

Course: B.Sc. Chemistry

FIRST SEMESTER

Sl. No.	Course Component	SUBJECTS
1.	Part-I	Foundation Course: Tamil-I / Telugu-I
2.	Part-II	Foundation Course: English-I
3.	Part - III: Core Subjects	General Chemistry – I
		Major Practical-I*
4.	Allied Subject-I	Physics-I
		Physics Practical*
5.	Part- IV: Non-Major Elective-I	Non-Major Elective for students who have studied Tamil upto XII Std. and taken Tamil Language under Part-I : Cottage Industry Products (or) Basic Tamil for those who have not studied Tamil upto XII Std. & taken a Non Tamil Language under Part-I
6.	Soft Skill-I	Essentials of Language and Communication- Level – I (Eng)

*Practical exams will be conducted at the end of Semester-II

List of Allied Subjects :

I Semester

Physics - I

II Semester

Physics - II

SECOND SEMESTER

Sl. No.	Course Component	SUBJECTS
1.	Part - I	Foundation Course: Tamil-II /Telugu-II
2.	Part - II	Foundation Course: English-II
3.	Part - III: Core Subjects	General Chemistry-II Major Practical-I*
4.	Allied Subject-II	Physics-II Physics Practicals *
5.	Part - IV: Non-Major Elective-II	Non-Major Elective for students who have studied Tamil upto XII Std. and taken Tamil Language under Part-I : Food Chemistry (or) Basic Tamil for those who have not studied Tamil upto XII Std. and taken a Non-Tamil Language under Part-I
6.	Soft Skill-II	Essentials of Spoken and Presentation Skills- Level – I (Eng)

Non-Major Elective : Any one subject to be chosen by the candidate for each semester, during First Year.

Sem -I

1. Chemistry in Everyday Life
2. Cottage Industry Products
3. Textile Chemistry

Sem-II

1. Soil and Agricultural Chemistry
2. Dairy Chemistry
3. Food Chemistry

THIRD SEMESTER

Sl. No.	Course Component	SUBJECTS
1.	Part - I	Foundation Course: Tamil-III / Telugu-III
2.	Part - II	Foundation Course :English-III
3.	Part - III: Core Subjects	General Chemistry - III
		Major - Practical - II*
4.	Allied Subject - III	Mathematics-I (or) Zoology-I
		Zoology Practicals*
5.	Part - IV Soft Skill-III	Personality Enrichment - Level-I
	Part - IV	Environmental Studies*

* Examination will be held in Semester - IV

FOURTH SEMESTER

Sl. No.	Course Component	SUBJECTS
1.	Part - I	Foundation Course: Tamil-IV / Telugu-IV
2.	Part - II	Foundation Course : English - IV
3.	Part - III: Core Subjects	General Chemistry - IV
		Major Practical - II*
4.	Allied Subject-IV	Mathematics - II (or) Zoology- II
		Zoology Practicals*
5.	Part - IV: Soft Skill	Computing Skills (Basics)
	Part-IV	Environmental Studies*

III SEMESTER

1. Mathematics-I (for students with Maths background in +2)
2. Zoology-I (for all others)

IV SEMESTER

1. Mathematics-II (for students with Maths background in +2)
2. Zoology-II (for all others)

FIFTH SEMESTER

Sl. No.	Course Component	SUBJECTS
1.	Part - III: Core Subjects	Inorganic Chemistry-I
		Organic Chemistry-I
		Physical Chemistry-I
		Gravimetric Analysis (Practical)*
		Organic Analysis & Preparation (Practical)*
		Physical Chemistry (Practical)*
2.	Elective	Elective - I : Industrial Chemistry
		Elective - II : Polymer Chemistry
3.	Part IV	Value Education

* Practical Examination will be held at the end of Semester - VI

SIXTH SEMESTER

Sl. No.	Course Component	SUBJECTS
1.	Part - III: Core Subjects	Inorganic Chemistry - II
		Organic Chemistry - II
		Physical Chemistry - II
		Gravimetric Analysis (Practical)*
		Organic Analysis and Preparation (Practical)*
		Physical-Chemistry Practical*
2	Electives	Elective - III : Analytical Chemistry
3.	Part - V	Extension Activities

Note : Any three of the electives are being offered - two electives in Semester V and one other elective in Semester VI

List of Electives :

1. Material and Nano Chemistry
2. Industrial Chemistry
3. Pharmaceutical Chemistry
4. Polymer Chemistry
5. Analytical Chemistry
6. Spectroscopy

CHOICE BASED CREDIT SYSTEM (CBCS)

The University of Madras has introduced the CBCS, which is being followed by all its affiliated Colleges in both Undergraduate and Postgraduate programmes, with effect from 2008-2009.

STRUCTURE OF THE U.G COURSES

	Course Components	Credits	
		B.A./B.Sc./BCA	B.Com.
Part-I	Language :Tamil / Telugu / Urudu	12	06
Part-II	English	12	06
Part-III	Core Subject	60	72
	Allied Subject	20	20
	Project /Electives	15	15
Part-IV	(1)		
	(a) Basic Tamil for students who have not studied Tamil upto XII std and have taken a non Tamil Language under part -1 (or)		
	(b) Advanced Tamil for students who have studied Tamil upto XII std and have taken Tamil Language under part -I (or)	04	04
	(c) Non-Major Elective for students of 1 year, who have studied Tamil upto XII std and have taken Tamil under part-I		
	(2) Skill Based Subjects		
	(i) Essentials of Language and Communication - Level-I (Eng.)		
	(ii) Essentials of Spoken and Presentation Skills -Level-I (Eng.)		
	(iii) Personality Enrichment -Level -I	12	12
	(iv) Computing Skills - Basics		
	(3) Environmental studies	02	02
(4) Value Based Education	02	02	
Part-V	Extension Activities : N.C.C./N.S.S./Sports/YRC/Rotaract	01	01
	Total Credits	140	140

QUESTION PAPER PATTERN

THEORY EXTERNAL: B.A. / B.Sc. / B.C.A. B.Com.	SCIENCE PRACTICALS
University Exam Marks	External: Marks
Sec-A : (30 Words) 10 out of 12 (10x2) : 20	University Exam : 60
Sec-B : (200 Words) 5 out of 7 (5x5) : 25	Internal:
Sec-C : (500 Words) — 3 out of 5 (3x10) : 30	Tests (2 out of 3) : 30
Total <u>75</u>	Attendance : 05
INTERNAL	Record : <u>05</u>
Tests (2 out of 3) : 10	Total <u>100</u>
Attendance : 05	Passing Requirements
Seminars : 05	(Practicals)
Assignments : 05	(i) 24 Out of 60 in Externals
Total <u>25</u>	(ii) 40 out of 100 in Aggregate
Total <u>100</u>	(Only after meeting
	requirement(i), requirement
	(ii) will take effect,
	irrespective of mark in (ii))
	Project (if any)
	Report / Dissertation : 80
	Viva 20
	Total <u>100</u>

Passing Requirements: (Theory)

- (i) 30 out of 75 in External &
- (ii) 40 out of 100 in the Aggregate (Total from External & Internal)
(Only after meeting requirement (i), requirement (ii) will take effect, irrespective of mark in (ii))
- (iii) 140 credits in Parts-(I, II, III, IV & V)
(+)
- (iv) A minimum of 1 credit should be earned to pass the degree from the Extension Activities prescribed.
(However this credit will not be taken into consideration for Classification / Ranking / Distinction)