جامعة الملك خالد
كلية العلوم
قسم الرياضيات

King Khalid University
College of Science
Department of Mathematics

KING KHALID UNIVERSITY
جامعة الملك خالد

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	Elective 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	