

The Honours Year in the Mathematical Sciences

This information sheet complements the information about the Bachelor of Mathematical Sciences (Honours) and Bachelor of Mathematical and Computer Sciences (Honours) available on the University website:

http://www.adelaide.edu.au/degree-finder/2016/hmasc_hbmathsci.html

http://www.adelaide.edu.au/degree-finder/2016/hsmcs_hbscm&cs.html

Entry Requirement

Students should have completed a Bachelor degree, with at least 12 units of Level III courses in Applied Mathematics, Pure Mathematics, or Statistics at credit standard or better.

Honours Enrolment

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

Students enrol in their courses online via Access Adelaide, including the three project courses, Honours Project in Mathematical Sciences A, B and C. Each project course has 3 load units. The C-course comes last and gives 9 credit units, 8 for the thesis and 1 for the seminar. Students can enrol in the A- and B-courses in their first semester and the C-course in the second semester, or enrol in the A-course in the first semester and the B- and C-courses in the second semester.

Students must consult their supervisor or the Honours Coordinator about course selection and complete a course selection form, to be signed by the supervisor and the Honours Coordinator, before enrolling online.

Honours Grade

The Honours grade (1st Class, 2nd Class Division A, etc.) is determined by the weighted average of the marks for the courses presented for the degree.

Submission of the Thesis

The thesis is due on Friday of Week 12 in the student's second semester. Two spiral bound copies and a PDF copy of the thesis should be delivered to the Honours Coordinator. The thesis should contain a declaration of originality and approval of submission, signed by the student and the supervisor.

Research Seminar

Each student will present a research seminar, usually (but not mandatorily) about some aspects of the research project. The seminars are presented in the mid-semester break of the second semester.

Timetable for the Project

- Supervisor and topic selection: 4 weeks before the start of the first semester.
- Outline of research project: beginning of Week 7 of the first semester, to be lodged with the Honours Coordinator.
- Students are expected to commence thesis writing no 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 will give feedback to the student in a timely manner. Incomplete or late 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 on a standard one calendar year basis. It will be adjusted for part-time Honours students.

Research Training

As part of their research training, students must attend a non-assessable course on research methodology, one hour per week during Semester 1.

Scope of Research Project

The length of the thesis should normally be 40–70 pages using the provided L^AT_EX template. Appendices are not included in this length. The thesis should contain:

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

Possible Types of Research Projects

- Critical review of a topic.
- Analysis of data, problem or application using existing techniques.
- A detailed exposition of results from the literature.
- Extensions or generalizations of existing work.

Assessment of the Thesis

The supervisor and an independent examiner assess the thesis.

Coursework

In addition to the project courses, students must undertake five courses, selected from the following lists.

List A: Honours topics courses (Applied Mathematics Topic A, etc.).

List B: Honours versions of Level III courses, to be assessed at Honours level.

List C: Approved AMSI courses.

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.

To earn a major in the discipline of Applied Mathematics, Pure Mathematics or Statistics, a student must complete at least 3 courses in that discipline from Lists A, B and C, with at least 2 of them from List A.

Students in the BMaCompSc(Hons) who do not qualify for a discipline major may request a major in Mathematical Sciences.

Students seeking to take more than five courses from Lists A and B must obtain permission from the Head of School.