









S. N.	Course Code	Course Title	Theory / Practical	Course Type	Periods/ Per week			Continuous Assessment			(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	
THEORIES																					
1	B030101T/MT136	Differential Calculus & Integral Calculus	Theory	Core Major (Compulsory)	3	1	0	15	10	25	75	100	04	✓	✓						
2	B060101T/MT139	Descriptive Statistics (Univariate) & Theory of Probability	Theory	Core Major (Elective)	3	1	0	15	10	25	75	100	04	✓	✓						
	B070101T/CS127	Problem Solving using Computer												✓	✓						
	B010101T/ PY113	Mathematical Physics & Newtonian Mechanics												✓	✓						
	B020101T/CH151	Fundamentals of Chemistry-I												✓	✓						
3	I030103V/MT143	Introduction to LaTeX OR MOOCs/SWAYAM etc.	Theory+ Practical	Vocational	2	0	2	-	-	-	100	100	03	✓	✓						
4	Z010101T/BE105	Food Nutrition and Hygiene	Theory	Co-curricular (Compulsory)	2	0	0	15	10	25	75	100	02	✓	✓	✓	✓	✓	✓		
5	A050101T/HE101	Rashtra Gaurav	Theory	Non Credit/Audit	2	0	0	-	-	-	-	100	00						✓	 	








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					Lecture (L)	Tutorial (T)	Practical (P)	Class Test (CT)	Teacher Assessment (TA)	Total				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	
THEORIES																				
1	B030201T/MT138	Matrices and Differential Equations & Geometry	Theory	Core Major (Compulsory)	4	2	0	15	10	25	75	100	06	✓	✓					
2	B060201T/ MT141	Descriptive Statistics (Bivariate) & Probability Distributions	Theory	Core Major (Elective)	4	2	0	15	10	25	75	100	04	✓	✓					
	B070201T/CS129	Database Management Systems												✓	✓					
	B010201T/PY115	Thermal Physics & Semiconductor Devices												✓	✓					
	B020201T/CH139	Bioorganic and Materials Chemistry												✓	✓					
3	ES115/BM186	Fundamentals of Environmental Science	Theory	Core Minor (Elective)	4	2	0	15	10	25	75	100	06	✓	✓					
	A040209T/LN109	Basics of Communication																		
4	I030202V/MT144	LaTeX – Scientific Writing OR MOOCs/SWAYAM etc.	Theory+ Practical	Vocational	2	0	2	-	-	-	100	100	03	✓	✓					
5	Z020201T/NS110	First Aid and Health	Theory	Co-curricular (Compulsory)	2	0	0	15	10	25	75	100	02	✓	✓	✓	✓	✓		

6	<u>B060203T/MT153</u>	Application of Artificial Intelligence in Mathematical Sciences	Theory	Non Credit/Audit	2	0	0	-	-	-	-	100	00	✓	✓	✓			✓		
PRACTICAL																					
7	B060202P/ MT142	Descriptive Data Analysis Lab (Bivariate)	Practical	Core Major (Elective)	0	0	4	15	10	25	75	100	02	✓		✓					
	B070202P/CS130	Database Management Systems Lab												✓	✓	✓					✓
	B010202P/PY116	Thermal Properties of Matter & Electronic Circuits												✓	✓	✓					✓
	B020202P/CH141	Biochemical Analysis												✓	✓	✓					✓
TOTAL					18	6	6	75	50	125	475	700	23								



Department of Mathematics & Statistics
Evaluation Scheme of Undergraduate & Post Graduate Program as per NEP-2020 Guidelines
B.Sc. (Hons.) Mathematics Four Year program with Double Majors (Statistics/ Computer Science /Physics/Chemistry)
w.e.f. Session 2024-25








Year: Second/ Semester: Third (Odd Semester)

DIPLOMA in Science (Mathematics & Statistics OR Mathematics & Computer Science OR Mathematics & Physics OR Mathematics & Chemistry)

S. N.	Course Code	Course Title	Theory / Practical	Course Type	Periods/ Per week			Continuous Assessment			(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
THEORIES																					
1	B030301T/MT228	Algebra & Mathematical Methods	Theory	Core Major (Compulsory)	4	2	0	15	10	25	75	100	06	✓		✓				 	
2	B060301T/MT230	Theory of Estimation & Sampling Survey	Theory	Core Major (Elective)	3	1	0	15	10	25	75	100	04	✓		✓					
	B070301T/CS273	Operating Systems												✓		✓					
	B010301T/PY207	Electromagnetic Theory & Modern Optics												✓							
	B020301T/CH232	Chemical Dynamics & Coordination Chemistry												✓		✓					
3	I030302V/MT234	Introduction to R OR MOOCs/SWAYAM etc	Theory+ Practical	Vocational	2	0	2	-	-	-	100	100	03	✓		✓					
4		Regional Languages		Minor Co-curricular	2	0	0	15	10	25	75	100	02	✓		✓					

PRACTICAL

5	B060302P/ MT231	Sampling Survey Lab	Practical	Core Major (Elective)	0	0	4	15	10	25	75	100	02	✓	✓	✓		✓	✓	✓											
	B070302P/CS274	Operating Systems Lab	Practical											✓		✓															
	B010302P/PY208	Demonstrative Aspects of Electricity & Magnetism	Practical											✓		✓															
	B020302P/CH234	Physical Analysis	Practical											✓	✓	✓		✓	✓	✓											
TOTAL					11	3	6	60	40	100	400	500	17																		

S. N.	Course Code	Course Title	Theory / Practical	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											
THEORY																																
1	B030601T/MT324	Metric Space & Complex Analysis	Theory	Core Major (Compulsory)	3	1	0	15	10	25	75	100	04	✓		✓																
2	B030602T/MT325	Numerical Analysis & Operations Research	Theory		3	1	0	15	10	25	75	100	04	✓		✓						 										
3	B060601T/MT330 AND B060602T/MT331	Statistical Computing & Introduction to Statistical Software AND Operations Research	Theory	Core Major (Elective)	3	1	0	15	10	25	75	100	04	✓																		
4	B070601T/CS368 AND B070602T/CS369	Data Communication and Computer Networks AND Cyber Security & Cyber Laws	Theory																													
5	B010601T/PY314 AND B010602T/PY315	Solid State & Nuclear Physics AND Analog & Digital Principles & Applications	Theory																						✓							 
6	B020601T/CH353 AND B020602T/CH354	Organic Synthesis-B AND Chemical Energetics and Radiochemistry	Theory																						✓							
PRACTICAL																																
1	B030603P/MT326	Practical on Numerical analysis using Mathematica /MATLAB	Practical	Core Major (Compulsory)	0	0	4	15	10	25	75	100	02	✓		✓																
2	B06060MT332	Operations Research & Statistical Computing Lab	Practical	Core Major (Elective)	0	0	4	15	10	25	75	100	02	✓																		
3	B070603P/CS370	Lab on Computer Networks	Practical																													
4	B010603P/PY316	Analog & Digital Circuits	Practical																													
5	B020603P/CH355	Analytical Methods	Practical																													
TOTAL					12	4	8	90	60	150	450	600	20																			



Department of Mathematics & Statistics

Evaluation Scheme of Undergraduate & Post Graduate Program as per NEP-2020 Guidelines

B.Sc. (Hons.) Mathematics Four Year program with Double Majors (Statistics/ Computer Science /Physics/Chemistry)

w.e.f. Session 2024-25

Year: Fourth / Semester: Seventh (Odd Semester)

4-Year B.Sc. in MATHEMATICS with Honours (<75% Marks)

S. N.	Course Code	Course Title	Theory / Practical	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
THEORY																					
1	B030701T/MT434	Real & Complex Analysis	Theory	Core Major (Compulsory)	3	1	0	15	10	25	75	100	04	✓		✓					
2	B030702T/MT435	Advanced Modern Algebra	Theory		3	1	0	15	10	25	75	100	04	✓		✓					
3	B030703T/MT436	Ordinary & Partial Differential Equations	Theory		3	1	0	15	10	25	75	100	04	✓		✓					
4	B030704T/MT437	Discrete Structures	Theory		3	1	0	15	10	25	75	100	04	✓		✓					
5	B030707/MT455	Advance Mathematical Modelling & Simulation	Theory		3	1	0	15	10	25	75	100	04	✓		✓					
TOTAL					15	5	0	75	50	125	375	500	20								

Department of Mathematics & Statistics
Evaluation Scheme of Undergraduate & Post Graduate Program as per NEP-2020 Guidelines
B.Sc. (Hons.) Mathematics Four Year program with Double Majors (Statistics/ Computer Science /Physics/Chemistry)
w.e.f. Session 2024-25
Year: Fourth / Semester: Eighth (Even Semester)
4-Year B.Sc. in MATHEMATICS with Honours (<75% Marks)

S. N.	Course Code	Course Title	Theory / Practical	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	
THEORY																				
1	B030801T/MT438	Advanced Differential Geometry	Theory	Core Major (Compulsory)	3	1	0	15	10	25	75	100	04	✓						
2	B030802T/MT439	Optimization & Statistical Techniques	Theory		3	1	0	15	10	25	75	100	04	✓						
3	(B030803T/MT440)	Numerical Analysis with Application	Theory		3	1	0	15	10	25	75	100	04	✓						
4	(B030804T/MT441)	Advanced Linear Algebra	Theory		3	1	0	15	10	25	75	100	04	✓						
PRACTICAL																				
5	(B030805P/MT442)	Advanced Numerical Analysis Lab	Practical	Core Major (Compulsory)	0	0	8	15	10	25	75	100	04	✓						
TOTAL					12	4	8	75	50	125	375	500	20							



Department of Mathematics & Statistics

Evaluation Scheme of Undergraduate & Post Graduate Program as per NEP-2020 Guidelines

B.Sc. (Hons.) Mathematics Four Year program with Double Majors (Statistics/ Computer Science /Physics/Chemistry)

w.e.f. Session 2024-25

Year: Fourth / Semester: Seventh (Odd Semester)

4-Year B.Sc. in MATHEMATICS with Honours (>75% Marks)

S. N.	Course Code	Course Title	Theory / Practical	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	
THEORY																					
1	B030701T/MT434	Real & Complex Analysis	Theory	Core Major (Compulsory)	3	1	0	15	10	25	75	100	04	✓		✓					
2	B030702T/MT435	Advanced Modern Algebra	Theory		3	1	0	15	10	25	75	100	04	✓		✓					
3	B030703T/MT436	Ordinary & Partial Differential Equations	Theory		3	1	0	15	10	25	75	100	04	✓		✓					
4	B030704T/MT437	Discrete Structures	Theory		3	1	0	15	10	25	75	100	04	✓		✓					
5	B030604R/MT334 OR B060705R/MT445	Mathematics Project-2 (R-3) OR Statistics Research Project-1 (R-6)	Theory		3	1	0	15	10	25	75	100	04	✓		✓					
TOTAL					15	5	0	75	50	125	375	500	20								

Department of Mathematics & Statistics
Evaluation Scheme of Undergraduate & Post Graduate Program as per NEP-2020 Guidelines
B.Sc. (Hons.) Mathematics Four Year program with Double Majors (Statistics/ Computer Science /Physics/Chemistry)
w.e.f. Session 2024-25
Year: Fourth / Semester: Eighth (Even Semester)
4-Year B.Sc. in MATHEMATICS with Honours (>75% Marks)

S. N.	Course Code	Course Title	Theory / Practical	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	
THEORY																				
1	B030801T/ MT438	Advanced Differential Geometry	Theory	Core Major (Compulsory)	3	1	0	15	10	25	75	100	04	✓						
2	B030802T/ MT439	Optimization & Statistical Techniques	Theory		3	1	0	15	10	25	75	100	04	✓						
3	(B030803T/ MT440)	Numerical Analysis with Application	Theory		3	1	0	15	10	25	75	100	04	✓						
4	(B030804T/ MT441)	Advanced Linear Algebra	Theory		3	1	0	15	10	25	75	100	04	✓						
5	B030806R/ MT444 OR B060805R/ MT446	Mathematics Research Project-2 (R-6) OR Statistics Research Project-2(R-6)	Theory		3	1	0	15	10	25	75	100	04	✓						
TOTAL					15	5	0	75	50	125	375	500	20							



Department of Mathematics & Statistics

Evaluation Scheme of Undergraduate & Post Graduate Program as per NEP-2020 Guidelines







B.Sc. (Hons.) Mathematics Four Year program with Double Majors (Statistics/ Computer Science /Physics/Chemistry)

w.e.f. Session 2024-25

Year: Fifth / Semester: Ninth (Odd Semester)

M.Sc.in MATHEMATICS

S. N.	Course Code	Course Title	Theory / Practical	Course Type	Periods/ Per week			Continuous Assessment			(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	B030901T/ MT538	Geometry of Manifolds	Theory	Core Major (Compulsory)	3	1	0	15	10	25	75	100	04	✓		✓							
2	B030902T/ MT539	Integral Equations with boundary value problem	Theory	Core Major (Compulsory)	3	1	0	15	10	25	75	100	04	✓									
3	B030903T/ MT540	Fluid Dynamics with Application	Theory	Core Major (Compulsory)	3	1	0	15	10	25	75	100	04	✓		✓							
4	B030904T/ MT541	Special Function	Theory	Core Major (Compulsory)	3	1	0	15	10	25	75	100	04	✓		✓							
	B030905R/ MT546	Mathematics Research Project-3	Practical	Core Major (Elective)	0	0	6	-	-	-	-	100	04	✓		✓							
	B060906R/MT550	Statistics Research Project-3			0	0	6	-	-	-	-	-	100	04	✓		✓						
TOTAL					12	4	6	60	40	100	300	500	20										

S. N.	Course Code	Course Title	Theory / Practical	Course Type	Periods/ Per week			Continuous Assessment			(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	B031001T/ MT542	Mechanics with Application	Theory	Core Major (Compulsory)	3	1	0	15	10	25	75	100	04	✓		✓									
2	B031002T/ MT543	Functional Analysis and variational inequality	Theory		3	1	0	15	10	25	75	100	04	✓		✓									
3	B031003T/ MT544	Calculus of Variations with Application	Theory		3	1	0	15	10	25	75	100	04	✓											
4	B031004T/ MT545	Advanced Topology	Theory		3	1	0	15	10	25	75	100	04	✓											
5	B031005R/ MT547	Mathematics Research Project-4	Practical	Core Major (Elective)	0	0	6	-	-	-	-	100	04	✓		✓									
6	B061005R/MT551	Statistics Research Project-4	Practical		✓	✓	✓		✓	✓	✓														
TOTAL					12	4	6	60	60	100	300	500	20												