

 KAZI NAZRUL UNIVERSITY				FACULTY OF SCIENCE, TECHNOLOGY & VOCATIONAL STUDIES			3-Year UG Degree /4-Year UG Degree (Honours) / 4-Year UG Degree (Honours with Research)			WITH EFFECT FROM THE ACADEMIC SESSION: 2023-24								
Abbreviated Degree	Discipline	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				
BSC	Mathematics	3-year UG Degree	I	Classical Algebra, Calculus and Analytical Geometry	MAJOR	BSCMTMMJ101	MJC-1	4 - 1 - 0	5	20		30		70	100	350		
				Choose from the Pool of Minor Courses offered in 1st Semester by other Disciplines within the faculty	MINOR	See Pool	MNC-1	See Pool	5		See Pool				100			
				Choose from the Pool of Multidisciplinary Courses offered in 1st Semester across the faculties	MD	See Pool	MDC-1	2 - 1 - 0	3			15		35	50			
				English/MIL Communication	AE	See Pool	AEC-1	4 - 0 - 0	4			15		35	50			
				Graph Theory	SE	BSCMTMSE101	SEC-1	2 - 1 - 0	3			15		35	50			
			II	Linear Algebra - I, Ordinary Differential Equations and Vector Calculus	MAJOR	BSCMTMMJ201	MJC-2	4 - 1 - 0	5	20		30		70	100	350		
				Choose from the Pool of Minor Courses offered in 2nd Semester by other Disciplines within the faculty	MINOR	Corresponding Course Code of Minor opted in 1st Semester	MNC-2	See Pool	5		See Pool				100			
				Choose from the Pool of Multidisciplinary Courses offered in 2nd Semester across the faculties	MD	See Pool	MDC-2	2 - 1 - 0	3			15		35	50			
				Environment Studies	VA	VA201	VAC-1	4 - 0 - 0	4			15		35	50			
				Mathematical Tools and Latex	SE	BSCMTMSE201	SEC-2	2 - 1 - 0	3			15		35	50			
			Student exiting the programmes after securing 40 credits will be awarded UG Certificate in the relevant Discipline/Subject provided they secure following 4 credits in work based vocational courses / summer internship during 1st year															
			II	Vocational Course	Any One	VC	VC201	VCC-1	0 - 0 - 8	4	24	30		20			50	400
				Summer Internship		SI	SI201	SIC-1										
			III	Real Analysis - I	MAJOR	BSCMTMMJ301	MJC-3	4 - 1 - 0	5	22		30		70	100	400		
				Abstract Algebra - I and Number Theory	MAJOR	BSCMTMMJ302	MJC-4	4 - 1 - 0	5			30		70	100			
				Choose from the Pool of Minor Courses offered in 3rd Semester by other Disciplines within the faculty	MINOR	See Pool	MNC-3	See Pool	5		See Pool				100			
				Choose from the Pool of Multidisciplinary Courses offered in 3rd Semester across the faculties	MD	See Pool	MDC-3	2 - 1 - 0	3			15		35	50			
				English Communication	AE	See Pool	AEC-2	4 - 0 - 0	4			15		35	50			
			IV	Multivariate Calculus	MAJOR	BSCMTMMJ401	MJC-5	4 - 1 - 0	5	22		30		70	100	400		
				Linear Algebra - II and Tensor Calculus	MAJOR	BSCMTMMJ402	MJC-6	4 - 1 - 0	5			30		70	100			
				Choose from the Pool of Minor Courses offered in 4th Semester by other Disciplines within the faculty	MINOR	See Pool	MNC-4	See Pool	5		See Pool				100			
				Programming in C	SE	BSCMTMSE401	SEC-3	2 - 1 - 0	3			15		35	50			
				Choose from the Pool of Value Added Course offered in 4th Semester	VA	See Pool	VAC-2	See Pool	4			15		35	50			
			Student exiting the programmes after securing 84 credits will be awarded UG Diploma in the relevant Discipline/Subject provided they secure following 4 credits in work based vocational courses / summer internship during 2nd year															
			IV	Vocational Course	Any One	VC	VC401	VCD-1	0 - 0 - 8	4	26	30		20			50	450
				Summer Internship		SI	SI401	SID-1										
V	Real Analysis - II	MAJOR	BSCMTMMJ501	MJC-7	4 - 1 - 0	5	20		30		70	100	400					
	Probability, Statistics and Linear Programming Problem	MAJOR	BSCMTMMJ502	MJC-8	4 - 1 - 0	5			30		70	100						
	Numerical Methods and Numerical Lab	MAJOR	BSCMTMMJ503	MJC-9	3 - 0 - 4	5		30	15	20	35	100						
	Choose from the Pool of Minor Courses offered in 5th Semester by other Disciplines within the faculty	MINOR	See Pool	MNC-5	See Pool	5		See Pool				100						
VI	Partial Differential Equations and Calculus of Variations	MAJOR	BSCMTMMJ601	MJC-10	4 - 1 - 0	5	22		30		70	100	450					
	Metric Spaces	MAJOR	BSCMTMMJ602	MJC-11	4 - 1 - 0	5			30		70	100						
	Mechanics	MAJOR	BSCMTMMJ603	MJC-12	4 - 1 - 0	5			30		70	100						
	Complex Analysis	MAJOR	BSCMTMMJ604	MJC-13	4 - 1 - 0	5			30		70	100						
	Summer Internship	SI	SI601	SIMC-1	0 - 0 - 4	2		30		20		50						
Total Credit and Marks				TOTAL CREDIT						126	TOTAL MARKS				2350			
Students who want to undertake 3-year UG programme will be awarded UG Degree in the relevant Discipline / Subject upon securing 126 credits																		

4 - Year UG Degree (Honours)	VII	Integral Transforms and Integral Equations	MAJOR	BSCMTMMJ701	MJC-14	4 - 1 - 0	5	25		30		70	100	500
		General Topology	MAJOR	BSCMTMMJ702	MJC-15	4 - 1 - 0	5			30		70	100	
		Functional Analysis	MAJOR	BSCMTMMJ703	MJC-16	4 - 1 - 0	5			30		70	100	
		Advanced Differential Equations and Special Functions	MAJOR	BSCMTMMJ704	MJC-17	4 - 1 - 0	5			30		70	100	
		Choose from the Pool of Minor Courses offered in 7th Semester by other Disciplines within the faculty	MINOR	See Pool	MNC-6	See Pool	5		See Pool			100		
	VIII	Operations Research	MAJOR	BSCMTMMJ801	MJC-18	4 - 1 - 0	5	22		30		70	100	500
		Differential Geometry	MAJOR	BSCMTMMJ802	MJC-19	3 - 1 - 0	4			30		70	100	
		Classical Mechanics	MAJOR	BSCMTMMJ803	MJC-20	3 - 1 - 0	4			30		70	100	
		Abstract Algebra - II	MAJOR	BSCMTMMJ804	MJC-21	3 - 1 - 0	4			30		70	100	
		Choose from the Pool of Minor Courses offered in 8th Semester by other Disciplines within the faculty	MINOR	See Pool	MNC-7	See Pool	5		See Pool			100		
Total Credit and Marks			TOTAL CREDIT					173	TOTAL MARKS				3350	

Students who want to undertake 4-year UG Honours program will be awarded UG Degree (Honours) in the relevant Discipline / Subject provided they secure 173 credits

4 - Year UG Degree (Honours with Research)	VII	Integral Equations and Integral Transforms	MAJOR	BSCMTMMJ701	MJC-14	4 - 1 - 0	5	25		30		70	100	500
		General Topology	MAJOR	BSCMTMMJ702	MJC-15	4 - 1 - 0	5			30		70	100	
		Functional Analysis	MAJOR	BSCMTMMJ703	MJC-16	4 - 1 - 0	5			30		70	100	
		Advanced Differential Equations and Special Functions	MAJOR	BSCMTMMJ704	MJC-17	4 - 1 - 0	5			30		70	100	
		Choose from the Pool of Minor Courses offered in 7th Semester by other Disciplines within the faculty	MINOR	See Pool	MNC-6	See Pool	5		See Pool			100		
	VIII	Operations Research	MAJOR	BSCMTMMJ801	MJC-18	4 - 1 - 0	5	22		30		70	100	500
		Research Methodology and Ethics	RP	BSCMTMRP801	RPC-1	4 - 0 - 0	4			30		70	100	
		Research Project / Dissertation	RP	BSCMTMRP802	RPC-2	0 - 0 - 16	8		120		80		200	
		choose from the Pool of Minor Courses offered in 8th Semester by other Disciplines within the faculty	MINOR	See Pool	MNC-7	See Pool	5		See Pool			100		
		Total Credit and Marks			TOTAL CREDIT					173	TOTAL MARKS			

Students who want to undertake 4-year UG Honours with Research program will be awarded UG Degree (Honours with Research) in the relevant Discipline / Subject provided they secure 173 credits

Abbreviations: MJ= Major;MJC= Major Course;MN= Minor;MNC= Minor Course; AE= Ability Enhancement; AEC= Ability Enhancement Course; SE= Skill Enhancement; SEC= Skill Enhancement Course; MD= Multidisciplinary ; MDC= Multidisciplinary Course; SI - Summer Internship;SIC - Summer Internship for Certificate; SID:Summer Internship for Diploma; SIMC - Summer Internship Mandatory Course; RP= Research Project ;RPC= Research Project Course; VA= Value Added;VAC= Value Added Course; VC= Vocational Course; VCC= Vocational Course for Certificate; VCD= Vocational Course for Diploma; CA= Continuous Assessment, ESE= End Semester Examination, L= Lecture Hour; T= Tutorial Hour and P= Practical Hour/ Field Work and NA= Not Applicable

Note: Minor Courses (MNC) : Students of a particular UG Course will choose from the Pool of Minor Courses offered by disciplines other than the major discipline opted by the student within the faculty. The student is required to opt the same Minor Discipline in the 2nd semester which he had opted in 1st semester. Explanation: If a student of Physics Major, opts for a Minor Course offered by Chemistry in 1st semester then that student is required to continue with the Minor Course offered by Chemistry for 2nd semester as Minor Course in the 2nd semester.

Semesterwise Pool of Minor Courses offered by Mathematics for other Disciplines within the Faculty

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	
									Practical	Theoretical	Practical	Theoretical			
Mathematics	I	Classical Algebra, Calculus and Analytical Geometry	MINOR	BSCMTMMN101	MNC-1	4 - 1 - 0	5	NA		30		70	100	NA	
	II	Linear Algebra - I, Ordinary Differential Equations and Vector Calculus		BSCMTMMN201	MNC-2	4 - 1 - 0	5			30		70	100		
	III	Real Analysis and Complex Analysis		BSCMTMMN301	MNC-3	4 - 1 - 0	5			30		70	100		
	IV	Abstract Algebra and Linear Algebra - II		BSCMTMMN401	MNC-4	4 - 1 - 0	5			30		70	100		
	V	Numerical Analysis and Partial Differential Equations		BSCMTMMN501	MNC-5	4 - 1 - 0	5			30		70	100		
	VI	NA		NA		NA				NA					
	VII	Mechanics		BSCMTMMN701	MNC-6	4 - 1 - 0	5			30		70	100		
	VIII	Probability, Statistics and Linear Programming Problem		BSCMTMMN801	MNC-7	4 - 1 - 0	5			30		70	100		

Semester wise Pool of Multidisciplinary Courses offered by Mathematics for other Disciplines across the Faculties

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
									Practical	Theoretical	Practical	Theoretical		
	I	Business Mathematics	MD	MDC113	MDC-1	2 - 1 - 0	3			15		35	50	

History	II	Any One	Understanding Medieval Bengal Select Themes: 1206 CE-1727 CE	MD	MDC204	MDC-2	2 -1 - 0	3	NA	15	35	50	NA
Commerce			Personal Finance		MDC205								
Nutrition			Nutrition and Public Health		MDC206								
Education			Educational Philosophy		MDC207								
Psychology			Stress Management		MDC208								
Computer			Social Media and Cyber Awareness		MDC209								
Bengali			Adhunik Bangla Sahitya		MDC210								
Nazrul Sangeet			Nazrul Sangeet		MDC211								
Electronics			E-Waste Management		MDC212								
Chemistry			Chemical Science		MDC213								
Sanskrit			Critical Survey of Sanskrit Language		MDC214								
Urdu			Asnaf- E -Adab		MDC215								
Hindi			Anuvad Vigyan		MDC216								
Botany			Herbal Home Remedies		MDC217								
Geography	III	Any One	Bharatavarsha—A Land of Rare Natural Endowments	MD	MDC301	MDC-3	2 - 1 - 0	3	NA	15	35	50	NA
Sanskrit			The Vedangas and other Streams of Indian Knowledge System		MDC302								
Physics			Indian Astronomy		MDC303								
Zoology			Indian Health Sciences		MDC304								
Mathematics			Indian Mathematics		MDC305								
Education			Indian Education		MDC306								
Political Sc			Indian Polity and Economy		MDC307								
Philosophy			Methodology of Indian Knowledge System		MDC308								