

**DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY,
CHHATRAPATI SAMBHAJINAGAR.**



Circular / Syll. Sec./AEDP/ Uni.Cam. & Sub-Cam/Curriculum/ 2026.

It is hereby inform to all concerned that, as per direction by the Government; **the Academic Council & Management Council at it's Meeting held on 02^{ed} June, 2026 & 06th June, 2026 has accepted the "Following Subject wise Curriculum of AEDP programme as per Guidelines of NEP & University Norms"** to be implemented in the university main and sub-campus.

Sr. No.	Name of the UG Curriculum	Intake Capacity
01.	B.Sc. Geoinformatics (Honors)	40
02.	B.Sc. (Honours) in Chemistry & B.Sc. (Honours with Ressearch) in Chemistry	30
03.	B.Sc. Statistics with Data Analytics	30
04.	B.Sc. Printing & Packaging Technology (Honours)	20
05.	BBA-Agro Business Managment	30

This is effective from the Academic Year 2026-27 and onwards as per appended herewith.

All concerned are requested to note the contents of this circular and bring notice to the students, teachers and staff for their information and necessary action.

University campus,
Chhatrapati Sambhajnagar-431 004.
Ref. No. SU/ AEDP/ Uni.Cam. &
Sub-Cam/Curriculum/ 2026/135-43

**Deputy Registrar
Syllabus Section**

Date: 06/ 07/ 2026.

Copy forwarded with necessary action to:-

- 1] The Head, Department of Geography/ Chemistry/ Statistics/ Printing & Packaging Technology/ Management-(Sub Campus),**
- 2] The Director, University Network & Information Centre, UNIC, with a request to upload this Circular on University Website.**
- 3] The Director, Board of Examinations & Evaluation,**
- 4] Public Relation Officer [PRO],**

Dr. Babasaheb Ambedkar Marathwada University,
Chhatrapati Sambhajnagar.

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**DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY,
Chhatrapati Sambhajnagar**



NAAC Re-accredited 'A+' Grade

Department of Chemistry

FACULTY OF SCIENCE & TECHNOLOGY

**B. Sc. (Honours) in Chemistry
&
B. Sc. (Honours with Research) in Chemistry**

As per NEP-2020

(To be implemented from Academic Year 2026-27)

Course structure and Curriculum

Effective from 2026-27

PREFACE

National Education policy 2020 has been intensely debated policies come into existence. In January, 2020 UGC has given the guideline for Learning outcome based curriculum framework (LOCF) work towards more holistic experience for the students . while focussing not just on knowledge delivery in higher education but also on the application of knowledge through theory, laboratory experiments, Project work and Internship / Apprenticeship in industry also emphasis on application of knowledge to real life experiences. LOCF is student-centric education in the context of development of personal, social, professional and acquired knowledge requirements in their career and life building, which focuses on measuring student performance through outcomes. It includes the knowledge, skills and attitudes enhancement in the students .

The aspects of LOCF is all-round development of the students, skill acquisition outside chosen subjects and research were undetermined but NEP has changed all of these in one stroke. The prominent features of the NEP framework are:

- Student centric education
- Multiple entry and exit points
- Skill based and industry oriented education
- Credit based evaluation system
- Academic bank credits

It also focuses on evaluation of outcomes of the program by considering the knowledge, skill and behaviour of a student's after completion of three/ four year degree program. The educational triangle of Teaching-Learning and Evaluation process is the unique features of the education. The curriculum practices such as competency based curriculum, Tailor-made curriculum development, spades, curriculum principles, Blooms Taxonomy and further use of assessment methodologies like, Norm-reference testing and Criterion reference testing, etc is being practiced since decades.

Maharashtra state government and the authorities of Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar has decided to implement National Education Policies -2020 from the academic year 2026-27 for three years B. Sc. (Honours) in Chemistry & four years B. Sc. (Honours with Research) in Chemistry with apprenticeship embedded degree programme.

Professor & Head
Department of Chemistry
Dr. Babasaheb Ambedkar
Marathwada University,
Chhatrapati Sambhajinagar

1. Vision:

To structure the Dr. Babasaheb Ambedkar Marathwada University to be an epitome of excellence by creating and imparting time responsive quality education to address changing scenario , keeping research and development at its core for any one at anytime and anywhere

2. Mission:

- To bring sustainable progress of society by nurturing chemistry with responsibilities
- To create and maintain programs of excellence in the areas of research , education and public outreach
- Department will produce students who are knowledge in chemistry and can think critically.
- To develop the researcher and scientist in chemical science through post-graduate education and research programme.
- To develop the competent manpower with technology based experimentation methodologies and value based practices for business and industries.
- To undertake projects to solve field base problems.
- To provide student centric learning facilities for the development of overall personality of learner.

3. Eligibility Criteria : 12th Science passed**4. Assessment and Evaluation : Internal : University Exam , 40: 60****5. Duration of Programme : Three years six semesters with 132 Credits****6. Duration of Programme : Four years eight semesters with 176 Credits****7. Each semester is of 22 Credits****Multi-Disciplinary Courses (MDC) : 24 Credits.**

These courses includes four different groups of subjects:

- Computer for Chemists
- Mathematics for Chemists
- Biology for Chemists
- Agriculture biomass transformations
- Basic Instrumentation

8. Ability Enhancement Courses (AEC) : 10 Credits.

Students must achieve competency in the Modern Indian Language (MIL) and English, with special emphasis on language and communication skills. These courses aim to enable the students to acquire and demonstrate the core linguistic skills, including critical reading and

expository and academic writing skills, that help them articulate their arguments, present their thinking clearly and coherently, and recognize the importance of language as a mediator of knowledge and identity. These courses are of 2 credits.

9. Skill Enhancement Courses (SEC) : 10 Credits

These courses aim to impart Laboratory practical skills, Instrument hands-on training, Chemistry related software handling training and its data interpretation. etc.

10 Value Added Courses (VAC) : 10 Credits

- Constitution of India,
- Environmental Science,
- Green Chemistry
- Yoga Education
- Human Values and Ethics

11. Research Project / Dissertation : 4 credit

Students of three years programme will have to complete the **4 credit** research oriented project work under the guidance of a faculty member. The research outcomes of their project work may be published in journals or may be presented in conferences /seminars or may be patented.

12. Internship/Apprenticeship :

- i), **22 Credits** for internship/ Apprenticeship in industry for three years programme .
- ii). **22 Credits** for internship/ Apprenticeship in industry for four years programme.

B.Sc. First Year Semester-I Course Structure

Course type	Course Code	Course Name	Teaching Scheme (Hrs./ week)		Credits Assigned		Marks		
			Theory	Practical	Theory	Practical	Conti. Inter. Assm en.	End. Sem Exam	Total Marks
Major	CHT-101	Inorg. Chem.	2	-	2	-	20	30	50
	CHT-102	Org. Chem.	2	-	2	-	20	30	50
	CHT-103	Phy. Chem.	2	-	2	-	20	30	50
	CHP-104	Inorg. Chem. Practicals	-	4	-	2	20	30	50
	CHP-105	Org. Chem. Practicals	-	4	-	2	20	30	50
	CHP-106	Phy. Chem. Practicals	-	4	-	2	20	30	50
Minor	CHT-107	Chemical Separation Methods	2		2	-	20	30	50
	CHP-108	Chemical Separation Method Practicals	-	4	-	2	20	30	50
MDC	CHT-109	Computer for Chemists	2	-	2	-	20	30	50
AEC	CHT-110	Comm. Skills	2	-	2	-	20	30	50
VAC	CHT-111	Constitution of India	2	-	2	-	20	30	50
Total			14	16	14	08	220	330	550

B.Sc. First Year Semester-II Course Structure

Course type	Course Code	Course Name	Teaching Scheme (Hrs./week)		Credits Assigned		Marks		
			Theory	Practical	Theory	Practical	Conti. Inter. Assm en.	End. Sem Exam	Total Marks
Major	CHT-201	Inog. Chem.	2	-	2	-	20	30	50
	CHT-202	Org.. Chem.	2	-	2	-	20	30	50
	CHT-203	Phy. Chem	2	-	2	-	20	30	50
	CHP-204	Inorg. Chem. Practicals	-	4	-	2	20	30	50
	CHP-205	Org. Chem. Practicals	-	4	-	2	20	30	50
	CHP-206	Phy. Chem. Practicals	-	4	-	2	20	30	50
Minor	CHT-207	Analytical Chemistry	2	-	2	-	20	30	50
	CHP-208	Anl. Chem. Practicals	-	4		2	20	30	50
MDC	CHT-209	Mathematics for Chemists	2	-	2	-	20	30	50
AEC	CHT-210	Laboratory safety	2	-	2	-	20	30	50
VAC	CHT-211	IKS -I	2	-	2	-	20	30	50
Total			14	16	14	08	220	330	550

B.Sc. Second Year Semester-III Course Structure

Course type	Course Code	Course Name	Teaching Scheme (Hrs./ week)		Credits Assigned		Marks		
			Theory	Practical	Theory	Practical	Conti. Inter. Assm en.	End. Sem Exam	Total Marks
Major	CHT-301	Inog. Chem.	2	-	2	-	20	30	50
	CHT-302	Org. Chem.	2	-	2	-	20	30	50
	CHT-303	Phy. Chem.	2	-	2	-	20	30	50
	CHP-304	Inorg. Chem. Practicals	-	4	-	2	20	30	50
	CHP-305	Org. Chem. Practicals	-	4	-	2	20	30	50
	CHP-306	Phy. Chem. Practicals	-	4	-	2	20	30	50
Minor	CHT-307	Basic spectroscopy	2	-	2	-	20	30	50
	CHP-308	Basic spectroscopy Practicals	-	4	-	2	20	30	50
MDC	CHT-309	Biology for Chemists	2	-	2	-	20	30	50
AEC	CHT-310	Environmental Science	2	-	2	-	20	30	50
VAC	CHT-311	IKS -II	2	-	2	-	20	30	50
Total			14	16	14	08	220	330	550

B.Sc. Second Year Semester-IV Course Structure

Course type	Course Code	Course Name	Teaching Scheme (Hrs./ week)		Credits Assigned		Marks		
			Theory	Practical	Theory	Practical	Conti. Inter. Assm en.	End. Sem Exam	Total Marks
Major	CHT-401	Inog. Chem	2	-	2	-	20	30	50
	CHT-402	Org. Chem	2	-	2	-	20	30	50
	CHT-403	Phy. Chem	2	-	2	-	20	30	50
	CHP-404	Inorg. Chem. Practicals	-	4	-	2	20	30	50
	CHP-405	Org. Chem. Practicals	-	4	-	2	20	30	50
	CHP-406	Phy. Chem. Practicals	-	4	-	2	20	30	50
Minor	CHT-407	Biorganic Chemistry	2	-	2	-	20	30	50
	CHP-408	Biorganic chemistry Practicals	-	4	-	2	20	30	50
MDC	CHT-409	Instrumentation -I	2	-	2	-	20	30	50
AEC	CHT-410	Research Methodology	2	-	2	-	20	30	50
VAC	CHT-411	Yoga Education	2	-	2	-	20	30	50
Total			14	16	14	08	220	330	550

B.Sc. Third Year Semester-V Course Structure

Course type	Course Code	Course Name	Teaching Scheme (Hrs./ week)		Credits Assigned		Marks		
			Theory	Practical	Theory	Practical	Conti. Inter. Assm en.	End. Sem Exam	Total Marks
Major	CHT-501	Inog. Chem.	2	-	2	-	20	30	50
	CHT-502	Org.. Chem.	2	-	2	-	20	30	50
	CHT-503	Phy. Chem.	2	-	2	-	20	30	50
	CHP-504	Inorg. Chem. Practicals	-	4	-	2	20	30	50
	CHP-505	Org. Chem. Practicals	-	4	-	2	20	30	50
	CHP-506	Phy. Chem. Practicals	-	4	-	2	20	30	50
Minor	CHT-507	Green Chemistry	2	-	2		20	30	50
	CHP-508	Green chemistry Practicals	-	4	-	2	20	30	50
MDC	CHT-509	Instrumentation -II	2	-	2		20	30	50
Project Work	CHT-510	Research Project	-	8	-	4	40	60	100
Total			10	24	10	12	220	330	550

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B.Sc. Third Year Semester-VI Course Structure

Course type	Course Code	Course Name	Teaching Scheme (Hrs./ week)		Credits Assigned		Marks		
			Theory	Practical	Theory	Practical	Conti. Inter. Assm en.	End. Sem Exam	Total Marks
Internships / Apprenticeship	CHT-601	Internships / Apprenticeship	--	44	-	22	220	330	550

B.Sc. Fourth Year Semester-VII Course Structure

Course type	Course Code	Course Name	Teaching Scheme (Hrs./week)		Credits Assigned		Marks		
			Theory	Practical	Theory	Practical	Conti. Inter. Assm en.	End. Sem Exam	Total Marks
Major	CHT-701	Inog. Chem.	2	-	2	-	20	30	50
	CHT-702	Org. Chem.	2	-	2	-	20	30	50
	CHT-703	Phy. Chem.	2	-	2	-	20	30	50
	CHP-704	Inorg. Chem Practicals	-	4	-	2	20	30	50
	CHP-705	Org. Chem. Practicals	-	4	-	2	20	30	50
	CHP-706	Phy. Chem. Practicals	-	4	-	2	20	30	50
Minor	CHT-707	Intellectual property right	2	-	2	-	20	30	50
	CHT-708	Nanomaterials	2	-	2	-	20	30	50
	CHP-709	Nanomaterials Practicals	-	4	-	2	20	30	50
AEC	CHT-710	AI in chemistry	2	-	2	-	20	30	50
VAC	CHT-711	Human values ethics	2	-	2	-	20	30	50
Total			14	16	14	08	220	330	550

B.Sc. Third Year Semester-VIII Course Structure

Course type	Course Code	Course Name	Teaching Scheme (Hrs./ week)		Credits Assigned		Marks		
			Theory	Practical	Theory	Practical	Conti. Inter. Assm en.	End. Sem Exam	Total Marks
Internships / Apprenticeship	CHT-801	Internships / Apprenticeship	--	44	-	22	220	330	550

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