

MUNI UNIVERSITY
Master of Science in Mathematics
Program Structure

Year One: Semester One

Course Code	Course Name	LH	TH	PH	CH	CU
MAT 1101	Measure, Integration and Probability theory	45	30	-	60	04
MAT 1102	General Algebra	45	30	-	60	04
MAT 1103	Applied Functional Analysis	45	30	-	60	04
MAT 1104	Differential Equations and Dynamical Systems	30	30	45	60	04
MAT 1105	Theory of Optimization	45	30	-	60	04
MAT 1106	Computational and Research Methods	30	30	45	60	04
	Total				360	24

Year One: Semester Two

Course Code	Course Name	Status	LH	TH	PH	CH	CU
MAT 1201	Stochastic Calculus	Core	45	30	-	60	04
MAT 1202	Analytic Partial Differential Equations	Core	45	30	-	60	04
MAT 1203	Scientific Writing and Communication	Core	30	30	45	60	04
Electives (Pure Mathematics Track), Choose at Least Four							
MAT 1204	Advanced Topics in Topology	Elective	30	30	-	45	03
MAT 1205	Advanced Rings and Modules	Elective	30	30	-	45	03
MAT 1206	Commutative Algebra	Elective	30	30	-	45	03
MAT 1207	Operator Theory	Elective	30	30	-	45	03
MAT 1208	Complex Analysis	Elective	30	30	-	45	03
MAT 1209	Ergodic theory	Elective	30	30	-	45	03
Electives (Applied Mathematics Track), Choose at Least Four							
MAT 1210	Numerical Methods for Partial Differential Equations	Elective	30	30	-	45	03
MAT 1211	Advanced Numerical Linear Algebra	Elective	30	30	-	45	03
MAT 1212	Stochastic Processes	Elective	30	30	-	45	03
MAT 1213	Financial Mathematics	Elective	30	30	-	45	03
MAT 1214	(Life) Insurance Mathematics	Elective	30	30	-	45	03
MAT 1215	Control Theory	Elective	30	30	-	45	03
MAT 1216	Advanced Multivariate Analysis	Elective	30	30	-	45	03
MAT 1217	Mathematical Ecology	Elective	30	30	-	45	03
MAT 1218	Mathematical Immunology	Elective	30	30	-	45	03
MAT 1219	Chaos and Nonlinear Dynamics	Elective	30	30	-	45	03
MAT 1220	Finite Element Methods	Elective	30	-	45	45	03
MAT 1221	Mathematical Epidemiology	Elective	30	30	-	45	03
MAT 1222	Research Seminar I	Core	30	30	-	45	03
	Total					405	27

Year One | Recess Term

Course Code	Course Name	LH	TH	PH	FH	CH	CU
MAT1301	Practicum and Field Engagement	-	-	90	22 5	75	05
Total Credit Units						75	05

Year Two: Semester One

Course Code	Course Name	LH	TH	PH	CH	CU
MAT 2101	Research and Grant Proposal Writing	-	-	-	75	05
	Total				75	05

Year Two: Semester Two

Course Code	Course Name	LH	TH	PH	FH	CH	CU
MAT 2201	Research Seminar II	30	30	-	-	45	03
MAT 2202	Dissertation, Publication & Viva Voce	-	-	90	225	75	05
	Total					120	08

Note: LH = Lecture Hour; TH = Tutorial Hour; PH = Practical Hour; CH = Contact Hour; CU = Credit Unit; FH = Field Hour 1 CH = 1 LH = 3 PH = 2 TH ____ = 5 FH