

MATH 4001 MATHEMATICS HONOURS THESIS

Credit Points 20

Legacy Code 200413

Coordinator Stephen Weissenhofer ([https://directory.westernsydney.edu.au/search/name/Stephen Weissenhofer/](https://directory.westernsydney.edu.au/search/name/Stephen%20Weissenhofer/))

Description This is a 40 credit point year-long subject taken over two terms (20 credit points in each term). The aim of this subject is to further develop the student's research and problem solving skills. The student is required to implement the research plan, complete a substantive piece of research in the field of Mathematics/Statistics, and to communicate the results of that work to an interested and technically literate audience. All projects will therefore contain at least two broad areas of assessment: the substantive work itself, and the oral and written communication of the work to others. All assessment components submitted in both of these areas are expected to be of a high professional standard. Students will present their research in the thesis. The thesis topic and structure will vary according to the area of interest of the student and the expertise of the supervisor. Throughout this subject regular planned consultations between the student and supervisor will occur. Students are expected to work to a schedule devised in consultation with their supervisor. The schedule will include set dates for the presentation of draft chapters for review by the supervisor.

School Computer, Data & Math Sciences

Discipline Mathematical Sciences

Student Contribution Band HECS Band 1 20cp

Check your HECS Band contribution amount via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 4 subject

Restrictions Students must have a grade point average greater than 5 unless a case can be made.

Assumed Knowledge

To effectively research in the area of Mathematics/Statistics, an understanding and knowledge equivalent to an undergraduate Bachelor of Science (Mathematics) degree or major in Mathematics/Statistics is required.

Learning Outcomes

On successful completion of this subject, students should be able to:

1. understanding of the fundamentals of pertinent theories and ability to apply these to a novel problem/situation;
2. evidence of original thought in the design and development of the research strategy
3. demonstrate superior communication skills and due care and attention to the requirements of academic writing and reporting of independent research;
4. facility in scholarly argument appropriate to the project, the discipline and to an Honours level
5. demonstrate an understanding of, and adherence to, the ethical and social implications of Mathematics/Statistics research and enquiry

Subject Content

The content is flexible depending on the nature of the research project

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Item	Length	Percent	Threshold	Individual/ Group Task
Thesis	8,000 - 12,000 words	100	N	Individual

Teaching Periods