



**LEBANESE
INTERNATIONAL
UNIVERSITY**

Major Title: Masters of Science in Mathematics
Major Code: MMATH
Level: graduate
Number Of Credits: 36
Date: 19-01-2017

Masters of Science in Mathematics (MMATH)

First Year

Fall Semester

Code	Title	Credits	Prerequisites	Corequisites
MATH502	Algebra	3		
	Major Elective	3		
MATH522	Topology	3		
MATH595	Special graduate skills	0		
Total		9		

Spring Semester

Code	Title	Credits	Prerequisites	Corequisites
	Major Elective	3		
MATH505	Numerical linear algebra	3		
MATH510	Real Analysis	3		
Total		9		

Second Year

Fall Semester

Code	Title	Credits	Prerequisites	Corequisites
	Major Elective	3		
MATH520	Functional Analysis	3		
Total		6		

Spring Semester

Code	Title	Credits	Prerequisites	Corequisites
	Major Elective	3		
MATH599	Thesis	6		
MATH560	Modern Differential Geometry	3	MATH520	
Total		12		

Major Elective Courses

Code	Title	Credits	Prerequisites	Corequisites
MATH500	Complex Analysis	3		
MATH506	Higher Linear Algebra	3		
MATH511	Analysis in Euclidean Spaces	3		
MATH515	Advanced Numerical Analysis	3		
MATH516	Optimization Theory	3		
MATH518	Topics in Number Theory	3		
MATH524	Mathematical Fluid Dynamics I	3		
MATH525	Finite Element Methods	3		
MATH530	Distribution Theory	3		
MATH534	Mathematical Fluid Dynamics II	3		
MATH536	Field Theory	3		
MATH540	Partial Differential Equations	3	MATH520	
MATH542	Algebraic topology	3		
MATH544	Computational Fluid Dynamics	3		

MATH545	Ordinary Differential Equations	3		
MATH546	Lie Groups and Lie Algebra	3		
MATH550	Non-Euclidean Geometries	3		
MATH554	Continuum Mechanics	3		
MATH555	Dynamical Systems	3		
MATH556	Matrix Theory	3		
MATH565	Applied Nonlinear Partial Differential Equations	3		
MATH566	Graph theory	3		
MATH570	Riemannian Geometry	3		
MATH571	Fractal Geometry	3		
MATH575	Differential Topology	3		
MATH576	Statistics	3		
MATH582	Mathematics Education	3		
MATH583	Topics in Mathematics	3		
MATH585	Topics in Applied Mathematics	3		
MATH586	Topics in Statistics	3		