King Khalid University

College of Science
Department of Mathematics

KING KHALID UNIVERSITY

جامعة الملك خالد

كلية العلوم
قسم الرياضيات

Master of Science in Financial Mathematics
(Number of program hours = 45)

First Year

First level				Second level			
Code	Course Name	Hr	Requisite	Code	Course Name	Hr	Requisite
6501MATH-2	Introduction to Finance	2		6506MATH-3	Financial Derivatives	3	
6502MATH-2	Macro Finance	2		6507MATH-3	Numerical Integration of SDE	3	
6503MATH-3	Stochastic Calculus	3		6508MATH-3	PDE and Numerical Approximations	3	
6504MATH-3	Numerical Analysis	3		6509MATH-3	Financial Econometrics	3	
6505MATH-3	Optimization Methods	3		****MATH-3	Elective Course 1	3	
Total		**13**		**Total**		**15**	

Second Year

Third level				Forth level			
Code	Course Name	Hr	Requisite	Code	Course Name	Hr	Requisite
6510MATH-2	Real Options and Applications	2		**** MATH-3	Optional Course 3	3	
6511MATH-3	Advanced Topics in Financial Derivatives	3		6573MATH-3 or 6574MATH-3	Research project or Entrepreneurial Project	3	
6512MATH-3	Computational Finance	3					
**** MATH-3	Elective Course 2	3					
Total		**11**		**Total**		**6**	

Elective course

Code	Course Name	Hr	Requisite
6513MATH-3	Credit Risk Modeling	3	
6514MATH-3	Mathematical Interest Theory	3	
6515MATH-3	Investments	3	
6516MATH-3	Financial applications of blockchains	3	
6517MATH-3	Financial Big Data	3	
6518MATH-3	Applied data Analysis	3	
6519MATH-3	Data Sciences for Business	3	
6513MATH-3	Credit Risk Modeling	3	
6514MATH-3	Mathematical Interest Theory	3	
6515MATH-3	Investments	3	