Academic Chair: Phil Schrader Start Date: Semester 1 2026

| Year 1 – 2026 | Semester 1 Units   | СР  | Semester 2 Units  | СР |
|---------------|--|-----|---|----|
|               | MAS164 Fundamentals of Mathematics*  | 3   | MAS162 Discrete Mathematics and Logic   | 3  |
|               | MAS183 Statistical Data Analysis   | 3   | MAS182 Introductory Calculus with Applications  | 3  |
|               | Discovery unit** or Elective   | 3   | Discovery unit** or Elective  | 3  |
|               | PEN100 or ICT100   | 3   | Elective  | 3  |
|               | Total  | 12* | Total   | 12 |
|               | Semester 1 Units   | СР  | Semester 2 Units  | СР |
| Year 2 - 2027 | MAS161 Calculus and Matrix Algebra   | 3   | MAS221 Mathematical Modelling & Differential Equations or MAS223 Applied Statistics or MAS225 Optimisation and Graph Theory | 3  |
|               | MAS222 Probability and Statistical Inference or MAS224 Biostatistics                     | 3   | MAS221 Mathematical Modelling & Differential Equations or MAS223 Applied Statistics or MAS225 Optimisation and Graph Theory | 3  |
|               | Elective   | 3   | Elective  | 3  |
|               | Elective   | 3   | Elective  | 3  |
|               | Total  | 12  | Total   | 12 |
| Year 3 - 2028 | Semester 1 Units   | СР  | Semester 2 Units  | СР |
|               | MAS220 Mathematical Methods & Multivariable Calculus                                     | 3   | 2 or 1 of:  MAS354 Modelling and Simulation or  MAS353 Statistical Design and Data Analysis                                 | 3  |
|               | 1 or 2 of:<br>MAS351 Environmental & Biological Modelling<br>MAS352 Time series Analysis | 3   | MAS354 Modelling and Simulation<br>or<br>MAS353 Statistical Design and Data Analysis<br>or<br>Elective                      | 3  |
|               | MAS300 or Elective   | 3   | MAS300 or Elective  | 3  |
|               | Elective   | 3   | Elective  | 3  |
|               | Total  | 12  | Total   | 12 |

## **TOTAL CREDIT POINTS** 72

## **Notes**

All units marked as "elective" may be replaced by units in another Major to complete that major.

In Year 3, you need to choose 9 points from those listed as "1 or 2 of" and "2 or 1 of". You should choose the unit in your major to specialise in either Mathematics or Statistics. If unsure you should contact the Unit Coordinator.

**Please note:** This course plan is a sample only and must be read in conjunction with the full course structure, unit prerequisites and enrolment options as outlined in the <u>Handbook</u>. Students should note that due to unit prerequisites, commencing study in Semester 2 may extend the duration of the course. This information is correct as at 1/12/2025.



<sup>\*</sup>MAS164 is not necessary if you have Year 12 Mathematical Methods ATAR or equivalent. In that case you should see the Course plan for that situation.

<sup>\*\*</sup>You will need to take at least one discovery unit.