(For students admitted in 2022-23 under the 4-year degree)

BSc in Quantitative Finance

In addition to the requirements of their major programs, students are required to complete the University and School requirements for graduation. For details please refer to the respective sections on this website.

Unless approved by the Dean or the Dean's designate, students are not allowed to reuse courses that are counted towards the School Requirements to also fulfill the Major or Option requirements.

Students may use no more than 6 credits earned from courses offered in self-paced online delivery mode to satisfy the graduation requirements of a degree program. This 6-credit limit does not apply to credits obtained through the credit transfer procedures of the University.

For students graduating with an additional major, they must take all the requirements specified for that major, within which they must complete at least 20 single-counted credits. These 20 credits cannot be used to fulfill any other requirements for graduation except for the 120-credit degree requirement.

Under the new 30-credit Common Core Program which is applicable to students admitted to the University in 2022-23 and thereafter, courses that have been counted towards School and/or Major Requirements are not allowed to be reused for fulfilment of the University Common Core Requirements. Students should look up the details of the Common Core Program including the general and School-/program-specific distributional requirements posted on the Common Core website where the link to it is available on this website.

Major Requirements

Required Course(s)

			Credit(s) attained
FINA	3103	Intermediate Investments	3
FINA	3203	Derivative Securities	3
FINA	3303	Intermediate Corporate Finance	3
FINA	3810	Bloomberg Market Concepts Certification	0
FINA	4803	Quantitative Trading	3
ECON	3334	Introduction to Econometrics	4
ISOM	3230	Business Programming in VBA	3
MATH		Note: MATH 1014 OR MATH 1024 (Students taken MATH 1020 to fulfill the School Requirements may be exempted from this requirement)	0-3
MATH	1014	Calculus II	3
MATH	1024	Honors Calculus II	3
MATH		Note: MATH 2011 OR MATH 2023	3-4
MATH	2011	Introduction to Multivariable Calculus	3
MATH	2023	Multivariable Calculus	4

Elective(s)

			Minimum credit(s) required
QFIN		Restricted Electives (Courses from the specified elective list, of which at least 3 credits from Area A, at least 6 credits from Area B, and at least 9 credits from Area C)	18
Area A: Finance			
FINA		Any FINA courses at 3000- or 4000-level	
Area B: Programming and Data Analysis			
ISOM	3360	Data Mining for Business Analytics	3
ISOM	3370	Big Data Technologies	3
COMP	2011	Programming with C++	4
COMP	2012	Object-Oriented Programming and Data Structures	4
COMP	2012H	Honors Object-Oriented Programming and Data Structures	5
COMP	3211	Fundamentals of Artificial Intelligence	3
COMP	4211	Machine Learning	3
COMP	4221	Introduction to Natural Language Processing	3
COMP	4331	Data Mining	3
COMP	4332	Big Data Mining and Management	3
COMP	4471	Deep Learning in Computer Vision	3
RMBI	4310	Advanced Data Mining for Risk Management and Business Intelligence	3
Area C: Quantitative Skills (No more than 1 course within the same course group of ISOM 4520 / RMBI 4210 may be counted towards the elective requirement)			
ECON	4304	Time Series Econometrics and Business Forecasting	4
ISOM	3540	Introduction to Probability Models	3
ISOM	4520	Statistics for Financial Risk Management	4
ISOM	4530	Statistical Analysis of Financial Data in R/S-plus	4
ISOM	4540	Time Series Analysis and Forecasting	4
MATH	2111	Matrix Algebra and Applications	3
MATH	2121	Linear Algebra	4
MATH	2131	Honors in Linear and Abstract Algebra I	4
MATH	2350	Applied Linear Algebra and Differential Equations	3
MATH	2351	Introduction to Differential Equations	3
MATH	2352	Differential Equations	4
MATH	2421	Probability	4
MATH	2431	Honors Probability	4
MATH	3423	Statistical Inference	3
MATH	4511	Quantitative Methods for Fixed Income Derivatives	3
MATH	4512	Fundamentals of Mathematical Finance	3
RMBI	4210	Quantitative Methods for Risk Management	3