

B.Sc. (Hons.) Mathematics

FIRST SEMESTER

SN	Course Code	Course Title	Contact hours	Credits
1	BS1MA101	Algebra	3	3
2	BS1MA102	Calculus	4	4
3	BS1PH101	Mechanics and Relativity	4	4
4	BS1PH102	Waves & Sound	3	3
5	BS1CH101	Atomic Structure and Chemical Bonding	3	3
6	BS1CH102	Organic Chemistry I	3	3
7	BS1HS101	Presentation & Communication Skills	2	2
8	BS1CH171	Quantitative and Qualitative Analysis Lab	2	1
9	BS1PH171	Physics Lab I	2	1
Total			26	24

SECOND SEMESTER

SN	Course Code	Course Title	Contact hours	Credits
1	BS1MA201	Linear Algebra	4	4
2	BS1MA202	Ordinary Differential Equations	4	4
3	BS1PH201	Electricity & Magnetism	3	3
4	BS1PH202	Heat and Thermodynamics	3	3
5	BS1CH201	Inorganic Chemistry	3	3
6	BS1CH202	Physical Chemistry I	3	3
7	BS1CI201	Computer Programming	3	3
8	BS1CH271	Physical Chemistry Lab	2	1
9	BS1PH271	Physics Lab II	2	1
10	BS1CI271	Computer Programming Lab	2	1
11	BS1HS201	English	2	0
Total			31	26

THIRD SEMESTER

SN	Course Code	Course Title	Contact hours	Credits
1	BS1MA301	Advanced Calculus	4	4
2	BS1MA302	3-Dimensional Geometry	4	4
3	BS1PH301	Optics & Laser Physics	3	3
4	BS1PH302	General Properties of Matter	3	3
5	BS1CH301	Organic Chemistry II	3	3
6	BS1CH302	Physical Chemistry II	3	3
7	BS1CI301	Data Structures	3	3
8	BS1CH371	Chemistry Lab	2	1
9	BS1PH371	Physics Lab III	2	1
10	BS1CI371	Data Structures Lab	2	1
Total			29	26

FOURTH SEMESTER

SN	Course Code	Course Title	Contact hours	Credits
1	BS1MA401	Partial Differential Equations	4	4
2	BS1MA402	Vector and Tensor Analysis	4	4
3	BS1PH401	Atomic & Molecular Physics	3	3
4	BS1PH402	Quantum Mechanics	3	3
5	BS1CH401	Environmental Science	3	3
6	BS1CH402	Industrial Chemistry	3	3
7	BS1CI401	Fundamentals of Algorithms	3	3
9	BS1CI471	Algorithms Lab	2	1
10	BS1MA471	MATLAB Programming	2	1
Total			27	25

FIFTH SEMESTER

SN	Course Code	Course Title	Contact hours	Credits
1	BS1MA501	Analysis I	3	3
2	BS1MA502	Abstract Algebra	3	3
3	BS1MA503	Statics and Dynamics	3	3
4	BS1MA504	Discrete Mathematics	3	3
5	BS1CI501	Object Oriented Programming	3	3
6	BS1CI502	Cryptography and Network Security	3	3
7	BS2MA50X	Elective I	3	3
8	BS2MA50X	Elective II	3	3
9	BS1CI571	Object Oriented Programming Lab	2	1
Total			26	25

SIXTH SEMESTER

SN	Course Code	Course Title	Contact hours	Credits
1	BS1MA601	Analysis-II	3	3
2	BS1MA602	Differential Geometry	3	3
3	BS1MA603	Numerical Analysis	3	3
4	BS1MA604	Mechanics	3	3
5	BS1MA605	Operations Research	3	3
6	BS2MA60X	Elective III	3	3
7	BS2MA60X	Elective IV	3	3
8	BS1CI601	Operating Systems	3	3
9	BS1CI671	Operating Systems Lab	2	1
10	BS1CI672	Project		6
Total			26	31