FACULTY OF

SCIENCE

COURSE STRUCTURE & SYLLABUS

M. SC. PHYSICS

Effective from Academic Year: 2022-23

Programme Structure Summary

Course Group	Course Name	Cr	Teaching Scheme				INT(T) Max./ Passing	EXT(T) Max./ Passing	INT(P) Max./ Passing	EXT(P) Max./ Passing	Grand Total Max./ Passing
			T	P	Tu	Cont. Hrs					
	SEMESTER 1										
Core	Principles of Physical Transducers	4.0	4.0			4	50/20	50/20			100/40
Core	Microprocessor & Microcontroller Interfacing	4.0	4.0			4	50/20	50/20			100/40
Core	Mathematical Physics	4.0	4.0			4	50/20	50/20			100/40
Core	Transducers Lab	4.0		8.0		8			50/20	50/20	100/40
Core	Microprocessor Lab	4.0		8.0		8			50/20	50/20	100/40
Core	Comprehensive Viva	1.0								50/20	50/20
Elective	Analog Circuits	4.0	4.0			4	50/20	50/20			100/40
Elective	Elements of Solid State Physics & Error analysis	4.0	4.0			4	50/20	50/20			100/40
Elective	Non linear Dynamics, Relativity & Cosmology	4.0	4.0			4	50/20	50/20			100/40

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			T	P	Tu	Cont. Hrs					
	SEMESTER 2										
Core	Spectroscopic Techniques & Analysis	4.0	4.0			4	50/20	50/20			100/40
Core	Optical Fibres & Devices	4.0	4.0			4	50/20	50/20			100/40
Core	Classical & Quantum Mechanics	4.0	4.0			4	50/20	50/20			100/40
Core	Optics and Spectroscopic Lab	4.0		8.0		8			50/20	50/20	100/40
Core	Electronics Lab	4.0		8.0		8			50/20	50/20	100/40
Core	Comprehensive Viva	1.0								50/20	50/20
Elective	Semiconductor Power Devices & Applications	4.0	4.0			4	50/20	50/20			100/40
Elective	Magnetic & Optical properties of Condensed Matter	4.0	4.0			4	50/20	50/20			100/40
Elective	Meteorological Parameters & Devices	4.0	4.0			4	50/20	50/20			100/40

Faculty Name: Science

Programme Name: M.Sc. Physics

Course Group	Course Name	Cr	Teaching Scheme				INT(T) Max./ Passing	EXT(T) Max./ Passing	INT(P) Max./ Passing	EXT(P) Max./ Passing	Grand Total Max./ Passing
			T	P	Tu	Cont. Hrs					
Core	Semiconductor Science	4.0	4.0			4	50/20	50/20			100/40
Core	Digital Communication	4.0	4.0			4	50/20	50/20			100/40
Core	Microwave and Digital Communication Lab	4.0	4.0	8.0		8			50/20	50/20	100/40
Core	Semiconductor Characterization Lab	4.0		8.0		8			50/20	50/20	100/40
Core	Comprehensive Viva	1.0								50/20	50/20
Elective	Control Systems	4.0	4.0			4	50/20	50/20			50/20
Elective	PLC-DCS-SCADA	4.0	4.0			4	50/20	50/20			100/40
Elective	Biophysics and Medical Instrumentation	4.0	4.0			4	50/20	50/20			100/40
Elective	Theoretical and Condensed Matter Physics	4.0	4.0			4	50/20	50/20			100/40
Elective	Crystallography and Material Science	4.0	4.0			4	50/20	50/20			100/40
Elective	Nano science and Nano electronics	4.0	4.0			4	50/20	50/20			100/40
Elective	Electrodynamics and Antenna	4.0	4.0			4	50/20	50/20			100/40
Elective	Microwave and Satellite Communication	4.0	4.0			4	50/20	50/20			100/40
Elective	Digital Signal Processing	4.0	4.0			4	50/20	50/20			100/40

SEMESTER 4

Course Group	Course Name	Cr	Teaching Scheme				INT(T) Max./ Passing	EXT(T) Max./ Passing	INT(P) Max./ Passing	EXT(P) Max./ Passing	Grand Total Max./ Passing
			T	P	Tu	Cont. Hrs					
Core	C Programming	4.0	4.0			4	50/20	50/20			100/40
Core	Project Work	20.0							250/100	250/100	500/200
Core	Comprehensive Viva	1.0								50 / 20	50/20