



School of Computing, Engineering and Mathematics

Honours Award Level Guidelines

2016



COURSE TITLE (HONOURS)	HONOURS CONTACT DETAILS
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Honours Award Level Guidelines 2016

The Honours in Bachelor Awards Policy describes the framework for all Honours courses, both end-on and embedded, at: <http://policies.uws.edu.au/view.current.php?id=00156>

These School Honours Award Level Guidelines contain procedural information specific to the Honours degrees in the School of Computing, Engineering and Mathematics, and on specific procedural variations as may be appropriate to each discipline listed on the front page.

Western Sydney University Honours Scholarships

Western Sydney University Honours Scholarships provide opportunities for exceptional students who have demonstrated academic excellence in their studies. These scholarships are awarded across all eligible Bachelor Honours Programs throughout the University and the recipients are determined on the basis of highest GPA to the maximum number awardable. Students who are transferring to Western Sydney University from another University to undertake a Bachelor Honours program are encouraged to apply. For more information please visit the Western Sydney University Scholarships website - www.uws.edu.au/scholarships

Application Process

On-Line Admissions for End-on Honours Courses

Students applying for Honours in Computing and Mathematics need to complete the on-line application found on the Western Sydney University website: <https://applyonline.uws.edu.au/connect/webconnect>

Note: The only End-on Honours Course currently available for enrolment within the Computing and Mathematics disciplines is 2711 Bachelor of Science(Honours) Mathematics

Admissions for Embedded Honours Courses

For embedded Honours Courses (such as Construction Management (CM), Engineering (Eng), and Industrial Design (ID)), the School will invite qualified students based on Western Sydney University Honours Policy and the criteria of admission.

The invitations will be extended by the School when the School has finalized the academic results of the previous semester.

Procedures for assessing applications

(Not applicable to CM, Eng, and ID)

All applications will be assessed initially by the School Honours Academic Course Advisor for Computing and Mathematics. All procedures MUST be consistent with clause 20 and 21 of the policy.

Criteria for Admission

The criteria for admission to an end-on or embedded Honours Programme are as required by the Honours in Bachelors Award Policy Part E Clause 21. The minimum requirements are:

- a) An Admission Average Mark (AAM) equal to or above 65%. The AAM will normally be calculated from the marks from all units since program commencement. An applicant with an AAM < 65% due to lower relative results in their first year of undergraduate study may be considered for admission if:

- The applicant has demonstrated a marked improvement in their academic performance in recent semesters; and
- A supporting letter from the applicant's potential supervisor regarding the applicant's ability to undertake Honours is supplied (see possible variation at c) below).

In addition, if the applicant is applying for the end-on Honours courses (as offered in Computing and Mathematics), the following criteria apply:

- b) Statement of Intent, or School Equivalent, which is a brief statement (up to 1000 words) describing the proposed research you wish to undertake as an Honours student. This should be written in consultation with an academic member of staff.
- c) A supporting letter may be required from your nominated supervisors, which states that your proposed project is suitable as an Honours project and that they are willing to supervise the project.
- d) Appointment of a supervisory panel by the Dean upon Honours Academic Course Advisor recommendation.
- e) Demonstrated satisfactory academic writing skills appropriate to the discipline. Applications for admission must be completed on the Western Sydney University website:

See http://future.uws.edu.au/future_students_home/applynow/honours

Calculation of the Admission Average Mark (AAM)

1. Following Clause (23) the AAM will normally be calculated on the basis of all units from program commencement.
2. Where advanced standing impedes the calculation of a whole of program AAM, the AAM will be calculated on programs with less than 80CP of advanced standing. Cases exceeding this amount will be treated on a case-by-case basis by the school Honours Committee.
3. Compulsory fail grades will be treated as fail grades in the calculation of AAM, and a mark of 49% will be applied in the calculation.

Statement of Intent or School Equivalent

All applicants for Honours from the Computing and Mathematics area (end-on) must submit a Statement of Intent (up to one page) in which they describe their intentions in regards to the Honours Course. Note that this is not applicable to CM, Eng, and ID students, as per the criteria above.

Appointment of a Principal and or Co Supervisors

Each Honours student may have a panel with a principal supervisor and a co-supervisor. Principal Honours supervisors would normally be registered to supervise Bachelor Honours (minimum requirement) on the School (CEM) Graduate Supervisors Register. Co-supervisors must have completed at least School Honours Supervisor Training.

- Honours supervisors are directed to the Code of Conduct and Guide for Supervisors before commencing supervision.

- An Honours student's principal supervisor should be qualified to PhD or Masters (Honours) level, as well as having an established publishing and research track record. The minimum level of academic award required to supervise an Honours is Honours Class II Division I.

The Graduate Supervisor Register may be accessed at:

http://www.westernsydney.edu.au/graduate_research_school/grs/supervisors/graduate_supervisor_register

Ethics and/or other required approvals

Ethics approval is formal approval of the proposed research study by the Western Sydney University Human Research Ethics Panel, or the Western Sydney University Animal Care and Ethics Committee, or the Western Sydney University Biosafety and Radiation Safety Committee, as indicated by the scope and nature of the study and ethical requirements and according to Guidelines for the Ethical Conduct of Research available through the Western Sydney University Office of Research Services (<http://www.uws.edu.au/research/ors>).

For some projects, the principal supervisor of a Honours student would be required to either obtained the appropriate ethics clearances, and if necessary Biosafety approval, or the applications must be submitted for processing by the relevant Committees, prior to the student's enrolment in Honours.

For embedded Honours courses (Engineering, Industrial Design and Construction Management), the students must factor the time required for ethics clearance into the research project so that they can submit their thesis by due date. Request for extension of submission only based on the ground that ethics approval is not obtained in time will not be considered. Before signing the Supervision Agreement, the student and the supervisor must discuss this issue.

Procedures for dealing with Supervision issues

Any supervision issues, such as change of topic and change of supervisor, should be firstly dealt with by the Unit Coordinator and then by the Academic Course Advisor (ACA) and then School Honours Committee, if necessary.

Honours Progression

Clause G of the 2013 Western Sydney University Honours in Bachelor Awards Policy, which deals with progression can be found at: <http://policies.uws.edu.au/view.current.php?id=00156#p7>

The normal period of candidature for students enrolled in an end-on Honours course is one year full-time, or its part-time equivalent.

The normal period of candidature for students enrolled in an embedded Honours course is one year full-time.

The due date for submission of the Honours thesis is specified in the Learning Guide.

Procedure for applying for an extension of submission date

The Request for Extension application form can be found at:

Note: Supervisors should be aware and advise students as appropriate, that late submission may make a student ineligible for consideration for a postgraduate scholarship determined at the December meeting of the University Research Committee.

Lodgement of Thesis

The timeframe for the examination process for Honours theses is restricted to ensure all Western Sydney Uni School Honours candidates are allocated an equitable amount of time to complete candidature requirements and to ensure that all candidates' grades are processed in time for consideration of higher degree scholarships. Dates for submission of theses will be set by the School Honours Academic Course Advisors and announced in the corresponding learning guides or vUWS site.

The student will submit the thesis as per the instructions set out in the respective learning guides.

An Examination Panel will undertake examination of the completed thesis.

Examination Procedures

Appointment of Examiners

The guidelines for examination of Honours theses are:

- a) Two examiners are required for examination of the candidate's thesis. The principal supervisor will recommend one examiner (Template for nomination of examiner Form is included in this guideline) and the School's Honours or Research and Higher Degrees Committee will approve a second, based on recommendations from the appropriate ACA. Examiner suggested by the supervisor will be taken as a recommendation only, and the School Honours/Research and Higher Degrees Committee may not necessarily accept this examiner. The principal supervisor may also recommend that a specific examiner is not selected, but will need to provide justification for this request.
- b) The identity of the examiners is confidential, and may not be revealed to the supervisors, the Honours students and the arbiters.
- c) Examiners must have at least a Bachelor Honours, First Class but normally will have a Masters (Honours) or PhD with at least 3 years experience post-graduation and have an established publishing and/or research track record, scholarly attainment or substantial professional experience in a relevant field. The School Honours/Research and Higher Degrees Committee will examine the qualifications and experience of the examiners for the suitability of each examiner.
- d) It is anticipated that most of the examiners will be selected from the staff of the University of Western Sydney, subject to there being adequate expertise available. External examiners may be appointed at the discretion of the School Honours/ Research and Higher Degrees Committee. If external examiners are nominated, a short CV and justification should be provided. The School will pay for costs for external examination.
- e) The School will ensure that new staff either have experience in supervising and examining Honours theses at a previous University, or receive professional development and appropriate mentoring to undertake such roles prior to being appointed as an examiner. This is of particular importance when staff member are appointed from overseas and may not be familiar with Australian Honours programs.
- f) Some external examination of theses will be conducted for quality assurance purposes at the completion of the Spring semester Honours round. This requirement may be waived in cases where Honours degrees are subject to external examination by means of an accreditation process.

- g) The examiners must not have worked with the Honours candidate on any aspect of their project work, but may participate in continuous assessment activities. The supervisors may be involved in some progressive assessment, such as mid-year reports and oral presentations.
- h) Examiners should undertake thesis examination strictly independently. There should be no reference to another examiner, supervisors or anyone else involved in the student's project or the examination process. This needs to be made clear to examiners as part of the request to them to mark the thesis.
- i) The School Honours Academic Course Advisors will ensure that each examiner is sent all relevant information and instructions pertaining to the marking of the thesis, which includes assessment forms outlined in the learning guide. It will be the responsibility of the corresponding School Honours Academic Course Advisor to work with the School's professional staff to ensure that examiner's reports are received in a timely manner.
- j) Upon receipt of the examiner's report the School Honours Academic Course Advisor will work with the School's professional staff to ensure its completeness and conformity with instructions. The School Honours Academic Course Advisor will ascertain if a third examiner is required under the conditions specified in the Honours in Bachelor Awards Policy. Procedures for the appointment and duties of a third examiner are provided in this Guidelines document.
- k) In the case where an ACA Honours is supervising Honours Students the allocation of examiners and handling of exam results of these students is usually handled by ACA of Disciplines.

The Use of Third Examiner (Arbiters)

As per the *Honours in Bachelor Awards Policy*, Part I clause (40), where there is a mark discrepancy of 10 or more marks between significant research component examiners, or a difference in the examiner-recommended "grade", the following provision applies:

(40) Where there is a mark discrepancy of 10 or more marks between significant research component examiners, or a difference in the examiner-recommended "grade", the School Honours Coordinator may take one or more of the following actions:

- a. invite the examiners to confer with each other and/or with the School Research and Higher Degrees Committee with a view to presenting a consolidated recommendation;
- b. appoint an experienced marker of Bachelor (honours) theses as a third examiner who will act as an arbiter; following review of the thesis and the other examiners' reports the arbiter determines a mark and grade on the basis of the published criteria and standards for the thesis; this is the final examination result for recommendation to the School Academic Committee.

Appointment of Arbiters

The School of Computing, Engineering and Mathematics has introduced the following procedure for the appointment and duties of a third examiner (arbiter):

- a) An arbiter is selected by the School Honours Committee. The arbiter must meet the minimum requirements set for examiners as set out under point c), page 4 of these guidelines and have substantial experience of marking Honours theses thus ensuring they are fully familiar with the criteria and appropriate standard of work for a Western Sydney University Honours thesis at all levels of award; have appropriate disciplinary knowledge to enable them to reach an informed and independent assessment of the student's work and to critically evaluate the other examiners' assessments and the justifications provided by them. The recommended mark for the thesis is decided by the arbiter. In CM, Engineering, and ID, the arbiter's mark is expected to be within the range of the two marks given by the two examiners.
- b) The two reports and marking sheets from Examiners 1 and 2 (with the identities of the examiners removed) are sent with the thesis to the arbiter by the School Honours Academic Course Advisors. The arbiter is explicitly requested not to read these reports before reading and reaching an independent assessment of the thesis.
- c) The arbiter reads the thesis to reach an independent assessment of the work, and they then read the examiners' reports and critically reflect on and evaluate their assessment and the justifications provided to support that assessment. The arbiter then prepares the standard report on the quality of the thesis, which includes providing a mark for the thesis. They also produce a report to the School Honours Committee explaining their decision in relation to the reports of Examiners 1 and 2, and the published criteria for the different ranges of marks that may be awarded for a thesis.
- d) Both of the arbiter's reports are returned to School Honours Academic Course Advisors.
- e) The arbiter's reports, both the standard assessment report and the report outlining the reasons for their decision, may at the discretion of the ACA be sent to supervisors and students after finalisation of the results and their de-identification.

Processing Honours Award Levels

The School of Computing, Engineering and Mathematics currently awards many different Honours degrees. The final mark for Honours is calculated from the assessable components of the Honours Course. These degrees have slightly different weightings for the Research Training, Coursework and Significant Research (Thesis) components, as shown in Table 1.

The School Academic Committee will meet to consider the recommendations from each discipline for grading of Honours students before endorsement of the final grades by the Dean. The final overall grade allocated to each student is dependent on the overall performance in all Honours units:

Honours Level	Final Honours Mark
Class 1	≥ 85
Second Class Division 1	≥ 75
Second Class Division 2	≥ 65
Third	≥ 50

The award of an Honours Class 1 requires a mark in the range 85-100% in the Significant Research (thesis) component and a weighted mark of 85-100% for the combined Research and Coursework components. The Honours level for embedded Honours will be determined by the achievement in the Honours thesis and the overall course Weighted Average Mark.

Table 1: Components of Honours Degrees in the School of Computing, Engineering and Mathematics and Calculation of Honours Levels

<i>Course Code</i>	<i>Course Title</i>	<i>End-On or Embedded</i>	<i>Significant Research Component (SRC)</i>	<i>Research Training Component (RTC)</i>	<i>Coursework Component (CC)</i>	<i>How is the level of Honours Calculated?</i>
2711.1	Bachelor of Science Mathematics (Honours)	End-On	200413 Mathematics Honours Thesis, 40 cp	200412 Research Proposal and Seminar Program, 10 cp	200411 Advanced Topics in Mathematics, 30 cp	SRC 50% + RTC 12.5% + CC 37.5%
3588.1	Bachelor of Computing (Honours) Ended	End-On	300363 Computing Honours Thesis, 60 cp	300364 Computing Honours Seminar Program, 10 cp,	Elective, Level 3 or above, 10cp	SRC 75% + RTC 25%
3613.1	Bachelor of Information Technology (Honours) Ended	End-On	300363 Computing Honours Thesis, 60 cp	300364 Computing Honours Seminar Program, 10 cp,	Elective, Level 3 or above, 10cp	SRC 75% + RTC 25%
3614.1	Bachelor of Computer Science (Honours) Ended	End-On	300363 Computing Honours Thesis, 60 cp	300364 Computing Honours Seminar Program, 10 cp,	Elective, Level 3 or above, 10cp	SRC 75% + RTC 25%
2607.2	Bachelor of Construction Management (Honours)	Embedded	300675 Honours Thesis, 40 cp			WAM formula
3503.3	Bachelor of Industrial Design (Honours)	Embedded	300774 Industrial Design Project (Completion), 40 cp	300773 Industrial Design Project (Commencement), 30 cp		WAM formula
3621.3	Bachelor of Engineering (Honours)	Embedded	300675 Honours Thesis, 40 cp			WAM formula
3666.1	Bachelor of Engineering (Advanced) (Honours)	Embedded	300668 Advanced Engineering Thesis, 60 cp			WAM formula

Processing and finalizing Honours Marks and Level of Award

Weighted Mark Formula (WAM) used for embedded degrees

Since Engineering, Industrial Design and Construction Management are professional degrees and may require accreditation from **professional bodies, the calculation of Honours levels should be similar to other major Schools offering these disciplines in Australia. The Honours degrees using a Weighted Average Mark (WAM)** for calculation of Honours levels are the Bachelor of Engineering (Honours), Bachelor of Engineering (Advanced) (Honours), Bachelor of Industrial Design (Honours) and Bachelor of Construction Management (Honours).

The WAM is calculated over all units that a student has attempted. The following will not be counted in the WAM calculation:

- A. A grade of Satisfactory (S);
- B. Withdrawn without Academic Penalty (W);
- C. Advanced Standing – Unspecified (L);
- D. Aegrotat Pass (Z);
- E. Advanced Standing – Specified (K).

Where a student has repeated a unit, both marks will be counted towards the WAM. The formula for calculating the WAM is given below:

$$\text{WAM} = \frac{\sum (\text{Mark of a unit attempted} \times \text{Credit Points of the unit} \times \text{Weighting of the unit})}{\sum (\text{Credit Points of a unit attempted} \times \text{Weighting of the unit})}$$

The weighting of a unit is given below:

Unit	Level 1	Level 2	Level 3	Level 4	Level 5 (other than Honours Thesis)	Honours Thesis
Weighting	1	2	4.5	4.5	4.5	5

The Honours level for these degrees will be determined by the achievement in the Honours thesis and the overall course WAM:

Honours Class	Honours Thesis	WAM
Class 1	≥ 85	≥ 75
Second Class Division 1	≥ 75	≥ 70
Second Class Division 2	≥ 65	≥ 65
Third	≥ 50	≥ 50

The highest Honours level meeting both requirements (Honours thesis mark and course WAM) will be awarded.

Grade Point Average (GPA) Calculation of Honours Level (Hons)

(Not applicable to CM,Eng and ID)

The calculation of the Honours Award level (Class of Honours) will be based on the results of Honours Research and the overall course GPA. These calculations will be carried out by the respective Honours course advisors.

School of Computing, Engineering and Mathematics

Supervisor's Recommendation for Honours Thesis Examiner

STUDENT

_____ STUDENT No: _____

COURSE/PROGRAM:

TITLE OF THESIS:

EXAMNER

Name:

Position:

Telephone: _____ Fax No: _____

Email:

Has the examiner indicated that they can mark the thesis within a	Yes	No
Has the examiner previously marked an Honours thesis?	Yes	No
Is there any potential conflict of interest?	Yes	No

Please attach:

a short resume for the examiner if not a Western Sydney University academic and a justification for why they are suitable to examine the thesis.

SIGNATURE

I acknowledge that the nominated examiner has not participated in the research and development of the submitted thesis.

Supervisor's Name

Signature

Date