

**SCHEME OF B.Sc. (HONS) PHYSICS 2019-22**

Sem	Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Comm Services	GP	Cont hrs	Credits
I	Waves & Oscillations PYL 101 (3-0-0)3	Mathematical Physics I PYL 104 (3-1-0)4	Applied Mechanics PYL 103 (3-1-0)4	Electricity and Magnetism PYL 105 (3-0-2)4	Effective Communication-I CLL 101 (1-0-2)2	Foreign Language Elective (1 2 0)3		PYR100 1	22	21
II	Optics PYL 102 (3-1-2)5	Leadership SML150 (2 1 0)3	Solid State Physics PYL 106 (3-0-2)4	Quantum Mechanics PYL 108 (3-0-0)3	Effective Comm.-II CLL 102 (1-0-2)2	CLL 120 Human Values (2-0-0)2		PYR110 1	22	22
III	Electromagnetic Theory PYL 201 (3-0-2)4	Thermal Physics PYL203 (3-0-2)4	Statistical Mechanics PYL 205 (3-1-0)4	Prog . Elec. I Lasers/ Nuclear, Particle and Astrophysics/ Fundamentals of Electronic Communication PYL110 (3-1-0)4	EVS CH100 (3-0-0)3	Open Elective I (3)3	PYS201 CS-III (70 hours)	PYR200 1	24	23
IV	Atomic and Molecular Physics PYL204 (3-1-2)5	Entrepreneurship SML300 (2 1 0)3	Prog .Elec. II Non Linear Optics/Biophysics/ Polymer Composites ASL 310 (3-0-2)4	Open Elective II (3)3	Engg. Chemistry CHL150 (2-0-2)3		PYS202 CS-IV (70 hours) (2 crdt)*	PYR220 1	21	20
V	Numerical Analysis MAL310 (3-0-2)4	Digital Electronics PYL 301 (3-1-2)5	Prog .Elec. III (MOOC) Experimental and analytical Techniques/Fiber Optics/Microprocessor PYL303 (3-0-2)4	Open Elective III (3)3	Mathematical Physics II PYL202 (3-1-0)4		PYS301 CS-V	PYR300 1	23	21
VI	Nuclear and Particle Physics PYL 302 (3-1-0)4	Electronic Devices PYL 304 (3-1-0)4	Prog . Elec. IV (MOOC) Optical Communication /Thin films and Nanomaterials (3-0-2)4	Open Elective IV (3)3	PYD 350 Project (0-0-6)3	Creativity and innovation outcome (1) PYL 310	PYS302 CS-VI (140hrs) (2 crdt)	PYR330 1	16	22
	Total								128	129

\*Students can utilize the entire year including the summer break period for completing 140 community service hours.

**SCHEME OF B.Sc. (HONS) PHYSICS 2020-23**

Sem	Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Course 7	Comm Services	GP	Cont hrs	Credits
I	CLL 101 Effective Communication-I 2.5(2-0-1)	MAL 101N Fundamentals of Mathematics 4(3-1-0)	PYL 102N Fundamentals of Physics 4(3-0-2)	ENL101 Statistics & Research Methodology-I 4(4-0-0)	CHL100 Environmental Studies 3(3-0-0)	PSL101 Understanding the Constitution 3(3-0-0)		PYS101 CS-I	PYR100 1	22	21.5
II	CLL 102 Effective Communication-II 2.5(2-0-1)	BSL102 FINE ARTS 2(1-0-2)	PCL102 Psychology for living 3(2-1-0)	CHL111 Fundamentals of Chemistry 4(3-0-2)	MAL 106N Basics of Computer Programming 4(3-0-2)	BSL101 Entrepreneurship 3(2-0-2)	CLL 120 Human Values and Professional Ethics 2(2-0-0)	PYS 102 CS-II (140 hrs= 2 crdts)*	PYR110 1	25	23.5
III	PYL 101 Waves & Oscillations 4(3-0-2)	PYL 106 Solid State Physics 4(3-0-2)	PYL 105 Electricity and Magnetism 4(3-0-2)	Prog . Elec. I 4 credits	Open Elective I 3 credits	MAL 301 Data Analysis 3(2-0-2)		PYS201 CS-III	PYR200 1	26	23
IV	PYL 201 Electromagnetic Theory 4(3-1-0)	PYL 211 Semiconductor Physics 4(3-0-2)	PYL 103 Applied Mechanics 4(3-1-0)	Prog .Elec. II 4 credits	Open Elective II 3 credits			PYS202 CS-IV (140hrs) (2 crdt)*	PYR220 1	21	22
PYI 240 Summer Internship. (0-0-6) 3											
V	PYL 104 Mathematical Physics I 4(3-1-0)	PYL 203N Thermodynamics and Statistical Mechanics 4(3-0-2)	Foreign Language 3(1-2-0)	Prog. Elec. III 4 credits	Open Elective III 3 credits		PYD 350 Project 4(0-0-8)	PYS301 CS-V	PYR300 1	20	23
VI	PYL 108 Quantum Mechanics 4(3-1-0)	PYL202 Mathematical Physics II 4(3-1-0)	PYL 301 Digital Electronics 4(3-0-2)	Prog. Elec. IV 4 credits	Open Elective IV 3 credits	PYL 310 Creativity and innovation outcome (1)	PYD 350 Project 4(0-0-8)	PYS302 CS-VI (140hrs) (2 crdt)	PYR330 1	21	27
Total										135	143

\*Students can utilize the entire year including the summer break period for completing 140 community service hours.