

Gulbarga



University

*Department of Studies and Research in Chemistry*

**Course Outline and Syllabus for Master of Science (M. Sc) in CHEMISTRY  
Under CBCS and CAGP (Effective from the academic year 2011-2012)**

Semester	Code	Title of the Course	Semester Exam	IA	Total	L	T	P	Credits
		<b>Hard Core</b>							
<b>First</b>	HCT1.1	Inorganic Chemistry-I	80	20	100	4	0	0	4
	HCT1.2	Organic Chemistry-I	80	20	100	4	0	0	4
	HCT1.3	Physical Chemistry-I	80	20	100	4	0	0	4
		<b>Soft-Core (Any One)</b>							
	SCT1.1	Analytical Chemistry-I	80	20	100	4	0	0	4
	SCT1.2	Pharmaceutical Chemistry	80	20	100	4	0	0	4
		<b>Practical</b>							
	HCP1.1	Inorganic Chemistry Practical –I	40	10	50	0	0	2	2
	HCP1.2	Organic Chemistry Practical –I	40	10	50	0	0	2	2
	HCP1.3	Physical Chemistry Practical-I	40	10	50	0	0	2	2
		<b>Soft-Core (Any One)</b>							
	SCP1.1	Analytical Chemistry Practical –I	40	10	50	0	0	2	2
	SCP1.2	Pharmaceutical Chemistry Practical	40	10	50	0	0	2	2
		<b>Total for First Semester</b>	<b>480</b>	<b>120</b>	<b>600</b>				<b>24</b>
<b>Second</b>		<b>Hard Core</b>							
	HCT2.1	Inorganic Chemistry-II	80	20	100	4	0	0	4
	HCT2.2	Organic Chemistry-II	80	20	100	4	0	0	4
		<b>Soft Core (Any One)</b>							
	SCT2.1	Analytical Chemistry-II	80	20	100	4	0	0	4
	SCT2.2	Physical Chemistry-II	80	20	100	4	0	0	4
		<b>Open Elective (Any One)</b>							
	OET2.1	Chemistry-I (Analytical)	80	20	100	4	0	0	4
	OET2.2	Chemistry-II (Physical)	80	20	100	4	0	0	4
		<b>Practical</b>							
	HCP2.1	Inorganic Chemistry Practical –II	40	10	50	0	0	2	2
	HCP2.2	Organic Chemistry Practical –II	40	10	50	0	0	2	2
		<b>Soft Core (Any One)</b>							
	SCP2.1	Analytical Chemistry Practical-II	40	10	50	0	0	2	2
	SCP2.2	Physical Chemistry Practical –II	40	10	50	0	0	2	2
		<b>Open Elective (Any One)</b>							
	OEP2.1	Chemistry Practical-I (Analytical)	40	10	50	0	0	2	2
	OEP2.2	Chemistry Practical-II (Physical)	40	10	50	0	0	2	2
		<b>Total Second Semester</b>	<b>480</b>	<b>120</b>	<b>600</b>				<b>24</b>

Semester	Code	Title of the Course	Semester Exam	IA	Total	L	T	P	Credits
		<b>Hard Core</b>							
<b>Third</b>	HCT3.1	Organic Chemistry-III (Spectroscopy)	80	20	100	4	0	0	4
	HCT3.2	Physical Chemistry-III	80	20	100	4	0	0	4
		<b>Soft-Core (Any One)</b>							
	SCT3.1	Analytical Chemistry-III	80	20	100	4	0	0	4
	SCT3.2	Inorganic Chemistry-III	80	20	100	4	0	0	4
		<b>Open Elective (Any One)</b>							
	OET3.1	Chemistry-III (Inorganic)	80	20	100	4	0	0	4
	OET3.2	Chemistry-IV (Organic)	80	20	100	4	0	0	4
		<b>Practical</b>							
	HCP3.1	Organic Chemistry Practical –III	40	10	50	0	0	2	2
	HCP3.2	Physical Chemistry Practical-III	40	10	50	0	0	2	2
		<b>Soft-Core (Any One)</b>							
	SCP3.1	Analytical Chemistry Practical-III	40	10	50	0	0	2	2
	SCP3.2	Inorganic Chemistry Practical–II	40	10	50	0	0	2	2
		<b>Open Elective (Any One)</b>							
	OEP3.1	Chemistry Practical-III (Inorganic)	40	10	50	0	0	2	2
	OEP3.2	Chemistry Practical-IV (Organic)	40	10	50	0	0	2	2
		<b>Total for Third Semester</b>	<b>480</b>	<b>120</b>	<b>600</b>				<b>24</b>
<b>Fourth</b>		<b>Hard Core</b>							
	HCT4.1	Inorganic Chemistry-IV	80	20	100	4	0	0	4
	HCT4.2	Physical Chemistry-IV	80	20	100	4	0	0	4
		<b>Soft Core (Any One)</b>							
	SCT4.1	Analytical Chemistry-IV	80	20	100	4	0	0	4
	SCT4.2	Special Topics in Org. Chem.	80	20	100	4	0	0	4
		<b>Practical</b>							
	HCP4.1	Inorganic Chemistry Practical-IV	40	10	50	0	0	2	2
	HCP4.2	Physical Chemistry Practical–IV	40	10	50	0	0	2	2
		<b>Soft Core (Any One)</b>							
	SCP4.1	Analytical Chemistry Practical-IV	40	10	50	0	0	2	2
	SCP4.2	Organic Chemistry Practical -IV	40	10	50	0	0	2	2
	HCMP4.3	Major Project	120	30	150	0	0	6	6
		<b>Total Fourth Semester</b>	<b>480</b>	<b>120</b>	<b>600</b>				<b>24</b>

L = Lecture; T = Tutorials; P = Practical's; 4 Credits of Theory = 4 Hours teaching per week  
 2 Credits of Practical's = 4 Hours per week

Scheme of Practical Exam: Expts-30 Marks, Viva-voce-5 Marks, Record-5 Marks = 40 Marks  
 Major Project: Project Evaluation-90 Marks & Viva-voce-30 Marks = 120 Marks