

6. SEMESTER-WISE SCHEDULE MSc Physics

SEMESTER I

Course type	Course title	Lecture (L)	Tutorial (T)	Practical (P)	Contact Hour(CH)	Credits
Core	PH 405:Semiconductor Devices	2	1	0	3	3
	PH 408:Electromagnetic Theory I	2	1	0	3	3
	PH 416:Condensed Matter Physics and Material Science	2	1	0	3	3
	PH 417:Advanced Classical Mechanics	2	1	0	3	3
	PH 418:Quantum Mechanics-I	2	1	0	4	3
	PH 400:Physics and Computational Lab	0	1	3	7	4
	PH 498:Physics Lab-I	0	0	4	8	4

SEMESTER II

Course type	Course title	Lecture (L)	Tutorial (T)	Practical (P)	Contact Hour(CH)	Credits
Core	PH 411:Statistical Physics	2	1	0	3	3
	PH 412:Analog and Digital Electronics	2	1	1	5	4
	PH 419:Advanced Mathematical Physics	2	0	1	4	3
	PH 551:Electromagnetic Theory II	2	1	0	3	3
	PH 552:Quantum Mechanics-II	2	1	0	3	3
	PH 455:Seminar	0	0	1	2	1
	PH 499:Physics Lab-II	0	0	4	8	4

SEMESTER III

Course type	Course title	Lecture (L)	Tutorial (T)	Practical (P)	Contact Hour(CH)	Credits
Core	PH 500:Project I	0	0	6	12	6
	PH 415:Nuclear and Particle Physics	2	1	0	3	3
	PH 553:Atomic and Molecular Spectroscopy	2	1	0	3	3
Elective	Elective I	2	1	0	3	3
	Elective II	2	1	0	3	3
	Open Elective-I	2	1	0	3	3

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SEMESTER IV

Course type	Course title	Lecture (L)	Tutorial (T)	Practical (P)	Contact Hour(CH)	Credits
Core	PH 599:Project II	0	0	10	20	10
Elective	Elective III	2	1	0	3	3
	Elective IV	2	1	0	3	3
	Open Elective-II	2	1	0	3	3

**Elective Courses are offered by the Department in Semester III and Semester IV.
Minimum of four is to be chosen from any two specialization.**

Course type	Course title	Lecture (L)	Tutorial (T)	Practical (P)	Contact Hour(CH)	Credits
	Astrophysics					
	PH 564:Introductory Astrophysics	2	1	0	3	3
	PH 565:Elements of GTR and Cosmology	2	1	0	3	3
	Condensed Matter Physics					
	PH 539:Advanced Condensed Matter Physics and Material Science	2	1	0	3	3
	PH 554:Soft Condensed Matter Physics	2	1	0	3	3
	Electronics & Communication					
	PH 522:Communication System	2	1	0	3	3
Elective	PH 523:Microwave Systems and Antenna Propagation	2	1	0	3	3
	PH 524:Digital Signal Processing	2	1	0	3	3
	PH 525:Microprocessors and Digital Signal Processing Based Systems	2	1	0	3	3
	High Energy Physics					
	PH 519:Quantum Field Theory	2	1	0	3	3
	PH 540:Particle Physics	2	1	0	3	3
	Photonics					
	PH 557:Photonics	2	1	0	3	3
	PH 559:Nanophotonics	2	1	0	3	3
	Plasma Physics					
	PH 545:Fundamental of Plasma Physics	2	1	0	3	3
	PH 547:Nonlinear Plasma Physics	2	1	0	3	3
	Nano-Science					
	PH 562:Quantum Effects in Low Dimensional Systems	2	1	0	3	3
	PH 563:Physics of Nano devices	2	1	0	3	3


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