The Honours Year in the Mathematical Sciences

Students will carry out an Honours project — which includes writing a thesis — under the supervision of a staff member in the School of Mathematical Sciences. In addition, students will undertake 5 courses worth 3 units each and present a seminar.

Entry Requirement
Students to have completed — with a credit average — a minimum of 12 units of Level III courses.

Honours Enrolment
Students enrol into an Honours degree in Applied Mathematics, Pure Mathematics or Statistics. In addition, students can enrol into Honours in Mathematical Sciences or joint honours with other disciplines.

Honours Mark
The Honours mark is a single mark out of 100 composed of the following proportions and totalling 24 units:

- 15 units from the five courses (3 from each course)
- 8 units from the project
- 1 unit from the seminar

Thesis Due Date
Last day of week 12 in their second semester.

Seminar
Each student will present a seminar typically (but not mandatorily) about some aspects of their project. The seminars are presented in the mid semester break of their second semester. Scope of the seminar and assessment guidelines will be determined based on current assessment rules.

Timetable for the Project
- Project supervisor and topic selection: 4 weeks before the start of their first semester.
- Outline of project by the beginning of Week 7 of their first semester, to be lodged with the Honours coordinator.
- Students expected to commence with the thesis writing not later than the beginning of their second semester.
- Seminar: mid-semester break of the second semester.
- Complete draft to supervisor: beginning of week 9 of the second semester. The supervisor to give feedback to student in a timely manner. Incomplete drafts may result in the supervisor not being able to provide adequate feedback to the student.
- The above timetable is designed for students taking honours in a standard one calendar year basis, and will be adjusted for students doing otherwise.

Research Training
As part of their research training, students will attend a non-assessable course on research related issues one hour per week during one semester. This research training is in addition to the 5 courses.
Scope of Project
The length of the thesis should normally be 40-70 pages using the provided LaTeX template. Appendices are not included in this length. The thesis should contain:

- a title, an abstract, a conclusion and references
- an introduction, problem statement/description, review of related work, methodology and results (as appropriate)

Possible Types of Projects
- Critical review of a topic
- Analysis of data, problem or application using existing techniques
- Replication of results from the literature
- Extensions or generalisations of existing work

Coursework
Students must undertake five courses during Honours, selected from the following lists.

List A: Approved Honours level courses
List B: Approved Level III courses to be assessed at Honours level
List C: Approved AMSI courses
List D: Other Level III courses offered within the School and assessed at Level III

Lists A, B and D relevant to the current year are available in the “Honours Course Selection” document, which is also used for students to inform the Honours Coordinator of their selection of courses for the current academic year. Courses in List A will be taught a total of at most 30 contact hours, those in List B and C will be taught 36 hours per semester (including tutorials and/or labs).

A student’s course selection must satisfy the following criteria.

- At least 3 courses are chosen from List A
- At most 2 courses are chosen from List B
- At most 1 course is chosen from List C
- At most 1 course is chosen from List D
- At least 3 discipline specific courses chosen from Lists A, B and C, with at least 2 of them from List A.

Students seeking to take more than five courses from Lists A, B and D must obtain permission from the Head of School. The overall score of students with more than five qualifying courses will be determined from the best five courses, subject to the above requirements.

Students in the Honours of Mathematical Sciences choose courses as prescribed above, but the 3 discipline specific courses will have a more flexible interpretation.

Examination Process
- Two examiners (one being the supervisor) read and assess the thesis, notionally independently, but with the context statement in mind.
- The two examiners are encouraged to meet to discuss the honours thesis before submitting their mark. The report and project mark of each examiner to be submitted to the Honours coordinator one week before the Honours meeting.
- The Honours coordinator oversees the marks, raises potential discrepancies, and attempts to resolve them with the two examiners before the Honours meeting.