REGULATIONS

for the

B.Tech Degree Courses offered under Faculty of Engineering

(With effect from 2012 Admissions)

June 2012

COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY COCHIN – 682 022

REGULATIONS FOR B.Tech DEGREE COURSE UNDER FACULTY OF ENGINEERING

The following regulations are made applicable to all the B.Tech programmes except Marine Engineering offered by Cochin University of Science and technology under Faculty of Engineering with effect from the academic year 2012-2013.

1.B.Tech Programme

The duration of the B.Tech course in the University shall be eight semesters spanning over four academic years. The teaching programme for each semester shall consist of 15 weeks.

1.1 Branch

- a) Civil Engineering
- b) Computer Science and Engineering
- c) Electronics and Biomedical Engineering
- d) Electronics and Communication Engineering
- e) Electrical and Electronics Engineering
- f) Electronics and Instrumentation Engineering
- g) Food Technology
- h) Information Technology
- i) Mechanical Engineering
- j) Safety and Fire Engineering

1.2 Structure of the B. Tech. programme

- 1.2.1 The programme of instruction will consist of core courses and electives.
- 1.2.2. Every branch of the B. Tech. programme will have a curriculum and syllabi for the courses approved by the Academic Council.
- 1.2.3. The B.Tech programmes shall follow the credit system.
- 1.2.4. The curriculum of any branch of the B. Tech. programme shall have a minimum total of 176 credits. In the case of lateral entry students this shall be 132.
- 1.2.5. A student shall complete the B.Tech programme in a maximum period of 8 years from the date of admission. In the case of lateral entry students the maximum period shall be 6 years.

1.3 Mode of Evaluation

- 1.3.1. The performance of the students will be evaluated based on continuous assessment and university examination.
- 1.3.2. For theory courses, the continuous assessment and university examination will carry a maximum of 50 marks and 100 marks respectively. For practical courses, the continuous assessment and end semester examination will carry 50 percent weightage each.
- 1.3.3. In each theory course, the assessment pattern will be as follows:

Continuous assessment:

1. I Periodical Test - Maximum marks: 12.5

2. II periodical Test - Maximum marks: 12.5

3. Assignments - Maximum marks: 15

4. Attendance – Maximum marks: 10

University Examination of 3 hours duration – Maximum marks : 100

1.3.4. In each practical course, assessment pattern will be as follows:

Continuous assessment : 50 percent
 End semester examination : 50 percent

- 1.3.5. Normally both question paper setting and valuation of answer papers for all the periodical tests shall be carried out by the teacher who has handled the course. The question paper for the university examination for theory papers will be set by an external examiner. The controller of examinations will make necessary arrangements for setting the question papers and valuation of answer books for the university examination.
- 1.3.6. The continuous assessment in laboratory course will be based on supervision of the student's work, their performance in viva-voce examinations and the quality of their work. The end- semester examination for the laboratory courses shall be conducted internally by the respective department / division with at least two faculty members as examiners. One of the examiners shall be an Associate Professor / Professor of the Department/Division.
- 1.3.7. In the case of project work, a committee consisting of the Project Coordinator (appointed by the Head of the Department / Division), project guide and at least one senior faculty member will carry out the assessment based on at least one interim review and a final review just before the submission of the project report.

- 1.3.8. The Viva-voce examination at the end of VIII Semester will be conducted by a panel of examiners consisting of the Head of the Department / Division or his/her nominee and one senior faculty of the Department/Division and an external expert.
- 1.3.9. A candidate shall be allowed to improve the continuous assessment marks in theory / laboratory courses subject to the following conditions:
- a) During his/her regular course work of any semester, improvement of continuous assessment marks of any previous semesters will not be permitted.
- b) He /she shall repeat the theory / practical course only once and satisfy the minimum attendance requirement of 75 percent while repeating the course.
- c) He / she shall not be allowed to repeat the course work of any semester if he/she has already secured a minimum of 60 percent marks for continuous assessment.

1.4. Pass requirements

- 1.4.1 A candidate has to obtain a minimum of 50 percent marks for continuous assessment and university examination put together with a minimum of 45 percent marks in the university semester examination for a pass in theory courses.
- 1.4.2 In the case of laboratory courses, the candidate shall obtain a minimum of 50 percent marks for continuous assessment and end semester examination put together with a minimum of 50 percent marks for end semester examination. Those who fail in the laboratory course shall appear in the end semester examination in the next available chance.

1.5 Promotion to Higher Semesters

- 1.5.1 The candidate shall be eligible for promotion from one semester to the next semester only if :
- a) he / she has secured a minimum of 75 % attendance, and has registered for the university examination.
- b) his/her progress and conduct have been satisfactory.

Promotion from one semester to the next semester shall be subject to the condition that the candidate to be promoted to the n^{th} semester should have earned a minimum of [(n-2) x 15] credits excluding the (n-1)th semester. This norm is applicable only from fifth semester onwards. In the case of lateral entry students, this norm shall be applicable from the seventh semester only.

1.6. Attendance.

1.6.1 The percentage of attendance of a candidate for a semester shall be indicated by a letter code as given below.

Attendance	Letter Code
90% and above	H
80 % and above but less than 90%	N
Below 80 %	L

$$(H - High, N - Normal, L - Low)$$

- 1.6.2. A student whose attendance is less than 75% for a semester is not eligible to appear for the university examination.
- 1.6.3. The Vice-Chancellor shall have the power to condone shortage of attendance up to 5 percent on medical grounds on the recommendations of the Principal/ Head of Division/ Department. However such condonation for shortage of attendance shall be given only twice during the entire course.

1.7. Grading

1.7.1. Grades shall be awarded to the students in each course based on the total marks obtained in continuous assessment and the university examination. The grading pattern shall be as follows:

Marks obtained (Percentage)	Grade	Grade points
90- 100	S	10
80-89	A	9
70-79	В	8
60-69	С	7
50-59	D	6
< 50	F	0

Decimal percentages shall be rounded to the next higher number if it is greater than or equal to 0.5.

- 1.7.2. A student is considered to have credited a course or earned credits in respect of a course if he/she secures a grade other than F for that course.
- 1.7.3. Grade Point Average.

The academic performance of a student in a semester is indicated by the Grade Point Average (GPA).

$$GPA = G1C1 + G2C2 + G3C3 + -----GnCn$$

 $C1 + C2 + C3 + -----Cn$

Where 'G' refers to the grade point and 'C' refers to the credit value of corresponding course undergone by the student.

CGPA for all the semesters of the B.Tech programme shall be calculated as follows:

CGPA = Σ (GPA for a semester x total no. of credits in the semester) Total number of credits for the programme

1.7.4. Grade Card

The Grade Card issued at the end of the semester to each student by the Controller of Examinations, will contain the following:

- a) the code, title, number of credits of each course registered in the semester,
- b) the letter grade obtained,
- c) the attendance code for the semester,
- d) the total number of credits earned by the student upto the end of that semester and
- e) GPA
- f) The month and year of passing each course and whether the candidate has improved his marks by reappearance.

A consolidated grade card will be issued on successful completion of the programme indicating the following:

- a) The GPAs obtained in each semester, the attendance code for the semester, and the month and year of successful completion of that semester.
- b) The CGPA obtained.

1.7.5. Classification

Classification based on CGPA is as follows:

CGPA 8 and above: First Class with distinction CGPA 6.5 and above, but less than 8: First Class CGPA 6 and above, but less than 6.5: Second Class.
