

**REGULATION FOR POST GRADUATE PROGRAMMES IN
ENGINEERING/TECHNOLOGY UNDER CHOICE BASED CREDIT SYSTEM
(CBCS) OFFERED BY THE UNIVERSITY DEPARTMENTS/SCHOOLS**

1 SCOPE

- 1.1 These Regulations shall apply to all M.Tech programmes conducted by the Departments/Schools of the Cochin University of Science and Technology .
- 1.2 The provisions herein supersede all other Regulations with respect to such programmes unless otherwise provided.

2. DEFINITIONS

Department/School means Departments/Schools instituted in the University as per Statutes and Act.

Core course means a course that the student admitted to a particular programme must successfully complete in order to receive the Degree and which cannot be substituted by any other course. Core course is offered by the Department where the student takes admission.

Elective course means a course, which can be substituted by equivalent courses from the same or other Departments/Schools.

Audited course means a course which can be opted by a student but which will not accrue any credit.

3. ELIGIBILITY AND ADMISSION PROCEDURE

As per the rules prescribed by the University from time to time.

4 ADMISSIONS

As per the Regulations prescribed by the University from time to time.

Each student admitted to a program shall be assigned a Unique Registration Number by the department concerned in a format prescribed by the university, which will be valid throughout his/her programme of study in the University.

5 COURSE STRUCTURE

- 5.1 The course content of M.Tech programmes shall consist of theory courses, practical courses, seminar, industrial training (optional) and project work.
- 5.2 The Department Council shall make recommendations on the content of core and elective courses including the detailed syllabus pertaining to each programme offered by the Department to the University to be approved by the concerned Board of Studies, Faculty and Academic Council
- 5.3 The curriculum for the first two semesters shall generally consist of theory courses, practical courses and seminar. There shall be three kinds of courses: Core, Electives and Audit courses. All core courses shall have three or four credits except in cases where only project/dissertation including seminars are involved in which case the minimum credit shall be sixteen. In all the programmes of study the elective courses (including inter departmental electives) shall have only three credits. Elective courses, if any offered through Massive Open On line Course (MOOC) can have two credits. Practical course / seminar will have one or two credits.
- 5.4 In the case of online courses attended by the student, a certificate of satisfactory completion and marks/ grade if any issued by the authority who conducted the course must be submitted to the Head of the Department. The Department can conduct a viva on the subject of the online course if necessary. On the completion of this, department council can award the respective weightage/grade to the student.
- 5.5 The number of credits for the project work in third and fourth semesters shall be in the range of 15 – 18 each.

6. COURSE REGISTRATION

- 6.1 Every Department/School shall have Faculty Members as Student Advisors. Each student will be assigned to an Advisor/Mentor, by the Department council within one week from the commencement of the classes, who will counsel the student on the choice of elective courses depending on the student's academic background and objective. The student will then register for the courses he plans to take for the semester within the time prescribed by the University. The student should have completed the prescribed prerequisites if any for a course before registration.
- 6.2 The Department offering a course shall prescribe the maximum number of students that can be admitted taking into consideration the facilities available.
- 6.3 The student can drop any elective/audit course(s) within 15 working days after the commencement of the classes.

- 6.4 University shall publish a Bulletin listing all the courses offered in every semester specifying the credits, prerequisites, list of topics the course intends to cover, the instructor who is giving the courses, the time and place of the classes for the courses. Each course shall have a code consisting of first two digits indicating the year of revision of syllabus/curriculum, following three digits denoting the program code, the next two digits indicating the semester and last two digits denote the serial number of the course.
- 6.5 A student shall register and complete at least one Interdisciplinary / industry based/online course as one of the Electives before registering for the final semester of the Programme.
- 6.6 Each Department/School will announce at least one interdisciplinary course (Elective) to be offered by them, in the “E” slot of the Common Time-table. This interdisciplinary course (Elective) shall not have any prerequisite.
- 6.7 No regular student shall register for more than 24 credits per semester and less than 16 credits per semester

7. EVALUATION

- 7.1 A student would be considered to have progressed satisfactorily at the end of a semester if he/she has a minimum of 75 % attendance. The evaluation is completely internal.
- 7.2 The entire system of evaluation is internal. The evaluation scheme for each semester contains two parts, a continuous assessment and a semester end examination. The student shall be evaluated continuously throughout the semester and marks shall be awarded on the basis of tests / assignments as detailed below :
- 7.3 There shall be two class tests, assignment and an end semester examination. The first class test carries 20 marks and will be based on the portions of the syllabi covered till then. The second class test also carries 20 marks and will be based on the portions covered till then after the first class test. A maximum of 10 marks will be awarded for the assignments
- 7.4 The end semester examination will be for 50 marks and shall contain questions from the entire syllabus of the course. The duration of the end semester examination shall be three hours.
- 7.5 All practical examinations will also be internally evaluated as per the procedures laid down by the Department Councils concerned.

7.6 Marks obtained in the continuous assessment shall be displayed on the notice board and grievances if any may be addressed to the teacher concerned/Head of the Department with supporting documents. The teacher and the HOD will examine the case and decide on his/her grievance. If the student is not convinced with the decision, he/she can approach the appellate authority, which is the department council, in writing and the council shall examine the same and take a final decision which has to be intimated to the student in writing. The decision of the appellate authority shall be final.

7.7 There shall be only a single evaluation for the semester end examination. Immediately after the end semester examination is over, the Head of the Department shall make arrangements to complete the evaluation and finalize the results within 10 working days.

7.8 The pass minimum in a subject is 50 %, with a separate minimum of 45% for end semester examination

7.9 The final marks and grade in all the courses obtained by the students in that semester will be displayed in the notice board. Those who could not obtain 50% marks (Grade D) in total for a course will be declared as failed in that course.

Those who fail in any course shall approach the teacher concerned if necessary, for a reexamination of the semester end examination. Within ten days of the display of the results in the notice board, the department shall conduct an additional semester end examination for these candidates. This reexamination is only to provide the student a chance to pass the examination by completing the course successfully. If he/she completes the course successfully making use of this additional chance, he/she will be awarded only a D grade enabling the candidate to be declared successful in that course.

If he/she cannot make it up, he/she may repeat the semester end examination of that course along with the subsequent batches, or re-register and repeats the course. In this case he/she will be awarded whatever grade he/she has secured.

8. PROJECT WORK

8.1 Project evaluation shall be done at the end of III and IV semesters in the case of full time programmes and at the end of V and VI semesters in the case of part time programmes.

8.2 The evaluation at the end of III Semester (Full time)/ V Semester (Part time) shall be conducted by an examination committee consisting of the head of the department / school / division, a senior teacher nominated by the head and the project guide.

8.3 At the end of IV or VI semester, the students will have to submit a dissertation on his / her project work to the Head of the Department/School within the last date prescribed for the purpose

8.4 The dissertation will be evaluated by an examination committee consisting of the head of the department / school / division, another faculty member and the project guide. The candidate shall make an open presentation of his/her dissertation which will be followed by a viva-voce examination.

For the purpose of assessment, the performance of a student in the project dissertation may be divided into the following sub components:

At the end of III semester (Full time) / V Semester (Part time)

Assessment by the project guide

(based on periodic assessment of the work of the candidate) - 50%

Assessment by the examination committee - 50%

At the end of IV semester (Full time) / VI Semester (Part time)

Assessment by the project guide

(based on periodic assessment of the work of the candidate) - 50%

Assessment by the examination committee - 50%

9.0 DECLARATION OF RESULTS

9.1 The result of the examinations will be finalised and published by the department council, which will act as the passing board and the minutes shall be sent to the controller of examinations for issue of grade card. The University shall issue mark lists/grade card at the end of each semester.

9.2 GRADE CARD

9.2.1 The University under its seal shall issue a Grade Card to the students on completion of each semester. The Grade card shall contain the following:

- a. Title of the course taken as core, elective and audit. (An audit course shall be listed only if the student has secured a pass)
- b. The grades awarded for each course along with the course credit.
- c. The number of credits (core and elective separately) earned by the student and the Grade point Average.
- d. The total credits (core and elective) earned till that semester.

9.2.2 The following grades will be awarded based on the overall performance in each subject.

Range of marks	Grades	Weightage
90 and above	S-Outstanding	10
80 to 89	A-Excellent	9
70 to 79	B-Very good	8
60 to 69	C-Good	7
50 to 59	D-Satisfactory	6
Below 50%	F-Failed	0

Overall performance at the end of the semester will be indicated by Grade Point Average (GPA) calculated as follows.

$$\text{GPA} = \frac{(G_1C_1 + G_2C_2 + G_3C_3 + \dots + G_nC_n)}{(C_1 + C_2 + C_3 + \dots + C_n)}$$

Where 'G' refers to the grade weightage and 'C' refers to the credit value of corresponding course undergone by the student. At the end of the final semester Cumulative Grade Point Average (CGPA) will be calculated based on the above formula, considering the Credits and Grades earned during the entire programme of study.

Classification for the Degree/Diploma will be given as follows based on the CGPA :

First Class with distinction	8 and above
First Class	6.5 and above
Second Class	6 and above

- 9.3 The Grade Card issued at the end of the final semester shall contain the details of all the courses taken which shall include the titles of the courses, the credits associated with each course, the CGPA and the class.
- 9.4 A student shall acquire a minimum of 36 credits in the first two semesters before he/she registers for third semester. A student shall complete the M.Tech programme in 8 (eight) consecutive semesters in the case of full time programme and 10 (ten) consecutive semesters in the case of part time programme by acquiring the minimum total credit requirement of 72.
- 9.5 A student who wishes to take up professional employment after completing the second semester shall obtain permission from the Head of the Department/School. The student will be permitted to carry out the project work in the institution / organisation where they are employed on production of a certificate from the Head of that institution/organisation to the effect that the student is permitted to carry out the project at the institution/organisation.

Such candidates shall carry out the project work under the joint supervision of a project guide from the Department/School and an external guide from the Institution/ Organization concerned. The Department / School Council shall verify the academic/ research credentials of the proposed external guide before granting permission.

In the case of students who propose to carry out their project work in National Laboratories on full time basis, the provision regarding having a project guide from the Department/School concerned may be exempted by the Department / School Council, if the situation warrants.

- 9.6 This clause will be applicable to the sponsored candidates also if they wish to carry out their project work in their parent organisation.

10 MONITORING AND MANAGEMENT OF PROGRAMMES

Every post graduate programme conducted in the Departments shall be Monitored by the Department Council subject to these regulations. Such monitoring shall include design of programmes , prescribing the mode of conduct of the programmes and monitoring the evaluation process of students.

11 TRANSITORY PROVISION

Notwithstanding anything contained in these regulations, the Vice-Chancellor shall, for a period of one year from the date of coming into force of these regulations, have the power to provide by order that these regulations shall be applied to any programme with such modifications as may be necessary.