

Course Curriculum of M.Sc. Mathematics Program



**Department of Mathematics
School of Technology
Pandit Deendayal Energy University**

Course structure

<u>Semester-I</u>						
Course Code	Course Name	Teaching Scheme				
		L	T	P	Credit	Contact Hr.
20MSM501T	Real Analysis	3	1	0	4	4
20MSM502T	Theory of ODE	3	1	0	4	4
20MSM503T	Linear Algebra	3	1	0	4	4
20MSM504T	Probability and Statistics	3	1	0	4	4
20MSM505T	Numerical Analysis	3	1	0	4	4
20HS501P	HSS -Communication Skills	0	0	2	1	2
Total		15	5	2	21	22

<u>Semester-II</u>						
Course Code	Course Name	Teaching Scheme				
		L	T	P	Credit	Contact Hr.
20MSM506T	Theory of PDE	3	1	0	4	4
20MSM507T	Complex Analysis	3	1	0	4	4
20MSM508T	Modern Algebra	3	1	0	4	4
20MSM509T	Topology	3	1	0	4	4
20MSM510T	Calculus of Variation and Integral Equations	3	1	0	4	4
20MSM511T	Object Oriented and Python Programming	3	0	0	3	3
20MSM512P	Object Oriented and Python Programming	0	0	2	1	2
Total		18	5	2	24	25

Semester-III						
Course Code	Course Name	Teaching Scheme				
		L	T	P	Credit	Contact Hr.
20MSM601T	Research Methodology	1	0	0	1	1
20MSM602T	Functional Analysis	3	1	0	4	4
20MSM603	Project-I	--	--	--	8	--
20MSM----	Elective-1	3	1	0	4	4
20MSM----	Elective-2	3	1	0	4	4
	Total	10	3	0/2	21	13+project-1

Semester-IV						
Course Code	Course Name	Teaching Scheme				
		L	T	P	Credit	Contact Hr.
20MSM617	Project-II	-	-	-	17	-
	Total	-	-	-	17	-

Elective-1					
Course Code	Course Name	L	T	P	Credit
20MSM604T	Fluid Mechanics	3	1	0	4
20MSM607T	Bio-Mathematics	3	1	0	4
20MSM609T	Optimization	3	1	0	4
20MSM611T	Fractional Calculus and Special function	3	1	0	4
20MSM613T	Numerical Solution of Differential Equations	3	1	0	4
20MSM615T/P	Artificial Neural Network	3	1	0	4
Elective-2					
20MSM605T/20MSM606T	Continuum Mechanics/Classical Mechanics	3	1	0	4
20MSM608T	Finite Element Method	3	1	0	4
20MSM610T	Modeling and Simulation	3	1	0	4
20MSM612T	Numerical Linear Algebra	3	1	0	4
20MSM614T	Boundary Element Method	3	1	0	4
20MSM616T	Tensor and Special Theory of Relativity	3	1	0	4