Department of Mathematics

Sample Study Plan for Major in Mathematics with Specialisation and Second Major in Data Analytics

(For students matriculated in AY2021/2022 or after)

College of Humanities and Sciences

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 HSH1000 The Human Condition HSI1000 How Science Works, Why Science Works HSS1000 Understanding Social Complexity		Scientific Inquiry II	Artificial Intelligence	Communities and Engagement	Interdisciplinary I	Interdisciplinary II	UE1
		Digital Literacy (CS1010S)	MA22xx	MA32xx	MA32xx	MA42xx in Specialisation List	MA42xx in Specialisation List
^ DSA1101 Introduction to Data Science	DTK1234 Design Thinking	Writing (SP1541)	MA22xx	MA32xx	MA32xx	MA42xx in Specialisation List	MA42xx in Specialisation List
MA1100/MA1100T Basic Discrete Mathematics	* MA2001 Linear Algebra I	MA2101/MA2101S Linear Algebra II	MA2108/MA2108S Mathematical Analysis I	CS2040 Data Structures and Algorithms	MA32xx	MA4198 Mathematics Capstone Project	MA42xx in Specialisation List
* MA2002 Calculus	MA2104 Multivariable Calculus	* MA2116/ST2131 Probability	DSA2101 Essential Data Analytics Tools: Data Visualisation	ST2132 Mathematical Statistics	DSA3102 Essential Data Analytics Tools: Convex Optimisation	ST3131 Regression Analysis	DSA4212 Optimisation for Large-Scale Data-Driven Inference

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

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