



DEPARTMENT OF MATHEMATICS

Master of Science in Mathematics Program

Semester System Curriculum-Study Plan

Curricular Overview

Total Credit hours of the program: 39 (Two years – 4 Semesters)

Study Plan						
Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College, or Program)
Level 1	MATH 600	Ethics and Editing Scientific Research	Required	-----	2(2,0,0)	Department
	MATH 610	Abstract Algebra	Required	-----	2(2,0,0)	Department
	MATH 620	Functional Analysis	Required	-----	2(2,0,0)	Department
	MATH 630	Theory of Differential Equations	Required	-----	2(2,0,0)	Department
	MATH 640	Numerical Analysis	Required		2(2,0,0)	Department
Level 2	Students select one course from them.	MATH 643 Stochastic Processes	Elective	MATH 630	2(1,1,0)	Department
		MATH 632 Mathematical Biology	Elective	MATH 630	2(1,1,0)	Department
	MATH 631	Partial Differential Equations 1	Required	MATH 600 & MATH 630	3(3,0,0)	Department
	MATH 641	Numerical Linear Algebra	Required	MATH 640	3(2,1,0)	Department
	MATH 642	Optimization Methods	Required	MATH 640	2(2,0,0)	Department
Level 3	Students select one course from them.	MATH 636 Partial Differential Equations 2	Elective	MATH 631	2(2,0,0)	Department
		MATH 646 Stochastic Differential Equations	Elective	MATH 643	2(2,0,0)	Department
	MATH 635	Principles of Optimal Control	Required	MATH 631	3(2,1,0)	Department
	MATH 645	Advanced Scientific Computation	Required	MATH 641	3(2,1,0)	Department
	MATH 697	Selected Topics in Mathematics*	Required	MATH 631 & MATH 641	2(2,0,0)	Department
Level 4	MATH 699	Thesis**	Required	**	9(9,0,0)	Department

*Needs department approval

** In order to register the thesis, one must pass 50% of the courses with a cumulative grade of no less than very good.