

Name of the Faculty : Science

Name of the Program : Master of Science (Physics) : 2022-23 onwards

Semester/Year	Council Code (If any)	Subject Code (If already existing)	Nomenclature	Theory/ Practical/	Core/ AECC/ SEC/ VAC/ DSE/ GE	For ERP	Theory/Practical (Result Combined or Separate)	L	T	P	Credits	Contact Hours	Theory			Theory (Internal)			Practical				Practical (Internal)				Overall Pass Marks	Scheme of Examinations [Theory+Internal or Practical+Internal]									
													Max	Pass	Attendance	Mid Term	Assignment	Professional Activities	Max	Pass	Demonstration/Presentation	Viva-voce	Max	Pass	Attendance	Mid Term			Project/Lab Work	Conduct/Demonstration	Max	Pass					
I/I	NA	17080101	Mathematical Physics	Theory	Core	Core	Separate	3	0	0	3	3	60	24	0	20	10	10	40	16	20	20	40	16	10	10	10	30	60	24	40	Theory+Internal					
		17080102	Mathematical Physics Lab	Practical	Core	Core	Separate	0	0	4	2	4										20	20	40	16	10	10	10	30	60	24	40	Practical+Internal				
		17080103	Classical Mechanics	Theory	Core	Core	Separate	3	0	0	3	3	3	60	24	0	20	10	10	40	16												40	Theory+Internal			
		17080104	Classical Mechanics lab	Practical	Core	Core	Separate	0	0	4	2	4										20	20	40	16	10	10	10	30	60	24	40	Practical+Internal				
		17080105	Statistical Mechanics	Theory	Core	Core	Separate	3	0	0	3	3	3	60	24	0	20	10	10	40	16													40	Theory+Internal		
		17080106	Statistical Mechanics Lab	Practical	Core	Core	Separate	0	0	4	2	4										20	20	40	16	10	10	10	30	60	24	40	Practical+Internal				
		17080107	Professional Ethics & Human Values	Theory	AECC	AECC	Separate	2	0	0	2	2	2	60	24	0	20	10	10	40	16													40	Theory+Internal		
17080108	Computational Methods & Programming(Matlab/Python)	Theory	SEC	SEC	Separate	2	0	0	2	2	2	60	24	0	20	10	10	40	16													40	Practical+Internal				
			Total Credits for Semester					13	0	12	19	25																									
II/I	NA	17080201	Quantum Mechanics	Theory	Core	Core	Separate	3	0	0	3	3	60	24	0	20	10	10	40	16	20	20	40	16	10	10	10	30	60	24	40	Theory+Internal					
		17080202	Quantum Mechanics Lab	Practical	Core	Core	Separate	0	0	4	2	4										20	20	40	16	10	10	10	30	60	24	40	Practical+Internal				
		17080203	Electrodynamics and Plasma Physics	Theory	Core	Core	Separate	3	0	0	3	3	3	60	24	0	20	10	10	40	16														40	Theory+Internal	
		17080204	Electrodynamics and Plasma Physics Lab	Practical	Core	Core	Separate	0	0	4	2	4										20	20	40	16	10	10	10	30	60	24	40	Practical+Internal				
		17080205	Atomic and Molecular Physics	Theory	Core	Core	Separate	3	0	0	3	3	3	60	24	0	20	10	10	40	16														40	Theory+Internal	
		17080206	Atomic and Molecular Physics Lab	Practical	Core	Core	Separate	0	0	4	2	4										20	20	40	16	10	10	10	30	60	24	40	Practical+Internal				
		17080207	Research Methodology	Theory	AECC	AECC	Separate	2	0	0	2	2	2	60	24	0	20	10	10	40	16														40	Theory+Internal	
17080208	The Physics of Nano Materials	Theory	SEC	SEC	Separate	2	0	0	2	2	2	60	24	0	20	10	10	40	16														40	Practical+Internal			
			Total Credits for Semester					13	0	12	19	25																									
III/II	NA	17080301	Laser and its applications	Theory	Core	SEC	Separate	2	0	0	2	2	60	24	0	20	10	10	40	16													40	Theory+Internal			
			Open Elective Course*	Theory	Core	Core	Separate	3	0	0	3	3	3	60	24	0	20	10	10	40	16														40	Theory+Internal	
		17080321	Summer Training	Practical	Core	Core	Separate	0	0	4	4	4										40	40	80	32	20	20	20	60	120	48	80	Practical+Internal				
			Electronics																																		
		17080303	Semiconductor Devices	Theory	DSE	DSE	Separate	3	0	0	3	3	3	60	24	0	20	10	10	40	16														40	Theory+Internal	
		17080304	Semiconductor Devices Lab	Practical	DSE	DSE	Separate	0	0	4	2	4										20	20	40	16	10	10	10	30	60	24	40	Practical+Internal				
		17080305	Digital Electronics	Theory	DSE	DSE	Separate	3	0	0	3	3	3	60	24	0	20	10	10	40	16															40	Theory+Internal
		17080306	Digital Electronics Lab	Practical	DSE	DSE	Separate	0	0	4	2	4										20	20	40	16	10	10	10	30	60	24	40	Practical+Internal				
		17080307	Analog and Digital Communication	Theory	DSE	DSE	Separate	3	0	0	3	3	3	60	24	0	20	10	10	40	16															40	Theory+Internal
		17080308	Analog and Digital Communication Lab	Practical	DSE	DSE	Separate	0	0	4	2	4										20	20	40	16	10	10	10	30	60	24	40	Practical+Internal				
			Condensed Matter Physics																																		
		17080309	Basic Concepts in Condensed Matter Physics	Theory	DSE	DSE	Separate	3	0	0	3	3	3	60	24	0	20	10	10	40	16															40	Theory+Internal
		17080310	Basic Concepts in Condensed Matter Physics Lab	Practical	DSE	DSE	Separate	0	0	4	2	4										20	20	40	16	10	10	10	30	60	24	40	Practical+Internal				
		17080311	Condensed Matter Physics: Physical Properties	Theory	DSE	DSE	Separate	3	0	0	3	3	3	60	24	0	20	10	10	40	16															40	Theory+Internal
		17080312	Condensed Matter Physics: Physical Properties Lab	Practical	DSE	DSE	Separate	0	0	4	2	4										20	20	40	16	10	10	10	30	60	24	40	Practical+Internal				
		17080313	Advanced Condensed Matter Physics	Theory	DSE	DSE	Separate	3	0	0	3	3	3	60	24	0	20	10	10	40	16															40	Theory+Internal
		17080314	Advanced Condensed Matter Physics Lab	Practical	DSE	DSE	Separate	0	0	4	2	4										20	20	40	16	10	10	10	30	60	24	40	Practical+Internal				
			Nuclear Physics																																		
17080315	Nuclear Physics	Theory	DSE	DSE	Separate	3	0	0	3	3	3	60	24	0	20	10	10	40	16															40	Theory+Internal		
17080316	Nuclear Physics Lab	Practical	DSE	DSE	Separate	0	0	4	2	4										20	20	40	16	10	10	10	30	60	24	40	Practical+Internal						
17080317	Advanced Nuclear Physics : Structure and Reactions	Theory	DSE	DSE	Separate	3	0	0	3	3	3	60	24	0	20	10	10	40	16															40	Theory+Internal		
17080318	Advanced Nuclear Physics : Structure and Reactions Lab	Practical	DSE	DSE	Separate	0	0	4	2	4										20	20	40	16	10	10	10	30	60	24	40	Practical+Internal						

