

## BSMS-Physics

SEMESTER - I (Common for all B.Tech Courses)						
S.No	C. Code	Course	L	T	P	C
1	MA 101	Calculus	3	1	0	8
2	PH 101	Quantum Physics and Applications	2	1	0	6
3	CH 102	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	Introduction to Programming	3	0	2	8
7	HS 101	Introduction to Fine Arts	3	0	2	8
8	HS 106	Design Thinking and Creativity	1	0	0	PP/NP
9	NO107/ NO105/ NO 106/ NO 108	NSO/NSS/NCC/NCA	0	0	2	2
First Semester Total Credits						39

Semester - II						
S. No	Course Code	Course Name	L	T	P	C
1	MA 102	Linear Algebra (1st Half)	3	1	0	4
2	MA 103	Differential Equations - I (2nd Half)	3	1	0	4
3	CS 201	Data Structures and Algorithms	3	0	0	6
4	CS 211	Data Structures and Algorithms Laboratory	0	0	3	3
5	PH 102	Electricity and Magnetism	2	1	0	6
6	BB 201	Biomolecules	2	1	0	6
7	CH 203	States of Matter (2nd Half)	3	0	0	3
8	CH 201	Organic Chemistry (1st Half)	3	0	0	3
9	CH 113	Hands On Science Laboratory - II	0	0	3	3
10	NO107/ NO105/ NO 106/ NO 108	NSO/NSS/NCC/NCA	0	0	2	2
Total Credits						40

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	CH 204	Physical Organic and Bioorganic Chemistry (1st Half)	3	0	0	3

4	CH 202	Inorganic Chemistry (2nd Half)	3	0	0	3
5	MA 209	Introduction to Probability Theory	3	1	0	8
6	PH 103	Waves, Oscillations & Optics	2	1	0	6
7	MA 223	Mathematics Laboratory	0	0	3	3
		Total Credits				35

<b>Semester - IV</b>						
<b>S. No</b>	<b>Course Code</b>	<b>Course Name</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	CE 301	Environmental Studies	3	0	0	6
2	EE 229	Electronic Devices (Post-mid-sem)	3	0	0	3
3	PH 204	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 212	General Physics Laboratory	0	0	3	3
7		ALO				
		Total Credits				30

<b>Semester V</b>						
<b>S.No</b>	<b>Course Code</b>	<b>Course Name</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	PH 201	Electrodynamics	2	1	0	6
2	PH 202	Classical Mechanics	2	1	0	6
3	PH 203	Quantum Mechanics - I	2	1	0	6
4	EE 202	Introduction to Analog Circuits (Pre- mid-sem)	3	0	0	3
5	EE 212	Devices and Circuit Lab	0	0	3	3
6		HSS Elective-II	3	0	0	6
7	PH 311	Advanced Physics Lab	0	0	3	3
8		ALO				
		Total Credits				33

<b>Semester VI</b>						
<b>S.No</b>	<b>Course Code</b>	<b>Course Name</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1		Program Elective-II (3-1-0-4)	2	1	0	6
2	PH 304	Statistical Physics	2	1	0	6
3	PH 405	Quantum Mechanics-II	2	1	0	6
4		Institute Elective – I	2	1	0	6
5		Institute Elective – II / Minor Project-I (2-1-0-6)	0	0	6	6
6		ALO				
		Total Credits				30

### Semester VII

S.No	Course Code	Course Name	L	T	P	C
1		Program Elective-III	2	1	0	6
2	PH 307	Seminar – I	0	0	3	3
3		Institute Elective – III	2	1	0	6
4		Institute Elective – VI	2	1	0	6
5		Institute Elective – V / Minor Project-II	0	0	6	6
		ALO				
		Total Credits				27

### Semester VIII

S.No	Course Code	Course Name	L	T	P	C
1		Program Elective-IV	2	1	0	6
2		Institute Elective – VI	2	1	0	6
3		Institute Elective – VII	2	1	0	6
4		Institute Elective – VIII/ Minor Project-III	2	1	0	6
5	PH 308	Seminar – II	0	0	3	3
		ALO				
		Total Credits				27

### Semester IX & X

		Independent Project				60
		Total Credits				60
		Overall Credits Required (Minimum)				<b>321</b>