

Sample Study Plan for Major in Quantitative Finance with Second Major in Data Analytics and Minor in Mathematics

(For students matriculated in AY2021/2022 or after)

Year 1		Year 2		Year 3		Year 4		
Sem 1	Sem 2	Sem 1	Sem 2	Sem 1	Sem 2	Sem 1	Sem 2	
HSA1000 Asian Interconnections		Scientific Inquiry II	Artificial Intelligence	Communities and Engagement	Interdisciplinary I	CS3244 Machine Learning	Interdisciplinary II	
HSH1000 The Human Condition								
HSI1000 How Science Works, Why Science Works			Digital Literacy (CS1010S)	DSA2101 Essential Data Analytics Tools: Data Visualisation	UE1	DSA3102 Essential Data Analytics Tools: Convex Optimisation	QF4102 Financial Modelling and Computation	DSA4212 Optimisation for Large-Scale Data-Driven Inference
HSS1000 Understanding Social Complexity								
MA1100/MA1100T Basic Discrete Mathematics	DTK1234 Design Thinking	Writing (SP1541)	ST2132 Mathematical Statistics	CS2040 Data Structures and Algorithms	QF3103 Advanced Mathematics in Quantitative Finance	One of the following modules: QF4205, DSE4211, DSE4212	QF4104 Project in Quantitative Finance and Fintech	
MA2002 Calculus*	MA2001 Linear Algebra I**	DSA1101 Introduction to Data Science^	MA2213 Numerical Analysis I	MA2101 Linear Algebra II	QF2103 Computing for Quantitative Finance	QF4103 Mathematical Models of Financial Derivatives	MA32xx	
QF1100 Introduction to Quantitative Finance	MA2104 Multivariable Calculus	MA2116/ST2131 Probability*	QF2104 Fundamentals of Quantitative Finance	MA2108 Mathematical Analysis I	QF3101 Investment Instrument and Risk Management	ST3131 Regression Analysis	MA32xx [#]	

* Double-counted between Major and Second Major | ** Triple-counted between Major, Second Major and Minor | ^ Satisfies the Data Literacy requirement

[#] Top-up necessitated by the triple counting of MA2001

Note: 1. To find out how HSA1000, HSH1000, HSI1000, HSS1000 are pre-allocated, click [here](#).

2. Students have to complete all CHS Common Curriculum courses in their first two years except for the following 3 courses:

- Communities and Engagement course – can be taken from Years 2 to 4
- Two Interdisciplinary courses – can be taken in Years 3 and 4