as specified in the curriculum corresponding to his/her programme within the stipulated time.
 - ii) Successfully completed the course requirements and has passed all the subjects prescribed in all the 7 semesters within a maximum period of 7 years reckoned from the commencement of the first semester to which the candidate was admitted.
 - Successfully completed any additional courses prescribed by the Director, Academic Courses whenever, any candidate is readmitted under regulations other than R-2013 (vide clause 18.2)
 - iv) No disciplinary action pending against the student.
 - v) The award of Degree must have been approved by the Syndicate of the University.

16.2 CLASSIFICATION OF THE DEGREE AWARDED

16.2.1 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 construed as an appearance.
- Should have secured a CGPA of not less than 8.50.

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.

16.2.2 FIRST CLASS:

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

- Should have passed all the courses of all the seven semesters within a maximum period of four and half years which includes one year of authorized break of study, if availed of (or) prevention from writing the End Semester examination due to lack of attendance, if applicable.
- Should have secured a CGPA of not less than 6.50.

16.2.3 SECOND CLASS:

All other candidates (not covered in clauses 16.2.1 and 16.2.2) who qualify for the award of the degree (vide Clause 16) shall be declared to have passed the examination in **Second Class**.

16.2.4. 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.

16.3 REVALUATION / REVIEW

A candidate can apply for revaluation / review 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 Examination through the Head of Departments. The Additional Controller of Examination will arrange for the revaluation and 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. A candidate can apply for revaluation of answer scripts for not exceeding 5 subjects at a time

17. PROVISION FOR WITHDRAWAL FROM EXAMINATION:

- 17.1 A candidate may, for valid reasons, (medically unfit / unexpected family situations) be granted permission to withdraw from appearing for the examination in any course or courses in any one of the 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. For such permitted withdrawal, the candidate has to register and reappear in the subsequent semester.
- 17.2 Withdrawal application shall be valid only if the candidate is otherwise eligible to write the examination (Clause 6) and if it is made within TEN days before the commencement of the examination in that course or courses and also recommended by the Head of the Department.
- 17.3 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 deciding the eligibility of a candidate for First Class with Distinction and First Class.
- 17.5 Withdrawal is NOT permitted in the final semester and for arrears examinations of the previous semesters.

18. AUTHORIZED BREAK OF STUDY FROM A PROGRAMME

- 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. A candidate is normally not permitted to temporarily break the period of study. However, if a candidate happens to discontinue the programme temporarily in the middle of duration of study for valid reasons (such as accident or hospitalization due to prolonged ill health) and to rejoin the programme in a later semester he / she shall apply to the Director, Academic Courses in advance, in any case, not later than the last date for registering for the semester in question, through the Head of the Department stating the reasons.
- 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 rejoined in new Regulations shall apply to the Director, Academic Courses in the prescribed format through Head of the Department for prescribing additional courses, if any, at the beginning of the readmitted semester itself, so as to compensate for the shortage of the credits.
- 18.3 The authorized break of study will not be counted towards the duration specified for passing all the courses for the purpose of classification (vide Clause 16.2.1).
- 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 5.2 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 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 18.3 is not applicable for this case.
- 18.6 In case of any valid reasons for extension of Break of Study, such extended Break of Study may be granted by the approval of the Director, Academic Courses for a period not more than 1 year in addition to the earlier authorized Break of Study. Such extended break of study shall be counted for the purpose of classification of degree (vide clause 16.2.1 and 16.2.2).
- 18.7 If the candidate has not reported back to the department, even after the extended Break of Study, the name of the candidate shall be deleted permanently from the college enrollment. Such candidates are not entitled to seek readmission under any circumstances.

19. DISCIPLINE

Every student is required to observe disciplined and decorous behavior both inside and outside the University and not to indulge in any activity which will tend to bring down the prestige of the University.

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 REGULATION AND CURRICULUM

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