

Division	Faculty of Science & Health Science
School Name	School of Science & Environmental Studies
Department Name	Department of Chemistry
Program Name	B. Sc. Chemistry (Industrial Chemistry)

Sem	Course Type	Total Credits
I		
	University Core	
	Effective Communication	1
	Environment and Sustainability	1
	Foundations of Peace	2
	Indian Constitution	1
	Learning to Learn	1
	Yoga - I	1
	University Core Total	7
	Program Foundation	
	Calculus	3
	Physical Chemistry -I	3
	Physics - I	3
	Physical Chemistry Lab - I	2
	Physics Lab	2
	Program Foundation Total	13
I Total		20
II		
	University Core	
	Co-creation	1
	Critical Thinking	1
	Digital Literacy	1
	Financial Literacy	1
	Yoga - II	1
	University Core Total	5
	Program Foundation	
	Inorganic Chemistry - I	3
	Biochemistry	3
	Inorganic Chemistry Lab - I	2
	Biochemistry Lab	2
	Physics - II	3
	Program Foundation Total	13
	Program Major	
	Introduction to Industrial Chemistry	3
	Program Major Total	3
II Total		21
III		
	Program Capstone Project/Problem Based Learning/Seminar and Internships	
	Project Based Learning - I	1
	Program Capstone Project/Problem Based Learning/Seminar and Internships Total	1
	University Core	
	Research Innovation Design Entrepreneurship (RIDE)	1
	Rural Immersion	1
	Spiritual and Cultural heritage: Indian Experience	2
	University Core Total	4
	University Electives	
	University Electives - I	4
	University Electives Total	4
	Program Foundation	

III	Introduction to Medicinal Chemistry	3
	Organic Chemistry – I	3
	Program Foundation Total	6
	Program Major	
	Physical Chemistry -II	3
	Organic Chemistry Lab -I	2
	Program Major Total	5
III Total		20
IV		
	Program Capstone Project/Problem Based Learning/Seminar and Internships	
	Project Based Learning - II	1
	Program Capstone Project/Problem Based Learning/Seminar and Internships Total	1
	University Electives	
	University Electives - II	4
	University Electives Total	4
	Program Major	
	Physical Chemistry Lab - II	2
	Material Chemistry	3
	Material Chemistry Lab	2
	Organic Chemistry - II	3
	Organic Chemistry Lab - II	2
	Industrial Chemistry - I	3
	Program Major Total	15
IV Total		20
V		
	Program Capstone Project/Problem Based Learning/Seminar and Internships	
	Project Based Learning - III	1
	Seminar - I	2
	Program Capstone Project/Problem Based Learning/Seminar and Internships Total	3
	Program Electives	
	Program Elective - I	4
	Program Electives Total	4
	University Core	
	Managing Conflicts Peacefully: Tools and Techniques	2
	University Core Total	2
	University Electives	
	University Electives - III	4
	University Electives Total	4
	Program Major	
	Polymer Chemistry	3
	Industrial Chemistry lab - I	2
	Industrial Chemistry - II	3
	Program Major Total	8
V Total		21
VI		
	Program Capstone Project/Problem Based Learning/Seminar and Internships	
	Project Based Learning - IV	1
	Analytical Chemistry Lab	2
	Program Capstone Project/Problem Based Learning/Seminar and Internships Total	3
	Program Electives	
	Program Elective - II	4
	Program Electives Total	4
	University Core	
	National Academic Immersion	2

VI	University Core Total	2
	Program Major	
	Analytical Chemistry - I	3
	Industrial Chemistry Lab - II	2
	Inorganic Chemistry - II	3
	Industrial Chemistry - III	3
	Program Major Total	11
VI Total		20
VII		
	Program Capstone Project/Problem Based Learning/Seminar and Internships	
	Mini Project	3
	Internship Skill Development	3
	Seminar - II	2
	Program Capstone Project/Problem Based Learning/Seminar and Internships Total	8
	Program Electives	
	Program Elective - III	4
	Program Electives Total	4
	Program Major	
	Analytical Chemistry- II	3
	MOOC - II	3
	Program Major Total	6
VII Total		18
VIII		
	Program Capstone Project/Problem Based Learning/Seminar and Internships	
	Major Research Project	8
	Industry Internship	8
	Program Capstone Project/Problem Based Learning/Seminar and Internships Total	16
	Program Electives	
	Program Elective - IV	4
	Program Electives Total	4
VIII Total		20
Grand Total		160

Semester	Course Name / Course Title	Program Electives
V	Textile Chemistry	Program Elective - I
V	Industrial Inorganic Chemistry	Program Elective - I
V	Paint Chemistry	Program Elective - I
V	Natural Product Chemistry	Program Elective - I
V	Agrochemicals	Program Elective - I
VI	Speciality Chemicals	Program Elective - II
VI	Intellectual Property Rights	Program Elective - II
VI	Paper Chemistry	Program Elective - II
VI	Metallurgy	Program Elective - II
VI	Rubber Chemistry	Program Elective - II
VII	Medicinal Chemistry	Program Elective - III
VII	Chemical Biology	Program Elective - III
VII	Industrial Chemicals & Environment	Program Elective - III
VII	IT Skills for Chemist	Program Elective - III
VII	Dye Chemistry	Program Elective - III
VIII	Retrosynthesis	Program Elective - IV
VIII	Biodegradable Polymers	Program Elective - IV
VIII	Bioorganic Chemistry	Program Elective - IV
VIII	Food Chemistry	Program Elective - IV
VIII	Catalysis	Program Elective - IV