

COURSE Pattern
CBCS Syllabus - B.Sc., Physics
(2021-22 onwards)

SEM	Part	P	Title of the paper	S. Code	H/W	L*	T*	P*	C	Marks		
										I	E	T
I	I	I L-I			6					3		
	II	II L-I			4					4		
	III	DSC-I	Mechanics and Properties of matter		4	3.5	0.5	-		4		
	III	DSC-II	Optics and Acoustics		2	3.5	0.5	-		1		
	III	P-I	Physics Practicals - I	Skill development	2	-	-	2		3		
	III	A-I/1			4					1		
	III	A-I/1P			2					2		
	IV	AECC-I	Value Education I/II		2	-	-	-		2		
II	I	I L-II			6					3		
	II	II L-II			6					3		
	III	DSC-III	Thermal physics and Statistical Mechanics		4	3.5	0.5	-		4		
	III	DSC-IV	Spectroscopy and Laser Physics	Employability	4	3.5	0.5	-		4		
	III	P-II	Physics Practicals - II	Skill development	2	-	-	2		1		
	III	A-I/2			4					3		
	III	A-I/2P			2					1		
	IV	AECC-II	Environmental Studies		2	2	-	-		2		
III	I	I L-III			6					3		
	II	II L-III			6					3		
	III	DSC-V	Electricity and Electromagnetism	Employability	4	3.5	0.5	-		4		
	III	P-III	Physics Practicals - III	Skill development	2	-	-	2		1		
	III	A-II/1			4					3		
	III	A-II/1P	Allied Physics Practicals	Skill development	2					1		
	IV	SEC-I	Introduction to computers		2	2	-	-		2		

Employability - 10 ✓
 Skill Development - 10 ✓
 Entrepreneurship - 1 ✓

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	IV	SEC-II	(MOOC NPTEL Course)		2				2		
	IV	NME-I	Laser Physics	Employability	2	2	-	-	2		
IV	I	I L-IV			6				3		
	II	II L-IV			6				3		
	III	DSC-VI	Computational Physics		4	4	-	-	4		
	III	P-IV	Physics Practicals - IV	Skill development	2	-	-	2	1		
	III	A-II/1			4				3		
	III	A-II/2P	Allied Physics Practicals	Skill development	2				1		
	IV	SEC-III	Soft skills-1		2				2		
	IV	SEC-IV	a)Energy Physics b)Renewable energy/ Energy Harvesting c)Physics work shop skills		2	2	-	-	2		
	IV	NME-II	Applied Physics		2	2	-	-	2		
	V	ECA							1		
V	SOP							1			
IV	Filed work/ Internship							2			
V	III	Core VII	Atomic and Nuclear Physics	Employability	5	4	1	-	4		
	III	Core VIII	Analog Electronics		4	3.5	0.5	-	4		
	III	Core IX	Mathematical methods		4	3	1	-	4		
	III	P-V	Physics Practicals - V	Skill development	4	-	-	4	2		
	III	P-VI	Physics Practicals - VI	Skill development	4	-	-	4	2		
	III	DSE I-A/B/C	a) Nano materials and Applications b)Geo Physics c) Recent trends in Physics	Employability Employability	4	4			4		
	III	DSE II-A/B/C	a)Biomedical Instrumentation b) Numerical Methods c) Particle and Astrophysics	Employability Employability	4	4			4		

	IV	Library Reading Hour			1	-	-	-				
VI	III	Core X	Quantum Mechanics and Relativity		4	3.5	0.5	-	4			
	III	Core XI	Digital Electronics		4	4	-	-	4			
	III	Core XII	Solid State Physics		4	4	-	-	4			
	III	P-VII	Physics Practicals - VII	Skill development	4	-	-	4	2			
	III	P-VIII	Physics Practicals - VIII	Skill development	4	-	-	4	2			
	III	DSE III	a) Communication systems b) Opto Electronics c) Microprocessor and Programming	Employability	4	4	-	-	4			
	III	DSE IV	Project	Entrepreneurship	4	-	-	-	4			
	IV	SEC-V	a) Radiation safety b) Basic Instrumentation skills c) Weather Forecasting		2	2	-	-	2			

- * L - Lecture hours
- * T - Tutorial hours
- * P - Practical hours

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