M. Sc. Physics Curriculum

From the Academic Year 2020-21

Semester – I

S. No.	Course No.	Course Name	L-T-P-C
1.	PH5101	Mathematical Physics-I	3-0-0-3
2.	PH5103	Classical Mechanics	3-1-0-4
3.	PH5105	Classical Electrodynamics	3-1-0-4
4.	PH5107	Quantum Mechanics-I	3-1-0-4
5.	PH5109	Applied Electronics	2-0-3-4
6.	PH5191	Physics Laboratory-I	0-0-3-2
		Total	**21**

Semester - II

S. No.	Course No.	Course Name	L-T-P-C
1.	PH5202	Mathematical Physics-II	3-0-0-3
2.	PH5204	Quantum Mechanics-II	3-1-0-4
3.	PH5206	Statistical Physics	3-1-0-4
4.	PH5208	Condensed Matter Physics	3-1-0-4
5.	PH5210	Computational Physics	2-0-3-4
6.	PH5292	Physics Laboratory-II	0-0-3-2
		Total	**21**

Semester - III

S. No.	Course No.	Course Name	L-T-P-C
1.	PH6101	Atomic and Molecular Physics	3-0-0-3
2.	PH6103	Classical and Quantum Optics	3-0-0-3
3.	FRE1	Free Elective-1	3-0-0-3
4.	PH6191	Advanced Physics Laboratory	0-0-6-4
5.	PH6111	Seminar	- - - 1
6.	PH6150	Project Phase-I	- - - 3
		Total	**17**

Semester - IV

S. No.	Course No.	Course Name	L-T-P-C
1.	PH6202	Nuclear and Particle Physics	3-0-0-3
2.	DPE	Department Elective	3-0-0-3
3.	FRE2	Free Elective-2	3-0-0-3
4.	PH6250	Project Phase-II	- - - 6
		Total	**15**

Total credits: 74

Department Electives

1. PH6021 Basics and Applications of Plasma Physics
2. PH6022 Fundamentals of Laser Physics
3. PH6023 Magnetism and Superconductivity
4. PH6121 Introduction to Condensed Matter Theory
5. PH6122 Quantum Collision Theory
6. PH6123 Advanced Computational Physics
7. PH6124 Advanced Statistical Mechanics
8. PH7021 Physical Techniques in Material Science