Requirements for Second Major in Data Analytics

Applicable to cohorts AY2021/2022 and after

Levels	Major Requirements	Cumulative Major Units
Level 1000 (4 Units)	Pass - DSA1101 Introduction to Data Science	4
Level 2000 (22-24 Units)	Pass - One of the following courses: + MA1508E Linear Algebra for Engineering˜ + MA1513 Linear Algebra with Differential Equations (2 Units)^˜ + MA1101R/MA2001 Linear Algebra I - One of the following courses: + MA1312 Calculus with Applications + MA1505 Mathematics I ˜ + MA1511 Engineering Calculus (2 Units)˜ **and** MA1512 Differential Equations for Engineering (2 Units)˜ + MA1521 Calculus for Computing + MA2002 Calculus - CS2040 Data Structures and Algorithms - ST2131/MA2116/MA2216 Probability - ST2132 Mathematical Statistics - One of the following courses: + DSA2101 Essential Data Analytics Tools: Data Visualisation + DSA2102 Essential Data Analytics Tools: Numerical Computation	26-28
Levels 3000 and 4000 (12-16 Units)	Pass - One of the following courses: + DSA3102 Essential Data Analytics Tools: Convex Optimisation* + DBA3701 Introduction to Optimisation* + MA3236 Nonlinear Programming* + MA3252 Linear and Network Optimisation* - Two (or three^) of the following courses: + CS3244 Machine Learning + DSA4211 High-Dimensional Statistical Analysis + DSA4212 Optimisation for Large-Scale Data-Driven Inference* + ST3131 Regression Analysis	40-42

^ Applicable only to students who use MA1513 Linear Algebra with Different Equations (2 Units) to fulfil the second major requirements.

* Students may need to read additional courses outside the second major requirements to satisfy the pre-requisites of this course.

˜ MA1505, MA1508E, MA1511, MA1512 and MA1513 are offered only to FoE students.

This second major is not offered with a primary major in Business Analytics or Data Science and Analytics or Data Science and Economics, and a minor in Data Analytics.

13-Jun-23