

**REGULATION FOR THE M.Sc. (FIVE YEAR INTEGRATED) Degree in Photonics OFFERED BY
INTERNATIONAL SCHOOL OF PHOTONICS, CUSAT**

1. SCOPE

1.1 These Regulations shall apply to the M.Sc. (Five Year Integrated) Degree in Photonics conducted by International School of Photonics of the Cochin University of Science and Technology.

1.2 The provisions herein supersede all other Regulations unless otherwise provided.

2 DEFINITIONS

2.1 Academic Committee means the committee constituted by the Vice-Chancellor under this regulation to monitor the running of the programme.

2.2 Core course means a course that the student admitted to a particular programme must successfully complete to receive the Degree and which cannot be substituted by any other course.

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

2.4 Audited course will not accrue any credit.

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

2.6 Levels of courses in these Regulations will generally means:

First Level	: Undergraduate programme (Semester I to Semester VI)
Second Level	: Post graduate programme (Semester VII to Semestr X)
Third Level	: M.Tech programmes

2.7 Choice Based Credit Semester (CBCS) System shall be followed.

3 ELIGIBILITY FOR ADMISSION

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

4 ADMISSIONS

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

After closing the admissions, each student will be assigned a unique registration number by the department which will be valid throughout his course in the University.

5 COURSE REGISTRATION

5.1 The School shall have Faculty Members as Student Advisors. Each student at the time of seeking admission will be assigned to an Advisor by the Department Council. She/he will advise the student about the academic programme and counsel on, the choice of 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 before the classes begin.

The Department shall prescribe the maximum number of students that can be admitted taking into consideration the facilities available. Preference shall be given to those students for whom the course is a core-course if the demand for registration is beyond the maximum prescribed. The student has to complete the prescribed prerequisites for the course before registration and register before the last date prescribed by the university. The student can drop/re-register any elective/audit courses(s) within **15** working days after the commencement of the classes.

5.2 The University shall make available to all students 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 and examination schedule. Each course shall have a code consisting of three characters denoting the Department and four digits of which first digit indicating the level of the course, second indicating the Semester and third and fourth digits the serial number of the course. However in such Departments having more than 1 Masters programme of same level, the first 2 characters denote Department and the third, the course of study.

6 COURSE STRUCTURE

6.1 The CBCS system will be fully internal in all sense. There shall be three kinds of courses: Core, Electives and Audit courses. Core courses should generally be offered by the Department/ School concerned. Normally no course shall have more than four credits except in cases where only project/dissertation including seminars are involved in which cases the minimum credit shall be sixteen.

6.2 In the case of integrated MSc Photonics course, the minimum credit required to be awarded the BSc (Photonics) degree is 116 and for MSc (Photonics) degree is 188.

6.3 The Department Council shall make recommendations on the core and elective courses including the detailed syllabus for each programme offered by the Department to the University and approved by the Board of Studies, Faculty and Academic Council. The Department Council shall have the freedom to design and introduce new electives and or audited courses, to modify/redesign existing electives and to replace any existing electives with new or modified/redesigned electives to facilitate better exposure and training for the students. Prior approval from the Board of Studies and

Academic Council is not required for such modifications in the electives, but shall be done only with the approval of the Academic Committee. Such changes shall be brought to the notice of the concerned bodies in the next meeting for ratification.

6.4 The general structure of the programme shall be as given below:

A minimum 75 % attendance is compulsory. But the Vice-Chancellor shall have the power to condone shortage of attendance up to 10 percent on medical grounds on the recommendations of the Head of Department. However such condonation for shortage of attendance shall be given only twice during the entire course

	Int. MSc Photonics
Programme duration	10 sem
Accumulated minimum credit required for successful completion of the programme	188
Minimum Attendance required	75%

Note: * Each semester shall have a minimum of 90 working days and one credit shall be given for one hour lecture or 2 hours of practical work per week. No regular student shall register for more than 24 credits per semester and less than 16 credits per semester.

The minimum credit required to continue to level 2 (Sem 7 to Sem 10) from level 1 (Sem 1 to Sem 6) shall be 90.

The student should have a minimum of 75% attendance to appear for the internal examinations as well.

6.5 A student shall compulsorily register and complete at least one Interdisciplinary Elective (IE) course (one of the Electives) from other Departments/Schools before registering for the final semester of the Programme. For Int.MSc Photonics course, Interdisciplinary Elective (IE) need to be completed in level 2 only.

6.6 Each Department/School must announce at least one interdisciplinary course (Electives) to be offered by them, in the "E" slot of the Common Time-table.

6.7 This interdisciplinary course (Elective) shall not have any prerequisite.

7.EVALUATION

7.1 The entire system of evaluation is internal. The evaluation scheme for each semester contains two parts, a continuous assessment and an end semester examination. The continuous assessment shall consist of minimum of two tests of twenty marks each and ten marks for assignments/seminars/quizzes etc. which has to be intimated to the students at the beginning of the semester. Marks obtained in the continuous assessment shall be displayed on the notice board and grievances received if any through the Head of the Department. The Department Council shall finalise the marks of the continuous assessment of each course.

The semester end examination shall cover the entire syllabus of the course. Equal weightage shall be given for the continuous assessment and the semester end components. All practical examinations will be internally evaluated as per the procedures laid down by the Department Councils concerned.

7.2 Two distinct sets of question papers for the semester end examination are to be set by the concerned teacher in advance, which shall be scrutinized by the department council to ensure that questions are within the scope of the syllabus and also the entire syllabus of the course is fairly covered in the question paper. Modifications can be suggested by the council if necessary and the incorporation of such suggestions should reflect in the final question paper. Out of the two question papers prepared, one shall be selected by the director for conducting the end semester examination.

There shall be only a single internal evaluation for the end semester examination. Immediately after the examination is over, the Head of the Department shall arrange an Internal valuation camp pertaining to all the end semester examinations conducted in the Department and the results shall be finalized within 10 working days after the examination is over. The marks and grade in all the subjects obtained by the students has to be displayed in the notice board and the answer scripts can be given back to the students for scrutiny if necessary.

7.3 **For each course there shall be a separate minimum of 45% marks for the semester end examinations.**

7.4 The Department shall publish the marks obtained by the students, in the continuous assessment and semester end examination. If the student has any grievance, he/she can approach the concerned teacher and submit his/her grievance with supporting documents/arguments within five working days of publication of the results. 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 appealing authority- 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 appealing committee shall be final.

7.5 The final marks and grades obtained by the students shall be published 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 core or elective course shall approach the concerned teacher if necessary for a re- examination of the semester end examination. Within one week of the display of the results in the notice board, the concerned teacher shall conduct an additional semester end examination for these candidates. This re- examination is only to enable the student to pass the examination so 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 for that course. If he/she cannot make it up, he may repeat the semester end examination of that course in the next available chance. The maximum duration for completing the MSc degree programme will in any case be 9 years from the date of commencement of first semester (A student will have additional two years to complete the first level and additional two years for completing the second level. Total additional years that can be availed is 4)

7.6 The result of the examinations will be declared by the department council within 30 days of the last examination of the semester and the minutes shall be sent to the controller of examinations to issue the mark list of that examination.

8 GRADE CARD

8.1 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 credits associated with and the grades awarded for each course.
- 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.

8.2 The following grading system be adopted for all the courses.

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

<u>Range of marks</u>	<u>Grades</u>	<u>Weightage</u>
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.

$$GPA = \frac{G1C1+G2C2+G3C3+.....GnCn}{C1+C2+C3+.....Cn}$$

$$C_1 + C_2 + C_3 + \dots + C_n$$

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 course of study.

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

First Class with distinction	8 and above
First Class	7 and above
Second Class	6 and above

8.3 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. The rank shall be awarded based on CGPA corrected to the 2nd Decimal.

9 MONITORING AND MANAGEMENT OF COURSES

9.1 Every post graduate programme conducted in the Departments shall be Monitored by the Department Council subject to these regulations. The Department Council shall design courses, prescribe the mode of conducting the courses and monitor the evaluation of students.

10 ACADEMIC COMMITTEE

10.1 There shall be an Academic Committee constituted by the Vice-Chancellor to monitor and co-ordinate the working of the credit and Semester system.

10.2 The Committee shall consist of:

- a The Pro-Vice-Chancellor Chairman
- b The Registrar Secretary
- c The Controller of Examinations
- d One Teacher from each Department

10.3 A Senior Professor nominated by the Vice-Chancellor from among the members of the Committee shall be the Vice-Chairman of the Committee

10.4 The term of the office of the committee shall be two years, but the committee once constituted shall continue in office until a reconstituted committee assumes office.

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.

12 REPEAL

The Regulations now in force, in so far as they are applicable to programmes offered in the University Departments and to the extent they are inconsistent with the existing regulations, and the regulations relating to the Credit and Semester System in their application to any course offered in a University Department, the latter shall prevail.
