

BSMS-Physics

SEMESTER - I

S.No	C. Code	Course	L	T	P	C
1	MA 101	Calculus	3	1.5	0	9
2	PH 101	Quantum Physics and Applications	2	1	0	6
3	CH101T	Fundamental Concepts and Applications of Chemistry	3	0	0	6
4	BB 103	Introduction to Modern biology	3	0	0	6
5	PH 113	Hands on Science Laboratory - I	0	0	3	3
6	CS 101	Computer Programming	3	0	3	9
7	HS 106	Design Thinking and Creativity	1	0	0	PP/NP
8	NO107/ NO105/	NSO/NSS/NCC/NCA	0	0	2	2
First Semester Total Credits						41

Semester - II

S. No	Course Code	Course Name	L	T	P	C
1	CS201	Data Structure & Algorithms	3	0	0	6
2	BB201	Biomolecules	2	1	0	6
3	MA XXX	Linea lgebra and Differential Equations	3	1.5	0	9
4	PH102	Electricity and Magnetism	2	1	0	6
5	CH203T	States of Matter	3	0	0	3
6	CH201T	Organic Chemisrty	3	0	0	3
7	CS211	Data Structure & Algorithms Lab	0	0	3	3
8	CH101L	Hands on Science Laboratory-II	0	0	3	3
9	NO107/ NO105	NSO/NSS/NCC/NCA	0	0	2	2
Total Credits						41

Semester III

S. No	Course Code	Course Name	L	T	P	C
1	HS 201	Economics	3	0	0	6
2	BB 301	Basics of Cell Biology and Genetics	3	0	0	6
3	CH204T	Physical Organic and Bioorganic Chemistry (1st Half)	3	0	0	3
4	CH202T	Inorganic Chemistry (2nd Half)	3	0	0	3
5	MA 209	Introduction to Probability Theory	3	1	0	8
6	PH 205	Waves, Oscillations & Optics	2	1	0	6
7	MA 223	Mathematics Laboratory	0	0	3	3
Total Credits						35

Semester - IV

S. No	Course Code	Course Name	L	T	P	C
1	CE 301	Environmental Studies	3	0	0	6
2	EE 229	Electronic Device (Post Mid Sem)	3	0	0	3

3	PH 322	Mathematical Physics-I	2	1	0	6
4		Program Elective-I	2	1	0	6
5		HSS Elective-I	3	0	0	6
6	PH 312	General Physics Laboratory	0	0	3	3
		Total Credits				30

Semester V

<u>S.No</u>	<u>Course Code</u>	<u>Course Name</u>	<u>L</u>	<u>T</u>	<u>P</u>	<u>C</u>
1	PH301T	Electrodynamics	2	1	0	6
2	PH302T	Classical Mechanics	3	0	0	6
3	PH303T	Quantum Mechanics - I	2	1	0	6
4	PH420T	Electronics	2	1	0	6
5	PH501T	Mathematical Physics-II	2	1	0	6
6	PH402L	Electronics Laboratory	0	0	3	3
		Total Credits				33

Semester VI

<u>S.No</u>	<u>Course Code</u>	<u>Course Name</u>	<u>L</u>	<u>T</u>	<u>P</u>	<u>C</u>
1	PH401T	Quantum Mechanics - II	2	1	0	6
2	PH305T	Statistical Physics	3	0	0	6
3	PH402T	Condensed Matter Physics	2	1	0	6
4		Institute Elective-I	2	1	0	6
5		Program Elective-I	2	1	0	6
6		Institute Elective-II	2	1	0	6
		Total Credits				36

Semester VII

<u>S.No</u>	<u>Course Code</u>	<u>Course Name</u>	<u>L</u>	<u>T</u>	<u>P</u>	<u>C</u>
1	PH501C	Numerical Methods	2	1	0	6
2	PH417T	Nuclear and Particle Physics	2	1	0	6
3	PH401L	Advanced Physics Laboratory	0	0	3	3
4		Program Elective-II	2	1	0	6
5		Institute Elective-III/PH501P:RnD Project	2	1	0	6
		Seminar-I	0	0	4	4
		Total Credits				31

Semester VIII

<u>S.No</u>	<u>Course Code</u>	<u>Course Name</u>	<u>L</u>	<u>T</u>	<u>P</u>	<u>C</u>
1	PH414T	Atomic and Molecular Physics	2	1	0	6
2		Institute Elective-IV	2	1	0	6
3		Institute Elective-V/PH502P R&D Project-2	2	1	0	6
4		Program Elective-III	2	1	0	6
		Total Credits				24

		Overall Credits Required (Minimum)	271
Semester IX & X			
		Independent Project	60
		Total Credits	60
		Overall Credits Required (Minimum)	331