

B.Sc. (Hons) Chemistry with Mathematics

Year: First/ Semester: First (Odd Semester)

S. N.	Course Code	Course Title	Theory (T) / Practical (P)	Course Type	Periods/ Per week			Continuous Assessment			End Semester Examination (ESE)	Subject Total	Total Credit Points	Attributes							United Nations Sustainable Development Goals (SDGs)
					Lecture (L)	Tutorial (T)	Practical (P)	Class Test (CT)	Teacher Assessment (TA)	Total				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
1	B020101T/CH151	Fundamentals of Chemistry-I	T	Core Major	3	1	-	15	10	25	75	100	04	√		√					4 QUALITY EDUCATION 
2	B020102P/CH134	Quantitative Analysis	P		-	-	4	15	10	25	75	100	02	√	√	√					4 QUALITY EDUCATION 
3	B030101T/MT136	Differential Calculus & Integral Calculus	T		3	1	-	15	10	25	75	100	04								-
4	B030102P/MT137	Practical using Mathematica/MATLAB	P		-	-	4	15	10	25	75	100	02								-
5	• B000101V/CH137 • --	• Plastic Waste Management • MOOCs/SWAYAM etc.	T + P	Vocational	1	-	2	-	-	-	100	100	03	√	√	√		√			4 QUALITY EDUCATION  13 CLIMATE ACTION 
6	Z010101T/BE105	Food Nutrition and Hygiene	T	Co-curricular	2	-	-	15	10	25	75	100	02	√		√		√			3 GOOD HEALTH AND WELL-BEING  4 QUALITY EDUCATION 
7	A050101T/HM101	Rashtra Gaurav*	T	Audit Course	2	-	-	-	-	-	100	100	00					√	√	√	4 QUALITY EDUCATION 
TOTAL					11	02	10	75	50	125	575	700	17								

*Qualifying (Non-Credit Course)

B.Sc. (Hons) Chemistry with Physics
Year: First/ Semester: First (Odd Semester)

S. N.	Course Code	Course Title	Theory (T) / Practical (P)	Course Type	Periods/ Per week			Continuous Assessment			End Semester Examination (ESE)	Subject Total	Total Credit Points	Attributes							United Nations Sustainable Development Goals (SDGs)
					Lecture (L)	Tutorial (T)	Practical (P)	Class Test (CT)	Teacher Assessment (TA)	Total				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
1	B020101T/CH151	Fundamentals of Chemistry-I	T	Core Major	3	1	-	15	10	25	75	100	04	√		√					4 QUALITY EDUCATION 
2	B020102P/CH134	Quantitative Analysis	P		-	-	4	15	10	25	75	100	02	√	√	√					4 QUALITY EDUCATION 
3	B010101T/PY113	Mathematical Physics & Newtonian Mechanics	T		3	1	-	15	10	25	75	100	04								-
4	B010102P/PY114	Mechanical Properties of Matter	P		-	-	4	15	10	25	75	100	02								-
5	• B000101V/CH137 • --	• Plastic Waste Management • MOOCs/SWAYAM etc.	T + P	Vocational	1	-	2	-	-	-	100	100	03	√	√	√		√			4 QUALITY EDUCATION  13 CLIMATE ACTION 
6	Z010101T/BE105	Food Nutrition and Hygiene	T	Co-curricular	2	-	-	15	10	25	75	100	02	√		√		√			3 GOOD HEALTH AND WELL-BEING  4 QUALITY EDUCATION 
7	A050101T/HM101	Rashtra Gaurav*	T	Audit Course	2	-	-	-	-	-	100	100	00					√	√	√	4 QUALITY EDUCATION 
TOTAL					11	02	10	75	50	125	575	700	17								

*Qualifying (Non-Credit Course)

B.Sc. (Hons) Chemistry with Zoology
Year: First/ Semester: First (Odd Semester)

S. N.	Course Code	Course Title	Theory (T) / Practical (P)	Course Type	Periods/ Per week			Continuous Assessment			End Semester Examination (ESE)	Subject Total	Total Credit Points	Attributes							United Nations Sustainable Development Goals (SDGs)
					Lecture (L)	Tutorial (T)	Practical (P)	Class Test (CT)	Teacher Assessment (TA)	Total				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
3 	20101T/CH151	Fundamentals of Chemistry-I	T	Core Major	3	1	-	15	10	25	75	100	04	√		√					
1																					
2	B020102P/CH134	Quantitative Analysis	P		-	-	4	15	10	25	75	100	02	√	√	√					
3	B050101T/BS164	Cytology, genetics & infectious diseases	T		3	1	-	15	10	25	75	100	04								-
4	B050102P/BS165	Cell Biology & Cytogenetics lab	P		-	-	4	15	10	25	75	100	02								-
5	• B000101V/CH137 • --	• Plastic Waste Management • MOOCs/SWAYAM etc.	T + P	Vocational	1	-	2	-	-	-	100	100	03	√	√	√		√			 
6	Z010101T/BE105	Food Nutrition and Hygiene	T	Co-curricular	2	-	-	15	10	25	75	100	02	√		√		√			 
7	A050101T/HM101	Rashtra Gaurav*	T	Audit Course	2	-	-	-	-	-	100	100	00					√	√	√	
TOTAL					11	02	10	75	50	125	575	700	17								

*Qualifying (Non-Credit Course)

B.Sc. (Hons) Chemistry with Botany
Year: First/ Semester: First (Odd Semester)

S. N.	Course Code	Course Title	Theory (T) / Practical (P)	Course Type	Periods/ Per week			Continuous Assessment			End Semester Examination (ESE)	Subject Total	Total Credit Points	Attributes							United Nations Sustainable Development Goals (SDGs)
					Lecture (L)	Tutorial (T)	Practical (P)	Class Test (CT)	Teacher Assessment (TA)	Total				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
1	B020101T/CH151	Fundamentals of Chemistry-I	T	Core Major	3	1	-	15	10	25	75	100	04	√		√					
2	B020102P/CH134	Quantitative Analysis	P		-	-	4	15	10	25	75	100	02	√	√	√					
3	B040101T/BS166	Microbiology & Plant Pathology	T		3	1	-	15	10	25	75	100	04								-
4	B040102P/BS167	Techniques in Microbiology & Plant Pathology	P		-	-	4	15	10	25	75	100	02								-
5	• B000101V/CH137 • --	• Plastic Waste Management • MOOCs/SWAYAM etc.	T + P	Vocational	1	-	2	-	-	-	100	100	03	√	√	√		√			 
6	Z010101T/BE105	Food Nutrition and Hygiene	T	Co-curricular	2	-	-	15	10	25	75	100	02	√		√		√			 
7	A050101T/HM101	Rashtra Gaurav*	T	Audit Course	2	-	-	-	-	-	100	100	00					√	√	√	
TOTAL					11	02	10	75	50	125	575	700	17								

*Qualifying (Non-Credit Course)

B.Sc. (Hons) Chemistry with Mathematics

Year: First/ Semester: Second (Even Semester)

S. N.	Course Code	Course Title	Theory (T) / Practical (P)	Course Type	Periods/ Per week			Continuous Assessment			End Semester Examination (ESE)	Subject Total	Total Credit Points	Attributes							United Nations Sustainable Development Goals (SDGs)
					Lecture (L)	Tutorial (T)	Practical (P)	Class Test (CT)	Teacher Assessment (TA)	Total				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
1	B020201T/CH139	Bioorganic and Materials Chemistry	T	Core Major	3	1	-	15	10	25	75	100	04	√		√					
2	B020202P/CH141	Biochemical Analysis	P		-	-	4	15	10	25	75	100	02	√	√	√					
3	B030201T/MT138	Matrices and Differential Equations & Geometry	T		5	1	-	15	10	25	75	100	06								-
4	- A040209T/LN109 - B150203T/ES135; - B150204P/ES136 -	- Basics of Communication - Eco-restoration and Invaded Ecosystems; - Ecosystems Dynamic Lab - BS	T	Minor Course	3	1	4	15	10	25	75	100	06	√	√	√		√	√	√	-
5	- I030202V/MT14 - B000201V/CH144 --	- LaTeX -Scientific Writing - Laboratory Safety & Sample Handling - MOOCs/SWAYAM etc.	T + P	Vocational	1	-	2	-	-	-	100	100	03	√		√		√	√	√	 
6	Z020201T/NS110	First Aid and Health	T	Co-curricular	2	-	-	15	10	25	75	100	02	√		√		√	√	√	 
7	B020205T/CH159	Advanced Application of Artificial Intelligence in Chemical Sciences*	T	Audit Course	2	-	-	-	-	-	100	100	00	√	√	√					 
TOTAL					16	03	10	75	50	125	575	700	23								

*Qualifying (Non-Credit Course)

B.Sc. (Hons) Chemistry with Physics
Year: First/ Semester: Second (Even Semester)

S. N.	Course Code	Course Title	Theory (T) / Practical (P)	Course Type	Periods/ Per week			Continuous Assessment			End Semester Examination (ESE)	Subject Total	Total Credit Points	Attributes							United Nations Sustainable Development Goals (SDGs)
					Lecture (L)	Tutorial (T)	Practical (P)	Class Test (CT)	Teacher Assessment (TA)	Total				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
1	B020201T/CH139	Bioorganic and Materials Chemistry	T	Core Major	3	1	-	15	10	25	75	100	04	√		√					
2	B020202P/CH141	Biochemical Analysis	P		-	-	4	15	10	25	75	100	02	√	√	√					
3	B010201T/PY115	Thermal Physics & Semiconductor Devices	T		3	1	-	15	10	25	75	100	04								-
4	B010202P/PY116	Thermal Properties of Matter & Electronic Circuits	P		-	-	4	15	10	25	75	100	02								-
5.	- A040209T/LN109 - B150203T/ES135; - B150204P/ES136 -	- Basics of Communication - Eco-restoration and Invaded Ecosystems; - Ecosystems Dynamic Lab - BS	T	Minor Course	3	1	4	15	10	25	75	100	06	√	√	√		√	√	√	-
6.	- I030202V/MT14 - B000201V/CH144 --	- LaTeX -Scientific Writing - Laboratory Safety & Sample Handling - MOOCs/SWAYAM etc.	T + P	Vocational	1	-	2	-	-	-	100	100	03	√		√		√	√	√	 
7.	Z020201T/NS110	First Aid and Health	T	Co-curricular	2	-	-	15	10	25	75	100	02	√		√		√	√	√	 
8.	B020205T/CH159	Advanced Application of Artificial Intelligence in Chemical Sciences*	T	Audit Course	2	-	-	-	-	-	100	100	00	√	√	√					 
TOTAL					14	03	14	90	60	150	650	800	23								

*Qualifying (Non-Credit Course)

B.Sc. (Hons) Chemistry with Zoology
Year: First/ Semester: Second (Even Semester)

S. N.	Course Code	Course Title	Theory (T) / Practical (P)	Course Type	Periods/ Per week			Continuous Assessment			End Semester Examination (ESE)	Subject Total	Total Credit Points	Attributes							United Nations Sustainable Development Goals (SDGs)
					Lecture (L)	Tutorial (T)	Practical (P)	Class Test (CT)	Teacher Assessment (TA)	Total				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
1	B020201T/CH139	Bioorganic and Materials Chemistry	T	Core Major	3	1	-	15	10	25	75	100	04	✓		✓					
2	B020202P/CH141	Biochemical Analysis	P		-	-	4	15	10	25	75	100	02	✓	✓	✓					
3	B050201T/BS175	Biochemistry & Physiology	T		3	1	-	15	10	25	75	100	04								-
4	B050202P/BS176	Physiological, Biochemical & Haematology Lab	P		-	-	4	15	10	25	75	100	02								-
5.	- A040209T/LN109 - B150203T/ES135; - B150204P/ES136 -	- Basics of Communication - Eco-restoration and Invaded Ecosystems; - Ecosystems Dynamic Lab - BS	T	Minor Course	3	1	4	15	10	25	75	100	06	✓	✓	✓		✓	✓	✓	-
6.	- I030202V/MT14 - B000201V/CH144 --	- LaTeX -Scientific Writing - Laboratory Safety & Sample Handling - MOOCs/SWAYAM etc.	T + P	Vocational	1	-	2	-	-	-	100	100	03	✓		✓		✓	✓	✓	 
7.	Z020201T/NS110	First Aid and Health	T	Co-curricular	2	-	-	15	10	25	75	100	02	✓		✓		✓	✓	✓	 
8.	B020205T/CH159	Advanced Application of Artificial Intelligence in Chemical Sciences*	T	Audit Course	2	-	-	-	-	-	100	100	00	✓	✓	✓					 
TOTAL					14	03	14	90	60	150	650	800	23								

*Qualifying (Non-Credit Course)

B.Sc. (Hons) Chemistry with Botany
Year: First/ Semester: Second (Even Semester)

S. N.	Course Code	Course Title	Theory (T) / Practical (P)	Course Type	Periods/ Per week			Continuous Assessment			End Semester Examination (ESE)	Subject Total	Total Credit Points	Attributes							United Nations Sustainable Development Goals (SDGs)
					Lecture (L)	Tutorial (T)	Practical (P)	Class Test (CT)	Teacher Assessment (TA)	Total				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
1	B020201T/CH139	Bioorganic and Materials Chemistry	T	Core Major	3	1	-	15	10	25	75	100	04	√		√					
2	B020202P/CH141	Biochemical Analysis	P		-	-	4	15	10	25	75	100	02	√	√	√					
3	B040201T/BS177	Archegoniates & Plant Architecture	T		3	1	-	15	10	25	75	100	04								-
4	B040202P/BS178	Land Plants Architecture	P		-	-	4	15	10	25	75	100	02								-
5.	- A040209T/LN109 - B150203T/ES135; - B150204P/ES136 -	- Basics of Communication - Eco-restoration and Invaded Ecosystems; - Ecosystems Dynamic Lab - BS	T	Minor Course	3	1	4	15	10	25	75	100	06	√	√	√		√	√	√	-
6.	- I030202V/MT14 - B000201V/CH144 --	- LaTeX -Scientific Writing - Laboratory Safety & Sample Handling - MOOCs/SWAYAM etc.	T + P	Vocational	1	-	2	-	-	-	100	100	03	√		√		√	√	√	 
7.	Z020201T/NS110	First Aid and Health	T	Co-curricular	2	-	-	15	10	25	75	100	02	√		√		√	√	√	 
8.	B020205T/CH159	Advanced Application of Artificial Intelligence in Chemical Sciences*	T	Audit Course	2	-	-	-	-	-	100	100	00	√	√	√					 
TOTAL					14	03	14	90	60	150	650	800	23								

*Qualifying (Non-Credit Course)