

Major in Data Science and Economics

Graduation Requirements for students admitted in AY2024/2025 and AY2025/2026

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: - DSE1101 Introductory Data Science for Economics¹ - EC1101E Introduction to Economic Analysis	8	8
2000	2. Pass: - 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 <i>or</i> MA2104 Multivariable Calculus - ST2131/MA2116/MA2116T Probability - ST2132 Mathematical Statistics	40	48
3000	3. Pass - 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 - EC4305 Applied Econometrics 20 units from the following list of courses, out of which at least one must be DSE4288, DSE4211/QF4211, DSE4212/QF4212, DSE4231: - DSA4264 Sense-Making Case Analysis: Public Policy and Society <i>or</i> DSA4265 Sense-Making Case Analysis: Economics and Finance - DSE4211 / QF4211 Digital Currencies - DSE4212 / QF4212 Data Science in FinTech	24	96

	○ DSE4231 Topics in Data Science and the Digital Economy ○ DSE4288 Undergraduate Project in Data Science and Economics³ ○ EC4308 Machine Learning and Economic Forecasting ○ EC4325 The Economics of Digital Platforms ○ 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. ³DSE4288 is an 8-unit project course taken within one semester.		
--	---	--	--

To graduate with a Major in Data Science and Economics, a student must have read and passed at least one of the following:

- [DSE4288 Undergraduate Project in Data Science and Economics](#)
- [Any UPIP Course](#)
- [Any NOC Internship Course](#)

Published February 2024
Updated July 2026