University of Mumbai

Website – mu.ac.in
Email id - dr.aams@fort.mu.ac.in
aams3@mu.ac.in

Academic Authorities,
Meetings &Services (AAMS)
Room No. 128, M. G. Road, Fort,
Mumbai – 400 032.
Tel.022-68320033

Re- accredited with A ++ Grade (CGPA 3.65) by NAAC
Category- I University Status awarded by UGC

No. 2026/June/AAMS/C- 161/48209 Date: 5th June, 2026

CIRCULAR:-

Attention of all the Principals of the Affiliated Colleges, all Academic Heads of University Departments, the Directors of the Recognized Institutions/Centres, Director, Centre for Distance & Online Education, Director, Dharmaveer Anand Dighe Thane Sub-Campus, Co-ordinator, School of Engineering and Applied Sciences, Kalyan Sub-Campus, Director, Chitrakar Padmabhushan Dr.Dhananjay Keer Ratnagiri Sub-Campus, Director, Sindhudurg Sub-Campus, Principal, Vishwabhushan Bharatratna Dr. B. A. Ambedkar College, Ambadave, Ratnagiri and Principal, V.V. Dalvie College, Talere, Sindhudurg is invited to this office Circular No. AAMS/ICD/2025-26/ 37 of dated 27 May, 2025 relating to the NEP UG Syllabus.

They are hereby informed that the recommendations made by the **Board of Studies in Chemistry** at its meeting held on 28th March, 2026 and subsequently passed by the Board of Deans at its meeting held on 15th May, 2026 vide item No.1 (c) have been accepted by the Academic Council at its meeting held on 18th May, 2026 **vide** item No.6.3 (N). In accordance therewith syllabus of **B.Sc. (Chemistry) (Scheme - III) (Sem V & VI)** (NEP 2020) is introduced as per appendix with effect from the academic year 2026-27.

(The said circular is available on the University's website www.mu.ac.in).

(Dr. Prasad Karande)
REGISTRAR

MUMBAI – 400 032
05th June, 2026

To

All the Principals of the Affiliated Colleges, all Academic Heads of Departments, the Directors of the Recognized Institutions/Centres, Director, Centre for Distance & Online Education, Director, Dharmaveer Anand Dighe Thane Sub-Campus, Co-ordinator, School of Engineering and Applied Sciences, Kalyan Sub-Campus, Director, Chitrakar Padmabhushan Dr.Dhananjay Keer Ratnagiri Sub-Campus, Director, Sindhudurg Sub-Campus, Principal, Vishwabhushan Bharatratna Dr. B. A. Ambedkar College, Ambadave, Ratnagiri and Principal, V.V. Dalvie College, Talere, Sindhudurg

AC./6.3 (N)/18/5/2026

Copy forwarded with Compliments for information to:-

1) The Chairman, Board of Deans,
2) The Dean, Faculty of Science,
3) The Chairman, **Board of Studies in Chemistry**
4) The Director, Board of Examinations and Evaluation,
5) The Director, Department of Students Development,
6) The Director, Department of Information & Communication Technology,
7) The Director, Centre for Distance and Online Education (CDOE)Vidyanagari,
8) The Deputy Registrar, Admission, Enrolment, Eligibility & Migration Department (AEM).

AC – 18/05/2026
Item No. – 6.3 (N)

As Per NEP 2020

University of Mumbai

Syllabus for Major Vertical – 1, 4 & 6 (Scheme – III)		
Faulty of Science & Technology		
Board of Studies in Chemistry		
Name of the Programme – B.Sc. (Chemistry)		
U.G. Third Year Programme	**Exit Degree**	**B.Sc. (Chemistry)**
Semester		**V & VI**
From the Academic Year		**2026-27**

University of Mumbai

(As per NEP 2020)

Sr. No.	Heading	Particulars
1	Title of program O:_____	B.Sc. (Chemistry)
2	Exit Degree	B.Sc. (Chemistry)
3	Scheme of Examination R: _____	NEP 40% Internal 60% External, Semester End Examination Individual Passing in Internal and External Examination
4	Standards of Passing R: _____	40%
5	Credit Structure R: SU- 525 E (III) R: SU- 525 F (III)	Attached herewith
6	Semesters	Sem. V & VI
7	Program Academic Level	5.5
8	Pattern	Semester
9	Status	New
10	To be implemented from Academic Year	2026-27

Sd/-	Sd/-	Sd/-
Sign of the BOS Dr. Sunil Patil Co-ordinator BOS in Chemistry	Sign of the Offg. Associate Dean Dr. Madhav R. Rajwade Faculty of Science & Technology	Sign of the Offg. Dean Prof. Shivram S. Garje Faculty of Science & Technology

B.Sc. (Chemistry)

Credit Structure (Sem. V & VI)

(B. Sc.)- Major & Minor

	R: SU- 525 E (III)									
Vertical		**1**	**2**		**3**	**4**	**5**	**6**		
Level	**Semester**	**Major 1**	**Major 2 (Minor)**	**Major 3 (Minor)**	**OE**	**VSC, SEC (VSEC)**	**AEC, VEC, IKS**	**OJT, FP, CEP, CC,RP**	**Cum. Cr. / Sem.**	**Degree/ Cum. Cr.**
		M1	M2	M3						
5.5	V	10+4 (**Mandatory + Elective**) Advanced Physical and Analytical Chemistry - Paper I (2) Advanced Analytical and Inorganic Chemistry – Paper II (2) Advanced Inorganic and Organic Chemistry – Paper III (2) Practicals in Advanced Chemistry – I (2) IKS in Chemistry (2) **Elective** Drugs and Dyes / Heavy and Fine Chemicals/ Petrochemicals – I (2) Practicals in Drugs and Dyes / Heavy and Fine Chemicals/ Petrochemicals – I (2	2	----	----	VSC (Practical) : 2 Techniques in Chemical Analysis and Synthesis (2)	----	CC:2 CEP:2	22	**UG Degree 132**
	R: SU- 525 F (III)									

	VI	14+4 (**Mandatory + Elective**) Advanced Physical and Analytical Chemistry - Paper IV (2) Advanced Analytical and Inorganic Chemistry – Paper V (2) Advanced Inorganic and Organic Chemistry – Paper VI (2) Practicals in Advanced Chemistry II (2) Practicals in Advanced Chemistry III (2) **Elective** Drugs and Dyes / Heavy and Fine Chemicals/ Petrochemicals – II (2) Practicals in Drugs and Dyes / Heavy and Fine Chemicals/ Petrochemicals – II (2)	----	----	----	----	----	OJT :4	22	
	Cum Cr.	52	18	8	10	8+2+2	6+4+2	8+6+4	132	
Exit option: Award of UG Degree in Major with 132 credits OR Continue with Major										

[Abbreviation - OE – Open Electives, VSC – Vocation Skill Course, SEC – Skill Enhancement Course, (VSEC), AEC – Ability Enhancement Course, VEC – Value Education Course, IKS – Indian Knowledge System, OJT – on Job Training, FP – Field Project, CEP – Community Engagement Project, CC – Co-Curricular, RP – Research Project]

[* 2 Credit IKS Major paper (Core Subject Specific Theory may be included in Sem III or V)]

Program Structure for Sem. V & VI
(NEP 2020)

Vertical No		Paper Title	Credits
Sem. V			
1.	Mandatory	1. Advanced Physical and Analytical Chemistry - Paper I	2
		2. Advanced Analytical and Inorganic Chemistry – Paper II	2
		3. Advanced Inorganic and Organic Chemistry – Paper III	2
		4. Practicals in Advanced Chemistry - I	2
		5. IKS in Chemistry	2
	Electives	1. Drugs and Dyes / Heavy and Fine Chemicals/ Petrochemicals – I	2
		2. Practicals in Drugs and Dyes / Heavy and Fine Chemicals/ Petrochemicals - I	2
2.	Minor (To be selected from other discipline)		4 (2+2)
4.	VSC (Practical)	Techniques in Chemical Analysis and Synthesis	2
6.	CEP (To be selected from CEP topic list)		2
		Credits	22
Sem. VI			
1.	Mandatory	1. Advanced Physical Chemistry – Paper IV	2
		2. Advanced Inorganic Chemistry – Paper V	2
		3. Advanced Organic Chemistry – Paper VI	2
		4. Advanced Analytical Chemistry – Paper VII	2
		5. Practicals in Advanced Chemistry - II	2
		6. Practicals in Advanced Chemistry - III	2
		7. Practicals in Advanced Chemistry - IV	2
	Electives	1. Drugs and Dyes / Heavy and Fine Chemicals/ Petrochemicals – II	2
		2. Practicals in Drugs and Dyes / Heavy and Fine Chemicals/ Petrochemicals - II	2
6.	VI	OJT	4
		Credits	22
		Total Credits	44

As Per NEP 2020

University of Mumbai

Syllabus for Community Engagement Project (CEP) Vertical-6	
Faulty of Science & Technology	
Board of Studies in Chemistry	
Name of the Programme – B.Sc. (Chemistry)	
Semester	**V**
Credit	**2**
Duration	**30 hrs (Field Work+ Survey) + 15hrs (Discussion + Report Writing) : Total - 45 hrs**
From the Academic Year	**2026-27**

Name of Faculty:- Science & Technology
Name of Programme :- B.Sc. (Chemistry)
Duration :- 30 hrs (Field Work+ Survey) + 15hrs (Discussion + Report Writing) : Total - 45 hrs

Indicative Topics for CEP

Sr. No.	Name of the Topic
1	Water quality testing of local drinking water sources
2	Soil testing and soil health awareness
3	Plastic waste management awareness
4	Composting of biodegradable waste
5	Air pollution awareness survey
6	Green chemistry awareness for sustainable living
7	Rainwater harvesting awareness
8	Environmental impact of detergents
9	Methods of safe drinking water purification
10	Household chemical safety awareness
11	Detection of food adulterants in daily food items
12	Hygiene and sanitation awareness programme
13	Preparation of hand sanitizer
14	Awareness on safe storage of medicines
15	Role of chemistry in daily life
16	pH testing of household substances
17	Preparation of natural acid-base indicators
18	Preparation of eco-friendly cleaning agents
19	Awareness on chemicals in cosmetics
20	Nutritional chemistry awareness (proteins, vitamins)
21	Awareness on chemical fertilizers and soil health
22	Safe use of pesticides awareness
23	Biofertilizers and sustainable agriculture
24	Water conservation awareness in agriculture
25	Soil pH and crop suitability awareness

The topics are indicative and the faculty members should allot Community Engagement Project that are relevant and important as per core Subject. The Community Engagement Project may be taken individual or in a group up to 5 students with proper guidance from Faculty.

Evaluation Pattern:-

Evaluation during CEP Program involves two key components :-

External Evaluation 60%

Internal Evaluation 40%

Evaluation Chart

(i) External Evaluation (Marks 30)

Criteria	Marks
Objectives, Literature Review , Methodology, Data Analysis, Conclusion and Recommendations	15
Overall Project Report Structure and Style	5
Presentation Skills & Communication	10
Total	30

(ii) Internal Evaluation by Guide (Marks 20)

Criteria	Marks
Attendance, Community interactions completion and interaction with Supervisor	10
Overall Report quality	10
Total	20