

**Courses offered for M.Sc. Chemistry Programme under CSS Patten in Affiliated Colleges (2019 onwards)**

Semester	Course Code	Course Title	Instruction/Week	Credits
<b>I</b>	CHE1C01	Quantum Mechanics and Computational Chemistry	4	4
	CHE1C02	Elementary inorganic chemistry	3	4
	CHE1C03	Structure and reactivity of organic Compounds	3	4
	CHE1C04	Thermodynamics, kinetics and catalysis	3	4
	CHE1L01	Inorganic chemistry practical I	4	-
	CHE1L02	Organic chemistry Practical I	4	-
	CHE1L03	Physical chemistry practical I	4	-
		<b>Total credits:</b>	<b>Core</b>	<b>16</b>
<b>II</b>	CHE2C05	Group theory and Chemical Bonding	3	3
	CHE2C06	Coordination chemistry	3	3
	CHE2C07	Organic reaction mechanisms	3	3
	CHE2C08	Electrochemistry, solid state chemistry and Statistical Thermodynamics	3	3
	CHE2L04	Inorganic chemistry practical II	4	3
	CHE2L05	Organic chemistry practical II	4	3
	CHE2L06	Physical chemistry practical II	4	3
		<b>Total credits:</b>	<b>Core</b>	<b>21</b>
<b>III</b>	CHE3C09	Molecular spectroscopy	4	4
	CHE3C10	Organometallic & Bioinorganic chemistry	3	4
	CHE3C11	Reagents and Transformations in Organic Chemistry	3	4
	CHE3L07	Inorganic chemistry practical III	4	
	CHE3L08	Organic chemistry practical III	4	
	CHE3L09	Physical chemistry practical III	4	
	CHE3E01	Synthetic organic chemistry(Elective)	3	4
	CHE3E02	Computational chemistry(Elective)	3	4
	CHE3E03	Green and Nanochemistry(Elective)	3	4
		<b>Total Credits:</b>	<b>Core</b>	<b>12</b>
		<b>Elective</b>	<b>4</b>	

	CHE4C12	Instrumental Methods of Analysis	4	4
	CHE4L10	Inorganic Chemistry Practical IV	3	3
	CHE4L11	Organic Chemistry Practical IV	3	3
	CHE4L12	Physical Chemistry Practical IV	3	3
	CHE4E04	Petrochemicals and Cosmetics(Elective)	4	4
	CHE4E05	Industrial Catalysis(Elective)	4	4
	CHE4E06	Natural Products & Polymers(Elective)	4	4
	CHE4E07	Material Science(Elective)	4	4
	CHE4E08	Organometallic Chemistry	4	4
	CHE4P01	Research Project	3	4
	CHE4V01	Viva Voce		2
		<b>Total Credits:</b>		
			<b>Core</b>	<b>13</b>
			<b>Elective</b>	<b>8</b>
			<b>Project</b>	<b>4</b>
			<b>Viva</b>	<b>2</b>
<b>TOTAL CREDITS OF THE PROGRAMME</b>				
		<b>CORE</b>		<b>62</b>
		<b>ELECTIVE</b>		<b>12</b>
		<b>PROJECT</b>		<b>4</b>
		<b>VIVAVOCE</b>		<b>2</b>
		<b>TOTALCREDITS</b>		<b>80</b>