



Master program of Pure Mathematics

First Level

Course Code	Course Title	Credits
570 Math.	Topology (1)	4
580 Math.	Measure Theory and Integration	4
540 Math.	Linear Algebra	4
Total		12

Second Level

Course Code	Course Title	Credits
541 Math.	Abstract Algebra	4
583 Math.	Complex Analysis (1)	4
581 Math.	Functional Analysis (1)	4
Total		12

Third Level

Course Code	Course Title	Credits
520 Math.	Ordinary Differential Equations	4
-	Elective Course	4
-	Elective Course	4
Total		12

Fourth Level

Course Code	Course Title	Credits
-	Elective Course	4
599 Math.	Research Project	4
Total		8

Master program of Pure Mathematics

The student must successfully complete (40) credit hours of the M. Sc. courses of mathematics.

The student must present a successfully complete and pass the research project (4) credit hours and its defense in his chosen area of specialization.

CODE/NO	Course name	No. of Credit hours			Perquisite
		Theo.	Pract.	total	
570 Math.	Topology (1)	4	-	4	-
580 Math.	Measure Theory and Integration	4	-	4	-
541 Math.	Abstract Algebra	4	-	4	-
540 Math.	Linear Algebra	4	-	4	-
581 Math.	Functional Analysis (1)	4	-	4	570Math - 580 Math
520 Math.	Ordinary Differential Equations	4	-	4	-
583 Math.	Complex Analysis (1)	4	-	4	-
Total		28	-	28	



Master program of Pure Mathematics

Elective courses: The student can choose any 3 courses from the following elective courses

CODE/NO	Course name	No. of Credit hours			Perquisite	
		Theo.	Pract.	total		
571 Math.	Topology (2)	4	-	4	570 Math.	Perquisite
556 Math.	Numerical Analysis	4	-	4	-	-
585 Math.	Stochastic Analysis	4	-	4	581 Math.	Perquisite
542 Math.	Group Theory	4	-	4	-	-
543 Math.	Selected Topics in Algebra	4	-	4	540 Math. - 541 Math.	Perquisite
575 Math.	Topological Vector Spaces	4	-	4	570 Math. - 581 Math.	Perquisite
533 Math.	Discrete Mathematics	4	-	4	541 Math.	Perquisite



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CODE/NO	Course name	No. of Credit hours			Perquisite	
		Theo.	Pract.	total		
523 Math.	Partial Differential Equations	4	-	4	580 Math.	Perquisite
587 Math.	Complex Analysis (2)	4	-	4	583 Math.	Perquisite
544 Math.	Fields and Galois Theory	4	-	4	541 Math.	Perquisite
572 Math.	Algebraic Topology	4	-	4	570 Math.	Perquisite
573 Math.	Differential Topology	4	-	4	570 Math. - 540 Math.	Perquisite
574 Math.	Riemannian Geometry	4	-	4	570 Math.	Perquisite
584 Math.	Functional Analysis (2)	4	-	4	581 Math.	Perquisite
519 Math.	Quantum Mechanics	4	-	4	-	-



Master program of Pure Mathematics

Research Project: the student must pass the Research Project

CODE/NO	Course name	No. of Credit hours			Perquisite
		Theo.	Pract.	total	
599 Math.	Research Project	4	-	4	Perquisite

Statistical Summary

Requirements	Credit hour	Total	Percentage %
Compulsory Courses	28	28	63.63
Elective courses	12	12	27.27
Research Project	4	4	9.1
Total	44	44	100



Master program of Applied Mathematics

First Level

Course Code	Course Name	Credit Hours
611 MATH	Dynamic System and Its Application	4
612 MATH	Mathematical Methods (1)	4
613 MATH	Ordinary Differential Equations(Theory &Applied)	4
Total		12

Second Level

Course Code	Course Title	Credits
620 MATH	Partial Differential Equations(4
622 MATH	Mathematical Methods (2)	4
623 MATH	Numerical Linear Algebra	4
Total		12

Third Level

Course Code	Course Title	Credits
631 MATH	Fluid Mechanics	4
636 MATH	Arithmetic Methods & Simulation	4
-	Optional Course (1)	4
Total		12

Fourth Level

Course Code	Course Title	Credits
	Optional Course (2)	4
690 MATH	Graduate Project	4
Total		8



كلية العلوم
College of Science
Department of Mathematics

Master program of Applied Mathematics

Courses(The Student Must Select Two Course ,8 Hours)

Course Code	Course Title	Credits
632 MATH	Approximation Theory and Finite Elements	4
633 MATH	Stability Theory	4
634 MATH	Biomathematics	4
635 MATH	Perturbation Theory	4
637 MATH	Advanced Mathematical Modelling	4