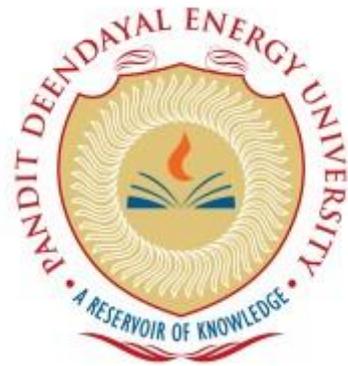


Course Structure of M.Sc. in Physics



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Course Code	Course Name	Theory	Tutorial	Practical	Hrs	Credits
Semester – I						
24MSP581T	Classical Mechanics	3	0	0	3	3
24MSP582T	Mathematical Physics	3	0	0	3	3
24MSP583T	Thermodynamics & Statistical Mechanics	3	0	0	3	3
24MSP584T	Solid State Physics	3	0	0	3	3
24MSP584P	Solid State Physics Laboratory	0	0	3	3	1.5
21MSP505T	Numerical Methods and Computer Programming	2	0	0	2	2
24MSP585P	Computer Programming Laboratory	0	0	4	4	2
21MSP507T	Atomic & Molecular Physics	3	0	0	3	3
Total		17	0	7	24	20.5
Semester – II						
21MSP508T	Quantum Mechanics	4	0	0	4	4
21MSP509T	Nuclear and Particle Physics	3	0	0	3	3
21MSP509P	Nuclear and Particle Physics - Lab.	0	0	3	3	1.5
24MSP586T	Classical Electrodynamics and Basic Plasma Physics	4	0	0	3	4
24MSP587T	Basic Electronics and Instrumentation	3	0	0	3	3
24MSP587P	Basic Electronics & Instrumentation Laboratory	0	0	6	6	3
24MSP588T	Laser Physics and Spectroscopy	3	0	0	3	3
Total		17	0	9	25	21.5

Course Code	Course Name	Theory	Tutorial	Practical	Hrs	Credits
Semester – III						
21RM601T	Research Methodology	1	0	0	1	1
21MSP601	Project - I	0	0	16	16	8
	Specialization Elective - I	3	0	0	3	3
	Specialization Elective - III	3	0	0	3	3
	Specialization Elective - III	3	0	0	3	3
	Specialization Laboratory	0	0	6	6	3
Total		10	0	22	32	21
*Details of specialization electives is provided on next page.						
Semester – IV						
21MSP622	Project - II	0	0	40	40	20
Total		0	0	40	40	20

Specializations offered in Semester – III			
Specialization 1 - Renewable Energy Resources		Specialization 2 - Advanced Fabrication and Experimental Techniques	
21MSP602T	Energy Harvesting and Storage Methods	21MSP605T	Advanced Experimental and Characterization Techniques - I
21MSP603T	Solid State Solar and Thermal Energy Harvesting	21MSP606T	Advanced Experimental and Characterization Techniques - II
21MSP604T	Wind, Hydro & Bioenergy Harvesting	24MSP683T	Advanced Fabrication Techniques
21MSP618P	Renewable Energy Resources - Lab.	24MSP688P	Advanced Fabrication & Experimental Techniques Laboratory
Specialization 3 - Advanced Condensed Matter Physics		Specialization 4 - Atmospheric Physics and Oceanography	
24MSP682T	Advanced Condensed Matter Physics	24MSP684T	Fundamentals of Ocean Sciences
21MSP609T	Computational Techniques For Solid State Physicist	24MSP685T	Instrumentation & Modelling of Oceans and Atmosphere
24MSP681T	Characterization Techniques	24MSP686T	Physics & Dynamics of the Atmosphere
24MSP690P	Advanced Condensed Matter Physics Laboratory	24MSP689P	Atmospheric Physics & Oceanography Laboratory
Specialization 5 - Advanced Electronics			
21MSP614T	Basic Communication Systems		
21MSP615T	Organic Electronics		
21MSP616T	Semiconductor Physics and Devices		
24MSP687P	Advanced Electronics Laboratory		