

Major in Data Science and Economics

Graduation Requirements for students admitted in AY2022/2023 and after

To be awarded a **Major in Data Science and Economics**, a candidate must satisfy the following:

Course Level	Major Requirements	Level Units	Cumulative Major Units
1000	1. Pass: <ul style="list-style-type: none"> DSE1101 Introductory Data Science for Economics¹ EC1101E Introduction to Economic Analysis 	8	8
2000	2. Pass: <ul style="list-style-type: none"> CS2040 Data Structures and Algorithms² DSA2101 Essential Data Analytics Tools: Data Visualisation DSA2102 Essential Data Analytics Tools: Numerical Computation EC2101 Microeconomic Analysis I EC2102 Macroeconomic Analysis I MA2001 Linear Algebra I MA2002 Calculus MA2311 Techniques in Advanced Calculus or MA2104 Multivariable Calculus ST2131 / MA2116 / MA2216 Probability ST2132 Mathematical Statistics 	40	48
3000	3. Pass <ul style="list-style-type: none"> DSA3102 Essential Data Analytics Tools: Convex Optimisation DSE3101 Practical Data Science for Economics EC3101 Microeconomic Analysis II EC3102 Macroeconomic Analysis II EC3304 Econometrics II ST3131 Regression Analysis 	24	72
4000	4. Pass <ul style="list-style-type: none"> DSE4101 Capstone Project in Data Science and Economics I EC4305 Applied Econometrics 4 additional courses from the following: <ul style="list-style-type: none"> DSA4264 Sense-Making Case Analysis: Public Policy and Society or DSA4265 Sense-Making Case Analysis: Economics and Finance DSE4201 Capstone Project in Data Science and Economics II³ DSE4211 / QF4211 Digital Currencies 	24	96

	<ul style="list-style-type: none"> • DSE4212 / QF4212 Data Science in FinTech • DSE4231 Topics in Data Science and the Digital Economy • EC4308 Machine Learning and Economic Forecasting • EC4501 Economics and Computation • FE5213 Quantitative Macroeconomics and Finance with Python 		
--	---	--	--

¹DSE1101 will be read in fulfilment of the Data Literacy requirement under the CHS Common Curriculum.

²CS1010S Programming Methodology, the pre-requisite of CS2040, will be read in fulfilment of the Digital Literacy requirement under the CHS Common Curriculum.

³The scope of DSE4101 can be optionally extended by 4 Units using DSE4201 Capstone Project in Data Science and Economics II, subject to the approval of the DSE programme committee.

Published 9 February 2024

Updated 17 July 2025