

Program Structure M.Sc. Physics (2 years)

Credits Distribution:

- 60% Core courses ~ 38 credits
- 30% Program Electives (PE) (can be opted from a list specified by the department which can include courses from sister departments which are relevant for the programme) ~ 18 credits
- 10% Open electives (OE) (OE can be opted from any department as per student's choice); ~ 6 credits
OE and PE can include lab courses as well as hands-on sessions
- Project ~ 15 credits
- Total Credits ~ 77

Credit Definition

Type of instruction	L-T-P-D	Distribution of contact and beyond contact hours			Total Credits = TH/3 (TC)
		Contact Hours (CH)	Beyond Contact Hours (BCH)	Total Hours (TH)	
1 hour of Lecture	1-0-0-0	1 hr	2 hr	3 hr	1
1 hour of Tutorial	0-1-0-0	1 hr	2 hr	3 hr	1
1 hour of Lab/ Hands On/ Seminar	0-0-1-0	1 hr	0.5 hr	1.5 hr	0.5
1 hour of Project	0-0-0-1	1 hr	2 hr	3 hr	1

L-Lecture, T-Tutorial, P-Laboratory, D-Project

Structure

Semester I						Semester II					
Type	Nos.	CH	BCH	TH	TC	Type	Nos.	CH	BCH	TH	TC
Lecture	5×(3-0-0-0)	15	30	45	15	Lecture	5×(3-0-0-0)	15	30	45	15
Lab	2×(0-0-3-0)	6	3	9	3	Lab	2×(0-0-3-0)	6	3	9	3
Hands On	1×(0-0-3-0)	3	1.5	4.5	1.5	Hands On	1×(0-0-3-0)	3	1.5	4.5	1.5
Total		24	34.5	58.5	19.5	Total		24	34.5	58.5	19.5
Semester III						Semester IV					
Type	Nos.	CH	BCH	TH	TC	Type	Nos.	CH	BCH	TH	TC
Lecture	4×(3-0-0-0)	12	24	36	12	Lecture	3×(3-0-0-0)	9	18	27	9
Lab	1×(0-0-3-0)	3	1.5	4.5	1.5	Project	1×(0-0-0-10)	10	20	30	10
Seminar	1×(0-0-1-0)	1	0.5	1.5	0.5						
Project	1×(0-0-0-5)	5	10	15	5						
Total		22	35	57	19	Total		19	38	57	19

Semester wise courses (Total credits – 77)

I Semester

<i>Cat.</i>	<i>Course Number, Course Title</i>	<i>L-T-P-D</i>	<i>Credits</i>
C	PHL6010 Mathematical Physics	3-0-0-0	3
C	PHL6020 Classical Mechanics	3-0-0-0	3
C	PHL6030 Quantum Mechanics	3-0-0-0	3
C	PHL6040 Electronics	3-0-0-0	3
C	PHL6050 Statistical Physics	3-0-0-0	3
C	PHP6010 Electronics Lab	0-0-3-0	1.5
C	PHP6020 Condensed Matter Physics Lab	0-0-3-0	1.5
C	PHP6030 Hands-on	0-0-3-0	1.5
<i>Total</i>			19.5

II Semester

<i>Cat.</i>	<i>Course Number, Course Title</i>	<i>L-T-P-D</i>	<i>Credits</i>
C	PHL6060 Electrodynamics	3-0-0-0	3
C	PHL6070 Condensed Matter Physics	3-0-0-0	3
C	PHL6080 Physics of Atoms & Molecules	3-0-0-0	3
C	PHL6090 Nuclear & Particle Physics	3-0-0-0	3
E	Program Elective-1	3-0-0-0	3
C	PHP6040 Atomic & Nuclear Physics Lab	0-0-3-0	1.5
C	PHP6050 Optics & Lasers Lab	0-0-3-0	1.5
C	PHP6060 Hands-on	0-0-3-0	1.5
<i>Total</i>			19.5

III Semester

<i>Cat.</i>	<i>Course Number, Course Title</i>	<i>L-T-P-D</i>	<i>Credits</i>
E	Program Elective-2	3-0-0-0	3
E	Program Elective-3	3-0-0-0	3
E	Program Elective-4	3-0-0-0	3
E	Open Elective-1	3-0-0-0	3
C	Computational Physics Lab	0-0-3-0	1.5
C	Seminar	0-0-1-0	0.5
P	Project	0-0-0-5	5
<i>Total</i>			19.0

IV Semester

<i>Cat.</i>	<i>Course Number, Course Title</i>	<i>L-T-P-D</i>	<i>Credits</i>
E	Program Elective-5	3-0-0-0	3
E	Program Elective-6	3-0-0-0	3
E	Open Elective-2	3-0-0-0	3
P	Project	0-0-0-10	10
<i>Total</i>			19.0