



केंद्रीय जनजातीय विश्वविद्यालय आंध्र प्रदेश
కేంద్రీయ గిరిజన విశ్వవిద్యాలయం ఆంధ్రప్రదేశ్
CENTRAL TRIBAL UNIVERSITY OF ANDHRA PRADESH
(A CENTRAL UNIVERSITY ESTABLISHED BY AN ACT OF PARLIAMENT)

CURRICULUM

2-Year M.Sc. Chemistry

w.e.f. 2023-24 admitted batch

**DEPARTMENT OF CHEMISTRY
SCHOOL OF SCIENCE**



M.Sc. CHEMISTRY REGULATIONS

(W.e.f. 2023-24 admitted batch)

1.0 ADMISSIONS

Admissions into M.Sc. Chemistry program shall be made only through CUET(PG) conducted by National Testing Agency (NTA)

2.0 ELIGIBILITY CRITERIA

A pass in Bachelor's degree with Chemistry as one of the subject(s) and with 50% marks in aggregate for General, EWS and OBC categories or its equivalent on grading scale of respective University (45% marks or its equivalent on grading scale of respective University for SC/ST/PwD candidates).

3.0 CHOICE BASED CREDIT SYSTEM (CBCS)

Choice based credit system (CBCS) is introduced based on UGC guidelines in order to promote:

- Student centered learning
- Cafeteria approach
- Inter-disciplinary learning.
- Industry-ready curriculum

4.0 STRUCTURE OF THE PROGRAMME

4.1 The program consists of:

- Core courses
- Discipline centric electives
- Practicum courses

4.2 Each course is assigned a certain number of credits depending upon the number of contact hours (lectures/tutorials/practical) per week.

4.3 In general, credits are assigned to the courses based on the following contact hours per week per semester.

- One credit for each lecture / tutorial hour.
- One credits for two hours of practicum
- Twelve credits for Research Project & Dissertation



- 4.4 The curriculum of four semesters M.Sc. Chemistry program is designed to have a total of 83 credits for the award of M.Sc. degree.

5.0 MEDIUM OF INSTRUCTION

The medium of instruction shall be English.

6.0 ATTENDANCE REQUIREMENTS

- 6.1 A student whose attendance is less than 75% in all the courses put together in any semester will not be permitted to attend the end - semester examination and he/she will not be allowed to register for subsequent semester of study. He /She have to repeat the semester along with his / her juniors.
- 6.2 However, the Vice Chancellor on the recommendation of the Head of the Department and Dean of the School may consider the shortage of attendance to the students whose attendance is between 65% and 74% on genuine medical grounds.

8.0 EVALUATION

The assessment of the student's performance in a Theory course shall be based on two components: Continuous Evaluation (30 marks) and Semester-end examination (70 marks).



PROGRAM STRUCTURE FOR TWO YEARS M.Sc. CHEMISTRY PROGRAM

	COUSE LEVEL	COURSE CODE	TITLE OF THE COURSE	LECTURES	TUTORIAL	PRACTICUM	CREDITS
SEMESTER-I	500	CHE501	Transition metal and Bioinorganic Chemistry	3	0	0	3
	500	CH 502	Stereochemistry and Organic Reaction Mechanisms	3	0	0	3
	500	CHE503	Chemical Kinetics, Thermodynamics & Electrochemistry	3	0	0	3
	500	CHE504	Chemistry of Materials	3	0	0	3
	500	CHE505	Chromatographic Separation Methods	3	0	0	3
	500	CHE511	Inorganic Chemistry Practicum	0	0	6	3
	500	CHE512	Physical Chemistry Practicum	0	0	6	3
Total							21
SEMESTER-II	500	CHE551	Main group and Organometallic Chemistry	3	0	0	3
	500	CHE552	Pericyclic reactions and Photochemistry	3	0	0	3
	500	CHE553	Surface Chemistry and Catalysis	3	0	0	3
	500	CHE554	Modern Analytical Techniques	3	0	0	3
	500	CHE571- CHE573-	Elective-I	3	0	0	3
	500	CHE561	Organic Chemistry Practicum	0	0	6	3
	500	CHE562	Analytical Chemistry Practicum	0	0	6	3
Total							21
SEMESTER-III	600	CHE601	Current Trends in Organic Synthesis	3	0	0	3
	600	CHE602	Chemistry of Heterocyclic Compounds and Natural Products	3	0	0	3
	600	CHE603	Advanced Spectroscopy	3	0	0	3
	600	CHE604	Research Methodology	3	0	0	3
	600	CHE621 - CHE623	Elective-II	3	0	0	3
	600	CHE611	Organic Chemistry-2 Practicum	0	0	6	3
	600	CHE612	Internship/Research literature review	0	0	6	3
Total							21
SEMESTER-IV	600	CHE671 - CHE677	Elective-III	3	0	0	3
	600		Elective-IV	3	0	0	3
	600	CHE681	Pre-project Seminar	0	0	4	2
	600	CHE682	Research Project & Dissertation	0	0	24	12
Total							20
Grand Total							83

NOTE: The above courses are the minimum requirement for the degree. Students are encouraged to take additional electives online to earn extra credits.