

Faculty of Engineering and Information Sciences
School of Mathematics and Applied Statistics
University of Wollongong

Bachelor of Mathematics (Honours)	761
Bachelor of Mathematics Advanced (Honours)	761_2
Bachelor of Medical Mathematics (Honours)	1851
Bachelor of Mathematics and Finance (Honours)	356

GUIDE FOR STUDENTS, SUPERVISORS AND EXAMINERS 2019¹

¹ The information contained in this document has been compiled from various Honours guides edited (in alphabetical order) by Sue Denny, Joanna Goard, Xiaoping Lu, Timothy Marchant, James McCoy, Mark Nelson, Rodney Nilsen, Graham Williams and Annette Worthy. With thanks to Sonia Jennings for her original work. This version was edited and typeset by Marianito Rodrigo in July 2019.

1. General information for students

In what follows, 'UOW' refers to the University of Wollongong, 'EIS' to Engineering and Information Sciences, 'SMAS' to School of Mathematics and Applied Statistics, 'cp' to credit points and 'WAM' to weighted average mark.

1.1. Contact details associated with the SMAS Honours program

1.1.1. Head of School

Name: Prof Aidan Sims
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Phone: (02) 4221 5003
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1.1.2. Honours coordinator

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1.2. Course codes

Degree	Abbreviation	Course code
Bachelor of Mathematics (Honours)	BMath (Hons)	761
Bachelor of Mathematics Advanced (Honours)	BMathAdv (Hons)	761_2
Bachelor of Medical Mathematics (Honours)	BMedMath(Hons)	1851
Bachelor of Mathematics and Finance (Honours)	BMathFin (Hons)	356

1.3. Requirements for admission

1.3.1. BMath (Hons)

Candidates who have completed the requirements for the Bachelor of Mathematics (144 cp) or an approved equivalent degree, with an average mark of at least 65%, are eligible for entry to the BMath (Hons) program. Approval is at the discretion of the EIS Associate Dean – Education, in consultation with the Honours coordinator.

1.3.2. BMathAdv (Hons)

Candidates who have completed the requirements for the Bachelor of Mathematics Advanced (144 cp) or an approved equivalent degree, with an average of at least 80%, are eligible for entry to the BMathAdv (Hons) program. Approval is at the discretion of the EIS Associate Dean – Education, in consultation with the Honours coordinator.

1.3.3. BMedMath (Hons)

Candidates who have completed the requirements for the Bachelor of Medical Mathematics (144 cp) or an approved equivalent degree, with an average of at least 65%, are eligible for entry to the BMedMath (Hons) program. Approval is at the discretion of the EIS Associate Dean – Education, in consultation with the Honours coordinator.

1.3.4. BMathFin (Hons)

Candidates who have a weighted average mark greater than or equal to 67.5% on satisfactory completion of the first three years of a BMathFin (Hons) degree are eligible for entry into the Honours strand in the final year. Students who do not meet this requirement should contact their degree coordinator to discuss their options.

1.4. Application process

1.4.1. BMath (Hons), BMathAdv (Hons) and BMedMath (Hons) degrees

Candidates should apply online at <https://www.uow.edu.au/apply/index.html> for their preferred Honours degree. Completed applications and accompanying documents should be submitted by the second Friday of December for commencement the following Autumn session, or by the last working day in June for entry to Spring session. Late applications may be accepted but is dependent on the availability of a supervisor. Due to the timetable of the Honours degrees, it is advisable to speak to potential supervisors before completing the application. All members of staff are potential supervisors for projects in mathematics or statistics. Contact information may be obtained from <http://eis.uow.edu.au/about/contacts/smas/index.html>.

Applications will be considered by the Honours coordinator for approval by the EIS Associate Dean – Education. Candidates at 300 level enrolled in the BMath/BMathAdv/BMedMath degrees at the University of Wollongong wishing to apply for Honours should contact the Honours coordinator.

1.4.2. BMathFin (Hons) degree

Candidates at 300 level enrolled in the BMathFin (Hons) degree at the University of Wollongong should initially contact their degree coordinator. Although there is no formal application process for this degree, students wishing to study in the Honours strand of the Bachelor of Mathematics and Finance degree should speak to the degree coordinator or Honours coordinator as soon as possible after the release of results. Students are highly encouraged to do this before the start of session, and should enrol in INFO401: Finance Honours Project and the required subjects as prescribed in the degree. Note that the enrolment is provisional until all marks are submitted for subjects towards the 144 cp of the Bachelor of Mathematics and Finance degree. If a student does not successfully obtain the required minimum WAM of 67.5% as mentioned above, they will be removed from this subject and should consult the calendar for enrolment information on the non-Honours strand. Note that a student who meets this WAM requirement must do the Honours strand.

It is strongly advised that students speak to potential supervisors before enrolling in INFO401. All members of staff are potential supervisors for projects in mathematics or statistics. Contact information may be obtained from <http://eis.uow.edu.au/about/contacts/smas/index.html>.

1.5. Change of research topic or supervisor(s)

An Honours student who wishes to change the research topic or supervisor(s) from that which was approved on admission must submit a request in writing to the Honours coordinator no later than the Friday of the second week of the session of commencement. The request must be accompanied by a brief rationale for the change. The Honours coordinator will take into account the merit of the request and in the case of a change of research topic, the opinion of the supervisor(s). Students will be advised in writing of the outcome.

1.6. Part-time Honours enrolment

This course is usually undertaken as full-time study. However part-time study is available and students should consult the Honours coordinator for a program of study, noting that the thesis project needs to be completed over two consecutive sessions if doing part-time study (excluding summer session). Approval is at the Honours coordinator's discretion and a limited range of subjects may be available as subjects change with each session and year. Deferral is not usual and a new application should be submitted.

1.7. Honours program objectives

After successful completion, students should be able to:

- (1) Identify and demonstrate a range of mathematical techniques used extensively in current research.
- (2) Successfully complete a research project in their discipline.
- (3) Effectively communicate research results via seminars and reports.
- (4) Understand and review journal and conference articles in their discipline.
- (5) Undertake higher level research degrees, such as the Master of Research and Doctor of Philosophy degrees.
- (6) Develop independent analytical skills in areas of relevance to the quantitative finance industry, in the case of the BMathFin (Hons) degree.

1.8. Roles

1.8.1. Head of academic unit and Honours coordinator

The academic unit, namely the School of Mathematics and Applied Statistics, is responsible for ensuring compliance with the UOW Code of Practice – Honours. While responsibility for completion of a suitable Honours project rests primarily with the student, in consultation with their supervisor(s), consistent with the above Code of Practice the head of academic unit and/or the Honours coordinator may wish to discuss progress with the student and/or the supervisor(s) at any stage during candidature, for the student's benefit. For example, it is important that Honours projects, especially those that have scope to proceed in several different directions, maintain a level and amount of mathematics and/or statistics appropriate to the degree.

1.8.2. Supervisors

The overriding responsibility of supervisors is to provide continuing support for their students in researching and producing an Honours thesis to the best of the student's ability. Supervisors must be familiar with the information in this guide. In accordance with Section 4 of the Code of Practice – Honours, specific other responsibilities of the supervisors are to:

- advise the head of the academic unit of any situation which might lead to a conflict of interest which could unduly advantage or disadvantage a student, e.g. if there is or has been a close personal relationship between a supervisor and an actual or potential Honours degree student;
- advise Honours degree students about their procedural and substantive rights and responsibilities contained in this code (directly or through the Honours guide);
- advise and assist Honours degree students to comply with workplace health and safety and ethics requirements where relevant;
- support Honours degree students in developing a proposal for their Honours project within a negotiated time frame;
- assist Honours degree students to develop a plan for completing the Honours project within an appropriate time frame;
- maintain regular contact with Honours degree students in order to monitor their progress;
- inform Honours degree students about any planned absences during the candidature and arrangements for supervision during those absences;

- provide timely and helpful written feedback to Honours degree students on any submissions and to assist them to develop solutions as problems are identified;
- advise Honours degree students of inadequate progress or work below the standard generally required and to suggest appropriate action;
- attend meetings of the academic unit assessment committee where students' grades are determined;
- ensure the Academic Integrity and Plagiarism Policy, Code of Practice – Research, Research Misconduct Policy, Intellectual Property Policy, Student Assignment of Intellectual Property Policy, Student Assignment of Intellectual Property Guidelines and Authorship Policy, and the consequences for the candidate's Honours project of breaching these policies, are explained carefully to the student;
- provide assistance to Honours degree students regarding preparation of the major and minor seminars.

It is essential that the student's thesis topic be within the supervisor's field of expertise and that the subject pursued be of interest to the supervisor. Adequate resources for the satisfactory completion of the thesis must be available.

Supervisors should make themselves familiar with the general rules pertaining to the relevant Honours degree and the Code of Practice – Honours, and bring these to the attention of the student wherever necessary.

Supervisors should meet with students on a regular basis, preferably weekly but not less than fortnightly, to discuss work in progress and to advise on the direction of the work. They should comment critically on any drafts of the thesis (including aspects of referencing, bibliographic work and proofreading) and/or on the creative presentation as a work-in-progress. They should provide regular advice and timely feedback necessary to the production of a thesis and/or creative presentation of merit.

A supervisor must alert the student and the Honours coordinator of any situation which indicates that the student might not meet the given deadlines for the thesis or appears incapable of attaining appropriate standards. In order to meet University deadlines for the declaration of marks, so that students may be considered for graduation and scholarships, examiners are asked to attend the School Assessment Committee meeting usually held a week after the end of the UOW exam period, or make alternative arrangements to the satisfaction of the Chair of the meeting.

1.8.3. Students

Honours students have the primary responsibility for the timely completion of their project report submissions and other assessment tasks. They should be familiar with the information in this guide. In accordance with Section 4 of the Code of Practice – Honours, specific responsibilities of students include:

- develop an Honours project proposal and plan for completing the project within a timeframe agreed to by the supervisor(s) and, where possible, the Honours coordinator;
- maintain regular contact with the supervisor(s);
- discuss any proposed variation of enrolment or leave of absence with their supervisor(s) and Honours coordinator;
- establish with the supervisor(s) the level of support required for successful completion of the Honours project;
- present required written material to the supervisor(s) in sufficient time to allow for comments and discussions before scheduled meetings;
- undertake additional work towards their Honours project identified as necessary by the supervisor(s);
- accept responsibility for the quality and originality of all submitted work;
- ensure all research is carried out in accordance with all statutory and other requirements relating to ethical, safe and responsible conduct of research;
- ensure they read and understand relevant University policy documents including Academic Integrity Policy, Code of Practice – Research, Intellectual Property Policy, Student Assignment of Intellectual Property Policy, Student Assignment of Intellectual Property Guidelines, Research Misconduct Policy and Authorship Policy.

1.9. First formal meeting between supervisor(s) and student

At their initial meeting or within a month after this, the Honours student and supervisor(s) should discuss the Code of Practice – Honours with particular reference to the sections dealing with the responsibilities of the supervisor(s)

and student. Where there is more than one supervisor, the student should be notified of the particular responsibilities of each supervisor. Student and supervisor(s) should then discuss and agree upon or note:

- the duration, location and timing of future meetings;
- the structure of future meetings, including which supervisor(s) will attend and the responsibilities of student and supervisor(s) in the event of postponement of a meeting;
- timetabling of and completion and presentation of research proposal, the details of what is required in the thesis/creative proposal and criteria for an acceptable thesis/creative proposal;
- a broad timetable, taking into account the level of the thesis/creative work, the student's timetable for the thesis/creative work, any foreseen intervening matters (e.g. major conferences), coursework required and the timetable agreed for completion and criteria of such work;
- 'remedial' work required and a timetable agreed for completion and criteria of such work;
- processes for submission of work, e.g. whether material should be submitted before meetings;
- access to equipment, study space, computer/software, and where and when these are/will be available and likely resource implications;
- requirements to attend seminars/orally present research material;
- the question of whether or not to keep a diary of meetings or another method of record keeping;
- Intellectual Property Policy, and careful explanation of the consequences of this for the student's research;
- Human Ethics Policy and its requirements;
- Grievance Policy and procedure.

1.10. Key dates

Date (Autumn session)	Description
Prior to commencement	Select project and supervisor(s)
Week 0	Meeting with Honours coordinator for those starting in Autumn
Week 1	Classes commence
Friday of Week 1	Email final list of coursework subjects to Honours coordinator
Week 4	10-minute minor seminar for those starting in Autumn
Week 8	25-minute major seminar for those starting in Spring
Friday of Week 11	Submission of written report for those starting in Spring
Friday of StuVac	Examiner reports due
First week of recess	School Assessment Committee meeting
Last working day in June	Applications for Spring session close; late applications may be accepted but is dependent on availability of a supervisor

Date (Spring session)	Description
Prior to commencement	Select project and supervisor(s)
Week 0	Meeting with Honours coordinator for those starting in Spring
Week 1	Classes commence
Friday of Week 1	Email final list of coursework subjects to Honours coordinator
Week 4	10-minute minor seminar for those starting in Spring
Week 8	25-minute major seminar for those starting in Autumn
Friday of Week 11	Submission of written report for those starting in Autumn
To be confirmed in October	Applications for PhD scholarships due to the Student Research Office
Friday of StuVac	Examiner reports due
First week of recess	School Assessment Committee meeting
Friday of the second week in December	Applications for next year close; late applications may be accepted but is dependent on availability of a supervisor

1.11. Information about Honours programs

1.11.1. BMath (Hons)

- Course code: 761
- Total credit points: 48 cp

The program of study has a coursework component and a project component. A full-time student's enrolment record typically follows a program specialising in either mathematics or statistics:

Program A: Honours in Mathematics			
Subject code	Subject name	cp	Session
MATH491	Mathematics Honours Thesis	12	Autumn/Spring
MATH451	Advanced Topics in Mathematics A	12	Autumn
MATH452	Advanced Topics in Mathematics B	12	Spring
	Elective 1	6	Autumn/Spring
	Elective 2	6	Autumn/Spring

Program B: Honours in Statistics			
Subject code	Subject name	cp	Session
STAT491	Statistics Honours Thesis	12	Autumn/Spring
STAT451	Advanced Topics in Statistics A	12	Autumn
STAT452	Advanced Topics in Statistics B	12	Spring
	Elective 1	6	Autumn/Spring
	Elective 2	6	Autumn/Spring

Variations may be possible and in any case students should check their enrolment with the Honours coordinator.

Part-time students typically will need to enrol as above, but undertaking 12 cp in each of four consecutive sessions. However, the project subjects MATH491 or STAT491 have to be undertaken in consecutive sessions. Note that in the above, a summer session is generally excepted in counting consecutive sessions.

The project component is worth 25% of the total credit points for the Honours degree, and consists of a written report and two project seminars.

The coursework component is worth 75% of the total credit points for the Honours degree. Six coursework topics must be chosen, normally consisting of 400-level subjects, 900-level subjects or 300-level subjects but assessed at 400 level,² offered by the School of Mathematics and Applied Statistics. The coursework topics chosen will be subject to approval from the Honours coordinator; not all 300-, 400- or 900-level courses may be allowable within the degree, even if they carry a MATH or STAT code (e.g. MATH407 cannot be taken for credit as part of the BMath (Hons) degree). It may be possible to count one summer school subject of the Australian Mathematical Sciences Institute (AMSI) and up to two courses offered by AMSI through the Advanced Collaborative Environment per session. Special topic courses running over session breaks may be available to count as Honours subjects. The subjects selected are to fit within the enrolment programs as above, and are to be discussed with the Honours coordinator.

The coursework topics that are offered are finalised at the beginning of each session and are posted on the Honours website. A list of AMSI Honours courses is available from <https://highered.amsi.org.au/ace-hons->

² The same 300-level subjects, although they are assessed at 400 level, cannot be counted twice for both undergraduate and Honours degrees.

courses/. Interested students should email the lecturers directly for more information.

The subject codes MATH451/MATH452 for Program A and STAT451/STAT452 for Program B are to be used for four of the six coursework topics. The final mark for each of these 12 cp subjects will be the average of the marks for the two coursework subjects that comprise it. Note that a student must pass each of the individual coursework subjects to pass the 12 cp subject, otherwise a Technical Fail will be given.

The subject codes MATH471/MATH472 for Program A and STAT471/STAT472 for Program B are to be used for the two elective subjects. Students must inform the Honours coordinator by email the definitive list of subjects that they wish to take by Friday of Week 1 during each session.

1.11.2. BMathAdv (Hons)

- Course code: 761_2
- Total credit points: 48 cp

The program of study has a coursework component and a project component. A full-time student's enrolment record typically follows a program specialising in either mathematics or statistics:

Program A: Honours in Mathematics				
Subject code	Subject name	cp	Session	
MATH492	Mathematics Advanced Honours Thesis	18	Autumn/Spring	
MATH451	Advanced Topics in Mathematics A	12	Autumn	
MATH452	Advanced Topics in Mathematics B	12	Spring	
	Elective	6	Autumn/Spring	

Program B: Honours in Statistics				
Subject code	Subject name	cp	Session	
STAT492	Statistics Advanced Honours Thesis	18	Autumn/Spring	
STAT451	Advanced Topics in Statistics A	12	Autumn	
STAT452	Advanced Topics in Statistics B	12	Spring	
	Elective	6	Autumn/Spring	

Variations may be possible and in any case students should check their enrolment with the Honours coordinator.

Part-time students typically will need to enrol as above, but undertaking 12 cp in each of four consecutive sessions. However, the project subjects MATH492 or STAT492 have to be undertaken in consecutive sessions. Note that in the above, a summer session is generally excepted in counting consecutive sessions.

The project component is worth 37.5% of the total credit points for the Honours degree, and consists of a written report and two project seminars.

The coursework component is worth 62.5% of the total credit points for the Honours degree. Five coursework topics must be chosen, normally consisting of 400-level subjects, 900-level subjects or 300-level subjects but assessed at 400 level,³ offered by the School of Mathematics and Applied Statistics. The coursework topics chosen will be subject to approval from the Honours coordinator; not all 300-, 400- or 900-level courses may be allowable within the degree, even if they carry a MATH or STAT code (e.g. MATH407 cannot be taken for credit as part of the BMath-Adv (Hons) degree). It may be possible to count one summer school subject of the Australian Mathematical

³ The same 300-level subjects, although they are assessed at 400 level, cannot be counted twice for both undergraduate and Honours degrees.

Sciences Institute (AMSI) and up to two courses offered by AMSI through the Advanced Collaborative Environment per session. Special topic courses running over session breaks may be available to count as Honours subjects. The subjects selected are to fit within the enrolment programs as above, and are to be discussed with the Honours coordinator.

The coursework topics that are offered are finalised at the beginning of each session and are posted on the Honours website. A list of AMSI Honours courses is available from <https://highered.amsi.org.au/ace-hons-courses/>. Interested students should email the lecturers directly for more information.

The subjects codes MATH451/MATH452 for Program A and STAT451/STAT452 for Program B are to be used for four of the six coursework topics. The final mark for each of these 12 cp subjects will be the average of the marks for the two coursework subjects that comprise it. Note that a student must pass each of the individual coursework subjects to pass the 12 cp subject, otherwise a Technical Fail will be given. The subjects codes MATH471/MATH472 for Program A and STAT471/STAT472 for Program B are to be used for the elective subject. Students must inform the Honours coordinator by email the definitive list of subjects that they wish to take by Friday of Week 1 during each session.

1.11.3. BMedMath (Hons)

- Course code: 1851
- Total credit points: 48 cp

The program of study has a coursework component and a project component. A full-time student's enrolment record typically follows a program specialising in either mathematics or statistics:

Program A: Honours in Mathematics			
Subject code	Subject name	cp	Session
MATH493	Medical Mathematics Honours Thesis	12	Autumn/Spring
MATH451	Advanced Topics in Mathematics A	12	Autumn
MATH452	Advanced Topics in Mathematics B	12	Spring
	Elective 1	6	Autumn/Spring
	Elective 2	6	Autumn/Spring

Program B: Honours in Statistics			
Subject code	Subject name	cp	Session
STAT493	Medical Statistics Honours Thesis	12	Autumn/Spring
STAT451	Advanced Topics in Statistics A	12	Autumn
STAT452	Advanced Topics in Statistics B	12	Spring
	Elective 1	6	Autumn/Spring
	Elective 2	6	Autumn/Spring

Variations may be possible and in any case students should check their enrolment with the Honours coordinator.

Part-time students typically will need to enrol as above, but undertaking 12 cp in each of four consecutive sessions. However, the project subjects MATH493 or STAT493 have to be undertaken in consecutive sessions. Note that in the above, a summer session is generally excepted in counting consecutive sessions.

The project component is worth 25% of the total credit points for the Honours degree, and consists of a written report and two project seminars.

The coursework component is worth 75% of the total credit points for the Honours degree. Six coursework topics

must be chosen, normally consisting of 400-level subjects, 900-level subjects or 300-level subjects but assessed at 400 level,⁴ offered by the School of Mathematics and Applied Statistics. The coursework topics chosen will be subject to approval from the Honours coordinator; not all 300-, 400- or 900-level courses may be allowable within the degree, even if they carry a MATH or STAT code (e.g. MATH407 cannot be taken for credit as part of the BMed-Math (Hons) degree). It may be possible to count one summer school subject of the Australian Mathematical Sciences Institute (AMSI) and up to two courses offered by AMSI through the Advanced Collaborative Environment per session. Special topic courses running over session breaks may be available to count as Honours subjects. The subjects selected are to fit within the enrolment programs as above, and are to be discussed with the Honours coordinator.

The coursework topics that are offered are finalised at the beginning of each session and are posted on the Honours website. A list of AMSI honours courses is available from <https://highered.amsi.org.au/ace-hons-courses/>. Interested students should email the lecturers directly for more information.

The subjects codes MATH451/MATH452 for Program A and STAT451/STAT452 for Program B are to be used for four of the six coursework topics. The final mark for each of these 12 cp subjects will be the average of the marks for the two coursework subjects that comprise it. Note that a student must pass each of the individual coursework subjects to pass the 12 cp subject, otherwise a Technical Fail will be given. The subjects codes MATH471/MATH472 for Program A and STAT471/STAT472 for Program B are to be used for the non-Science elective subject. Students must inform the Honours coordinator by email the definitive list of subjects that they wish to take by Friday of Week 1 during each session.

1.11.4. BMathFin (Hons)

- Course code: 356

This Honours program is part of the four-year embedded BMathFin (Hons) degree. A full-time student's enrolment record typically follows the following program:

Year 4 of the BMathFin (Hons) degree				
Subject code	Subject name	cp	Session	
INFO401	Finance Honours Project	12	Autumn/Spring	
MATH407	Research Methods	6	Autumn	
	Elective 1	6	Autumn/Spring	
	Elective 2	6	Autumn/Spring	
	Elective 3	6	Autumn/Spring	
	Elective 4	6	Autumn/Spring	
	Elective 5	6	Autumn/Spring	

Electives must be chosen from the List of Electives and will depend on the major; consult with the BMathFin degree coordinator. For the BMathFin (Hons) degree, the Honours coordinator is only responsible for the thesis subject INFO401. The project subject INFO401 has to be undertaken in consecutive sessions, noting that a summer session is generally excepted in counting consecutive sessions.

Students enrolled in the BMathFin (Hons) degree and who are undertaking special coursework topics are required to enrol on SOLS as MATH471/MATH472 (for a mathematics topic) or STAT471/STAT472 (for a statistics topic). Students must inform the Honours coordinator by email the subjects that they wish to take under these codes by Friday of Week 1 during each session.

⁴ The same 300-level subjects, although they are assessed at 400 level, cannot be counted twice for both undergraduate and Honours degrees. For the BMedMath (Hons) degree, one of the six coursework subjects has to be a 300- or 400-level Science elective, with approval from the Honours coordinator.

1.12. Ethics requirements

In accordance with the relevant legislation, the University has established the following ethics committees: Animal Ethics Committee, Human Research Ethics Committee and Biosafety Committee. The role of these committees is to review the ethical aspects of research involving animals, humans or biological matter. Before conducting or commencing any research investigation involving these variables, students are required to submit a research ethics application to the appropriate committee and obtain approval to ensure that all statutory requirements are met. Any questions or requests for further information should be directed to the Ethics Officer in the Research Services Office at 4221 3386. Students are advised to refer to <http://www.uow.edu.au/research/ethics/index.html> for access to information about Research Ethics Committees and Guidelines.

1.13. Horner Computer Laboratory

The Horner Computer Laboratory in 15.210 is available to Honours students. Access to this room can be obtained by completing a key and swipe card application available at EIS Central in 4.G14. Access after hours, weekends and session breaks is only available with a swipe card. The initial cost of the key and swipe card is covered by the School; however a replacement cost will be paid by the student if lost or damaged.

1.14. Materials required

There are no special requirements for the SMAS Honours degree programs.

1.15. Financial costs/assistance

Students are required to meet all costs associated with their research. Limited access to a photocopying card may be available upon application to the administrative assistants in 4.G14.

1.16. Prizes, scholarships and grants

1.16.1. University Medal

Honours students who achieve a minimum of Honours Class I and have outstanding academic results over their entire undergraduate degree may be considered for the award of a University Medal. Nominations for this award are not made until the results for all potential medalists in the particular year have been finalised.

1.16.2. Austin Keane Memorial Prize

The Austin Keane Memorial Prize is open to candidates for Honours degrees offered by the School of Mathematics and Applied Statistics. Students will be considered for this prize in the year in which they graduate, which includes students who complete the thesis subject in Autumn session. Part-time students will also be considered in the year they complete the thesis subject. The award is \$250 plus a certificate, and is donated by the Family of Late Professor Austin Keane.

1.17. Grievances concerning supervision

Where there are unresolved problems or disagreements between a student and supervisor during the candidature, students may follow the procedures in the Academic Grievance Policy Coursework and Honours Students, and the Grievance Resolution Procedures, where applicable. See <http://www.uow.edu.au/about/policy/UOW058683.html>.

1.18. Intellectual property, confidentiality, authorship and responsible research policies

1.18.1. IP Student Assignment of Intellectual Property Policy

<http://www.uow.edu.au/about/policy/UOW058690.html>

1.18.2. IP Student Assignment of Intellectual Property Guidelines

<http://www.uow.edu.au/about/policy/UOW058616.html>

1.18.3. Authorship Policy

<http://www.uow.edu.au/about/policy/UOW058654.html>

2. Assessment of Honours projects

2.1. Weights for Honours projects

Degree	Thesis subject	cp
BMath (Hons)	MATH491/STAT491	12
BMathAdv (Hons)	MATH492/STAT492	18
BMedMath (Hons)	MATH493/STAT493	12
BMathFin (Hons)	INFO401	12

2.2. Project assessment

Assessment of the Honours project consists of a written report and two seminar presentations.

(1) Written report (90%)

The report will be assigned a mark out of 100.

SLOs assessed: 1, 2, 3, 4

(2) Project seminars (10%)

Project seminars in Autumn and Spring are a subject requirement. The minor seminar is not formally assessed, whereas the major seminar is formally assessed. Failure to deliver the two seminars will result in a mark of Technical Fail (TF) being awarded in the thesis subject.

SLOs assessed: 3

2.3. Dates for assessment

The last day for submission of the written report is on Friday of Week 11 of Spring (respectively, Autumn) session for students commencing their project in Autumn (respectively, Spring) session.

The 10-minute minor seminar is in Week 4 of Autumn (respectively, Spring) session for those students commencing in Autumn (respectively, Spring) session.

The 25-minute major seminar is in Week 8 of Spring (respectively, Autumn) session for those students commencing in Autumn (respectively, Spring) session.

2.4. Written report

2.4.1. Criteria for assessing the written report

The written report is assessed by considering issues such as the student's mastery of concepts, degree of originality, quality/quantity of content and the quality of presentation including its clarity, correctness, level of mathematics and/or statistics, organisation, detail and scope. *Note, in particular, that weighting of the BMathAdv (Hons) thesis implies that it will necessarily be a more substantial thesis.*

In assessing the written report the following areas are examined:

- literature review;
- exposition of theory, e.g. whether the theory required for the project was explained in a clear and logical manner;
- description of results;
- conclusions/outline of extensions to work presented in the thesis;
- degree of innovation and/or originality.

At the lower level originality would be shown by the student using their own examples to illustrate theory. At the higher level there would be a significant degree of new ideas/theory. The originality of the thesis should be clearly indicated by the student. It should be noted that originality does not imply an Honours thesis must contain new material publishable in quality mathematical journals. This could be the case, but it need not be, even for very high ranking Honours theses.

2.4.2. Guidelines for examiners of projects

In addition to the above criteria, the examiner will keep in mind the mark ranges and the project characteristics for each grade. They are as follows:

- High Distinction (85–100). The thesis gives a clear and thorough review of some specific topic of scope well above undergraduate level, usually exhibiting a flair for the topic and great skill in mathematical/statistical writing. Outstanding presentation, almost no minor errors and certainly no major errors in the report. For higher marks within this range (95–100), a substantial degree of originality is expected and the student will clearly have obtained a substantial degree of insight with significant thought on the topic.
- Distinction (75–84). A good mastery has been achieved in concepts that are new to the author and clearly beyond the scope of the standard undergraduate degree, presentation is generally of a high standard and the thesis is generally well structured and clear. There would generally be no serious errors (e.g. fundamental misunderstandings and/or misconceptions and/or incorrect deductions or conclusions) and few minor errors (e.g. typographical errors, errors in exposition, language, grammar).
- Credit (65–74). A reasonable attempt has been made to come to terms with the topic and there is some merit in the report. The report might contain some technical problems and/or be not quite sufficient in scope for a higher ranked Honours thesis and/or the standard of presentation may be insufficient. There may be minor errors throughout or a significant error at some point that does not affect the majority of the work.
- Pass (50–64). The student has learnt something mathematical and/or statistical that could not have been obtained from earlier undergraduate courses, but there are serious flaws concerning technical issues and/or scope and/or the standard of presentation. There may be some serious errors and/or incorrect assertions or deductions that cause many but not all of the main results of the thesis to be incorrect. The thesis may be poorly written, structured and/or in parts incoherent.
- Fail (0–49). An unsatisfactory project with an insufficient report. The thesis report contains a large number of significant errors and/or fundamental errors rendering the majority of the material incorrect and/or the thesis

simply does not demonstrate sufficient work for the component of the degree.

Examiners are asked to give the project a mark out of 100 and to write a report justifying their mark. One half to one page is sufficient. The deadline for the submission of the report will be set by the Honours coordinator. Note that joint supervisors need to prepare a joint report and coordinate the sharing of the project copy. Projects with examiner comments may be kept by the examiner. Examiners should notify the Honours coordinator if they are not prepared to have their name provided to the student with the student's copy of the written report.

Examiners must not engage in any discussion with the student concerning the assessment of Honours work until the results are formally released via SOLS to the student by the University. If communication between the examiner and the student regarding the Honours work is necessary, it must be directed through the Honours coordinator.

2.4.3. Method for choosing examiners

The Honours thesis will be assessed by the supervisor(s) and by another staff member within the university who has expertise in the general topic area of the project. In rare cases an examiner external to the university may be chosen. The non-supervisory examiner will be chosen by the Honours coordinator and will be kept confidential. At least one of the examiners will be from SMAS. All examiners will be given a copy of this document. Examiners will be notified by email concerning the work they are to assess and due dates for the submission of their reports. All examiners will be made aware of the assessment requirements as set out in this guide.

Examiners must be familiar with the expectations of an Honours degree and must also (i) have a degree equivalent to or higher than that being examined, or (ii) be currently active researchers or have proven research records, or (iii) have previous successful experience in Honours supervision or examination.

2.4.4. Procedure regarding discrepancies between marks awarded by different examiners

The final thesis mark for the project will be the average of the supervisor(s) mark and the other examiner's mark. In cases where these vary by more than 10%, the project will be assessed by an additional marker (adjudicating examiner). The three marks and a recommended value will go to the School Assessment Committee for a final decision. The recommended value is normally the average of the three marks.

2.4.5. Late submission

Work submitted late without approval will incur a 10% penalty of the final mark for each week or part thereof after the due date. A request for late submission of the project must be made in writing to the Honours coordinator and in association with an application for special consideration via SOLS. A new submission date will be given and failure to submit by the new due date will incur a 10% penalty of the final mark for each week or part thereof.

2.4.6. Feedback on written report

Copies of the examiners' reports may be requested from the Honours coordinator via email by students for up to three months from the date results are formally released to students via SOLS. The reports may or may not have the names of the examiners.

2.4.7. Written report submission information

Students shall submit their written reports to their supervisors by 5 p.m. of the Friday of Week 11, earlier if there is mutual agreement, according to the following guidelines:

- Soft copy in PDF format sent by email to the supervisor(s) and the Honours coordinator;
- Two unbound hard copies (bulldog clip at the top only);
- Double sided;
- One and a half to double spaced;
- A4-size paper;
- Typeset in L^AT_EX;
- Usually 80–100 pages, excluding appendices.⁵

A cover sheet is to be included with the report as a receipt of submission, which is available from <https://eis.uow.edu.au/current-students/>. The receipt will be signed by the supervisor as acknowledgement of submission of the report. Hard copies of project reports handed in by students for examination will not be returned.

2.4.8. Referencing

Students should discuss a referencing style with their supervisor. For instance, a recommended style for applied mathematics projects is the ANZIAM Journal referencing style. Please see the ANZIAM Journal for examples. Students should refer to the Academic Integrity and Plagiarism Policy on plagiarism.

2.4.9. Procedure regarding assessment outcomes

- There is no provision for resubmission of an Honours project.
- Students who have an issue or concern regarding assessment of their Honours project or other assessable work may follow the grievance resolution procedures stated in the Grievance Policy at <https://www.uow.edu.au/about/policy/UOW058683.html>.
- Special consideration is available to students whose work is affected by serious documented illness or misadventure. Refer to the Student Academic Consideration Policy at <http://www.uow.edu.au/about/policy/UOW058721.html>.
- Inadequate supervision or other arrangements during the period of study will not be taken into consideration in reviewing the assessment of an Honours project, unless documented efforts have been made by the student to report these issues which have not been adequately addressed.

2.5. Project seminars

Guidelines for assessment of seminars will be given to students at the beginning of the year. Seminars are usually held in rooms which have overhead projectors, computer projectors and whiteboards available. While there is not a set style of presentation, the use of overheads or computer slides is highly recommended. Students should discuss their presentations with their supervisors. The minor seminar should last for 10 minutes, giving a basic outline for the project. The major seminar should last for 25 minutes, detailing the findings in the project. Examples, possibly simplified, should be given. The full scope of the project, and any remaining work to be completed in the remaining few weeks, should be clear.

2.6. Scaling of marks

Marks will not be modified or scaled.

⁵ Project reports that are outside these limits may be accepted at the discretion of the Honours coordinator.

2.7. Honours grades

For the BMath (Hons), BMathAdv (Hons) and BMedMath (Hons) degrees, a student's final mark will be calculated by combining project and coursework. Honours is awarded in the following categories:

Category	Mark
Class I	85–100
Class II, Division I	75–84
Class II, Division II	65–74
Class III	50–64
Fail	0–49

For the BMathFin (Hons) degree, a student's final mark that includes both project and coursework is calculated using a weighted average mark (WAM) using the formula

$$\text{WAM} = \frac{\sum_n mwc}{\sum_n wc},$$

where m is the mark obtained in each subject, w is the weight reflecting the level of the subject, c is the credit-point value of the subject and n is the total number of subject attempts. The summations are over all subjects. The weights are given by $w = j$, where $j = 1, 2, 3, 4$ for 100j-level subjects that constitute an Honours program. Note that every attempt at a subject in the course is included in the determination of the WAM. Honours is awarded in the following categories:

Category	Mark
Class I	77.5–100
Class II, Division I	72.5–<77.5
Class II, Division II	67.5–<72.5
No Honours awarded	0–<67.5

2.8. Attendance requirements

Students and supervisors should meet on a regular basis – preferably weekly, but not less than fortnightly – to discuss work in progress and to advise on the direction of the work. As part of the project, two compulsory seminars are to be given. Failure to deliver the two seminars will result in a grade of Technical Fail (TF) given for the thesis subject. Students are required to attend the project seminars given by all students.

2.9. Academic integrity

The UOW policy on acknowledgement practice and plagiarism provides detailed information about how to acknowledge the work of others: <http://www.uow.edu.au/about/policy/UOW058648.html>.

The University's Academic Integrity and Plagiarism Policy, Faculty Handbooks and subject guides clearly set out the University's expectation that students submit only their own original work for assessment and avoid plagiarising the work of others or cheating. Reusing any of your own work (either in part or in full), which you have submitted previously for assessment, is not permitted without appropriate acknowledgement or without the explicit permission of the subject coordinator. Plagiarism can be detected and has led to students being expelled from the University.

The use by students of any website that provides access to essays or other assessment items, sometimes marketed as 'resources', is extremely unwise. Students who provide an assessment item (or provide access to an assessment

item) to others, either directly or indirectly (e.g. by uploading an assessment item to a website) are considered by the University to be intentionally or recklessly helping other students to cheat. Uploading an assessment task, subject outline or other course materials without express permission of the University is considered academic misconduct and students place themselves at risk of being expelled from the University.

2.10. Academic consideration

Substantial medical, compassionate and other reasons that affect a student's performance must be thoroughly documented and submitted to Student Central within three days of the event. The medical certificate or other official document must stipulate, precisely and legibly, the degree to which the event has affected, or is likely to affect, the student's performance, and the exact period of the incapacity. The student must also inform the Honours coordinator within three days, and appear for an interview with the Honours coordinator to discuss the effect of the problem on the performance, and to make any special arrangements deemed necessary. If no adequate written information in the official documentation is provided or no contact has been made with the Honours coordinator to explain your circumstances, then the academic consideration will be forfeited. Refer to the Student Academic Consideration Policy at <https://www.uow.edu.au/about/policy/UOW058721.html> for more information. Leave of absence during the course of any Honours program is normally not possible, except under exceptional circumstances, as the availability of supervision upon return cannot be guaranteed.

3. General advice for students

3.1. Student support

3.1.1. Faculty Central/Student Hub

EIS Central or Student Hub is your first point of contact for a wide range of enquiries including:

- providing assistance with student forms;
- making an appointment with the Head of Students;
- accepting some assignments where referred to in your subject outline.

Location: Building 4 Ground Floor
Phone: (02) 4221 3491
Email: eis@uow.edu.au

3.1.2. Student Support Advisers

If you have a temporary or ongoing issue or a problem that is affecting your study, including issues that are related to belonging to an equity group, then the Student Support Advisers may be able to help. There are Student Support Advisers available to assist students who are studying at all UOW campuses and in all UOW faculties. Contact details can be found in <https://www.uow.edu.au/student/services/SSA/contact/index.html>.

3.1.3. Library services

To save yourself time and enhance your studies, connect with information specialists and resources anytime, anywhere via Ask Us at <http://www.library.uow.edu.au/ask/UOW026599.html> or Google 'UOW library ask us'.

Online – Ask a librarian:	Ask questions and receive a response within one business day
In person – Book a librarian:	30-minute appointment with a librarian
Research consultation service:	One-hour appointment with an information specialist; available to UOW academics, HDRs, Postgraduate Coursework, Honours and Masters students
By phone:	(02) 4221 3548

The Main Library (Building 16) and Education Curriculum Resources Centre (Building 22) are located at the Wollongong Campus. UOW Libraries at other locations are listed on the Library website.

3.2. Policies and guidelines

3.2.1. Teaching and Assessment: Code of Practice – Teaching

This code is a key document in implementing the University's Teaching and Assessment Policy and sets out the specific responsibilities of parties affected in relation to learning, teaching and assessment, as well as procedures for teaching staff.

<http://www.uow.edu.au/about/policy/UOW058666.html>

3.2.2. Teaching and Assessment: Assessment and Feedback

The purpose of this policy is to set out UOW's approach to effective learning, teaching and assessment, including the principles and minimum standards underlying teaching and assessment practice.

<http://www.uow.edu.au/about/policy/alphalisting/UOW222905.html>

3.2.3. Teaching and Assessment: Subject Delivery

This policy sets out specific requirements in relation to the delivery of subjects.

<http://www.uow.edu.au/about/policy/alphalisting/UOW222906.html>

3.2.4. The Student Charter – Your Rights and Responsibilities

The Student Charter is shaped by the University's mission to excel through providing world-class teaching, learning and research opportunities that challenge, inform and inspire its students in a diverse and inclusive environment. The Student Charter is based on principles that guide all members of the University and that promote responsible partnerships within and beyond the University community. It acknowledges the importance of the connection that is forged between students and staff of the University as well as the broader community. It encompasses a commitment to academic integrity and the five fundamental values on which this rests: honesty, trust, fairness, respect and responsibility.

<http://www.uow.edu.au/student/charter/index.html>

3.2.5. Academic Integrity and Plagiarism

The University's policy on acknowledgement practice and plagiarism provides detailed information about how to acknowledge the work of others.

<http://www.uow.edu.au/about/policy/UOW058648.html>

3.2.6. Student Academic Consideration

The purpose of the Student Academic Consideration Policy is to enable student requests for academic consideration for specific assessment tasks, examinations, academic progress or attendance requirements in a subject relevant to their course to be evaluated in a fair, reasonable, timely and consistent manner throughout the University. This policy sets out clear and defined requirements allowing for transparency, ease of interpretation and implementation. Consistency in criteria, procedures and outcomes in the processing of applications for academic consideration for all forms of assessment are requirements of this policy.

<http://www.uow.edu.au/about/policy/UOW058721.html>

3.2.7. Course Progress

The Course Progress Policy establishes the requirements, definitions and procedures to be used in determining the standards of acceptable course progress, the definitions of the roles and responsibilities of UOW staff and students with regard to course progress, as well as the descriptions of the resources and choices available to assist students at risk of not achieving course progress standards.

<http://www.uow.edu.au/about/policy/UOW058679.html>

3.2.8. Coursework Student Academic Complaints

UOW aims to provide a transparent and consistent process for resolving student academic grievances.

<http://www.uow.edu.au/about/policy/UOW058653.html>

3.2.9. Inclusive Language Guidelines

UOW endorses a policy of non-discriminatory language practice in all academic and administrative activities of the University.

<http://www.uow.edu.au/about/policy/alphalisting/UOW140611.html>

3.2.10. Copyright

The purpose of this policy is to outline responsibilities and procedures regarding the use of third party copyright material, with the objectives of reducing staff and UOW exposure to the risks associated with the use of third party copyright material, assisting staff to make full legal use of the materials at their disposal by clearly identifying responsibilities and promoting copyright compliance.

<http://www.uow.edu.au/about/policy/alphalisting/UOW026670.html>

3.2.11. Intellectual Property

UOW's Intellectual Property Policy provides guidance on the approach taken to intellectual property (IP), including its ownership, protection and exploitation.

<http://www.uow.edu.au/about/policy/UOW058689.html>

3.2.12. Student Conduct Rules

In line with UOW's commitment to academic integrity, new rules related to student conduct have been in effect since 1 January 2008.

<http://www.uow.edu.au/about/policy/UOW058723.html>

3.2.13. Code of Practice – Research

This code mandates the current policy and best practice relating to procedures for responsible research.

<http://www.uow.edu.au/about/policy/UOW058663.html>

3.2.14. Code of Practice – Honours

This code sets out the responsibilities of all parties involved in managing students undertaking Honours programs.

<http://www.uow.edu.au/about/policy/UOW058661.html>

3.2.15. Code of Practice – Student Professional Experience

This policy sets out what is expected from students, the University and Host Organisations in providing student professional experience programs. It applies to student professional experience programs that form the whole or part of a subject or course offered at the University. The code assists in promoting a productive learning experience for students.

<http://www.uow.edu.au/about/policy/UOW058662.html>

3.2.16. Student Assignment of Intellectual Property

This policy applies to all students, both undergraduate and postgraduate, of UOW. It may also apply to other persons by agreement. This policy sets out the approach taken by UOW in relation to student assignment of IP.

<http://www.uow.edu.au/about/policy/UOW058690.html>

3.2.17. Ethical or Religious Objection by Students to the Use of Animals and Animal Products in Coursework Subjects

UOW is committed to recognition of the diversity of values held by students at the University and seeks to provide avenues for students to complete their chosen field of study without compromising their ethical commitments. The University, through its Animal Ethics Committee, has a responsibility to review any proposed research and teaching involving living animals in accordance with the NHMRC Australian Code of Practice for the Care and Use of Animals for Scientific Purposes (2004) and the Animal Research Act 1985 (NSW). This policy provides a framework for recognition of and responses to students' ethical or religious objection to animal use in coursework subjects at UOW. For the purpose of this policy, animal use includes killing of animals in experimental work, dissection of animals that are already dead, use of animal tissues and use of animal-derived products (such as sera). These uses are relevant to teaching and assessment.

<http://www.uow.edu.au/about/policy/UOW058708.html>

3.2.18. Human Research Ethics Guidelines

The Human Research Ethics Committee protects the welfare and rights of the participants in research activities.

<http://www.uow.edu.au/research/ethics/human/index.html>

3.2.19. Workplace Health and Safety

The Workplace Health and Safety unit at UOW aims to provide structures, system and support to ensure the health, safety and welfare of all at the campus.

<http://staff.uow.edu.au/ohs/>