

CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT

PARALAKHEMUNDI, GAJAPATI, ODISHA

SCHOOL OF BASIC SCIENCES



ACADEMIC REGULATIONS

FOR

5-YEAR INTEGRATED M.Sc. PROGRAMME

2012-13

CUTM offers five-year Integrated M.Sc. programme in three streams, viz Physics, Chemistry and Mathematics. The followings are the academic system, method of evaluation and course structure for the five-year Integrated M.Sc. programme.

1. Duration of Curriculum & Calendar

- 1.1 The duration of the integrated programme is 5 academic years. A student is expected to complete this programme in a maximum duration of 7 academic years. The duration of the B.Sc & M.Sc programme are 3 years & 2 years respectively. However a student is expected to complete this programme in a maximum duration of 5 years & 4 years respectively.
- 1.2 Each academic year is divided into two semesters. (Autumn) semester is during the months of July to December and the second (Spring) semester is during the months of January to June.
- 1.3 The number of teaching weeks in each semester is fifteen to eighteen with a minimum of 90 teaching days excluding the holidays and days for conduct of tests / examinations.
- 1.4 Each year the University shall draw out a calendar of academic & associated activities, which shall be adhered to. The same is non-negotiable. Details of curricula & syllabi shall be as decided by the Academic Council with provision for modification from time to time as per the needs of the specializations concerned.

2. Eligibility for Admission:

- 2.1 Passed in class XII /10+2 / Intermediate with Science for integrated M.Sc of any stream
- 2.2 Passed in +3 Science for M.Sc (Lateral entry)
- 2.3 Other criteria shall be as per provisions of the university, formulated for the purpose from time to time.

3. Course Structure of the Programme:

The semester-wise distribution of subjects and credits are indicated in the detailed course structure of the programme.

- 3.1 The curriculum of the programme in each stream consists of
 - Basic subjects
 - Professional Core subjects
 - Professional Elective subjects
 - Free Elective subjects
 - Seminar
 - Project/ Dissertation
- 3.2 Each subject is assigned a certain number of credits as follows:

- 1 credit per one lecture hour per week.
- 1 credit per one tutorial hour per week.
- 1 credit per two practical hours per week
- 4 credits for each seminar
- 12 credits for Project/ Dissertation.

4. Eligibility to Appear at Examinations:

- 4.1 A student is eligible to appear in an examination provided he/she pursues a regular course of study in respective stream and attends at least 75% of classes in aggregate both in theory & practical subjects scheduled during the semester. The attendance is considered from the date of commencement of classes as per academic calendar of the university. The schedule of classes is notified through a Time Table before the beginning of the classes in a Semester.
- 4.2 A student who is absent for short periods on health ground or due to participation in cultural, sports, other academic/official assignments in the interest of the institution/college/university/government with prior written permission of the head of the institution/college is permitted a maximum of additional concession of 10% in attendance and is eligible to appear in examination with a minimum of 65% of attendance in aggregate both in theory & practical subjects in a semester.

5. Grading System:

- 5.1 University follows a nine point grading system on base of 10 point scale according to the performance of a student in all subject items. The grades along with the corresponding points are categorized as follows:

Qualification	Grade	Score on 100 percentage points	Point
Outstanding	O	90 & above up to 100	10
Excellent	E	80 & above but less than 90	9
Very good	A	70 & above but less than 80	8
Good	B	60 & above but less than 70	7
Fair	C	50 & above but less than 60	6
Pass	D	40 & above but less than 50	5
Failed	F	Below 40	0
Malpractice	M	--	0
Absent	S	--	0

N.B.: Grade **C** is the **pass grade** for each Practical/Seminar/ Project/Dissertation.

Grade **D** is the **pass grade** for each theory subject.

Grade **C** is the **satisfactory grade** for CSR(Cultural, Sports and Socially Responsible) activities.

5.2 A student's level of overall competence is measured by a GRADE POINT INDEX as specified below:

- SGPI – Semester grade point index
- CGPI – Cumulative grade point index

5.3 The SGPA is calculated based on the prescribed subjects of a semester as

$$SGPI = \frac{\sum_{i=1}^N C_i * P_i}{\sum_{i=1}^N C_i}$$

The CGPI is calculated based on all subjects up to the end of a particular semester

$$As \ CGPI = \frac{\sum_{i=1}^N C_i * P_i}{\sum_{i=1}^N C_i}$$

Where,

C_i = Credits assigned to a subject item as indicated by the Course structure

P_i = Point corresponding to a grade, obtained by a student in that particular subject

N = Number of subjects taken up to the end of a semester

6. Requirements for the Award of Degree:

6.1 Integrated M.Sc Degree:

A student is eligible for the award of the Integrated M.Sc. Degree if he / she has

- undergone the prescribed programme of study successfully and secured at least pass grade in each of the Theory, Practical, Seminar & Project/Dissertation as mentioned in 5.1 within the stipulated duration as mentioned in 1.1.
- obtained a minimum of 220 credits out of 240 credits after skipping a maximum of 8 credits from Free elective subjects and 12 credits from Professional elective theory subjects.
- obtained at least satisfactory grade in CSR activities(i.e. NCC/NSS/Games/Sports/Music/Debate/Quiz/Yoga) during the study period as mentioned in 5.1.
- no dues to the University / Library / Hostels etc.
- no disciplinary action pending against him / her.

6.2 B.Sc Degree:

A student is eligible for the award of the B.Sc. Degree if he / she has

- (i) undergone the prescribed programme of study successfully and secured at least pass grade in each of the Theory & Practical mentioned in 5.1 within the stipulated duration as mentioned in 1.1.
- (ii) obtained a minimum of 128 credits out of 144 credits after skipping a maximum of 4 credits from Free elective subjects and 12 credits from Professional elective theory subjects.
- (iii) obtained at least satisfactory grade in CSR activities (i.e. NCC/NSS/Games/Sports/Music/Debate/Quiz/Yoga) during the study period as mentioned in 5.1.
- (iv) no dues to the University / Library / Hostels etc.
- (v) no disciplinary action pending against him / her.

6.3 M.Sc Degree(Lateral Entry):

A student is eligible for the award of the M.Sc. Degree if he / she has

- (i) undergone the prescribed programme of study successfully and secured at least pass grade in each of the Theory, Practical, Seminar & Project/Dissertation as mentioned in 5.1 within the stipulated duration as mentioned in 1.1.
- (ii) obtained a minimum of 92 credits out of 96 credits after skipping a maximum of 4 credits from Free elective subjects.
- (iii) obtained at least satisfactory grade in CSR activities (i.e. NCC/NSS/Games/Sports/Music/Debate/Quiz/Yoga) during the study period as mentioned in 5.1.
- (iv) no dues to the University / Library / Hostels etc.
- (v) no disciplinary action pending against him / her.

6.4 Skipping of subjects :

If a student accumulates more credits beyond the required minimum number of credits and intends to skip a subject in which he / she has failed or not appeared or passed but got low grade, he / she has to make a formal application through the college to the University after completion of the programme. Such subject(s) which he / she has chosen to skip shall not appear in the grade sheet issued by the University.

- (i) This facility is however applicable only to Free Elective and Professional Elective theory subjects of any stream.
- (ii) The CGPI at the end of the programme shall, in such cases, be based on the remaining credits and credit points earned by the student.

6.5 Criteria for award of Gold Medals

- (a) The best graduate / university gold medal winner will be selected based on the highest Cumulative Grade Point Average secured by the graduate passing out in the academic year.
- (b) The candidate must have passed all the course items prescribed for all the ten semesters in the **FIRST ATTEMPT** and completed the M.Sc. in five years. The grade point obtained before the improvement exam shall be considered for the gold medal issue.
- (c) For award of gold medal / scholarships etc. more than one candidate may be declared Joint Winner if they have same CGPI.
- (d) Candidate securing less than 8.50 CGPI will not be considered for award of Gold Medal.

7. Evaluation System:

The University shall have a continuous evaluation system for each theory, practical, seminars, project & dissertation.

For this purpose the university will hold the following examinations.

- End Semester Examinations at the end of the Odd Semester course work (1st/ 3rd/ 5th / 7th/9th semesters)
- End Semester examinations at the end of Even Semester course work (2nd / 4th / 6th / 8th/10th semesters)
- Supplementary / Improvement Examinations of even semesters (2nd / 4th / 6th/8th semesters at the end of Odd semester course work and examinations).
- Supplementary / Improvement Examinations of Odd semesters (1st/ 3rd/ 5th /7th semesters at the end of even semester course work and examinations).
- Special Supplementary / Improvement Examinations of 9th&10th semesters, for the benefit of candidates who have completed the course work of all ten semesters and have backlogs only from 9th& 10th semesters, after the declaration of results of tenth semester.

The Improvement examinations are intended to enable the candidates to clear subjects / course items of a semester with a better grade. It will be same as the supplementary examinations.

Details of evaluations of various items are given as under:-

7.1 Theory papers:

(a) A theory paper will have 100 percentage points. The weightage for three class tests and the end semester examinations will be as follows:

• Internal - I of one hour duration	=	10 percentage points.
• Internal - II of one hour duration	=	10 percentage points.
• Internal - III of one hour duration	=	10 percentage points.
• Assignments / quiz / viva-voce /attendance	=	10 percentage points.
• End Semester External Examination of three hours duration	=	60 percentage points.
Total	=	100percentage points.

- (b) There is no repeat tests if a candidate is absent for any of the Internal tests, for any reason what so ever.
- (c) A candidate is deemed to clear (pass) a theory paper if he / she secures minimum 'D' grade in the End Semester Examinations and the three class tests along with Assignments/quiz/viva-voce/attendance taken together (i.e out of 100) based on "NORMALISED GRADING SYSTEM".

7.2 Practical papers:

(a) A practical paper shall have 100 percentage points. Each practical experiments shall have equal percentage points as its weightage. A practical paper shall have 2,3& 6 contact hours/week for 1,2 & 4 credit papers respectively. A practical experiment shall be completed in all respect within the allotted hours. The evaluation of the experiment done by the candidate has also to be completed within the allotted hour. A practical experiment will be evaluated based on the following components. The relative weightage of the components are given below:

- Experiment planning & execution – 20
- Results & interpretation -30
- Report – 20
- Record - 10
- Understanding on the theory related to experiment – 20

(b) A candidate shall clear a practical paper if his/her score in the paper is minimum of 50 percentage points.

- (c) College can arrange a compensatory practical class for a student who misses an experiment on medical ground. Such a compensatory experiment has to be arranged within two weeks of his/her missing a practical class.

7.3 Seminar item:

- (a) A seminar item shall have 100 percentage points. It will be assessed by a Departmental Seminar Evaluation Committee constituted by the Head of the Department, each candidate is required to present the work carried out in the form of a seminar where the committee and the other students will be present. A seminar item will be evaluated based on the following components :
- Quality of material – 30 points
 - Quality of presentation – 30 points
 - Quality & extent of response from other students – 20 points
 - Participation in other presentations – 20 points
- (a) Minimum score to pass in Seminar item shall be 50 percentage points.

7.4 Project / Dissertation:

- (a) A Project/Dissertation item shall have 100 percentage points. Each candidate shall do a project/dissertation under the supervision of a Supervisor. There could be a Co-Supervisor if the project/dissertation is interdisciplinary in nature. The evaluation shall be done by a committee of teachers where the Project Supervisor(s) shall be a member(s).

Project/dissertation will be evaluated based on the following components :

- Understanding the relevance, scope & dimension of the project/dissertation -10 points
 - Relation to literature/application – 10 points
 - Methodology – 10 points
 - Quality of Analysis & Results – 10 points
 - Interpretation and conclusions – 20 points
 - Report – 20 points
 - Defence -20 points
- (b) Minimum score to pass in Project item is 50 percentage points.

8. Examination system:

- 8.1 Each discipline consists of the following four types of items:

- Theory Items
- Practical Items
- Seminar Items
- Project/Dissertation Items

The schedule of these items along with their credit points for each semester shall be as per rules formulated by the Academic Council from time to time.

- 8.2. At the end of each semester, there shall be an examination (hereinafter called end-semester examination) conducted by the University as per programme announced at the beginning of each academic year.
- 8.3. Back paper examinations, if any, shall be held with the normal end semester examination. There will be an examination window every semester where all even and odd semester exams (regular and back papers) will be held.
- 8.4. Students with backlogs shall clear their backlog subjects along with regular students of lower semester(s) in subsequent year or in the same year if a subject is offered in both semesters.
- 8.5. There shall be Special examination for students who have completed the course work of all ten semesters and have backlog papers from 9th & 10th only. There shall be no retotaling / rechecking for any subject of Special Examinations.
- 8.6. Students who have been found to indulge in malpractice at examination and have secured "M" grade in any subject will be governed by the disciplinary action taken against them by the University. Such candidates will be allowed to appear at any of the subsequent examinations based on the action taken against them.
- 8.7. Students who are absent at the examination in any subject will be awarded "S" grade. They are permitted to appear at the subsequent examinations in those subjects as backlog candidates.
- 8.8. A student who has passed the end semester examination but would like to improve his grade in a course item can also register for the exam and give the exam. However such facility is available only for the external end semester examination. The higher of the marks of the two results will be taken into account. There will be no bar on number of attempts a student can make for improvement of his grade.
- 8.9. All internal marks will be carried forward both for back paper and improvement examinations in the case of theory courses.
- 8.10. In the case of failure in a practical/ sessional, the candidate is given the chance to improve his grade and obtain a passing grade by conducting additional work / experiments as prescribed by the department.

9. Declaration of Result & Promotion

- In order to pass a programme / course, a candidate must secure at least a pass grade as defined in clause 5.1 in each of the theory, practical, project and seminar items.
- The promotional status between two consecutive semesters and or two consecutive levels / years shall be indicated on the semester grade sheet ,which carries the remark “promoted to next year”, as the university has no restriction on the number of backlogs to be carried.
- The SGPI of the semester shall be updated after the candidate clears the subjects in which he / she has failed at a subsequent examination.
- The University shall publish a list of all successful candidates of each of the semester examinations within the date prescribed in academic calendar.
- The overall performance of a successful candidate for the award of a degree shall be based on the combined results of all the examinations of the concerned programme.
- Candidates, who are permitted to discontinue the M.Sc. programme for valid reasons, may rejoin a course at the commencement of the semester in which it is offered. Such candidates will be governed by rules, regulations, course structure and syllabi in force at the time of joining.
- Candidates , who are detained from appearing at the end-semester examination due to shortage of attendance , have to register for that course once again and appear at the subsequent examination to obtain a passing grade.

10. Registration & Enrollment

- Except for the first semester of any academic programme, registration for a semester will be done on dates stipulated by the University on the prescribed formats.
- During the course of study the students may register in any number of (2nd semester onwards) backlog (failed) subjects of their lower semesters; preference being given to lowest possible semester in addition to the prescribed subjects of that semester. After completing the 10th semester, a student may register in any number of backlog (failed) subjects and attempt to clear them during appropriate semester examinations. The student once registered for a set of backlog subjects cannot change them during the semester.
- Candidates, failing in a course item are required to register to appear at the end-semester examination in that course item with the specified date.

- Candidates, detained for shortage of attendance have to register for the course item at the beginning of the semester , complete all requirements as specified to appear at the end semester examination and obtain a passing grade.
- A student shall be admitted to any examination in a subject only if he / she has registered for that subject and paid necessary registration and examination fees in the beginning of the semester.

11 General

- 11.1 The academic regulations should be read as a whole for the purpose of interpretation.
- 11.2 In case of doubt or ambiguity in the interpretation of the above regulations, the decision of the Vice-Chancellor is final.
- 11.3 The University may change or amend the academic regulations or syllabus at any time and the changes or amendments made shall be applicable to all the students with effect from the dates notified by the University.