# ALAGAPPA CHETTIAR COLLEGE OF ENGG. & TECH.,KARAIKUDI – 4. (A GOVT, AUTONOMOUS INSTITUTION)

# Regulation - 2011

# Degree of Bachelor Engineering (B.E - Part Time)

The following regulations are applicable to all autonomous under graduate programmes of this Institute affiliated to Anna University.

# 1. Preliminary Definitions and Nomenclature.

In these regulations, unless the context otherwise requires

- i. 'Programme' means Degree Programme, that is B.E Degree programme
- ii. 'Branch' means Specialization or discipline of B.E Degree programme like Civil Engineering, Electrical & Electronics Engg. etc.,
- iii. 'Course' means a theory or practical subject that is normally studied in a semester, like Mathematics, Physics, Chemistry etc.,

# 2. ADMISSION PROCEDURE

Candidates seeking admission to the first semester (also known as Bridge semester) of the B.E. (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.

# 3. Programmes offered

A candidate may be offered a programme in any one of the branches of study approved by AICTE and it is offered by this Institution

The programmes offered by this Institute are given below.

# Part-Time B.E. Degree Programmes :

- a. B.E. Civil Engineering
- b. B.E. Mechanical Engineering
- c. B.E. Electrical and Electronics Engineering
- d. B.E. Electronics and Communication Engineering

# 4. Structure of the Programme

- 4.1 Every Programme will have curricula with syllabi consisting of theory and practicals such as:
- General core courses comprising Mathematics, Basic Sciences, Engineering Sciences, Humanities and Engineering.

- ii. Core courses of Engineering/Technology.
- iii. Elective courses for specialization in related fields.
- iv. Workshop practice, computer practice, engineering graphics, laboratory work, industrial training, seminar presentation, project work, educational tours, camps etc.
- v. There shall be a certain minimum number of core courses and sufficient number of elective courses that can be opted by the student. The blend of different courses shall be so designed that the student, at the end of the programme, would have been trained not only in his / her relevant professional field but also would have developed as a socially conscious human being.
- 4.2 Each course is normally assigned certain number of credits.

(i) One lecture period per week : 1 credit
 (ii) One tutorial period per week : 1 credit
 (iii) Two periods of Laboratory Practical/ : 1 credit

Seminar / project work

(iv) 3 or 4 periods of laboratory Practical : 2 credits

- 4.3 Each semester curriculum shall normally have a blend of lecture courses not exceeding 7 and practical courses not exceeding 4. However, the total number of courses per semester shall not exceed 10.
- 4.4 For the award of the degree, a student has to earn certain minimum total number of credits specified in the curriculum of the relevant branch.
- 4.5 The medium of instruction is English for all courses, examinations, seminar presentations and project / thesis / dissertation reports.

#### 5. ELIGIBILITY

Candidates seeking admission shall satisfy the following conditions:

- (i) Eligibility conditions such as class, marks and number of attempts shall be as prescribed by the Syndicate of the University from time to time.
- (ii) Shall have been employed for at least two years **after qualifying for the Diploma.** The period being counted from the academic year in which admission is sought.
- (iii) 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.
- (iv) Shall have employment or work place within a radial zone of 90 Km from the Institution.
- (v) Shall have to satisfy the conditions of physical fitness as prescribed by the Syndicate of the University.

# **6. DURATION OF THE PROGRAMME**

6.1 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, (evenings) 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.

6.2 A student is ordinarily expected to complete the B.E. / B.Tech. (Part – time - 7 semesters) 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. This maximum period shall be 16 semesters in the case of women candidates.

## 7. BRANCHES OF STUDY

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

- i) B.E. (PT)Civil Engineering
- ii) B.E (PT)Mechanical Engineering
- iii) B.E. (PT)Electrical and Electronics Engineering
- iv) B.E. (PT)Electronics and Communication Engineering

The detailed eligibility for the courses are mentioned in the Annexure-I

# 8. REQUIREMENT FOR COMPLETION OF A SEMESTER

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.

- 8.2 However, a candidate who secures overall attendance between 65% and 69% in one particular 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 attested by the Head of the Department. The same shall be forwarded to the Controller of Examinations, Anna University, Chennai for record purposes.
- 8.3 Candidates who could secure **less than 65%** 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.

## 9. FACULTY ADVISER

To help the students in planning their courses of study and for general advice on the academic programme, the Head of the Department will attach a certain class of students to a teacher of the Department who shall function as Faculty Adviser for those students throughout their period of study. Such Faculty Advisers shall advise the students and monitor the courses undergone by the students, check the attendance and progress of the students attached to him/her and counsel them periodically. If necessary, the faculty adviser may also discuss with or inform the parents about the progress of the students.

## 10. CLASS COMMITTEE

- 10.1. Every class shall have a class committee consisting of teachers handling the class concerned, student representatives and a chairperson. The objective of the class committee shall monitor 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 other details relevant to academic activity.
  - Informing the student representatives on the details of Regulations regarding weightage used For each assessment. In the case of practical courses (laboratory / drawing / project work / Seminar etc.) the breakup of marks for each experiment / exercise / module of work, should be clearly discussed in the class committee meeting and informed to the students.
  - Analyzing the performance of the students of the class after each series 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.
    - Informing the students about the attendance details of the class at every class committee meeting and students with shortage of attendance are advised to attend the class regularly.
- 10.2. 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 Principal / Chief faculty advisor.
- 10.3. The class committee shall be constituted within the first week of each semester.

- 10.4. At least 4 student representatives (usually 2 boys and 2 girls) shall be included in the class committee.
- 10.5. The chairperson of the class committee may invite the Faculty adviser(s) and the Head of the Department to the meeting of the class committee.
- 10.6. The Principal may participate in any class committee of the institution.
- 10.7. The chairperson is required to prepare the minutes of every meeting, submit the same to Principal 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 Principal, the same shall be brought to the notice of the Principal.
- 10.8. 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 Chairman 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. 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.

# 11. COURSE COMMITTEE FOR COMMON COURSES

Each common theory course offered to more than one discipline or group, shall have a "Course Committee" comprising all the teachers teaching the common course with one of them nominated as Course Coordinator. The nomination of the course Coordinator shall be made by the Head of the Department / Principal / Chief Faculty Advisor depending upon whether all the teachers teaching the common course belong to a single department or to several departments. The "Course committee" shall meet in order to arrive at a common scheme of evaluation for the test and shall ensure a uniform evaluation of the tests. Where ever feasible, the course committee may also prepare a common question paper for the internal assessment of series test

## 12. SYSTEM OF EXAMINATION

- 12.1 Performance in each course of study shall be evaluated based on (i) continuous internal assessment throughout the semester and (ii) End semester examination.
- 12.2 Each course, both theory and practical (other than project work) shall be evaluated for a maximum of 100 marks. The project work shall be evaluated for a maximum of 200 marks.
- 12.2.1 For all theory and practical courses other than project work, the continuous internal assessment will carry 20 marks while the End Semester 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.
- 12.2.2 For project work, the continuous internal assessment will carry 40 marks while the End Semester examination will carry 160 marks (Oral presentation).
- 12.3 The 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.
- 12.4 The End Semester 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, and an internal examiner.
- 12.4.1 The project report shall carry a maximum 60 marks (same mark shall be awarded for the report submitted by every student within the project group) while the viva-voce examination shall carry 100 marks. (Marks are awarded to each student of the project group based on the individual performance in the viva-voce examination oral presentation).
- 12.5 For the End Semester examination in both theory and practical courses including project work the internal and external examiners shall be appointed by the Principal and Chairman, of this institution.

# 13. PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

For all theory and practical courses the continuous assessment shall be for a maximum of 20 marks (consisting of 15 marks for tests/experiments and 5 marks for attendance) and for project work, the continuous assessment shall be for a maximum of 40 marks (consisting of 35 marks for project assessment and 5 marks for attendance). The above continuous assessment shall be awarded as per the procedure given below:

## 14.1.(a) Theory Courses

The maximum marks for internal Assessment shall be 20 marks in case of theory courses. Three tests each carrying 50 marks shall be conducted during the semester by the Department concerned. The total marks obtained in all 3 tests, put together shall be reduced to 15 marks and rounded to the nearest integer. The remaining 5 marks shall be distributed for attendance as follows.

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75% ≤ % of attendance ≤ 79 - 1 mark
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 $80\% \le \%$  of attendance  $\le 84\%$  - 2 marks

 $85\% \le \%$  of attendance  $\le 89\%$  - 3 marks

 $90\% \le \%$  of attendance  $\le 94\%$  - 4 marks

 $95\% \le \%$  of attendance  $\le 100\% - 5$  marks

#### (b) Practical Courses:

Every practical exercise / experiment shall be evaluated based on the exercise / experiment prescribed as per the syllabi and the records of work done maintained by the students. There shall be at least one model test for practical during the semester. The criteria for arriving at the internal assessment marks (15 marks) shall be decided based on the performance of the students in the model test and all experiments put together and reduced to 15 marks. The remaining 5 marks shall be awarded for attendance as followed for the theory subject.

# (c) 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.

If there is a theory course with Laboratory component, there shall be three tests: the first two tests (each 50 marks) will be from theory portions and the third test (maximum mark 50) will be from laboratory component. The sum of marks of first two tests shall be reduced to 15 marks and the third test mark shall be reduced to 15 marks. The sum of these 30 marks may then be arrived at for 15 and rounded to the nearest integer. The remaining 5 marks shall be distributed for attendance as followed in theory subject.

# 14.2 Project Work:

The HODshall constitute a review committee for the department concerned for internal evaluation of project. There shall be three review meetings for assessments 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 assessments shall be **reduced for 35 marks** and rounded to the nearest integer. The remaining 5 marks shall be awarded for attendance.

14.3.1 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), 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 and the same may be submitted to the Principal for monitoring the assessment of the students. The HOD of the concerned department may keep the document of attendance and class records in safe custody for submission to the inspection team of NBA / AICTE as and when needed.

## 15. REQUIREMENTS FOR APPEARING FOR END SEMESTER EXAMINATION

A candidate shall normally be permitted to appear for the End Semester examination of any semester commencing from I semester if he/she has satisfied the semester completion requirements (clause 16) and has registered for examination in all courses of the semester. Registration is mandatory for semester examinations as well as arrears examinations failing which the candidate will not be permitted to move to the higher semester.

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

#### 16. PASSING REQUIREMENTS

16.1 A candidate who secures not less than 50% of total marks prescribed for the courses 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 the examination. The evaluation for the end semester shall be 100 marks.
- 16.1.1 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.
- 16.1.2 The internal assessment marks obtained by the candidate in the first appearance shall be retained and considered valid for all subsequent examination till the candidate pass the subjects.

#### 14. AWARD OF LETTER GRADES

17.1. 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	<b>Grade Points</b>	Marks Range
S	10	90 – 100
Α	9	80 – 89
В	8	70 – 79
С	7	60 – 69
D	6	56 – 59
Е	5	50 – 55
U	0	< 50
I	0	Prevented
W	0	Withdrawal
AB	0	Absent

<sup>&</sup>quot;U" denotes Fail and "AB" denotes absence in the subject

"W" denotes **withdrawal** from appearing for the examination in the subject. (This grade will figure both in Marks Sheet as well as in Result Sheet.)

The Grade "I" denotes inadequate attendance and hence prevention from writing the end semester examination.

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

# **Grade sheet**

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

following details:

- The name of Institution
- The list of courses enrolled during the semester and the grade scored.
- The Grade Point Average (GPA) for the semester and
- The Cumulative Grade Point Average (CGPA) of all courses enrolled from first semester onwards.

GPA is the ratio of the sum of the products of the number of credits of courses enrolled and the points corresponding to the grades scored in those courses, taken for all the courses, to the sum of the credits of all courses registered.

GPA = <u>Sum of [ C \* GP]</u> Sum of C

"C" Credits allotted for the subjects.

"GP" Grade points earned.

CGPA will be calculated in a similar manner, considering all the courses enrolled from first semester.

#### 17.2 **REVALUATION**

A candidate can apply for revaluation of his/her semester examination answer paper in a theory course, within 2 weeks from the declaration of results, on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of the Department. A candidate can apply for revaluation of answer scripts for not exceeding 5 subjects at a time. The Controller of Examinations will arrange for the revaluation and the results will be intimated in the institution website as well as trough Head of the Department. Revaluation is not permitted for practical courses, seminars, practical training and for project work.

17.2.1 After the examination results, the students are allowed to apply for **photocopy of the answer script** in the relevant subject if the student is willing to apply for the same with prescribed fee.

# 18. ELIGIBILITY FOR THE AWARD OF THE DEGREE

- 18.1 A student shall be declared to be eligible for the award of the Degree if he/she satisfies the following conditions:
  - 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 of the University to which the Institution is affiliated.
  - No dues to the institute, Library and Hostels.

#### 19. CLASSIFICATION OF THE DEGREE AWARDED

#### 19.1 First Class With Distinction:

Candidate who qualifies for the award of the Degree (vide clause 15) having passed the examination in all the courses in his/her first appearance within the specified minimum number of semesters securing a CGPA of not less than <u>8.00</u> shall be declared to have passed the examination in **First Class with Distinction**.

Lateral entry candidates have to pass all the six semesters in the first appearance within six consecutive semesters securing a CGPA of not less than 8.0.

#### 19.2 First Class:

A candidate who qualifies for the award of the Degree (vide clause 15) having passed the examination in all the courses within the specified minimum number of semesters plus one year (two semesters), securing a **CGPA** of not less than 6.50 shall be declared to have passed the examination in **First Class**. For this purpose the withdrawal from examination will not be construed as an appearance. Further, the authorized break of study (vide clause 18) will not be counted for the purpose of classification.

Lateral entry candidates have to pass all the subjects in the last six semesters within a maximum period of eight consecutive semesters from first semester of lateral entry securing a CGPA of not less than 6.5.

#### 19.3 **Second Class**:

All other candidates (not covered in clauses 16.1 & 16.2) who qualify for the award of the degree shall be declared to have passed the examination in **Second Class**.

19.4. A candidate who is absent in semester examination in a course / project work after having enrolled for the same shall be considered to have appeared in that examination for the purpose of classification.

# 20. PROVISION FOR WITHDRAWAL FROM END-SEMESTER EXAMINATION

- 20.1. 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.
- 20.2. Such withdrawal shall be permitted only once during the entire period of study of the degree programme.
- 20.3 Withdrawal application is valid only if it is made within 3 working days prior to the commencement of the examination in that course or courses and recommended by the Principal.
- 20.4. Withdrawal shall not be construed as an appearance for the eligibility of a candidate for First Class with Distinction. This provision is not applicable to those who seek withdrawal during VII semester.
- 20.5. Withdrawal from the End semester examination is **NOT** applicable to arrears subjects of previous

Semesters.

20.6 The candidate shall reappear for the withdrawn courses during the examination conducted in the subsequent semester.

## 21. PROVISION FOR AUTHORISED BREAK OF STUDY

- 21.1 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 Principal and Chairman well in advance, along with readmission order from DOTE but not later than the last date for registering for the end semester examination of the semester.
- 22.2. The candidate permitted to rejoin the Programme after the break shall be governed by the Curriculum and Regulations in force at the time of rejoining. If the Regulations is changed, then, those candidates may have to do additional courses as prescribed by the Principal and Chairman.
- 22.3. The authorized break of study (for a maximum of one year) will not be counted for the duration specified for passing all the courses for the purpose of classification. However, additional break of study granted will be counted for the purpose of classification.
- 22.4. 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 irrespective of the period of break of study in order that he/she may be eligible for the award of the degree.
- 22.5 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" or "Withdrawal" is not applicable for this case.
- 22.6 Once TC issued for any reason during the course of study,he/she is not permitted to rejoin to course.