



ANDHRA PRADESH STATE COUNCIL OF HIGHER EDUCATION

Programme: B.Sc. Honours in Physics (Major)

w.e.f. AY 2023-24

COURSE STRUCTURE

Year	Semester	Course	Title of the Course	No. of Hrs /Week	No. of Credits
I	I	1	Essentials and Applications of Mathematical, Physical and Chemical Sciences	3+2	4
		2	Advances in Mathematical, Physical and Chemical Sciences	3+2	4
	II	3	Mechanics and Properties of Matter	3	3
			Mechanics and Properties of Matter Practical Course	2	1
		4	Waves and Oscillations	3	3
			Waves and Oscillations Practical Course	2	1
II	III	5	Optics	3	3
			Optics Practical Course	2	1
		6	Heat and Thermodynamics	3	3
			Heat and Thermodynamics Practical Course	2	1
		7	Electronic Devices and Circuits	3	3
			Electronic Devices and Circuits Practical Course	2	1
		8	Analog and Digital Electronics	3	3
			Analog and Digital Electronics Practical course	2	1
	IV	9	Electricity and Magnetism	3	3
			Electricity and Magnetism Practical Course	2	1
		10	Modern Physics	3	3
			Modern Physics Practical Course	2	1
		11	Introduction to Nuclear and Particle Physics	3	3
			Introduction to Nuclear and Particle Physics Practical Course	2	1

Year	Semester	Course	Title of the Course	No. of Hrs /Week	No. of Credits
III	V	12	Applications of Electricity & Electronics	3	3
			Applications of Electricity & Electronics Practical Course	2	1
		13	Electronic Instrumentation	3	3
			Electronic Instrumentation Practical Course	2	1
		14 A	Optical Instruments and Optometry	3	3
			Optical Instruments and Optometry Practical Course	2	1
		OR			
		14 B	Optical Imaging and Photography	3	3
			Optical Imaging and Photography Practical Course	2	1
		15 A	Low Temperature Physics & Refrigeration	3	3
			Low Temperature Physics & Refrigeration Practical Course	2	1
		OR			
		15 B	Solar Energy and Applications	3	3
			Solar Energy and Applications Practical Course	2	1
	VI	Internship			
	VII		Courses will be available in due course of time		
	VIII		Courses will be available in due course of time		