faculty of Science

Mathematics Department

MSc. in Mathematics- Comprehensive Track

A. Admission Requirements:

Students wishing to enroll in this program must satisfy the following two conditions:

- Have a bachelor degree in mathematics.
- Meeting the English language requirements as outlined by the decisions of the Higher Education Council.

B. Degree Requirements:

1. Meeting the conditions stipulated in the Master program regulations number (3) for the year 2011.
2. Completion of remedial courses recommended by the department graduate studies committee.
3. Studying and successfully passing at least (33) credit hours from the level of (600) and above.

1. Core Courses: (24) credit hours

Course code	Course name	Credit hours
Math. 601	Theory of Ordinary Differential Equations and its Applications I	3
Math. 611	Measure Theory and Integration I	3
Math. 613	Complex Analysis I	3
Math. 621	Advanced Numerical Analysis	3
Math. 641	Modern Algebra I	3
Math. 661	Advanced General Topology I	3
Math. 643	Modern Algebra III	3
Math. 676	Applied Graph Theory	3

2. Elective Courses: (9) credit hours

Course	Course name	Credit hours
Math. 602	Theory of Ordinary Differential Equations and its Applications II	3
Math. 603	Partial Differential Equations I	3
Math. 604	Partial Differential Equations II	3
Math. 612	Functional Analysis I	3
Math. 614	Complex Analysis II	3
Math. 615	Measure Theory and Integration II	3
Math. 616	Theory of Operators	3
Math. 617	Abstract Harmonic Analysis	3
Math. 623	Approximation Theory	3
Math. 642	Modern Algebra II	3
Math. 644	Homological Algebra	3
Math. 645	Theory of Algebraic Numbers	3
Math. 646	Introduction to Group Representations	3
Math. 647	Algebraic Geometry	3
Math. 662	Advanced General Topology II	3
Math. 663	Algebraic Topology I	3
Math. 664	Algebraic Topology II	3
Math. 665	Dimension Theory	3
Math. 671	Advanced Mathematical Methods I	3
Math. 672	Advanced Mathematical Methods II	3
Math. 673	Elasticity Theory	3
Math. 674	Advanced Topics in Mechanics	3
Math. 675	Orthogonal Polynomials	3
Math. 677	Introduction to Operations Research	3
Math. 691	Selected Topics in Real Analysis	3
Math. 692	Selected Topics in Complex Analysis	3
Math. 693	Selected Topics in Algebra	3
Math. 694	Selected Topics in Topology	3
Math. 695	Selected Topics in Applied Mathematics	3
Math. 696	Selected Topics in Functional Analysis	3

3. Passing the Comprehensive exam (Math. 698) according to Yarmouk university regulations. The Comprehensive exam accounts for zero credit hours for registration purposes.