

What you will study

Below are the core courses for Master of Analytics – these are compulsory courses and so must be taken to complete the requirements of the programme.

Course Code	Course Name	Semester	Points	Notes
ENGE817	STEM Research Methods	1 & 2	15	<i>This is the core course. It runs in both Semester 1 and Semester 2 – if you complete this in S1, you do not need to take it again in S2.</i>
COMP809	Data Mining and Machine Learning	1	15	
MATH803	Mathematical Modelling and Simulation	1	15	<i>Required for joint SAS certificate</i>
STAT802	Advanced Topics in Analytics	1	15	<i>Required for joint SAS certificate</i>
COMP810	Data Warehousing and Big Data	2	15	<i>Prior SQL knowledge is advantageous</i>
STAT804	Optimisation and Operations Research	2	15	<i>Required for joint SAS certificate</i>

Elective Choices for 2026

Below are the current electives for 2026, and they may differ from what is available in 2027. This timetable is subject to change, and courses with insufficient enrolments or limited resources may be cancelled. Please note, Semester 2 2026 electives are not yet confirmed.

Course Code	Course Name	Semester	Points	Notes
COMP814	Text Mining	1	15	
MATH802	Advanced Financial Modelling and Analytics	1	15	<i>Required for joint SAS certificate</i>
STAT805	Computational Mathematics and Statistics	1 & 2	15	<i>Provides background knowledge for COMP810, STAT802, STAT804.</i>
COMP813	Artificial Intelligence	1 & 2	15	
STAT803	Official Statistics	2	15	
COMP815	Nature Inspired Computing	2	15	

You are also permitted to take up to 30 points of electives from other CMS programmes. The enrolment limit is 1 course per semester, and these are *subject to approval*.

Dissertation

For Master of Analytics programme, the Dissertation will be partially in the form of a Project with an industry partner. **Only the Postgraduate Coordinator can enrol students in the Dissertation, after final approval.**

Course Code	Course Name	Semester	Points ¹	Notes
STAT995	Dissertation	3	60	<i>After completing 120 points of courses including ENGE817, subject to minimum grade average and school approval</i>

Recommended Study Plan

Below is the recommended outline for a full-time student who will start in Semester 1.

Year 1 Semester 1:

Course Code	Course Name	Points	Core/Elective
COMP809	Data Mining and Machine Learning	15 Points	Core
MATH803	Mathematical Modelling and Simulation	15 Points	Core
STAT802	Advanced Topics in Analytics	15 Points	Core
MATH802	Advanced Financial Modelling and Analytics	15 Points	Elective

Year 1 Semester 2:

Course Code	Course Name	Points	Core/Elective
ENGE817	STEM Research Methods	15 Points	Core
COMP810	Data Warehousing and Big Data	15 Points	Core
STAT804	Optimisation and Operations Research	15 Points	Core
TBC	Elective*	15 Points	Elective*

*The recommended elective for Year 1 Semester 2, can be STAT805 Computational Mathematics and Statistics **OR** STAT803 Official Statistics.

Year 2 Semester 1:

Course Code	Course Name	Points	Core/Elective
STAT995	Dissertation	60 Points	Core