



Zarqa University
Curriculum / Study Plan for
Master Degree in Mathematics
PROGRAM: Mathematics / Thesis Track

Faculty of Science and Information Technology / Department of Mathematics

GENERAL RULES AND CONDITIONS: This plan conforms to the regulations of the general frame work set by The Graduate Studies.

The study plan consists of (33) credit hours as follows:

I. Compulsory Courses: (15) credit hours as follows:

Course no.	Course title	Cr. Hrs.	Pre-requisite
1309711	Real analysis (measure theory and integration)	3	
1309731	Mathematical statistics	3	
1309741	Modern algebra 1	3	
1309761	General topology 1	3	
1309771	Methods of applied mathematics 1	3	

II. Elective courses: (9) credit hours to be chosen from one of the following Subjects:

Course no.	Course title	Cr. Hrs.	Pre-requisite
1309701	Theory of ordinary differential equations	3	
1309702	Partial differential equations	3	
1309705	Dynamical systems	3	1309761
1309712	Complex analysis	3	
1309713	Functional analysis	3	1309711
1309732	Probability theory	3	
1309733	Stochastic processes	3	
1309734	Linear statistical models	3	
1309735	Nonparametric statistics	3	
1309742	Modern algebra 2	3	1309741
1309743	Advanced matrix theory	3	
1309744	Analytic number theory	3	
1309762	Topology 2	3	1309761
1309763	Graph theory	3	
1309764	Algebraic topology	3	1309761
1309772	Advanced numerical analysis	3	
1309773	Methods of applied mathematics 2	3	1309771
1309781	Selected topics in pure mathematics	3	
1309782	Selected topics in applied mathematics	3	
1309783	Selected topics in statistics	3	

III. Thesis:

Course no.	Course title	Cr. Hrs.	Pre-requisite
1309000	Thesis	9	
1309799	Thesis In Progress	0	

Codes of knowledge fields:

0-Differentiation, Integration and equations
 6- Topology and Geometry

1- Real analysis
 7- Methods of Solution

3-Statistics and Probability
 8- Special Topics

4-Algebra
 9 Thesis or Exams

5- Foundations of Mathematics