MUTHAYAMMAL ENGINEERING COLLEGE, RASIPURAM – 637 408 (Autonomous) REGULATIONS 2019

CHOICE BASED CREDIT SYSTEM

Common to all B.E. / B.Tech. FullTime Programmes

(For the students admitted to B.E. / B.Tech. Programmes from the Academic year 2019 - 2020 onwards)

1. PRELIMINARYDEFINITIONSAND NOMENCLATURE

In this Regulation, u	lation, unless the context otherwise specifies:			
AY	Academic Year			
CIA	Continuous Internal Assessment			
CAM	Continuous Assessment Marks			
CBCS	Choice Based Credit System			
PE	Professional Elective			
Programme	A degree with a major specialization in an Engineering/ Technology			
	discipline offered by the College			
Course	Course is any subject of study that may be classified as Theory only, Lab			
	only, Lab embedded Theory, Project embedded Theory or Project.			
ESE	End Semester Examination			
PC	Professional Core			
BS	Basic Sciences			
ES	Engineering Sciences			
OE	Open Elective			
UG	Under Graduate			
University	Anna University, Chennai, India			
College	Muthayammal Engineering College, Rasipuram.			

2. PREAMBLE

Students of today are much different from the students of the past in many ways. They want to be independent and like to make decisions on their own. Employers expect students to have the right attitude with diverse skill sets to work in a team. The present rigid, cohort system of learning doesn't allow the students in selecting the courses of their choice to become a holistic personality.

In this direction MEC is introducing the Choice Based Credit System (CBCS) into its academic curriculum. Wherein the students can register courses of their choice to enable fast, average and slow learners to plan and pace the same in a Semester as may be necessary and register for more/average/less Credits within limits from the prescribed value, based on their learning capacities as observed and alter the pace of learning within the broad framework of academic course and credit requirements. CBCS allows students in deciding their academic plan and permits students to alter it as they progress in time.

Students will have the option of choosing courses from a 'Group of courses' within each classification. Ample options are given to choose interdisciplinary courses from other Engineering Departments which will help the student to develop additional skills. Slow learners will also benefit since important courses will be made available in both semesters. Suitable provisions are included to reward academically sound students.

CBCS offers flexibility for students to build their own curriculum in addition to the enhancement of their skill in planning. A Faculty Adviser facilitates a student in identifying the courses based on

programme requirement, course prerequisites, student's ability and interest in various academic disciplines.

3. ADMISSION PROCEDURE

Students for admission to the first semester of the eight semester B.E. / B.Tech. Degree Programme shall be admitted as per the regulations of Department of Technical Education, Government of Tamil Nadu and Anna University, Chennai.

4. PROGRAMMES OFFERED

Astudentmaybeofferedadmissiontoanyoneofthe programmeofstudy approved by the University and offered at Muthayammal Engineering College, Rasipuram.

Details of programmes currently being offeredbyMuthayammal Engineering College, Rasipuram arelistedbelow

- 1. B.E. Mechanical Engineering
- 2. B.E. Civil Engineering
- 3. B.E. Electronics and Communication Engineering
- 4. B.E Electrical and Electronics Engineering
- 5. B.E. Computer Science Engineering
- 6. B.Tech. Information Technology

5. STRUCTURE OF THE PROGRAMMES

5.1 Credit Assignment

Eachcourseisassignedcertainnumberofcredits basedon the following:

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

5.2 Categorization of Courses

- i. **Humanities and Social Sciences (HS)** courses include Technical English, Employability Skills, Engineering Ethics and Human Values, Communication Skills and Environmental Science and Engineering.
- ii. Basic Sciences (BS) courses include Mathematics, Physics, Chemistry, Biology, etc.
- iii. **Engineering Sciences (ES)** courses include Engineering practices, Engineering Graphics, Basics of Electrical / Electronics / Mechanical / Computer Engineering, Instrumentation etc.
- iv. **Professional Core (PC)** courses include the core courses relevant to the chosen specialization/branch.
- v. **Professional Elective** (**PE**) courses include the elective courses relevant to the chosen specialization/ branch.
- vi. **Open Elective (OE)** courses include the courses relevant to the chosen specialization / branch which a student can choose from the curriculum of other B.E. / B. Tech. / B. Arch. programmes and courses offered by the Departments under the Faculty of Science and Humanities
- vii. **Employability Enhancement Courses (EEC)**include Project Work and/or Internship, Seminar, Professional Practices, Case Study and Industrial/Practical Training.

EveryB.E. / B. Tech.Programmewillhaveacurriculumwithsyllabiconsistingoftheoryand practical courses that shall be categorized as follows:

S. No.	Category	Range of Total Credits(%)		Suggested Breakdown of Credits (for
		Min	Max	Total=180)
1.	Humanities and Social Sciences (HS), including Management.	5	10	14
2.	Basic Sciences(BS) including Mathematics, Physics, Chemistry, Biology.	15	20	28
3.	Engineering Sciences (ES), includingMaterials, Workshop, Drawing, Basics ofElectrical/Electronics/Mechanical/ComputerEngineering, Instrumentation.	15	20	30
4.	Professional Core (PC), relevant tothe chosen specialization/branch; (May besplit into Hard (no choice) and Soft(withchoice), if required.	30	40	61
5.	Professional Electives (PE), relevant to the chosen specialization/ branch.	10	15	20
6.	Open Subjects- Electives (OE), from othertechnical and/or emerging subject areas.	5	10	9
7.	Employability Enhancement Courses (EEC)	10	15	18
	Total Credits			160

5.3. Personalityand Character Development

Students shall enroll in any one of the personality and character development programmes
(NCC/NSS/Sports/YRC) and undergo training for
about40hoursandattendacampofaboutsevendays.Thetrainingshallinclude classes on hygiene and
health awareness and also training in first-aid.

- National Cadet Corps (NCC) will have about 20 parades.
- **NationalServiceScheme**(**NSS**)willhavesocialserviceactivitiesinandaround the College / Institution.
- Sportswillhavesports, Games, DrillsandPhysical exercises.
- Youth Red Cross (YRC) will have activities related to social services in and around College/Institutions. While the training activities will normally be during weekends, the camp will normally be during vacation period.

5.4 Number of Courses per Semester

Curriculum of a semester shall normally have a blend of courses including Theory /Lab Embedded Theory/ Project Embedded Theory/ Laboratory courses, not exceeding 7 theory courses and 3 laboratory courses. Each course may have credits assigned as per clause **5.1**.

5.5. Industrial Training / Internship

- **5.5.1** ThestudentsmayundergoIndustrialtraining foraperiodasspecified 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 Industries/ Research organization / Universities of repute (after due approval from the Department Consultative Committee) for the period prescribed in the curriculum during summer / winter vacation, in lieu of Industrial training.
- 5.5.2. 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 Grade Sheet. However, the number of credits earned shall not be considered for classification of the degree.

5.5.3. The student is allowed to undergo a maximum of 6 weeks Industrial Training during the entire duration of study.

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

5.6Industrial Visit

Every student will be encouraged to go for at least one Industrial Visit every year starting from these cond year of the Programme. The Heads of Departments shall ensure that necessary arrangements are made in this regard.

5.7 Self Study Courses

- **5.7.1**Students may be permitted to credit a maximum of one Self Study course with the approval of Departmental Consultative Committee.
- **5.7.2** The student can opt for **one** Self Study courses provided the student does not have current arrears and maintains a CGPA of 7.0 and above.
- **5.7.3** The Department may offer self study courses. The purpose of the course is to permit the student to study a course / a topic of the student's choice. The syllabus for the self study course should not contain the topics covered partially or fully under the program curriculum. The students shall study on their own under the guidance of a faculty member. No formal lectures need to be delivered. The syllabus of the course and mode of assessments shall be approved by the Departmental Consultative Committee and forwarded to the Dean for Academic Courses for the formal approval of the course by the academic bodies; the Head of the Department shall be responsible for the periodic monitoring and evaluation of the course before the commencement of the semester.
 - **5.7.4** The self study course can be considered as equivalent to mini project/inplant training with **one** credit weightage.

5.8 Medium of Instruction

ThemediumofinstructionisEnglishforallcourses, examinations, seminar presentations and project / thesis / dissertation reports.

5.9 Online Course

Thestudents (Refer Anna University Regulation)

5.10 Value Added Courses

(Refer Anna University Regulation and modify according to our system)

6. DURATION OF THE PROGRAMMES

- **6.1** A student is normally expected to complete the B.E. / B.Tech. Programme in 4 years (8 Semesters) but in any case not more than 7 years (14 Semesters).
 - **6.2** Each semester shall normally consist of 90 teaching 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.
 - **6.3** The total duration for completion of the programme reckoned from the commencement of the first semester to which the student was admitted shall notexceed themaximumduration

specified inclause 6.1 irrespective of the period of break of study (vide clause 17) or prevention (vide clause 8.4) in order that the student may be eligible for the award of the degree (vide clause 15).

7. COURSE ENROLLMENT AND REGISTRATION

- **7.1** Each student, shall be assigned to a Faculty Advisor (vide clause 9) 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.
- **7.2.** Depending on academic and non academic resources available to each programme, courses offered may vary. Students will get a chance to make their own plan of study by changing the pace with which they study (fast/ normal/slow) and to opt for a faculty member of their choice.
- **7.3** The number of credits registered for during a semester should not be less than 16 credits and should not exceed 30 credits (Normally it is 23 credits).
- **7.4** Every student shall enroll for the courses of the succeeding semester in the current semester. However, the student shall confirm the enrollment by registering for the courses within the first**five** working days after the commencement of the concerned semester.
- **7.5** No elective course shall be offered by a Department unless a minimum of 10 students register for that course.
- **7.6** 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.
- **7.6.1**Each student on admission shall register for **all the courses prescribed in the curriculum in** the student's **first Semester of study**.
- **7.6.2** The enrollment for all the courses of the Semester II to VIII will commence 10 working days prior to the last working day of the preceding semester. The student shall confirm the enrollment by registering for the courses within the first five working days after the commencement of the Semester II to VIII. However, the student is allowed to register for courses for which the student has been stopped due to shortage of attendance.
- **7.6.3** The student shall enroll for the courses with the guidance of the student's Faculty Advisor. If the student wishes, the student may drop or add courses (vide clause 7.7) within **five** working days after the commencement of the concerned semester and complete the registration process duly authorized by the Faculty Advisor. 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.

7.7 Flexibility to Add or Drop courses

- **7.7.1** From the II to VIII semesters, the student has the option of registering for additional courses or dropping existing courses. However the maximum number of credits the student can register in a particular semester cannot exceed 30 credits.
- **7.7.2** A studenthastoearnthetotalnumberofcredits specified in the curriculum of the respective Programme of study in order to be eligible to obtain the degree. However, if the student wishes, then the student is permitted to earn more than the total number of credits prescribed in the curriculum of the respective programme.

7.8 Reappearance Registration

- **7.8.1** If a student fails in a course, the student shall take it as an arrear. The student can retain the already earned Continuous Assessment marks for three subsequent appearances and thereafter he/she will redo the course for continuous assessment and end semester exams.
- **7.8.2** If the theory course, in which the student has failed, is a professional elective or an open elective, the student may register for the same or any other professional elective or open elective course respectively in the subsequent semesters.
- **7.8.3** If a student is prevented from writing End Semester Examination of a course due to lack of attendance, the student has to register for that course again, when offered next, attend the classes and fulfill the attendance requirements as per clause 8. If the course, in which the student has lack of attendance, is a Professional Elective or an Open Elective, the student may register for the same

or any other Professional Elective or Open Elective course respectively in the subsequent semesters.

8. REQUIREMENTS FOR APPEARING FOR THE END SEMESTER EXAMINATION OF A COURSE

Astudent who has fulfilled the following conditions (vide clause 8.1 and 8.2) shall be deemed to have satisfied the attendance requirements for appearing for End Semester Examination of a particular course.

- **8.1** Ideallyeverystudentisexpectedtoattendallperiodsandearn100% attendance. However, the student shallsecurenotlessthan 80% attendance course wise taking into account the number of periods required for that course as specified in the curriculum.
- **8.2** If a student secures attendance between 70% and less than 80% 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 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.
- **8.3** Astudent shall normally be permitted toappear forEnd Semester Examination of the course if the student has satisfied the attendance requirements(videClause 8.1 8.2)andhasregisteredforexaminationinthose courses of that semester by paying the prescribed fee.
- **8.4** Studentswho do not satisfy clause 8.1 and 8.2 and who securelessthan70% attendance in a course willnotbepermitted to write the End-Semester Examination of that course. The student has to register and repeat this courseina subsequent semester when it is offered next (vide clause 7.8.4).
- **8.5** Astudent whohasalreadyappearedforacourseinasemesterandpassed the examination is not entitled to reappear in the same course for improvement of letter grades.

9. FACULTYADVISOR

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 of courses, authorizes 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.

Theresponsibilities for the faculty advisorshall 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.
- Tomonitortheacademic and general performanceofthestudentsincludingattendance and to counsel them accordingly.

10. COURSE COMMITTEES

10.1 COMMON COURSE COMMITTEE

A theorycourse handled by more than one teacher shallhavea"Common CourseCommittee" comprising of all teachers teaching that course and some students who have registered for that course. There shall be two student representatives from each batch of that course. One of the teachers shall be nominated as Course Coordinator by the Head of the DepartmentdulyapprovedbytheDean, Academic Courses.

ThefirstmeetingoftheCommon Course Committeeshallbeheldwithinfifteendaysfrom 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 oftheRegulations. 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 CourseCommittee" (without the student representatives) shallmeet to ensure uniform evaluation of continuous assessments after arriving at a common scheme of evaluation for the assessments (vide clause 11).

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.

10.2 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:

ThefirstmeetingoftheMultiple Courses Committeeshallbeheldwithinfifteendaysfrom 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 oftheRegulations. 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.

10.3 OVERALL MONITORING COMMITTEE

- **10.3.1** 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-in-charge 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.
- **10.3.2** The overall monitoring committee can invite the Faculty Advisors or students for any of the committee meetings if necessary.

11. ASSESSMENT PROCEDURES FORAWARDING MARKS

AllB.E./B.Tech.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 and Project work.

Performance in each course of studyshall be evaluated based on (i) Continuous Assessmentsthroughoutthesemesterand(ii)End Semester Examinationat the end of the semester. For Theory Courses outof100marks,themaximum marksforContinuousAssessmentisfixedas50 and the End Semester Examination carries 50 marks. For Laboratory Courses outof100marks,themaximum marksforContinuousAssessmentisfixedas50and the End Semester Examination carries 50 marks. The continuous assessment is 50 marks for the Project

Work, and project report evaluation and viva-voce examination carries 50 marks. All other courses included under Employability Enhancement Courses are evaluated by Continuous Assessments only. Each course shall be evaluated for a maximum of 100 marks as shown below:

S.	Catagony of course	ContinuousAssessme	End Semester
No.	Category of course	nts	Examinations
1	Theory Courses	50 Marks	50 Marks
2	Laboratory Courses	50 Marks	50 Marks
3	Project Work	50 Marks	50 Marks
4	All other EEC Courses	100 Marks	-

Everyteacherisrequiredtomaintainan 'ATTENDANCEANDASSESSMENT

RECORD'foreverysemesterwhichconsistsofattendancemarkedineachtheory / Laboratory/EEC class,the assessment marksandtherecordofclasswork(topics covered),separatelyforeachcoursehandledbytheteacher.Thisshouldbesubmitted

to the Head of the Department periodically (at least three times in a semester) for

checkingthesyllabuscoverageandtherecordsof assessment marksandattendance. The Head of the Department will affix his/her signature and date after due verification. At theendofthesemester, there cordshould be verified by the Head of the Department

whoshallkeepthisdocumentinsafecustody(for eight years). Therecordsofattendance and assessment of both current and previous semesters should be available for inspection.

11.1 ASSESSMENT FOR THEORYCOURSES:

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.

Continuous Assessment comprises of three Continuous Internal Assessment (CIA) test, conducted by the course instructor / coordinator / department. The total marks obtained in the three CIA testsput together shall be reduced to 30 marks, two unit tests put together shall be reduced to 10 marks and assessment of assignments/ quiz/ online exams shall be reduced to 10 marks and rounded to the nearest integer. In case a student misses the CIA test or unit test 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 Head of the Department and approval from the Dean of Academic courses, a **Reassessment** may be given at the end of the semester.

The End Semester Examination for theory courses will be of three hours duration. End Semester Examination is mandatory requirement for passing the courses with ESE component in assessment. (Insert table From Agenda Page no vii)

11.2 ASSESSMENT FOR LABORATORYCOURSES:

For Laboratory Courses out of 100 marks, the maximum marks for Continuous Assessment is fixed as 50 and the End Semester Examination carries 50 marks. Every laboratory exercise / experiment shall be evaluated based on the student performance during the laboratory class and the student's records maintained. The total marks for all the laboratory exercises shall be reduced to 25 marks. There shall be at least two online tests/ viva voce/ assessment. The total marks in the two assessments shall be reduced to 20 marks and the maintenance of record shall be assessed for five marks. The End Semester Examinations for Laboratory courses will be of the same duration as that of the regular lab course.

11.3 ASSESSMENT FOR PROJECT WORK:

For Project work out of 100 marks, the maximum marks for Continuous Assessment is fixed as 50 and the End Semester Examination (project report evaluation and viva-voce examination) carries

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

There shall be **two 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 a review committee for each programme. There shall be a minimum of three members in the review committee. The project **Guide** will be one of the members of the Review Committee. The total marks obtained in the two Reviews shall be 50 marks.

The student(s) is expected to submit the project report on or before the last working day of the semester. The End Semester Examination for project work shall consist of evaluation of the final project report submitted by the student or students of the project group 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 Head of the Department with the approval of the Dean for Academic courses shall appoint Internal and External Examiners for the End Semester Examinations of the Project Work.

The Continuous Assessment and End Semester Examinations marks for Project Work and the Viva-Voce Examination will be distributed as indicated below.

ContinuousAssessment (50 Marks)			End Semester Examination (50 Marks)				
Review I (25 Marks)		Review (25 Mar		Report Evaluation (25 Marks)		Viva – Voce (25 Marks)	
Review Committee (excluding guide)	Guide	Review Committee (excluding guide)	Guide	External Examiner	Internal Examiner	External Examiner	Internal Examiner
15	10	15	10	15	10	15	10

11.4.1 If the project report is not submitted on or before the specified deadline then the student(s) is deemed to have failed in the Project Work. The failed student(s) shall register for the same in the subsequent semesterand repeat the project work again.

11.5 ASSESSMENT FOR PROJECT EMBEDDED THEORYCOURSES:

The assessment for the Project embedded theory shall be as that of the theory (vide clause 11.1) and the assessment for the embedded project shall be as that of the project (vide clause 11.4) and the cumulative mark will be calculated based on the credit distribution.

For a course with L: T: P: C of 3:0:2:4 the theory component shall be reduced to 75% and the project component reduced to 25% and together will be determined for 100. For a course with L: T: P: C of 3:0:4:5 the theory component shall be reduced to 60% and the project component reduced to 40% and together will be determined for 100.

11.6 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 two 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%).

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

The Industrial / Practical Training shall carry 100 marks and shall be evaluated through Continuous Assessment only. 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 Controller of Examinations by the Head of the Department.

11.8ASSESSMENT 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 11.1) 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 performance.

12. PASSING REQUIREMENTS

- **12.1** The Passing requirement for a student in a course is that the student should have 50% marks in the End Semester Examinations and should have 50% of the total marks by putting both the Continuous Assessment and End Semester Examinations together.
- **12.1.1** If a student fails a professional elective or an open elective, the student may be permitted to register for the same course as arrear or opt for new registration to any other professional elective or open elective course respectively in the subsequent semesters. Registering for a new course will require fulfillment of attendance vide clause 8.
- **12.2** The passing requirement for the courses which are assessed only through continuous assessment (EEC courses except project work), shall be determined based on the marks obtained in continuousassessment tests.
- 12.3 Astudentcanapplyforrevaluationoffhe student's semesterexaminationanswer paper in a theory weeks from the declaration of course, within two results, on paymentofaprescribedfeealongwithprescribedapplicationtothe Controller of Examinations (CoE) throughtheHeadofDepartments.TheCoEwillarrangefortherevaluationand the results will be intimated to the student concerned through the Head of the Department. Revaluation is not permitted for laboratory coursesand project work.

13 AWARD OF LETTER GRADES

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

Letter Grade	Range of Marks	Grade Points
O(Outstanding)	100- 91	10
A+(Excellent)	90- 81	9
A(Very Good)	80-71	8
B+(Good)	70- 61	7
B(Average)	60 - 50	6
U (Fail)	-	0
U* (Absent)	-	0
SA (Shortage of Attendance)	-	0

Note: 'U'denotesfailforthat particular course. U* denotes absent for that particular course. 'SA'denotesshortageofattendance(asperClause 8)andhencepreventedfrom writing End Semester Examinations.

13.2 For the Co-curricular activities such as National Cadet Corps (NCC)/ National Service Scheme (NSS) / sports /YRC, a satisfactory / not satisfactory grading will appear in the mark sheet. Everystudentshallputinaminimumof75% attendance in the training and attend the camp compulsorily. The training and campshall be completed during the first year of the programme. However, for valid reasons, the Head of the Institution may permit a student to complete this requirement in the second year. A satisfactory grade in the above co-curricular activities is compulsory for the award of degree.

14. GPAAND CGPACALCULATION

- 14.1 TheCoEshall callforameetingofthepassing boardaftertheEnd SemesterExaminations, to pass the results and with the approval of the board will declare the results. Afterresultsaredeclared, GradeSheetswillbeissuedtoeachstudentwhichwill contain the following details:
 - the list of courses registered during the semester and the grades scored.
 - the Grade PointAverage (GPA) for the semester and
 - the Cumulative Grade PointAverage (CGPA) of all courses registered from first semester onwards.

Duringeachsemester, the list of courses registered and the grade scored in each course are used to compute the Grade Point Average (GPA). GPA is the ratio 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 statement of the sum of the grades scored in the semester.

$$GPA = \sum (C_i \times g_i) / \sum C_i$$

where, C_i - is the Credits assigned to the course

g_i- is the grade point corresponding to the letter grade obtained foreach course.

n - is number of all Courses successfully cleared during theparticular 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. U, U* and "SA" grades will be excluded for calculating GPA and CGPA.

14.2 If a student studies more number of electives (PE/OE) than required as per the student'sprogrammecurriculum, the courses with higher grades alone will be considered for calculation of CGPA.

15. ELIGIBILITYFOR THEAWARD OF DEGREE

15.1. AstudentshallbedeclaredtobeeligiblefortheawardoftheB.E. / B.Tech. Degreeprovided the student has

- i. Successfullygainedtherequirednumberoftotalcreditsasspecifiedin the curriculum corresponding to the student's programme within the stipulated time (vide Clause 5.2).
- ii. Successfully completed the course requirements, appeared for the End Semester Examinations and passed all the courses prescribed in all the eight semesters within a maximum period of eight years reckoned from the commencement of the first semester to which the candidate was admitted.
- iii. Successfully passed any additional courses prescribed by the Dean, Academic Courses whenever readmitted under regulations other than R-2016

- iv. Successfully completed the NCC / NSS / Sports / YRC requirements.
- v. No disciplinary action pending against the student.

15.2 CLASSIFICATION OF THE DEGREEAWARDED

15.2.1 FIRST CLASS WITH DISTINCTION:

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

- Shouldhavepassedtheexaminationinallthecourses of all the eightsemesters in the student's First Appearance within **five** years, which includes authorized break of study of one year. Withdrawal from examination (vide Clause 16) will not be considered as an appearance.
- Should have secured a CGPA of not less than 8.50
- ShouldNOThavebeenpreventedfromwritingend semester examination due to lack of attendance in any of the courses.

15.2.2 FIRST CLASS:

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

- Shouldhavepassedtheexaminationinallthecoursesofall eightsemesters within fiveyears, 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**

15.2.3 SECOND CLASS:

Allotherstudents(notcoveredinclauses15.2.1and15.2.2)whoqualifyforthe awardofthedegree (videClause15.1)shallbedeclared tohavepassed the examination in **Second Class**.

15.2.4. Astudent whoisabsentinEnd Semester Examination of acourse/projectwork afterhaving registered for the same shall be considered to have appeared in that examination (except approved with drawal from end semester examinations as per clause 16) for the purpose of classification.

16. PROVISION FOR WITHDRAWALFROM EXAMINATION

- **16.1** Astudentmay, for valid reasons, (medically unfit / unexpected family situations / sports approved by HOD)begrantedpermissiontowithdrawfromappearingfortheEnd Semester Examination inanycourseorcoursesin**ANYONE**ofthesemesterexaminationsduringtheentire durationofthedegreeprogramme. The application shall be sent to Dean, Academic Courses through HOD with required documents.
- **16.2** Withdrawalapplicationshallbevalidonlyifthe student isotherwiseeligibleto writetheexamination(Clause8)andifitismadewithinTEN working daysbefore thecommencement of the End Semester Examination in that course or courses and also recommended by the Head of theDepartment.
 - **16.3** Not with standing the requirement of mandatory TEN working daysnotice, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case.
- **16.4** Withdrawal shall not be considered as an appearance for deciding the eligibility of a student for First Class with Distinction.
- **16.5** Withdrawal is permitted for the End Semester Examination in the final semester only if the period of study of the student concerned does not exceed 5 years as per clause 15.2.1.

17. BREAK OF STUDYFROMAPROGRAMME

17.1A 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.

- a. The student applies for break of study, the student shall apply to the Dean, Academic Courses in advance, in any case, not later than the last date of the first assessment period. The application 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 Dean for Academic Courses.
- b. 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 Dean for 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.
- **17.2**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 6.1 irrespective of the period of break of study in order that the student may be eligible for the award of the degree (vide clause 15).
- **17.3** 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 Dean for Academic Courses through the concerned HOD before the end of the semester in which the student has taken break of study.
- **17.4** If a student has not reported to the department for a period of two consecutive semesters withoutany intimation, the name of the student shall be deleted permanently from the collegeenrollment. Such students are not entitled to seek readmission under any circumstances.
- **17.5** If a student indulges in malpractice in any of the examinations, the student shall be liable to bepunitive action as prescribed by the University from time to time.

18. REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

The College 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 Chairman of Academic council.