



DEPARTMENT OF MATHEMATICS
UNIVERSITY OF KASHMIR, SRINAGAR-190006

Jammu and Kashmir, India

(NAAC Accredited Grade A⁺ University)

Structure & Syllabus for 2-Year/1-Year Master's Program in Mathematics

(CW+CW and CW+R Schemes)

NCrf Credit Level	Semester	Core Papers (Core Course/ Elective)	Course Level	Credits	Total Credits	Max. Marks			Contact Hours
		Course Name and Code				Internal	End Sem	Total	
6	I	Abstract Algebra (MMTHCAA125)	400	4 (Core)	20	28	72	100	For each credit: Theory (15h) and Practicals (30 h)
		Real Analysis (MMTHCRA125)	400	4 (Core)		28	72	100	
		Metric and Topological Spaces (MMTHCTS125)	400	4 (Core)		28	72	100	
		Topics in Number Theory (MMTHDNT125)	400	4 (DCE)		28	72	100	
		Computational Mathematics (MMTHDCM125)	400	4 (DCE)		28	72	100	
		Mathematical Statistics (MMTHDMS125)	400	4 (DCE)		28	72	100	
		Numerical Analysis (MMTHDNA125)	400	4 (DCE)		28	72	100	
	II	Complex Analysis (MMTHCCA225)	400	4 (Core)	20	28	72	100	For each credit: Theory (15h) and Practicals (30 h)
		Ordinary and Partial Differential Equations (MMTHCDE225)	400	4 (Core)		28	72	100	
		Linear Algebra (MMTHCLA225)	400	4 (Core)		28	72	100	
		Research Methodology (MMTHDRM225)	500	4 (DCE)		28	72	100	
		Integral Equations and Calculus of Variations (MMTHDIE225)	400	4 (DCE)		28	72	100	
		Algebraic Topology (MMTHDAT225)	400	4 (DCE)		28	72	100	
		Operations Research (MMTHDOR225)	400	4 (DCE)		28	72	100	
		Total Credit (First Year)			40				
1-Year Masters Program in Mathematics or 3 rd / 4 th Semester of 2-year Program					Lateral Entry				
6.5	III	Functional Analysis (MMTHCFA325)	500	4 (Core)	20	28	72	100	For each credit: Theory (15h) and Practicals (30 h)
		Differential Geometry (MMTHCDG325)	500	4 (Core)		28	72	100	
		Measure Theory (MMTHCMT325)	500	4 (Core)		28	72	100	
		Advanced Complex Analysis (MMTHDCA325)	500	4 (DCE)		28	72	100	

IV (CW+CW and CW+R Schemes)	Advanced Graph Theory (MMTHDGT325)	500	4 (DCE)		28	72	100	For each credit: Theory (15h) and Practicals (30 h)
	Mathematical Biology (MMTHDMB325)	500	4 (DCE)		28	72	100	
	Fourier and Wavelet Analysis (MMTHDFW325)	500	4 (DCE)		28	72	100	
	Fields and Galois Theory (MMTHCFG425)	500	4 (Core)	20	28	72	100	
	Research Project (MMTHPDI425)	500	12 (DCE)		300			
	Internship (MMTHISO425)	500	4(DCE)		28	72	100	
	Riemannian Geometry (MMTHDRG425)	500	4 (DCE)		28	72	100	
	Advanced Functional Analysis (MMTHDFA425)	500	4 (DCE)		28	72	100	
	Advanced Measure Theory (MMTHDMT425)	500	4 (DCE)		28	72	100	
	Homological Algebra (MMTHDHA425)	500	4 (DCE)		28	72	100	
	Non-Linear Functional Analysis (MMTHDNL425)	500	4 (DCE)		28	72	100	
	Total Credits (Aggregate)				80			

Members of Board of Studies

Prof. M A.Khanday HOD Mathematics (Chairman)	Prof. S. Pirzada (Member) University of Kashmir	Prof. M. Abdullah Mir (Member) University of Kashmir	Prof. N. A. Rather (Member), Ex. Professor University of Kashmir		
Prof. K. S. Charak (External Member) Jammu University	Prof. K. R. Kazmi (External Member) Aligarh Muslim Univ.	Prof. M Iqbal Bhat (Member, South Campus) University of Kashmir	Dr. Afrab A. Shah (Member) Central Univ. of Kashmir		
Dr. Aijaz A. Bhat (Member) Islamia College Hawal	Dr. M. Ibrahim Mir (Member, S. Campus) University of Kashmir	Prof. Basharat A Want (Member, Physics Dept) University of Kashmir	Prof. M. S. Pukhta (Member) SKUAST-K		
Prof. M. Ashraf Shah (Co-Opted Member) NEP-Cell University of Kashmir	Prof. M. A. Sidiqi (Co-Opted Member) NEP-Cell University of Kashmir	Dr. M. S. Lone (Co-Opted Member)	Dr. T. Rashid (Co-Opted Member)	Mr. Tanveer A Bhat Sr. Research	Mr. Wasim Thoker Sr. Research Scholar

**Head of the Department
Chairman**