

KAZI NAZRUL UNIVERSITY			FACULTY OF SCIENCE, TECHNOLOGY AND VOCATIONAL STUDIES		DEGREE PROGRAMME: M.SC IN MATHEMATICS			WITH EFFECT FROM THE ACADEMIC SESSION: 2022-23																			
Abbreviated Degree	Discipline	Abbreviated Degree Programme	Semester	Course Name	Course Type	Course Code	Course Details	L - T - P	Course Credit	Sem Credit	CA Marks		ESE Marks		Total Marks	Sem Marks											
											Practical	Theoretical	Practical	Theoretical													
M.SC	MATHEMATICS	MSCMATH	I	Real Analysis	C	MSCMATHC101	CC-1	4 - 0 - 0	4	20		15		35	50	250											
				Complex Analysis	C	MSCMATHC102	CC-2	4 - 0 - 0	4		15		35	50													
				Abstract Algebra	C	MSCMATHC103	CC-3	4 - 0 - 0	4		15		35	50													
				Ordinary Differential Equations and Special Functions	C	MSCMATHC104	CC-4	4 - 0 - 0	4		15		35	50													
				Classical Mechanics and Calculus of Variations	C	MSCMATHC105	CC-5	4 - 0 - 0	4		15		35	50													
			II	Topology	C	MSCMATHC201	CC-6	4 - 0 - 0	4	20		15		35	50	250											
				Linear Algebra and Principles of Operations Research	C	MSCMATHC202	CC-7	4 - 0 - 0	4		15		35	50													
				Partial Differential Equations	C	MSCMATHC203	CC-8	4 - 0 - 0	4		15		35	50													
				Numerical Analysis	C	MSCMATHC204	CC-9	4 - 0 - 0	4		15		35	50													
				Choose from Pool of Minor Electives	MIE	See Pool	MIEC-1	See Pool	4		See Pool		50														
			III	Functional Analysis	C	MSCMATHC301	CC-10	4 - 0 - 0	4	24	5X2=10	24		15		35	50	300									
				Mechanics of Continua	C	MSCMATHC302	CC-11	4 - 0 - 0	4				15		35	50											
				Computer Aided Numerical Practical	C	MSCMATHC303	CC-12	0 - 0 - 4	2				30		20	50											
				Advanced Complex Analysis I	(Any Two)	MJE	MSCMATHMJE301	MJEC-1 & MJEC-2	4 - 1 - 0				15		35	50X2=100											
				Advanced Functional Analysis I			MSCMATHMJE302		4 - 1 - 0				15		35												
				Advanced Topology			MSCMATHMJE303		4 - 1 - 0				15		35												
				Differential Geometry of Manifolds I			MSCMATHMJE304		4 - 1 - 0				15		35												
				Field Theory			MSCMATHMJE305		4 - 1 - 0				15		35												
				Operator Theory I			MSCMATHMJE306		4 - 1 - 0				15		35												
				Biomathematics I			MSCMATHMJE307		4 - 1 - 0				15		35												
				Computational Fluid Dynamics I			MSCMATHMJE308		4 - 1 - 0				15		35												
				Fluid Mechanics I			MSCMATHMJE309		4 - 1 - 0				15		35												
				Mechanics of Viscous Fluid and Boundary Layer Theory I			MSCMATHMJE310		4 - 1 - 0				15		35												
				Operations Research I			MSCMATHMJE311		4 - 1 - 0				15		35												
				Quantum Mechanics I			MSCMATHMJE312		4 - 1 - 0				15		35												
				Theory of Elasticity I			MSCMATHMJE313		4 - 1 - 0				15		35												
				Choose from Pool of Minor Electives			MIE		See Pool				MIEC-2	See Pool	4		See Pool		50								
				IV			Graph Theory		C				MSCMATHC401	CC-13	4 - 0 - 0		4		24	5X2=10	24		15		35	50	350
							Integral Transforms & Integral Equations		C				MSCMATHC402	CC-14	4 - 0 - 0		4					15		35	50		
			Differential Geometry				C		MSCMATHC403	CC-15	4 - 0 - 0	4	15		35		50										
			Project Work				C		MSCMATHC404	CC-16	1 - 0 - 2	2	30		20		50										
			Advanced Complex Analysis II				(Any Two)		MJE	MSCMATHMJE401	MJEC-3 & MJEC-4	4 - 1 - 0	15		35		50X2=100										
			Advanced Functional Analysis II		MSCMATHMJE402	4 - 1 - 0		15				35															
			Algebraic Topology		MSCMATHMJE403	4 - 1 - 0		15				35															
			Differential Geometry of Manifolds II		MSCMATHMJE404	4 - 1 - 0		15				35															
			Semigroup Theory		MSCMATHMJE405	4 - 1 - 0		15				35															
			Operator Theory II		MSCMATHMJE406	4 - 1 - 0		15				35															
			Biomathematics II		MSCMATHMJE407	4 - 1 - 0		15				35															
			Computational Fluid Dynamics II		MSCMATHMJE408	4 - 1 - 0		15				35															
			Fluid Mechanics II		MSCMATHMJE409	4 - 1 - 0		15				35															
			Mechanics of Viscous Fluid and Boundary Layer Theory II		MSCMATHMJE410	4 - 1 - 0		15				35															
			Operations Research II		MSCMATHMJE411	4 - 1 - 0		15				35															
			Quantum Mechanics II		MSCMATHMJE412	4 - 1 - 0		15				35															
			Theory of Elasticity II		MSCMATHMJE413	4 - 1 - 0		15				35															
			Choose from Pool of Minor Electives		MIE	See Pool		MIEC-2		See Pool		4	See Pool		50												
Total Credit and Marks										88						1100											
Abbreviations: C= Core; CC=Core Course; MJE= Major Elective; MJEC= Major Elective Course; MIE= Minor Elective; MIEC= Minor Elective Course; CA Marks= Continuous Assessment Marks; ESE Marks= End Semester Examination Marks; L= Lecture Hour; T= Tutorial Hour; P= Practical Hour/ Field Work and NA= Not Applicable																											
Pool of Minor Elective [Offered by the Department of Mathematics for all other Departments across faculties]. Student has to choose at least one Minor Elective from other departments except his/her own department.																											
Discipline		Semester	Course Name		Course Type	Course Code		Course Details		L - T - P		Course Credit	Sem Credit	CA Marks		ESE Marks		Total Marks	Sem Marks								
MATHEMATICS		II	Operations Research		MIE	MSCMATHMIE201		MIEC-1		4 - 0 - 0		4	NA		15			35	50	NA							
		III	Computer Programming in C		MIE	MSCMATHMIE301	MIEC-2	4 - 0 - 0	4	NA		15		35	50	NA											