

Requirements for Major in Data Science and Economics

Applicable to cohorts AY2021/2022 and after

Levels	Major Requirements	Cumulative Major Units
Level 1000 (8 Units)	Pass - DSE1101 Introductory Data Science for Economics ¹ - EC1101E Introduction to Economic Analysis	8
Level 2000 (40 Units)	Pass - CS2040 Data Structures and Algorithms ² - 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	48
Level 3000 (24 Units)	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	72
Level 4000 (24 Units)	Pass - DSE4101 Capstone Project in Data Science and Economics I - EC4305 Applied Econometrics - Four additional courses from the following: + 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 II ³ + DSE4211 / QF4211 Digital Currencies + DSE4212 / QF4212 Data Science in FinTech + DSE4231 Topics in Data Science and the Digital Economy + EC4308 Machine Learning and Economic Forecasting + FE5213 Quantitative Macroeconomics and Finance with Python	96

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

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

³ The 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.