

Course Structure for the Program M.Sc. Tech. in Medical Physics & Instrumentation

Semester – I				
Paper Name	Paper Code	No of Papers	Credit	L-T-P
APPLIED MATHEMATICS & STATISTICS	PHY21501	1	4	4-0-0
ANATOMY & PHYSIOLOGY	PHY21502	1	4	
ADVANCED ELECTRONIC CIRCUITS & MICROPROCESSOR	PHY21503	1	4	4-0-0
MEDICAL EQUIPMENT MANAGEMENT	PHY21504	1	4	4-0-0
PHYSICS FOR MEDICINE	PHY21505	1	4	4-0-0
ADVANCED ELECTRONICS CIRCUIT LAB	PHY22506	1	2	0-0-3
MICROPROCESSOR LAB	PHY22507	1	2	0-0-3
Total		5 + 2 = 7	24	

Semester II				
Paper Name	Paper Code	No of Papers	Credit	L-T-P
NUCLEAR MEDICINE TECHNOLOGY	PHY21508	1	4	4-0-0
MEDICAL EQUIPMENT CALIBRATION AND MAINTENANCE	PHY21509	1	4	4-0-0
CLINICAL INSTRUMENTS & SYSTEMS	PHY21510	1	4	4-0-0
MEDICAL APPLICATION OF SPECTROSCOPY AND IMAGE PROCESSING	PHY21511	1	4	4-0-0
RADIATION SAFETY TECHNIQUES	PHY21512	1	4	4-0-0
SENSOR AND MEDICAL INSTRUMENT LAB	PHY22513	1	2	0-0-3
NUMERICAL METHODS AND PROGRAMMING LAB	PHY22514	1	2	0-0-3
Total		5 + 2 = 7	24	

Semester III				
Paper Name	Paper Code	No of Papers	Credit	L-T-P
NANO-BIOTECHNOLOGY	PHY21515	1	4	4-0-0
TISSUE ENGINEERING AND ARTIFICIAL ORGAN	PHY21516	1	4	4-0-0
ELECTIVE I		1	4	4-0-0
ELECTIVE II		1	4	4-0-0
DISSERTATION I	PHY25517	1	6	
IMAGE PROCESSING LAB	PHY22518	1	2	
Total		4 + 1 + 1 = 6	24	

Semester IV				
Paper Name	Paper Code	No of Papers	Credit	L-T-P
INTERNSHIP	PHY24519	1	8	
DISSERTATION II AND GRAND VIVA	PHY25520	1	20	
TOTAL		1+1+1	28	

TOTAL CREDIT: (24 + 24 + 24 + 28) = 100

Options for Elective I and II	
Sl. No	Name of the Paper
1.	BIO-SENSORS AND MEMS (PHY21521)
2	ROBOTICS AND ARTIFICIAL INTELLIGENCE (PHY21522)
3	SIMULATION IN BIOMEDICAL ENGINEERING (PHY21523)
4	BIO-INFORMATICS AND SIMULATION OF PHYSIOLOGICAL SYSTEMS (PHY21524)
6	ADVANCED BIO-MATERIALS AND PROSTHETICS (PHY21525)
7	BIO-TELEMETRY AND TELE-MEDICINE (PHY21526)
8	BRAIN-COMPUTER INTERFACE (PHY21527)
9	TISSUE ENGINEERING (PHY21528)