



Bankura University B. Sc. Three Years Degree (Honours) CBCS w.e.f. 2017-18

**CBCS SYLLABUS**  
**FOR**  
**THREE YEARS UNDER-GRADUATE COURSE**  
**IN**  
**CHEMISTRY (HONOURS)**  
*(w.e.f. 2017)*



**BANKURA UNIVERSITY**  
**BANKURA**  
**WEST BENGAL**  
**PIN 722155**

**MODEL STRUCTURE IN CHEMISTRY (HONOURS)****SEMESTER – I**

Course Code	Course Title	Credit	Marks			No. of Hours/ Week			
			IA	ESE		Total	Lec	Tu	Pr
UG/CHEM/ 101/C-1	Organic Chemistry I (T1&P1)	6	10	Th	Pr	50	4	X	4
				25	15				
UG/CHEM/ 102/C-2	Physical Chemistry I (T2&P2)	6	10	Th	Pr	50	4	X	4
				25	15				
UG/CHEM/ 103/GE-1	Atomic Structure, Chemical Periodicity, Acids and Bases, Redox Reactions, General Organic Chemistry and Aliphatic Hydrocarbons (T1&P1)	6	10	Th	Pr	50	4	X	4
				25	15				
UG/104/ AECC-1	Environmental Studies	4	10	40		50			
<b>Total in Semester – I</b>		<b>22</b>	<b>40</b>	<b>160</b>		<b>200</b>			

**SEMESTER – II**

Course Code	Course Title	Credit	Marks			No. of Hours/Week			
			I.A	ESE		Total	Lec.	Tu.	Pr.
UG/CHEM/ 201/C-3	Inorganic Chemistry I (T3&P3)	6	10	Th	Pr	50	4	X	4
				25	15				
UG/CHEM/ 202/C-4	Organic Chemistry II (T4&P4)	6	10	Th	Pr	50	4	X	4
				25	15				
UG/CHEM/ 203/GE-2	States of Matter & Chemical Kinetics; Chemical Bonding & Molecular Structure, p-Block Elements (T2&P2)	6	10	Th	Pr	50	4	X	4
				25	15				
UG/204/ AECC-2	English/Hind/MIL	2	10	40		50			
<b>Total in Semester – II</b>		<b>20</b>	<b>40</b>	<b>160</b>		<b>200</b>			

**SEMESTER –III**

Course Code	Course Title	Credit	Marks			No. of Hours/Week			
			I.A.	ESE		Total	Lec.	Tu.	Pr.
UG/CHEM /301/C-5	Physical Chemistry II (T5&P5)	6	10	Th	Pr	50	4	X	4
				25	15				
UG/CHEM /302/ C-6	Inorganic Chemistry II (T6&P6)	6	10	Th	Pr	50	4	X	4
				25	15				
UG/CHEM /303/C-7	Organic Chemistry III (T7&P7)	6	10	Th	Pr	50	4	X	4
				25	15				
UG/CHEM /304/GE-3	Chemical Energetics , Conductance ; Organic Chemistry –II (T3&P3)	6	10	Th	Pr	50	4	X	4
				25	15				
UG/CHEM /305/SEC-1	Basic Analytical Chemistry (T1)	2	10	Th	Pr	50	1	X	2
				25	15				
<b>Total in Semester – III</b>		<b>26</b>	<b>50</b>	<b>200</b>		<b>250</b>			

**SEMESTER –IV**

Course Code	Course Title	Credit	Marks			No. of Hours/ Week			
			I.A.	ESE		Total	Lec.	Tu.	Pr.
UG/CHEM /401/C-8	Physical Chemistry III (T8&P8)	6	10	Th	Pr	50	4	X	4
				25	15				
UG/CHEM /402/C-9	Inorganic Chemistry III (T9&P9)	6	10	Th	Pr	50	4	X	4
				25	15				
UG/CHEM /403/C-10	Organic Chemistry IV (T10&P10)	6	10	Th	Pr	50	4	X	4
				25	15				
UG/CHEM /404/GE-4	Transition Metal & Coordination Chemistry; Functional Group Organic Chemistry (T4&P4)	6	10	Th	Pr	50	4	X	4
				25	15				
UG/CHEM 405/SEC-2	Pharmaceutical Chemistry (T2)	2	10	Th	Pr	50	1	X	2
				25	15				
<b>Total in Semester – IV</b>		<b>26</b>	<b>50</b>	<b>200</b>		<b>250</b>			

**SEMESTER – V**

Course Code	Course Title	Credit	Marks			No. of Hours/Week			
			I.A	ESE		Total			
UG/CHEM/ 501/C-11	Inorganic Chemistry IV (T11&P11)	6	10	Th	Pr	50	4	X	4
				25	15				
UG/CHEM/ 502/C-12	Organic Chemistry V (T12&P12)	6	10	Th	Pr	50	4	X	4
				25	15				
UG/CHEM/ 503/DSE-1	Advanced Physical Chemistry (T1&P1)	6	10	Th	40	50	4	X	4
				25	15				
UG/CHEM/ 504/DSE-2	Green Chemistry (T2&P2)	6	10	Th	Pr	50	4	X	4
				25	15				
<b>Total in Semester – V</b>		<b>24</b>	<b>40</b>	<b>160</b>		<b>200</b>			

**SEMESTER – VI**

Course Code	Course Title	Credit	Marks			No. of Hours/Week			
			I.A	ESE		Total	Lec.	Tu.	Pr.
UG/CHEM/ 601/C-13	Inorganic Chemistry V (T13&P13)	6	10	Th	Pr	50	4	X	4
				25	15				
UG/CHEM/ 602/C-14	Physical Chemistry IV (T14&P14)	6	10	Th	Pr	50	4	X	4
				25	15				
UG/CHEM/ 603/DSE-3	Analytical Methods in Chemistry (T3&P3)	6	10	Th	Pr	50	4	X	4
				25	15				
UG/CHEM/ 604/DSE-4	Polymer Chemistry (T4&P4)	6	10	Th	Pr	50	4	X	4
				25	15				
<b>Total in Semester – VI</b>		<b>24</b>	<b>40</b>	<b>160</b>		<b>200</b>			

SC = Subject Code, C= Core Course, AECC= Ability Enhancement Compulsory Course, SEC= Skill Enhancement Course, GE= Generic Elective, DSE= Discipline Specific Elective IA= Internal Assessment, ESE= End-Semester Examination, Lec.=Lecture, Tu.= Tutorial, and Pr.=Practical