NOTICE OF MEETING

Meeting 1/2018 of the Graduate Studies Committee will be held at 10:00am on Tuesday 13 February 2018 in the Senate Room, Quadrangle. The Agenda for the meeting is below.

Alyssa White
Committee Officer

AGENDA

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<td>4.2 <strong>Medicine</strong>: Doctor of Medical Science Patrick Kelly attached</td>
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<td>4.3 <strong>Science</strong>: Master of Mathematics and associated degrees Tim Newsome attached</td>
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<td><strong>Higher Degree by Research</strong></td>
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<td>4.4 Increasing engagement opportunities for HDR students Ross Coleman attached</td>
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<td></td>
<td>5.1 <strong>Education Portfolio</strong>: Update on Master of Advanced Studies Peter McCallum attached</td>
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Respect is a core value of the Academic Board
Graduate Studies Committee agenda

6 OTHER BUSINESS

Next meeting (reserve): 2:00pm – 4:00pm, Tuesday 13 March 2018
Senate Room, Quadrangle

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Graduate Studies Committee – Terms of Reference

**Purpose**
The Graduate Studies Committee assists the Academic Board in ensuring the maintenance of the highest standards and quality in teaching, learning, research training and scholarship at the University of Sydney and, in this context, advises the Academic Board about Resolutions, policy and procedures relating to postgraduate study at the University and acts as the Academic Board's agent in determining postgraduate matters, including the approval of new and amended courses, in accordance with the Resolutions of the Senate: Delegations of Authority: Academic Functions.

**Terms of Reference**

1. To monitor issues relating to quality in relation to postgraduate award courses and research training, and to make recommendations to the Academic Board as detailed below.
2. To advise the Academic Board on Resolutions, policy and procedures relating to all postgraduate studies in the University, including the assessment and examinations of postgraduate research candidates.
3. To make recommendations to the Academic Board regarding:
   3.1. proposals to introduce new postgraduate award courses and amendments to existing postgraduate award courses; and
   3.2. requirements to be satisfied by candidates for the award of a degree, diploma or certificate.
4. To act for the Academic Board in:
   4.1. admitting candidates, on the advice of the faculty or board of studies concerned, for higher doctorates who are not graduates of the University of Sydney; and
   4.2. determining, on the recommendation of the faculty or board of studies concerned, whether or not a Higher Doctorate be awarded.
5. To contribute to the development of the University’s strategic objectives in relation to postgraduate study and research training, and to develop, recommend to the Academic Board, and regularly review Resolutions, policy and procedures supporting those strategic objectives.
6. To receive reports from, and provide advice to, the Deputy Vice-Chancellor (Education), and, where appropriate the Deputy Vice-Chancellor (Research) and the Deputy-Vice Chancellor (International) on quality assurance and others matters relating to postgraduate study and research training at the University.
7. To determine matters relating to the award of the degree of Doctor of Philosophy;
8. To establish effective supervisory policy and procedures for postgraduate research students;
9. To obtain information or reports from any faculty, school or department, the Library or other academic unit on academic matters relating to postgraduate studies.
10. To ensure proper communication channels are established with other committees of the Academic Board and University Executive to promote cross-referencing and discussion of matters concerning postgraduate students.
11. To determine the terms and conditions of awards, postgraduate scholarships and prizes established within the University.
12. To act for the Academic Board in:
   12.1. recognising institutions, programs and courses for the purposes of admission postgraduate coursework and research;
   12.2. approving special admission schemes for postgraduate courses; and
   12.3. confirming academic selection criteria for international students set by Deans.
13. To provide regular reports on its activities under its terms of reference to the Academic Board.
14. To consider and report on any matter referred to it by the Academic Board, or its committees, the University Executive or the Vice-Chancellor.
Non-Confidential

<table>
<thead>
<tr>
<th>Author</th>
<th>Dr Matthew Charet, Executive Officer to Academic Board</th>
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<tr>
<td>Reviewer/Approver</td>
<td>Professor Kirsten McKenzie, Chair</td>
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<tr>
<td>Paper title</td>
<td>Minutes of the Previous Meeting</td>
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<tr>
<td>Purpose</td>
<td>To seek approval of the minutes of the previous meeting.</td>
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**RECOMMENDATION**

*That the Graduate Studies Committee resolve that the minutes of meeting 8/2017, held on 7 November 2017, be confirmed as a true record.*

**MINUTES**

### GRADUATE STUDIES COMMITTEE

**2:00pm – 4:00pm, Tuesday 7 November 2017**

**Senate Room, Quadrangle (A14)**

**Members Present:** Professor Kirsten McKenzie (Chair); Dr Matthew Beck (Business); Associate Professor Ross Coleman (Director, Graduate Research); Anne Fernandez (Nominee of the Deputy Registrar); Dr Janice Gullick (Nursing); Associate Professor Patrick Kelly (Medicine); Associate Professor Michael Kertesz (Agriculture); Tong Li (Postgraduate Research Student); Associate Professor Tony Masters (Chair of the Academic Board); Associate Professor Kathleen Nelson (Chair, HDR Examinations Sub-Committee); Dr Tim Newsome (Science); Associate Professor Aek Phakiti (Education & Social Work); Associate Professor Gaby Ramia (Arts & Social Sciences); Associate Professor Marjorie Valix (Engineering & IT).

**Attendees:** Professor Sally Andrews (Science) (for Item 4.11); Dr George Carayannopoulos (Head, HDR Administration Centre); Dr Matthew Charet (Secretary); Dr Kelly Freebody (Arts & Social Sciences) (for Items 4.1 and 4.2); Edwina Grose (Head, Academic Model and Student Progression); Associate Professor Annette Katelaris (Medicine) (for Item 4.3); Associate Professor Peter McCallum (Director, Educational Strategy); Professor Mary Myerscough (Science) (for Items 4.4 and 4.5).

**Apologies:** Dr Roslyn Bathgate (Veterinary Science); Professor Jo-Anne Brien (Pharmacy); Associate Professor Rachel Codd (Medicine); Professor David Hamer (Law); Associate Professor Lynette MacKenzie (Health Sciences); Associate Professor Shae McCrystal (Chair, HDR Scholarships Sub-Committee); Nicole Seebacher (nominee of the President, SUPRA); Associate Professor Lee Stickells (Architecture, Design & Planning); Dr Munira Xaymardan (Dentistry).

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**UNCONFIRMED MINUTES**

1 **WELCOME AND APOLOGIES**

   The Committee welcomed new members and noted apologies as recorded above.

2 **PROCEDURAL MATTERS**

   2.1 **Minutes of Previous Meeting**

   Members confirmed the minutes of the previous meeting, held on 1 August 2017, as an accurate record, subject to correction of the finish time of the meeting.

   **Resolution GSC17/8-1**

   *That the Graduate Studies Committee resolve that the minutes of meeting 7/2017, held on 19*
Non-Confidential

September 2017, as amended, be confirmed as a true record.

2.2 Actions Arising

Associate Professor Coleman informed members that the issues identified at the previous meeting relating to proposed amendments of HDR policies had been discussed with the Policy Management Unit and it has been agreed that there is no huge risk to operations with the amendments as currently presented. Noting that it is intended to conduct a wholesale review of HDR policies and procedures in 2018 – including the consistency issues identified – members agreed to endorse the presentation of these policies, as presented to the 19 September meeting, to the Academic Board for further action as appropriate.

3 STANDING ITEMS

3.1 Report of the Chair

The Chair had nothing to add to the written report.

Resolution GSC17/8-2
That the Graduate Studies Committee note the report of the Chair.

3.2 Report of the Academic Board

In addition to the written report, Associate Professor Masters informed members that at the meeting, the Board was presented with a model of the proposed new structure for the committees of the Academic Board from 2018, with comments invited from both members of the Board and of the Committee. A final proposal was currently in formulation and a working group was scheduled to discuss the model prior to presentation of a final version to the 28 November Academic Board meeting.

Associate Professor Masters also thanked Professor McKenzie and Associate Professor Kertesz for their work as Chair and Acting Chair of the committee respectively over the last two years.

Resolution GSC17/8-3
That the Graduate Studies Committee note the report of the Academic Board meeting held on 10 October 2017.

3.3 Report of HDR Examinations Sub-Committee

Associate Professor Nelson advised that she had nothing to add further to the circulated report, which the committee duly noted.

Resolution GSC17/8-4
That the Graduate Studies Committee note the report of the HDR Examinations Sub-Committee meeting of 3 October 2017.

3.4 Report of HDR Scholarships Sub-Committee

Associate Professor McCrystal was not in attendance.

4 ITEMS FOR ACTION

Major Course Proposals

4.1 Arts: Bachelor of Arts / Master of Teaching (School and Community Education)

Dr Freebody was in attendance to speak to this proposal. She informed members that this vertically-integrated award course consolidates a number of currently ad-hoc activities for education in non-school settings (such as rural, remote and aboriginal communities, the youth and corrective services, hospitals and the like). It is intended that the Masters component will be professionally accredited and the proposal has been discussed with the profession, which is supportive. Dr Freebody advised that it is intended to run this program over 4.5 years, with mandatory course overload to achieve this timeframe. In discussion, Ms Grose advised that the University cannot mandate over-enrolment, so it will be necessary to redesign delivery over five years. A number of critical pieces of information are also lacking from the current proposal, such as unit of study tables, and these will need to be rectified before the proposal can be considered.
In order to rectify these issues, and to allow time for a Government decision on the matter of CSPs, it was agreed that this item not be approved but be brought back to the committee in early 2018.

**Resolution GSC17/8-5**  
That the Graduate Studies Committee recommend that this proposal not be approved, but be revised and represented to a future meeting.

### 4.2 Arts: Master of Education Leadership in Aboriginal Education

Dr Freebody spoke to this proposal and advised that it adds an additional specialisation within the existing Master of Education award course. Observing that the primary intake pathway for this degree is limited, Associate Professor Masters informed members that the Curriculum and Course Planning Committee had expressed concern that the admission pool would soon ‘dry up’, and Dr Freebody advised that there are other admission pathways to leverage and that relationships are being developed with other institutions, observing that this is the only offering of its kind in NSW. The proposal was endorsed for presentation to the Academic Board.

**Resolution GSC17/8-6**  
That the Graduate Studies Committee recommend that the Academic Board:  
(1) approve the proposal from the Faculty of Arts and Social Sciences to introduce the Master of Education Leadership in Aboriginal Education;  
(2) recommend that Senate endorse the Academic Board’s approval of the proposal and approve amendments to the Resolutions of Senate related to the Degrees, Diplomas and Certificates in the Faculty of Arts and Social Sciences; and  
(3) approve the introduction of course resolutions arising from this proposal, with effect from 1 January 2019.

### 4.3 Medicine: Master of Medicine/Master of Science in Medicine (General Practice and Primary Health Care)

Associate Professor Katelaris was in attendance to speak to this proposal and advised that it is an addition to the existing streams in the Master of Medicine/Master of Science in Medicine award courses. The intended structure will provide a further specialisation, drawing largely on existing units of study. The program will provide a guided enrolment program taking into consideration the career development needs of candidates.

The proposal was endorsed for presentation to the Academic Board.

**Resolution GSC17/8-7**  
That the Graduate Studies Committee recommend that the Academic Board:  
(1) approve the proposal from the Faculty of Medicine to introduce a stream in General Practice and Primary Health Care in the Master of Medicine / Master of Science in Medicine and associated award courses;  
(2) recommend that Senate endorse the Academic Board’s approval of the proposal and approve amendments to the Resolutions of Senate related to the Degrees, Diplomas and Certificates in the Faculty of Medicine; and  
(3) approve the amendment of course resolutions and the introduction of new units of study arising from this proposal, with effect from 1 January 2019.

### 4.4 Science: Bachelor of Science / Master of Mathematics

Professor Myerscough was in attendance to speak to this proposal and Item 4.5, which were presented together. Members were informed that the proposed courses are intended to fill a gap in the University’s positioning within the sector and will build on the School’s strong reputation in research. In discussion, Professor Myerscough advised that a full-fee model will be introduced if CSPs for postgraduate coursework award courses are removed pending a Government decision.

The proposal was endorsed for presentation to the Academic Board.

**Resolution GSC17/8-8**  
That the Graduate Studies Committee recommend that the Academic Board:  
(1) approve the proposal from the Faculty of Science to introduce the Bachelor of Science / Master of Mathematics;
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(2) recommend that Senate endorse the Academic Board’s approval of the proposal and approve amendments to the Resolutions of Senate related to the Degrees, Diplomas and Certificates in the Faculty of Science; and

(3) approve the introduction of course resolutions and the amendment of unit of study tables arising from this proposal, with effect from 1 January 2019.

4.5 Science: Master of Mathematics

This item was discussed with Item 4.4 above.

The proposal was endorsed for presentation to the Academic Board.

Resolution GSC17/8-9

That the Graduate Studies Committee recommend that the Academic Board:

(1) approve the proposal from the Faculty of Science to introduce the Master of Mathematics;

(2) recommend that Senate endorse the Academic Board’s approval of the proposal and approve amendments to the Resolutions of Senate related to the Degrees, Diplomas and Certificates in the Faculty of Science; and

(3) approve the introduction of course resolutions and the amendment of unit of study tables arising from this proposal, with effect from 1 January 2019.

4.6 Education Portfolio: Curriculum Framework for a Research-Pathway and Vertically-Integrated Masters Degree

Associate Professor McCallum informed members that this proposal marks the beginning of the next phase following the redesign of the undergraduate curriculum and calls for policy changes to enable the development of a research-pathway Masters degree as well as vertically-integrated Bachelor-Masters combined award courses. Noting that the Government is currently discussing the availability of CSPs for postgraduate qualifications, it is anticipated that full course proposals for award courses enabled by these policy changes will proceed for implementation in 2019 (for the stand-alone research-pathway Masters) and 2020 (for a suite of Vertically-Integrated Masters degrees including specialisations). A reduction in the volume of learning may be possible for these degrees based on prior study, and it is proposed to require the completion of a number of OLEs as part of the stand-alone degree. Associate Professor McCallum assured members that these new award courses are not intended to mandate the replacement of appended Honours or existing postgraduate or vertically-integrated awards (such as combined Nursing), but faculties may wish to transition existing offerings into the newly-available framework enabled by these changes.

Members were also informed that a discussion is also currently underway regarding how the research-pathway award will be assessed for HDR scholarship allocations; this will be further discussed by the HDR Scholarships Sub-Committee in 2018. It was also observed that the award is intended to provide a direct pathway into PhD candidature for students who demonstrate the appropriate academic merit (by achieving the equivalent of First or Second Class Honours, for example). Members were advised that the possible future phasing-out of existing Master of Philosophy award courses (as discussed following the ACOLA Review) will also be enabled by the introduction of the research-pathway Masters award course.

The proposal was endorsed for presentation to the Academic Board.

Resolution GSC17/8-10

That the Graduate Studies Committee recommend that the Academic Board:

(1) endorse the proposed curriculum framework for a research-pathway Masters degree;

(2) note the name Master of Advanced Studies ([discipline]) for the research-pathway Masters degree;

(3) endorse the proposed curriculum framework for vertically-integrated research-pathway and professional/specialist Bachelor/Master combined degrees; and

(4) endorse the proposed changes to the Coursework Policy to include the curriculum framework for a research-pathway Masters degree and vertically integrated Bachelor/Masters degrees.
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Minor Course Proposals

4.7 Arts: Graduate Certificate in Human and Community Services

Associate Professor Ramia advised that this proposal enables more targeted marketing in this area. In discussion, it was observed that a number of corrections or clarifications were needed, including the addition of missing unit of study codes and the alignment of the proposal with the definition of ‘specialisation’ as provided in the Learning and Teaching Policy.

In order to rectify these issues, it was agreed that this item not be approved but be brought back to a future meeting.

Resolution GSC17/8-11
That the Graduate Studies Committee recommend that this proposal not be approved, but be revised and represented to a future meeting.

4.8 Arts: Master of Human Rights

Associate Professor Ramia advised that this proposal had been included in a suite of changes to postgraduate award courses endorsed earlier in the year, but that the Academic Model Team (AMT) had identified a number of errors in the structure of the program. This proposal corrects these errors following consultation with the AMT, and it is proposed to slightly delay the opening of enrolment in this degree until after the Academic Board has approved the proposal.

The proposal was endorsed for presentation to the Academic Board.

[NOTE: Subsequent to the meeting, Ms Fernandez advised that there is an error in the program composition, with insufficient core units presented to enable completion of the Graduate Diploma. The Faculty has amended the proposal to address this.]

Resolution GSC17/8-12
That the Graduate Studies Committee recommend that the Academic Board:

(1) approve the proposal from the Faculty of Arts and Social Sciences to amend the Master of Human Rights and related award courses, as amended; and
(2) approve the amendment of unit of study tables arising from the proposal, with effect from 1 January 2018.

4.9 Engineering: Master of Information Technology / Master of Information Technology Management

Associate Professor Valix advised that this proposal arises from changes made earlier in the year to the stand-alone Master of Information Technology and Master of Information Technology Management to allow credit transfer from the Graduate Diploma in Computing. The current proposal is required to align the combined degree with the individual degrees in enabling this recognition of prior learning.

The proposal was endorsed for presentation to the Academic Board.

Resolution GSC17/8-13
That the Graduate Studies Committee recommend that the Academic Board

(1) approve the proposal from the Faculty of Engineering and Information Technologies to amend the Master of Information Technology and Master of Information Technology Management; and
(2) approve the amendment of course resolutions and unit of study tables arising from this proposal, with immediate effect.

4.10 Law: Juris Doctor

This item was withdrawn from discussion.

4.11 Science: Graduate Diploma in Psychology

Professor Andrews was in attendance to speak to this item and advised that the current version of this award course needs to be updated to make it compliant with AQF Level 8. This has been achieved by increasing the number of 4000 level units of study, and the award has also been mapped against the requirements of AQF Level 8 to demonstrate student achievement of suitable knowledge and skills.
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The proposal was endorsed for presentation to the Academic Board.

Resolution GSC17/8-14
That the Graduate Studies Committee recommend that the Academic Board:
(1) approve the proposal from the Faculty of Science to amend the Graduate Diploma in Psychology; and
(2) approve the amendment of course resolutions and unit of study tables arising from the proposal, with effect from 1 January 2019.

Higher Degree by Research
4.12 Implementing the Watt Review – funding HDR training and support through the RTP

Associate Professor Coleman advised that this paper sets out a framework to ensure that HDR students develop the graduate qualities approved at the previous meeting of the Academic Board. It is intended to require all HDR candidates to undertake a minimum of two and up to six coursework units of study, including an OLE specific to research candidates, and that funding for this coursework will be provided through the Research Training Program (RTP). Contrary to local perception, external benchmarking indicates that rather than distracting students from their research projects, such coursework preparation improves completion times as well as providing better skills for career advancement. Flexibility will be possible to accommodate students who enter HDR study through a coursework Masters degree, and there will also be opportunities to accommodate discipline-specific specialist learning requirements, including the enablement of completion of 2000- and 3000-level units of study where appropriate.

Associate Professor Coleman invited further observations to be returned directly to him.

Resolution GSC17/8-15
That the Graduate Studies Committee note the proposal to:
(1) Provide enhanced training and support to all HDR students through the establishment of a requirement to complete a minimum of 12 credit points of coursework for PhD candidates and 6 credit points of coursework for Masters by research candidates;
(2) Provide coursework for HDR students through the Open Learning Environment and require that PhD students access at least 6 of their credit points of coursework from the Open Learning Environment at 5000 level; and
(3) Fund the completion of coursework through a modest redistribution of the completions portion of the Research Training Program (RTP) grant of $1200 per PhD student and $600 per Masters by Research student, noting that UEM would not be charged on HDR student load in coursework.

Major Course Proposals
4.13 Medicine: Master of International Public Health

Associate Professor Kelly advised at the meeting that this proposal and the proposal for Item 4.14 below had been considered by the Curriculum and Course Planning Committee and the University Executive but had not been forwarded to the Committee Secretary for inclusion in the agenda. It was agreed that these proposals be considered by circulation, and the Committee Secretary circulated the proposals immediately following the meeting. Feedback was requested by close of business Friday 10 November 2017.

In discussion by circulation, it was recommended to remove reference to the Graduate Diploma as an ‘exit-only’ award; and to map learning outcomes and graduate qualities to the relevant AQF level, including the Graduate Diploma.

The proposal was endorsed for presentation to the Academic Board as amended.

Resolution GSC17/8-16
That the Graduate Studies Committee recommend that the Academic Board:
(1) approve the proposal from the Faculty of Medicine to amend the Master of International Public Health and the Graduate Diploma in International Public Health (including renaming these award courses);
(2) recommend that Senate endorse the Academic Board’s approval of the proposal and approve amendments to the Resolutions of Senate related to the Degrees, Diplomas and Certificates in the Faculty of Medicine; and
(3) approve the introduction of course resolutions and units of study arising from this proposal,
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with effect from 1 January 2019.

4.14 **Medicine**: Master of Public Health

This item was circulated with Item 4.13 above following the meeting.

In discussion, it was observed that there was a lack of clarity as to what “Part 1 of the Table” refers, with Table 1 not included in the proposal. The Faculty undertook to correct this as an intended correction that had been missed in the course review process.

The proposal was endorsed for presentation to the Academic Board as amended.

**Resolution GSC17/8-17**

That the Graduate Studies Committee recommend that the Academic Board:

(1) approve the proposal from the Faculty of Medicine to amend the Master of Public Health and the Graduate Diploma in Public Health;

(2) recommend that Senate endorse the Academic Board’s approval of the proposal and approve amendments to the Resolutions of Senate related to the Degrees, Diplomas and Certificates in the Faculty of Medicine; and

(3) approve the amendment of course resolutions and units of study arising from this proposal, with effect from 1 January 2019.

5 **ITEMS FOR NOTING**

5.1 **HDR Internships Working Party Report**

This paper was noted without further comment.

**Resolution GSC17/8-18**

That the Graduate Studies Committee:

(1) note the advice in the Higher Degree by Research (HDR) Internships Working Party Report.

(2) note that further work will be conducted by the Director-Graduate Research to develop a proposal of means by which HDR students may undertake internships with industry, including such options as:

   a. implementing a non-credit bearing module in the Learning Management System (LMS) to act as a shell unit for HDR internship activities;

   b. refining the APR process to help the APR panel and candidate have a discussion about the suitability and relevance of an internship for a given student’s candidature;

   c. develop and distribute supporting documentation to faculties and students that addresses internship standards, university responsibilities, Intellectual Property (IP), and insurance; and

   d. produce a means by which students can access information about internship opportunities and perhaps enrol in opportunities of interest.

(3) note that further advice will be sought on the best way to collect data on student involvement with internships and then propose a solution to the committee.

(4) note the proposal for student participation in internship activities to be included on their academic transcript.

5.2 **Dentistry**: Doctor of Clinical Dentistry (Special Needs Dentistry)

This paper was noted without further comment.

**Resolution GSC17/8-19**

That the Graduate Studies Committee recommends that the Academic Board:

(1) formally note the previous approval of a proposal from the Faculty of Dentistry to amend the Doctor of Clinical Dentistry (Special Care Dentistry);

(2) recommend that Senate endorse the Academic Board’s approval of the proposal and approve amendments to the Resolutions of Senate related to the Degrees, Diplomas and Certificates in the Faculty of Dentistry; and

(3) formally approve the amendment of course resolutions and unit of study tables arising from this proposal, with effect from 1 January 2019.
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6 OTHER BUSINESS

6.1 Any Other Business

There being no other business, the meeting closed at 4:08pm.

Next meeting: 2:00pm – 4:00pm, Tuesday 6 February 2018
Senate Room, Quadrangle

A full copy of the Graduate Studies Committee papers is available at
Non-Confidential

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<tr>
<th>Author</th>
<th>Matthew Charet, Executive Officer to Academic Board</th>
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<tr>
<td>Reviewer/Approver</td>
<td>Associate Professor Tony Masters, Chair of Academic Board</td>
</tr>
<tr>
<td>Paper title</td>
<td>Revised Terms of Reference</td>
</tr>
<tr>
<td>Purpose</td>
<td>To seek the Committee’s endorsement of revised Terms of Reference</td>
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**RECOMMENDATION**

*That the Graduate Studies Committee recommend that the Academic Board approve the revised Terms of Reference, as presented, with effect from 6 March 2018.*

**EXECUTIVE SUMMARY**

At its meeting of 28 November 2017, the Academic Board approved a draft set of Terms of Reference to accompany a restructure of the Standing Committees of the Academic Board. The background of the proposal, including an explanation of the purpose of the restructure of the committees, revision of the Terms of Reference and constituency for each committee, and the consultation process through which the current draft was formulated, can be found in the [agenda papers](#) for the 28 November 2018 meeting of the Academic Board (as Item 4.2).

It was agreed at that meeting that the Terms of Reference would be presented to each committee for endorsement at the first cycle of committee meetings in 2018. The draft Terms of Reference for the Graduate Studies Committee are attached, with additional feedback received from the University Policy Manager following the November meeting included as marked. This draft is presented to the Committee for its consideration and endorsement.

The committee is asked to resolve on this proposal as recommended above, for presentation of the Terms of Reference to the 6 March 2018 meeting of the Academic Board.

**ATTACHMENTS**

**Attachment 1:** Draft Terms of Reference – Graduate Studies Committee
Graduate Studies Committee – Draft Terms of Reference

Purpose
The Graduate Studies Committee assists the Academic Board in ensuring the maintenance of the highest standards and quality in teaching, learning, research training and scholarship at the University of Sydney. In this context, it advises the Academic Board about resolutions, policy and procedures relating to postgraduate study at the University. It determines and acts as the Academic Board’s agent in determining postgraduate matters, including the approval of new and amended courses, in accordance with the Resolutions of the Senate: Delegations of Authority: Academic Functions University of Sydney (Delegations of Authority – Academic Functions) Rule 2016.

Terms of Reference
1. To monitor issues relating to quality in relation to postgraduate award courses and research training, and to make recommendations to the Academic Board as detailed below.
2. To advise the Academic Board on resolutions, policy and procedures relating to all postgraduate studies in the University, including the assessment and examinations of postgraduate research candidates.
3. To make recommendations to the Academic Board regarding:
   • 3.1. proposals to introduce new postgraduate award courses and amendments to existing postgraduate award courses; and
   • 3.2. requirements to be satisfied by candidates for the award of a degree, diploma or certificate.
4. To provide academic oversight in relation to domains 1.4.1; 1.4.2; 1.4.5, 1.4.6, 1.4.7, 1.5.2; 3.1.1, 3.1.2, 3.1.3; 3.1.4; 3.1.5; 4.2.1 (a)-(e) inclusive, 5.1.2; 5.1.3, 5.4.2 and 6.3.2(c) of the Higher Education Standards Framework (Threshold Standards) 2015.
5. To ensure graduate education is compliant with appropriate rules, policies and procedures, including, but not limited to the:
   • University of Sydney (Coursework) Rule 2014, the
   • Coursework Policy 2014, the
   • Assessment Procedures 2011, the
   • Learning and Teaching Policy 2015, the
   • Learning and Teaching Procedures 2016, the
   • Academic Honesty in Coursework Policy 2015
   • the Academic Honesty Procedures 2016, the
   • University of Sydney (Higher Degree by Research) Rule 2011, the
   • Thesis and Examination of Higher Degree by Research Policy 2015, the
   • Thesis and Examination of Higher Degree by Research Procedures 2015, the
   • Thesis and Examination of Higher Degrees by Research Guidelines for Examiners.
6. To act for the Academic Board in:
   • 6.1. admitting candidates, on the advice of the Faculty, University School or Board of Studies concerned, for higher doctorates who are not graduates of the University of Sydney; and
   • 6.2. determining, on the recommendation of the Faculty, University School or Board of Studies concerned, whether or not a Higher Doctorate should be awarded.
7. To contribute to the development of the University’s strategic objectives in relation to postgraduate study and research training, and to develop, recommend to the Academic Board, and regularly review resolutions, policy and procedures supporting those strategic objectives.

8. To receive reports from, and provide advice to, the Deputy Vice-Chancellor (Education), and, where appropriate the Deputy Vice-Chancellor (Research), the Register and the Pro-Vice-Chancellor (Global Engagement) on quality assurance and others matters relating to postgraduate study and research training at the University.

9. To determine matters relating to the award of the degree of Doctor of Philosophy.

10. To establish effective supervisory policy and procedures for postgraduate research students.

11. To obtain information or reports from any Faculty, University School, Board of Studies, school or department, the Library or other academic unit on academic matters relating to postgraduate studies.

12. To ensure proper communication channels are established with other committees of the Academic Board and University Executive to promote cross-referencing and discussion of matters concerning postgraduate students.

13. To determine the terms and conditions of awards, postgraduate scholarships and prizes established within the University.

14. On behalf of the Academic Board to in:
   - 14.1. recognising institutions, programs and courses for the purposes of admission postgraduate coursework and research;
   - 14.2. approving special admission schemes for postgraduate courses; and
   - 14.3. confirming academic selection criteria for international students set by Deans or Heads of School and Deans of University Schools.

15. To provide regular reports on its activities under its terms of reference to the Academic Board.

16. To consider and report on any matter referred to it by the Academic Board, or its committees, the University Executive or the Vice-Chancellor.

Note: The Chair of the Graduate Studies Committee acts for the Academic Board has, in some circumstances, delegated authority under the University of Sydney (Delegations of Authority – Academic Functions) Rule 2016, including to in varying the requirements for a particular candidate in exceptional circumstances for a higher doctorates or and the degree of Doctor of Philosophy in exceptional circumstances, in accordance with the Resolutions of the Senate: Delegations of Authority: Academic Functions.

Constitution

Ex Officio Members
the Chair of the Committee
the Chair of the Academic Board, or nominee
the Chairs of the HDR Scholarships Sub-Committees of the Graduate Studies Committee, if not already a members
the Director, Graduate Research, or nominee
the Deputy Registrar, or nominee
the President of the Sydney University Postgraduate Representative Association, or nominee

Appointed Members
The Academic Board shall appoint one member to the committee, on nomination by members of the Board, from:
- one member from each 2016 faculty and University School; and
- one postgraduate coursework student; and
- one postgraduate research student nominated by members of the Board.

The Academic Board shall, on the recommendation of the Chair of the Academic Board, appoint as its representatives three elected staff members of the Academic Board, on the recommendation of the Chair of the Academic Board. On the recommendation of any two of these members, an item before the Committee will be referred to the Academic Board as a starred item for consideration.

**Deputy Chair**

The Committee may, on the nomination of its Chair, appoint one member, on the nomination of the Chair of the Committee, to act as Deputy Chair.

**Co-opted Members**

The Committee may co-opt up to four members. Co-opted members may be selected from the members of the Academic Board or the wider University community or may express interest directly to the Chair of the Committee, but must have an interest and/or experience in issues considered by the Committee. The term of office of members co-opted by the Committee shall be specified at the time of co-option and such members shall have all rights and privileges of other members.

**Assessors and Reviewers**

The Committee may invite and appoint assessors and reviewers to assist it with its functions, including, as appropriate, persons from outside the University.

**Observers**

Students and staff of the University may attend meetings as observers, and may be allowed, with the permission of the Chair of the committee, to address the meeting on issues being considered by the committee.

**Frequency of meetings**

The Committee shall meet at least five (5) times a year.

**Voting Rights**

Voting rights at meetings of the Committee are restricted to ex-officio members, appointed members and co-opted members.

**Quorum**

A quorum for a meeting of the Committee shall be seven (7) members.

**Sub-Committee**

Higher Degree by Research Scholarships Sub-Committee
RECOMMENDATION

That the Graduate Studies Committee note the report of the Chair.

RECOGNITION OF PRIOR LEARNING

Members are asked to note that the Acting Chair of the Academic Board, on the recommendation of the Interim Chair of the Graduate Studies Committee, has approved the recognition of prior learning for one PhD candidate in the Faculty of Arts and Social Sciences.

HIGHER DOCTORATE

Members are asked to note that the Acting Chair of the Academic Board has approved the admission to candidature and appointment of examiners for a candidate for the Doctor of Medical Science in Sydney Medical School.
RECOMMENDATION

That the Graduate Studies Committee note the report of the Academic Board meeting held on 28 November 2017.

REPORT OF ACADEMIC BOARD MEETING

Items related to the Academic Standards and Policy Committee

The Academic Board noted the report from the meeting of the Academic Standards and Policy Committee held on 14 November 2017; and

- endorsed amendments to the University of Sydney (Higher Degree by Research) Rule 2011 (as amended) and agreed to recommend that Senate adopt the amended Rule, as presented, with effect from 1 January 2018;
- approved the amendment of the Progress Planning and Review of Higher Degree by Research Students Policy 2015 and the Progress Planning and Review of Higher Degree by Research Students Procedures 2015, as presented, and adopted the amended policy and procedures, with effect from 1 January 2018;
- approved the amendment of the Supervision of Higher Degree by Research Students Policy 2013, as presented, and adopted the amended policy, with effect from 1 January 2018;
- approved the amendment of the Thesis and Examination of Higher Degrees by Research Policy 2015, as presented, and adopted the amended policy, with effect from 1 January 2018;
- approved the amendment of the Continuing and Extra-curricular Education Policy 2017 and recommended that the Deputy Vice-Chancellor (Education) adopt the policy, with effect from 1 January 2018;
- endorsed the amendment of the University of Sydney (Student Appeals against Academic Decisions) Rule 2006 (as amended), as presented, and recommended that Senate approve the amendment of the Rule, with effect from 1 January 2018;
- approved a proposal from the Faculty of Arts and Social Sciences to amend its Faculty Resolutions and approved the amendment of Faculty Resolutions arising from the proposal, with effect from 1 January 2018;
- noted the Student Misconduct Report 2015 – 2016, as presented; and
- noted the report of the Phase 4 Review of the Faculty of Arts and Social Sciences and the Faculty’s response.
Non-Confidential

Items related to the Admissions Committee
The Academic Board noted the report from the meeting of the Admissions Committee held by circulation on 14 November 2017; and

• approved a proposal from the Admissions Office that the Irish Leaving Certificate undertaken from 2017 onwards be assessed for admission to the University of Sydney using the revised schedule S9266, which includes new grades and tariff as allocated by the Irish Central Applications Office, with immediate effect.

Items related to the Graduate Studies Committee
The Academic Board noted the report from meeting of the Graduate Studies Committee held on 7 November 2017 and:

• approved a proposal from the Faculty of Arts and Social Sciences to introduce the Master of Education Leadership in Aboriginal Education; recommend that Senate endorse the Academic Board’s approval of the proposal and approve amendments to the Resolutions of Senate related to the Degrees, Diplomas and Certificates in the Faculty of Arts and Social Sciences; and approve the introduction of course resolutions arising from this proposal, with effect from 1 January 2019;

• approved a proposal from the Faculty of Arts and Social Sciences to amend the Master of Human Rights and related award courses, as amended, and approve the amendment of unit of study tables arising from the proposal, with effect from 1 January 2018;

• formally noted the previous approval of a proposal from the Faculty of Dentistry to amend the Doctor of Clinical Dentistry (Special Care Dentistry); recommend that Senate endorse the Academic Board’s approval of the proposal and approve amendments to the Resolutions of Senate related to the Degrees, Diplomas and Certificates in the Faculty of Dentistry; and formally approve the amendment of course resolutions and unit of study tables arising from this proposal, with effect from 1 January 2018;

• approved the proposed curriculum framework for a research-pathway Masters degree; note the name Master of Advanced Studies ([discipline]) for the research-pathway Masters degree; approve the proposed curriculum framework for vertically-integrated research-pathway and professional/specialist Bachelor/Master combined degrees; and approve changes to the Coursework Policy 2014 incorporating the curriculum framework for a research-pathway Masters degree and vertically integrated degrees, with effect from 1 January 2018;

• approved a proposal from the Faculty of Engineering and Information Technologies to amend the Master of Information Technology / Master of Information Technology Management and approve the amendment of course resolutions and unit of study tables arising from this proposal, with immediate effect;

• approved a proposal from the Sydney Law School to amend the Doctor of Juridical Studies, Master of Criminology by Research and Master of Laws by Research degrees and approve the amendment of course resolutions arising from the proposal, with effect from 1 January 2018 (endorsed as amended at the 19 September 2017 meeting of the Graduate Studies Committee);

• approved a proposal from the Sydney Medical School to amend the Master of International Public Health and the Graduate Diploma in International Public Health (including renaming these award courses); recommend that Senate endorse the Academic Board’s approval of the proposal and approve amendments to the Resolutions of Senate related to the Degrees, Diplomas and Certificates in the Sydney Medical School; and approve the introduction of course resolutions and units of study arising from this proposal, with effect from 1 January 2019;

• approved a proposal from the Sydney Medical School to introduce a stream in General Practice and Primary Health Care in the Master of Medicine / Master of Science in Medicine and associated award courses; recommend that Senate endorse the Academic Board’s approval of the proposal and approve amendments to the Resolutions of Senate related to the Degrees, Diplomas and Certificates in the Faculty of Medicine; and approve the amendment of course resolutions and the introduction of new units of study arising from this proposal, with effect from 1 January 2019;

• approved a proposal from the Sydney Medical School to amend the Master of Public Health and the Graduate Diploma in Public Health; recommend that Senate endorse the Academic Board’s approval of the proposal and approve amendments to the Resolutions of Senate related to the Degrees, Diplomas and Certificates in the Faculty of Medicine; and approve the amendment of course resolutions and units of study arising from this proposal, with effect from 1 January 2019;

• approved a proposal from the Faculty of Science to introduce the Bachelor of Science / Master of Mathematics; recommend that Senate endorse the Academic Board’s approval of the proposal and approve amendments to the Resolutions of Senate related to the Degrees, Diplomas and Certificates in...
the Faculty of Science; and approve the introduction of course resolutions and the amendment of unit of study tables arising from this proposal, with effect from 1 January 2019;
• approved a proposal from the Faculty of Science to introduce the Master of Mathematics; recommend that Senate endorse the Academic Board’s approval of the proposal and approve amendments to the Resolutions of Senate related to the Degrees, Diplomas and Certificates in the Faculty of Science; and approve the introduction of course resolutions and the amendment of unit of study tables arising from this proposal, with effect from 1 January 2019; and
• approved a proposal from the Faculty of Science to amend the Graduate Diploma in Psychology and approve the amendment of course resolutions and unit of study tables arising from the proposal, with effect from 1 January 2019.

Items related to the Undergraduate Studies Committee
The Academic Board noted the report from the meeting of the Undergraduate Studies Committee held on 7 November 2017 and:
• approved a proposal from the Sydney Conservatorium of Music to amend the Bachelor of Music and approve the amendment of the course resolutions arising from the proposal, with effect from 1 January 2018;
• approved a proposal from the Faculty of Science to amend the Bachelor of Psychology and approve the amendment of the course resolutions and unit of study tables arising from the proposal, with effect from 1 January 2019;
• approved a proposal from the Faculty of Science to amend the pre-2018 curriculum Bachelor of Science, Bachelor of Science (Advanced), Bachelor of Science (Advanced Mathematics) Bachelor of Science/Bachelor of Arts, Bachelor of Liberal Arts and Science, Bachelor of Psychology, Bachelor of Science / Bachelor of Laws, Bachelor of Science / Master of Nutrition and Dietetics, Bachelor of Science (Advanced) / Doctor of Dental Medicine and Bachelor of Science (Advanced) / Doctor of Medicine and approve the amendments to course resolutions and tables of units of study arising from the proposal, with effect from 1 January 2018; and
• approved a proposal from the Faculty of Science to amend the Bachelor of Medical Science, Bachelor of Medical Science (Honours) and Bachelor of Medical Science / Doctor of Medicine award courses and approve the amendment of course resolutions and unit of study tables arising from the proposal, with effect from 1 January 2018.

Other matters
The Academic Board also:
• observed the presentation of the 2017 Wentworth Medal;
• approved the 2018 membership of the Academic Board;
• granted authority to the Chair and Deputy Chair to act on behalf of the Board in respect to any urgent matters that arise between this meeting and the next meeting on 6 March 2018;
• received a report from the Pro-Vice-Chancellor (Research – Engagement and Enterprise) on recognising engagement in promotions at the University of Sydney;
• received a report from the Co-Chairs of the Assessment Working Party on developing a University-wide approach to assessment, and accepted the recommendations set out in the report;
• noted the Report of the Chair and the verbal report from the Vice-Chancellor and Principal;
• adopted a committee architecture for 2018/9 committees; noted draft Terms of Reference for these committees, and asked the committees to present finalised Terms of Reference to the first meeting of the Academic Board in 2018;
• received an update on the University’s TEQSA re-registration;
• received a report from the student members of the Board; and
• approved the 2018 Academic Calendars for the Faculty of Arts and Social Sciences, Faculty of Dentistry, Sydney Medical School and Sydney Nursing School.

RECOMMENDATION

That the Graduate Studies Committee note the report of the Higher Degree by Research Scholarships Sub-Committee (HDRSSC) meeting held on 2 February 2018.

HDRSSC MEETING 2 FEBRUARY 2018

Proceedings of the Sub-Committee

The Sub-Committee:

- Invited Associate Professor Ross Coleman to discuss the implementation of new enhanced Scholarships. The Sub-Committee resolved to defer their decision on which ranking model to use to award the new enhanced scholarships, pending data modelling. The Sub-Committee also resolved to offer the new enhanced scholarships monthly, from semester two 2018 onwards;

- Discussed International HDR Scholarships and noted that the Budget Review Committee did not support additional funding for international HDR students being awarded in 2018. The Sub-Committee resolved to raise the matter at the next GSC meeting;

- Discussed ranking guideline issues raised in the current awards process and resolved that membership of the Australian and New Zealand College of Vet Science (ANZCVS) should count for Honours equivalency (H1E) based on its significant research and professional development component;

- Determined the award of RTPS and RTPS International and UPAs;

- Determined the award of USYD Merit Scholarships;

- 23 Domestic RTPS awards were awarded and 2 International RTPS awards were offered in the current round

- 14 IRS and 8 USydISS awards were offered in the current round

- Received an update on the awards offered in the previous scholarship round, noting that 3 applicants had declined their scholarship offer;

- Discussed the 2018 forward plan, and matters on the agenda for 2018 including consideration of Appendix B of the Ranking Guidelines and the implementation of R points subject to the receipt of necessary data.
Non-Confidential

<table>
<thead>
<tr>
<th>Author</th>
<th>Georgie Wheadon, Senior Policy and Projects Officer, Education Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reviewer/Approver</td>
<td>Peter McCallum, Director, Education Strategy</td>
</tr>
<tr>
<td>Paper title</td>
<td>PROPOSED REVISIONS TO COURSE RESOLUTION TEMPLATES</td>
</tr>
<tr>
<td>Purpose</td>
<td>To propose revisions to the postgraduate course resolutions template</td>
</tr>
</tbody>
</table>

RECOMMENDATION

*That the Graduate Studies Committee recommend that the Academic Board adopt the revised postgraduate course resolutions template, as presented, with immediate effect.*

EXECUTIVE SUMMARY

As part of the curriculum mapping and management projects, the Education portfolio has revised the current templates for course resolutions. Suggestions to improve the postgraduate course templates are included in Attachment 1.

Once the structure of the templates has been agreed, the intention is to incorporate the revised templates into Sydney Curriculum, the online system being used for the curriculum mapping project. Faculties will be asked to populate the new templates and phase out use of the current templates. An implementation schedule for this work will be advised later by the Education portfolio.

The Education portfolio will work with the vendor of Sydney Curriculum (Akari) on any modifications that are needed to embed the templates in the online system. This may necessitate changes to the format of template, with any additional issues returned to UE Education for discussion and endorsement.

BACKGROUND

‘Award course resolutions’ (course resolutions) are defined in the [Coursework Policy 2014](#), as the ‘resolutions setting out the requirements for the award approved by the Academic Board and tabled at a meeting of the Senate’. They are also described in cl 2.3 of the [Coursework Rule 2014](#).

Course resolutions must specify admission, degree requirements and related matters in a way that is clear and states unambiguously what is necessary to gain admission and complete the degree, particularly including any element specific to the degree not covered in University policy. In general, course resolutions should not re-state rules at a higher level of resolutions, such as faculty or Senate resolutions. They should list additions or enhancements to those rules only, where required or permitted.

Course resolutions templates are included in the course proposal and course review template. Faculties have been using the templates and customising them to some degree, but there is a growing need for course information to be available in a consistent format. In the undergraduate template, for example, there is also a need for the templates to reflect the requirements of the new undergraduate curriculum including the categorisation of types of undergraduate degree (liberal studies, specialist, professional and vertically integrated research-track), and the elements in Table S (the shared pool of majors and minors, the Dalyell stream) and Table O (the Open Learning Environment).

Following the finalisation of course resolution templates, faculty and Senate resolution templates will also be revised with changes to be brought forward for consideration of the Committee.
Non-Confidential

ISSUES

New sections, edits and suggested instructions to faculties added in tracked changes (Attachment 1). The instructions have been written with intention that faculties should fill in as little ‘free text’ as possible, and to complete only the sections relevant to their degree. Where possible, the faculty will be asked to select the relevant response for a section from a drop-down menu of choices, including the option ‘X is not available in this degree’.

The main suggestions for changes to the template are listed below.

Postgraduate resolutions:
- added ‘Student Mobility Policy 2018’ (policy name to be confirmed) (preamble);
- revised definition of Master’s -Research Pathway Master’s as a class award option (section 7);
- added new section on recognition of prior learning (section 10);
- renumbered sections (sections 11-16);
- deleted section on credit for previous study (formerly section 14);
- added new section on award of the master’s degree, graduate diploma and graduate certificate (section 14); and
- renamed ‘Transitional Arrangement’ with ‘Commencement of these resolutions’ (section 16).

CONSULTATION

The Education portfolio consulted the Chair of the Academic Board about the proposed changes to the templates, and the intention to introduce them as a replacement for all current course resolution templates.

ATTACHMENTS

Attachment 1 – Revisions to the postgraduate course resolutions template
APPENDIX 3B: POSTGRADUATE COURSE RESOLUTIONS

The objective of the course resolutions is to describe admission, its requirements and related matters in a way that is clear and states unambiguously what is necessary to gain admission and complete the degree, particularly including any element specific to the degree not covered in University policy, the intention of the course and specify its requirements as clearly as possible with minimum content. The course resolutions are the ‘source of truth’ for award requirements. They should be informative and definitive to a prospective student, a current student and a staff member. Course resolutions should not be specified if the content is adequately covered at a higher level i.e. in a University policy or Faculty resolution. In general, course resolutions should not re-state rules at a higher level – they should list additions or enhancements to those rules only, where required or permitted.

The style of course resolutions should be in plain and clear English, but relatively formal. Think of the reader as being a prospective student. This should not prevent you from being thorough or definitive. The actual audiences are prospective and current students and staff of the University.
Graduate Certificate in XXX
Graduate Diploma in XXX
Master of XXX

These resolutions must be read in conjunction with applicable University By-laws, Rules and policies including (but not limited to) the University of Sydney (Coursework) Rule 2014 (the ‘Coursework Rule’), the Coursework Policy 2014 (the ‘Coursework Policy’), the Learning and Teaching Policy 2015, the Resolutions of the Faculty, the University of Sydney (Student Appeals against Academic Decisions) Rule 2006 (as amended), the Student Mobility Policy 2018 and the Academic Board policies and procedures on Academic Honesty in Coursework. Up to date Current versions of all such documentspolicies are available from the Policy Register: http://www.sydney.edu.au/policies.

Course Resolutions

1. Course codes
[List the codes and course names covered by these resolutions.]

<table>
<thead>
<tr>
<th>Code</th>
<th>Course title</th>
</tr>
</thead>
</table>

2. Attendance pattern
[Required content – state whether the course is available as full time, part time or both. If the course can be taken partly, fully, or only in distance mode, please indicate as below. Otherwise delete reference to distance mode]
The attendance pattern for this course is full time or part time according to candidate choice / full time only / part time only. [Some/all units of study are available/only available in distance mode. Visa restriction normally restrict International students studying within Australia to taking a maximum of 25% of courses via distance mode]

3. Master’s type
[Required content for coursework master’s degrees.]
The master’s degree in these resolutions is [a professional/ an advanced learning/research pathway/extended] master’s course, as defined by the Coursework Rule 2014 and the Coursework Policy 2014.

Or

This master’s degree is [a professional/ an advanced learning/research pathway/extended] master’s course, as defined by the Coursework Rule 2014 and the Coursework Policy 2014.

4. Embedded courses in this sequence
[Required content for embedded courses.]

(1) The embedded courses in this sequence are:
• the Graduate Certificate in XXX
• the Graduate Diploma in XXX
• the Master of XXX

(2) Providing candidates satisfy the admission requirements for each stage, a candidate may progress to the award of any of the courses in this sequence and receive full credit for work completed in the prior award. Only the highest award completed will be conferred.

5. Streams
[Required content where there are streams – delete if no streams. List the streams of the course. State whether a stream is a requirement or not, and the procedures for transferring between streams.]

(1) The Graduate Certificate in/ Graduate Diploma in/ Master of XXX is available in the following streams: [free text]
(2) Completion of a stream is/ is not a requirement of the course.
(3) Candidates wishing to transfer between streams should contact the Faculty student office.

6. Cross-faculty management
[Required content for combined degrees delivered by two or more faculties. Delete for non combined courses or combined courses delivered by only one faculty. Specify the faculty responsible for administration of candidature for this course. Modify the standard clause as appropriate.]

(1) Candidates in this combined degree program will be under the general supervision of the Faculty of XXX until the end of the semester in which they complete the requirements for the Master of XXX. They will then be under the supervision of the Faculty of YYY.
(2) The Deans of the Faculty of XXX and the Faculty of YYY shall jointly exercise authority in any matter concerned with the combined course not otherwise dealt with in these resolutions.

7. Admission to candidature

Postgraduate requirements for admission to candidature should be specified in detail and should be compliant with the minimum entry standards for postgraduate courses specified in the Coursework Rule. Conditions should be specific rather than general and include names of degrees or disciplines of study required for admission as well as other criteria (if any) e.g. minimum WAM requirements, interviews, auditions or entrance tests. Include the generic statement about available places – modify only if places are allocated on some other basis.]

(1) Available places will be offered to qualified applicants based on merit, according to the following admissions criteria.

Or

(1) Available places will be offered to qualified applicants in the order in which complete applications are received, according to the following admissions criteria.

Admission to candidature requires...

- [cut and paste the relevant section from the table below.]

<table>
<thead>
<tr>
<th>Select the appropriate class of award and paste above</th>
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</table>
| **Graduate Certificate** | A bachelor's degree or higher award in [SPECIFY DISCIPLINE], from the University of Sydney, or qualifications deemed by the faculty to be equivalent. 
  In exceptional circumstances the Dean may admit applicants without these qualifications who, in the opinion of the faculty, have qualifications and evidence of experience and achievement sufficient to successfully undertake the award. |
| **Graduate Diploma** | A bachelor's degree or higher award in [SPECIFY DISCIPLINE], from the University of Sydney, or a qualification deemed by the faculty to be equivalent. 
  Completion of the requirements of the embedded graduate certificate in this discipline or qualifications deemed by the faculty to be equivalent.
  In exceptional circumstances the Dean may admit applicants without these qualifications who, in the opinion of the faculty, have qualifications and evidence of experience and achievement sufficient to successfully undertake the award. |
| **Master's-Advanced Learning** | A master’s degree in [SPECIFY DISCIPLINE]; or
  A pass bachelor’s degree with a credit average, or an honours bachelor’s degree from the University of Sydney, in [SPECIFY DISCIPLINE], or

Graduate Studies Committee
13 February 2018
qualifications deemed by the faculty to be equivalent; or Completion of the requirements of the embedded graduate diploma or graduate certificate in this discipline, or qualifications deemed by the faculty to be equivalent.

### Master's - Professional

**Master's**

A master's degree in [SPECIFY DISCIPLINE]; or

A bachelor’s degree in [SPECIFY DISCIPLINE] from the University of Sydney, or qualifications deemed by the faculty to be equivalent; or Completion of the requirements of the embedded graduate diploma or graduate certificate in this discipline, or qualifications deemed by the faculty to be equivalent; and [other professional requirements – specify if required].

In exceptional circumstances the Dean may admit applicants without these qualifications who, in the opinion of the faculty, have qualifications and evidence of experience and achievement sufficient to successfully undertake the award.

<table>
<thead>
<tr>
<th>Master's - Research pathway</th>
<th>Master's</th>
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<tbody>
<tr>
<td>A master's bachelor’s degree with a major in [SPECIFY SPECIALISATION] or with study of comparable depth.</td>
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### 8. Requirements for award

[Required content- specify the requirements in terms of total credit points and subsets of credit points. Conditions should be specific rather than general. The requirements need to state the total credit points needed as well as any features within that total. Specify the structure of the degree i.e. how many majors/ major/streams the candidate must complete, the number of credit points for a major/ stream etc. Avoid expressing requirements in terms of numbers of units of study, i.e. ‘12 credit points’ rather than ‘two units of study’.

Units of study should be listed separately in a named table, which should also contain detailed requirements for any streams, majors or specialisations, and it is good practice to embed the course rules into the table in a way that guides a candidate through the requirements, however, a table does NOT replace the expression of the requirements in the resolutions.]

The units of study that may be taken for the course/s are set out in Table X.

To qualify for the award of the XXXX a candidate must complete XX credit points, including:

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<th>Select the appropriate class of award and paste above</th>
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<tr>
<td><strong>Graduate Certificate</strong></td>
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<tr>
<td><strong>Graduate Diploma</strong></td>
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<tr>
<td><strong>Master’s - Advanced Learning including: Master of Arts</strong></td>
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<td><strong>Master of Science</strong></td>
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<td><strong>Other Advanced Learning</strong></td>
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- Optional elective units of study offered by the Faculty of enrolment or another Faculty.
- Optional elective units involving a professional / industry project;
- Optional international exchange.

| Master's - Professional | Candidates must complete XX credit points [minimum 48, maximum 96] including:
|--------------------------|-------------------------------------------------------------
|                          | o Core units of study.                                      |
|                          | Additional requirements may include:
|                          | o A capstone experience where appropriate;                 |
|                          | o Elective advanced units of study including:
|                          | - Optional 12 credit points of research;                   |
|                          | - Optional elective units of study offered by the Faculty of enrolment or another Faculty. |
|                          | - Optional elective units involving a professional / industry project ;|
|                          | - Optional international exchange.                         |

9. Specialisations
[Required content where there are specialisations – delete if no specialisations. List the specialisations of the course. State whether a specialisation is a requirement or not. Define the minimum requirements for a specialisation and the maximum number of specialisations one candidate can complete. Modify the model text as appropriate.]

Completion of a specialisation is/ is not a requirement of the course. Candidates have the option of completing up to two specialisations. A specialisation requires the completion of XX credit points chosen from units of study listed in the table for that specialisation as specified in Table xxxx. Units of study counted towards one specialisation may not count toward any other specialisation completed. The specialisations available are:

[List]

10. Recognition of prior learning
[Optional content. Insert any specific details for credit or reduction in the volume of learning in this degree that are not covered in the Coursework Policy 2014].

(1) Waivers may be granted or the volume of learning may be reduced in recognition of prior learning in accordance with the Coursework Policy 2014 (Note: a waiver on its own waives a requirement but does not reduce the volume of learning for the degree as a whole).

(2) Candidates for the Master of xxxx may be eligible for a reduction in the volume of learning of up to 48 credit points, subject to the following:
   a. A reduction in the volume of learning to a maximum of 24 credit points for a bachelor degree in a cognate discipline as determined by Faculty of XXXX;
   b. A reduction in the volume of learning to a maximum of 24 credit points for an honour bachelor degree, Graduate Certificate or Graduate Diploma;
   c. The maximum reduction in the volume of learning on the basis of prior learning is 48 credit points.

(3) Candidates for the Graduate Diploma in xxxx may be eligible for a reduction in the volume of learning of up to 24 credit points for relevant postgraduate studies where no award has been or will be made.

(4) Candidates for the Graduate Certificate in xxxx may be eligible for a reduction in the volume of learning of up to 12 credit points for relevant postgraduate studies where no award has been or will be made.

(5) Notwithstanding any reduction in the volume of learning granted on the basis of work completed or prior learning, in order to qualify for an award a student must complete at least 50 per cent of the requirements prescribed for the award course at the University of Sydney.

Graduate Studies Committee 13 February 2018
110. Progression rules
[Required content: Delete if not applicable. Specify rules about progression from one stage of the degree, diploma or certificate to another, if any. It is worth stating significant progression points even if these are evident in the unit of study pre-requisite rules. Specify any consequences, such as transfer to a shorter course, or repeat of a year. Note that the process of exclusion from a course is subject to the procedures of the progression policy and exclusion should not be a direct consequence of the rules stated here.

e.g. Candidates must pass all stage one units of study before proceeding to stage two. Failure in any single unit results in a failure of the stage and requires the candidate to retake the entire stage without credit or exemption for work previously completed.
Or
Candidates must pass UNITXXXX before proceeding to the core units in year two.
Or
Candidates who fail any clinical placement unit will be identified as not meeting academic progression requirements and become subject to the Progression provisions of the Coursework Rule. Candidates who subsequently fail the clinical placement for a second time will be excluded from the course if they cannot show cause. Any further failures will result in automatic exclusion from the course.]

124. Cross-institutional study
[Required content for courses where cross-institutional study is NOT an option, or where course specific restrictions apply. Otherwise, delete.]
Cross-institutional study is not available in this course.

132. International exchange
[Required content for courses where the exchange policy is different from the Faculty rule. Otherwise, delete. If international exchange is a requirement of the course, make that statement under ‘Requirements for award.’]
International exchange is not allowed in this course.

Or

The Faculty encourages candidates in this course to participate in international exchange programs. For more information on international exchanges refer to the International Office.

14. Award of the master’s degree, graduate diploma and graduate certificate
[required content: specify that the degree will be awarded at pass level and whether the major or specialisation will appear on the testamur. The permissible class for the award of degrees, diplomas and certificates are specified in the Coursework Rule 2014]

(1) The master’s degree will be awarded in the pass grade
(2) The testamur for the Master of xxxx will specify:
   a. The specialisation(s) completed

153. Course transfer
[Required content for combined degrees and embedded courses. Specify whether candidature can be transferred to either one of the single degrees in the event that the candidate does not wish to finish the combined program. Specify transfer rules from longer embedded courses to shorter embedded courses. Transfer between streams is dealt with under the heading ‘Streams’. Forced transfer arising out of a progression problem is dealt with under the heading ‘Progression Rules’. ]

(1) A candidate may abandon the combined program and elect to complete either the Master of XXX or the Master of YYY in accordance with the resolutions governing that degree.

Or
(1) A candidate may abandon the combined program and elect to complete the Master of XXX in accordance with the resolutions governing that degree. Completion of the Master of YYY in the future will require a new application for admission to candidature for that course and completion in accordance with the resolutions governing that degree.

Or

(1) A candidate for the master’s degree or graduate diploma may elect to discontinue study and graduate with a shorter award from this embedded sequence, with the approval of the Dean, and provided the requirements of the shorter award have been met.

14. Credit for previous study
[Optional content — specify only if there are course specific rules. Variation from the Coursework Rule, or a consistent Faculty policy, is discouraged. Adapt the model text as required]
Credit transfer is subject to the provisions of the Coursework Rule and the Resolutions of the Faculty of XXX. All candidates for the Master of XXX, notwithstanding any credit transfer, must complete...

165. Commencement of these resolutions Transitional provisions
[Required content when an existing course changes its requirements.]
(1) These resolutions apply to students who commenced their candidature after 1 January, 20XX and students who commenced their candidature prior to 1 January, 20XX who elect to proceed under these resolutions.
(2) Candidates who commenced prior to 1 January, 20XX may complete the requirements in accordance with the resolutions in force at the time of their commencement, provided that requirements are completed by 1 January, 2016. The Faculty may specify a later date for completion or specify alternative requirements for completion of candidatures that extend beyond this time.
Non-Confidential

<table>
<thead>
<tr>
<th>Author</th>
<th>Ria Deamer, Sydney Medical School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reviewer/Approver</td>
<td>Professor Arthur Conigrave, Dean, Sydney Medical School</td>
</tr>
<tr>
<td>Paper title</td>
<td>Faculty of Medicine Course Resolutions for the Doctor of Medical Science</td>
</tr>
<tr>
<td>Purpose</td>
<td>It is proposed that the course resolutions for the Doctor of Medical Science be made obsolete by inclusion of the degree requirements in the University of Sydney (Higher Degree by Research Rule) 2011</td>
</tr>
</tbody>
</table>

**RECOMMENDATION**

That the Graduate Studies Committee recommend that the Academic Board rescind the course resolutions for the Doctor of Medical Science, as presented, with immediate effect.

**EXECUTIVE SUMMARY**

It is proposed that the course resolutions for the Doctor of Medical Science have been made obsolete by inclusion of the degree requirements in the University of Sydney (Higher Degree by Research Rule) 2011. To remove duplication, it is therefore proposed that the course resolutions be rescinded.
Doctor of Medical Science

These resolutions must be read in conjunction with applicable University By-laws, Rules and policies including (but not limited to) the University of Sydney (Coursework) Rule 2014 (the 'Coursework Rule'), the Coursework Policy 2014, the Resolutions of the School, the University of Sydney (Student Appeals against Academic Decisions) Rule 2006 (as amended) and the Academic Board policies on Academic Dishonesty and Plagiarism. Up-to-date versions of all such documents are available from the Policy Register: http://www.sydney.edu.au/policies.

Course resolutions

Part 1: Preliminary

1 Course codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Course title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHMEDSCI-01</td>
<td>Doctor of Medical Science</td>
</tr>
</tbody>
</table>

2 Award of the Higher Doctorate

(1) The higher doctorate is awarded for published work, that in the opinion of examiners:
   (a) constitutes a distinguished contribution to knowledge or creative achievement; and
   (b) is recognised by scholars in the relevant field as constituting a distinguished contribution to knowledge in that field.

(2) Without limiting subclause (1), a published work may be regarded as a distinguished contribution to knowledge if:
   (a) it represents a significant body of research that advances knowledge in a chosen field; or
   (b) it has given rise to, or is a major part of, a significant debate in scholarly books and journals among recognised scholars in a chosen field; or
   (c) it has directly given rise to significant changes in the direction of research, or of practice, of a newer generation of recognised scholars in a chosen field.

(3) The higher doctorate is generally awarded to mature candidates with well developed careers.

Part 2: Admission requirements

3 Eligibility for admission to candidature

(1) To be eligible to be admitted to candidature, an applicant must:
   (a) hold a medical degree from the University of Sydney that was conferred ten or more years prior to the application date; or
   (b) have been a full-time member of the academic staff of the University for at least five years (or pro-rata part-time); or
   (c) be recognised by the Academic Board, on the recommendation of the Dean, to have equivalent academic standing.

(2) To be eligible for candidature, an applicant who does not meet the requirements of clause 3(1) or 3(2), must:
   (a) hold another degree from the University that was conferred ten or more years prior to the application date; or
   (b) have qualifications that were conferred ten or more years prior to the application date and standing that are determined by the School and by the Graduate Studies Committee of the Academic Board to be equivalent to holding a degree from the University; or
   (c) have been recognised by the Academic Board, on the recommendation of the Dean, to have been involved in the teaching and research of the University to an equivalent level.

4 Application for admission to candidature

(1) An applicant for admission to candidature must:
   (a) state the name of the higher doctorate;
   (b) specify the applicant's academic qualifications; and
   (c) describe the applicant's association with the University.

(2) The application must be accompanied by:
   (a) a list of the published works that the candidate proposes to submit for examination;
   (b) an overview of the theme of the published works;
   (c) a statement of how the publications are related to each other and the overall theme;
   (d) a self-appraisal of the published works highlighting their significance in relation to the field of research and the world stage, including evidence of research impact;
   (e) a statement of how these publications are related to one another and to the field of research; and
   (f) where jointly authored publications are to be submitted, a statement of the applicant's role in the initiation, conduct or direction of such conjoint research.

5 Preliminary assessment of application for admission

(1) The Dean will appoint a Prima Facie Committee (Assessment Committee) to assess applications for admission to candidature.
The Prima Facie Committee will be comprised of Associate Dean (Postgraduate Studies) (or his/her nominee), as chair, and three to four Professors of School, nominated by the Dean. In addition, the head of discipline (or his/her nominee) will be asked to review the application and provide an assessment of the contribution to the chosen field.

The Prima Facie Committee will consider, in each application for admission, whether:

(a) the applicant is eligible for admission to candidature;
(b) the published work is in a field appropriate for the nominated degree;
(c) the School is competent to examine the work at the required level; and
(d) whether the applicant should be admitted to candidature.

Admission to candidature

If a prima facie case exists, the Academic Board may on the recommendation of the Dean, on advice from the Prima Facie Committee, admit the applicant to candidature.

Enrolment

A successful applicant must enrol as a candidate for the higher doctorate in the first enrolment period for one part-time semester following receipt of his or her offer of admission.

Part 3 Thesis and examination

Submission of work for examination

The candidate must submit to the Dean five copies of the published work (thesis) that meets the requirements of higher doctorates specified in the HDR Rule.

Form of the thesis

(1) The thesis shall be submitted for examination in permanent form as set out below. Provision for electronic submission of theses for the purpose of examination may occur where both the candidate wishes to submit in this form and examiners are prepared to examine in this way. Candidates wishing to submit electronically are required to advise of their intent at the time of enrolment so that arrangements may be made with prospective examiners.

Permanent form thesis

(a) The thesis shall be on international standard A4 size paper sewn and bound in boards covered with bookcloth, buckram or other binding fabric.
(b) The title of the thesis, the candidate’s initials and surname, the title of the degree, the year of submission and the name of the University of Sydney should appear in lettering on the front cover and on the title page.
(c) The lettering on the spine, reading from top to bottom, should conform as far as possible to the above except that the name of the University of Sydney may be omitted and the thesis title abbreviated. Supporting material should be bound in the back of the thesis as an appendix or in a separate set of covers.

Electronic form thesis

(a) A thesis submitted in electronic form must normally be submitted on disk and must be in a format that the school determines as acceptable to both the candidate and the examiner(s), with the same structure as the ultimate printed version, and each chapter must be in a separate document.
(b) The title of the thesis, the candidate’s initials and surname, the title of the degree, the year of submission and the name of the University of Sydney should appear on the title page and on a label affixed to the disk.
(c) A hard copy of the thesis should normally be submitted for retention by the school office, and further copies for any examiner(s) unwilling or unable to examine the thesis electronically. A copy for retention in the school office may also be submitted in electronic form.

Appointment of examiners

(1) The Academic Board will, on the recommendation of the Dean, on advice from the Prima Facie Committee, appoint at least three examiners, of whom at least two will be external examiners. Recommended examiners should be known to be familiar with the examination of research theses, be active in research and/or scholarship and be free from conflict of interest.

(2) The Academic Board may appoint examiners in addition to those recommended by the Dean.

Examination

Examination of the thesis shall be conducted in accordance with the HDR Rule.

Lodging the published work

If the Academic Board decides to award a higher doctorate to the candidate, the candidate must lodge one bound copy of the published work printed on acid-free archival paper with the school for lodgment with the University Library.

Part 4: Other

Transitional provisions

(1) These course resolutions apply to students who commenced their candidature after 1 January 2014 and persons who commenced their candidature prior to 1 January 2014 who formally elect to proceed under these resolutions.

(2) Candidates who commenced prior to 1 January, 2014 and elect not to proceed under these resolutions complete the requirements in accordance with the resolutions in force at the time of their commencement, provided that requirements are completed by 31 December 2014. The Dean or Associate Dean may specify a later date for completion or specify alternative requirements for completion of candidatures that extend beyond this time.
This submission is to request a name change for the Master of Mathematics postgraduate coursework masters degree and its associated vertically integrated masters degrees. The new name, Master of Mathematical Sciences better reflects the degree’s breadth of choices and is favoured in market research with prospective students.

RECOMMENDATION

That the Graduate Studies Committee recommend that the Academic Board:

1. approve the proposal from the Faculty of Science to change the name of the Master of Mathematics to the Master of Mathematical Sciences, and of the associated vertically integrated masters degrees eg. Bachelor of Science/Master of Mathematical Sciences;

2. recommend that Senate approve the amendment of the Resolutions of Senate for the Faculty of Science; and

3. approve the amended course resolutions, with effect from 1 January 2019.

EXECUTIVE SUMMARY

The proposed amendment is to change every occurrence of Master of Mathematics in the degree resolutions to Master of Mathematical Sciences and to change every occurrence of the abbreviation MMath to MMathSci.

The School of Mathematics and Statistics has received approval for a two-year coursework Masters to be introduced in 2019 which can be vertically integrated with both the BSc and the BA. Similar postgraduate coursework degrees are offered by institutions both in Australia and overseas under various names. The degree was named Master of Mathematics pending market research with prospective postgraduate and undergraduate students. This market research has now been completed.

This research showed that Master of Mathematical Sciences was regarded as the title with the best fit and most liked for the degree by prospective postgraduate students. This title was also regarded as a good fit and well-liked by prospective undergraduate students for the vertically integrated masters with the BSc and BA.

Both cohorts preferred Master of Mathematical Sciences to Master of Mathematics.

The title Master of Mathematical Sciences captures the breadth of choice within the degree well, as students have the opportunity to focus on Mathematics, Statistics, Statistical Data Science, or Financial Mathematics and Statistics.

The School also considered the title Master of Mathematics and Statistics, but decided that adopting this title would necessitate ensuring that all graduates had some knowledge of statistics and that this is not the intent of the postgraduate degree.
BACKGROUND / CONTEXT

In 2017 the School of Mathematics and Statistics proposed a new postgraduate coursework degree, following the University’s decision to introduce masters degrees that were vertically integrated with the BSc and BA. There is strong evidence from other universities that there is a growing market for this type of degree. It also provides the opportunity for better preparation for students entering research degrees.

To ensure that the degree was approved in time to commence in 2019, the proposal used the interim title of Master of Mathematics while we commissioned market research in parallel with the degree approval process. The results of this market research clearly do not support Master of Mathematics as a degree title but do support Master of Mathematical Sciences.

ISSUES

The sole issue for consideration is the change of name for the degree. The name change to Master of Mathematical Sciences is supported by market research and also by members of the School of Mathematics and Statistics.

OPTIONS

The options are either to keep the name as Master of Mathematics or to change the name to Master of Mathematical Sciences. The Chair of Academic Board and the Provost have already approved the use of Master of Mathematical Sciences in marketing, handbooks and UAC materials for 2019 commencing students.

CONSULTATION

The market research surveyed 268 prospective undergraduate students with ATARs of 90 and above, and 168 postgraduate students.

The School of Mathematics and Statistics Education Committee supports the change.

We have also consulted with Louise Atkins (Student recruitment) and Kate Sanday (Marketing and Communication) in the Faculty of Science office.

We have consulted the DVCE, the Provost, the Acting Chair of Academic Board and the Associate Dean (Education) of Science who all support the change.

FINANCIAL CONSIDERATIONS

There are no financial considerations. The change is cost-neutral at this stage.

RISKS / BENEFITS

The benefit is a set of degrees with more attractive and relevant titles.

The risk is that mention MMath or Masters of Mathematics may not be completely eliminated from published materials and degree resolutions, resulting in confusion.
IMPLEMENTATION

Revised resolutions have been prepared by the Faculty of Science and the Faculty of Arts and Social Science.

With the permission of the Provost and Chair of Academic Board, the undergraduate handbook and the UAC entries are already using the new degree title.

Web pages and other outward-looking publications either have been changed or will be changed soon.

Staff of the School of Mathematics and Statistics and the Faculty of Science have been informed of the planned change, and the Faculty of Science Board endorsed the change at its meeting of 6 February 2018.

ATTACHMENTS

Extracts from Pollinate report. The first extract is the page on the results of surveying prospective undergraduate students for the vertically integrated masters degrees. The second extract is the page on the survey results for prospective students for the stand-alone masters degree.
Non-Confidential

Graduate Studies Committee
13 February 2018

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Degree name alternatives shown to respondents

Bachelor of Science (Honours)
Bachelor of Science (Mathematics and Statistics)
Bachelor of Science (Mathematics and Data Science)
Bachelor of Science (Mathematics and Statistics, and Data Science)
Bachelor of Science (Mathematics and Statistics, and Data Science)

'Mathematics and Statistics' is the best fit with the undergraduate degree

Why Mathematics and Statistics is the best fit:

- The degree is comprehensive and not overly complex. It provides
  enough detail to where one can have a Bachelor of Science and a
  Master's in the field of mathematics.
- It is not too long and easy to understand for someone to understand
  under the broad, exact and rigorous.

The concise, easy to understand nature of this name drove preference

2a
Naming Preferences
Prospective undergraduate degree

Become a leader in the field of mathematics and statistics.

This combined degree is designed to give you a science degree foundation,
then help you complete a deep training in mathematical sciences,
including data science.

You will choose a major and then progress from undergraduate study
to advanced, specialist course and project work in order to prepare you
for further research or the workplace.
Graduate Studies Committee
13 February 2018

Submission To
Graduate Studies Committee
Date
13 February 2018
Item No
4.3

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Mathematical Sciences is ranked as the best fit postgraduate degree description, however not significantly compared on a different average.

The University of Sydney
Postgraduate Degree Descriptions Shown

Prospective Postgraduate degree

Degree name

alternatives

2b
Minor Course Amendment Proposal

Faculty: Faculty of Science

Contact person: Mary Myerscough

1. Name of award course
   Master of Mathematics

2. Purpose of proposal
   The purpose of this proposal is to change the name of the degree from Master of Mathematics to Master of Mathematical Sciences

3. Details of amendment
   The School of Mathematics and Statistics has received approval for a two-year coursework Masters to be introduced in 2019 which could be vertically integrated with both the BSc and the BA. Similar postgraduate coursework degrees are offered by institutions both in Australia and overseas under various names. The degree was named Master of Mathematics pending market research with prospective postgraduate and undergraduate students. This market research has now been completed.

   This research showed that Master of Mathematical Sciences was regarded as the title with the best fit and most liked for the degree by prospective postgraduate students. This title was also regarded as a good fit and well-liked by prospective undergraduate students for the vertically integrated masters with the BSc and BA.

   Both cohorts preferred Master of Mathematical Sciences to Master of Mathematics.

   The title Master of Mathematical Sciences captures the breadth of choice within the degree well, as students have the opportunity to focus on Mathematics, Statistics, Statistical Data Science, or Financial Mathematics and Statistics.

   The proposed amendment is to change every occurrence of Master of Mathematics in the degree resolutions to Master of Mathematical Sciences and to change every occurrence of the abbreviation MMath to MMathSci.

4. Transitional arrangements
   No transitional arrangements are required as the degree has not been offered yet

5. Other relevant information

6. Signature of Dean
   Prof T W Hambley
   Dean, Faculty of Science

Minor Course Amendment Proposal

Version 01.10.2014
Master of Mathematical Sciences

Graduate Certificate in Mathematical Sciences
Graduate Diploma in Mathematical Sciences
Master of Mathematical Sciences

These resolutions must be read in conjunction with applicable University By-laws, Rules and policies including (but not limited to) the University of Sydney (Coursework) Rule 2014 (the ‘Coursework Rule’), the Coursework Policy 2014, the Resolutions of the Faculty, the University of Sydney (Student Appeals against Academic Decisions) Rule 2006 (as amended), the Academic Honesty in Coursework Policy 2015 and the Academic Honesty Procedures 2016. Up to date versions of all such documents are available from the Policy Register: sydney.edu.au/policies.

Course resolutions

1 Course codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Course title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAMA-01</td>
<td>Graduate Certificate in Mathematical Sciences</td>
</tr>
<tr>
<td></td>
<td>Graduate Diploma in Mathematical Sciences</td>
</tr>
<tr>
<td></td>
<td>Master of Mathematical Sciences</td>
</tr>
</tbody>
</table>

2 Attendance pattern

The attendance pattern for these courses is full time or part time according to candidate choice.

3 Master's type

The masters degree in these resolutions is an Advanced Learning Masters course, as defined by the Coursework Policy.

4 Embedded courses in this sequence

(1) The embedded courses in this sequence are:
(a) Graduate Certificate in Mathematical Sciences
(b) Graduate Diploma in Mathematical Sciences
(c) Master of Mathematical Sciences

5 Admission to candidature

(1) With approval of the Dean, available places in the Master of Mathematical Sciences will be offered to qualified applicants according to the following admissions criteria. In exceptional circumstances the Dean may admit applicants without these qualifications who, in the opinion of the faculty, have qualifications and evidence of experience and achievement sufficient to successfully undertake the award.
(2) Admission to the Master of Mathematical Sciences requires:
(a) A bachelor’s degree, or an equivalent qualification, including completion of at least 24 credit points of mathematical sciences units at 3000-level with at least a distinction average over these mathematical sciences units, and
(b) Satisfaction of English language requirements.
(3) Admission to the Graduate Certificate or Graduate Diploma is available only by transfer from the Master of Mathematical Sciences with approval of the Dean or Associate Dean.

6 Requirements for award

(1) The units of study that may be taken for the course are set out in the postgraduate table of units of study for the Mathematics subject area.
(2) To qualify for the award of Master of Mathematical Sciences a candidate must complete 96 credit points including:
(a) No more than 24 credit points of 3000 level electives; and
(b) No more than 48 credit points of 4000 level electives; and
(c) At least 12 credit points of 5000 level electives; and
(d) 24 credit points of research core project units.
(3) To qualify for the award of Graduate Diploma, a candidate must complete 72 credit points including:
(a) No more than 24 credit points of 3000 level electives; and
(b) At least 24 credit points of electives at 4000 level or above, and
(c) 24 credit points of research core project units
(4) To qualify for the award of Graduate Certificate, a candidate must complete 48 credit points including
(a) No more than 24 credit points of 3000 level electives; and
(b) At least 24 credit points of electives at 4000 level or above.

7 Cross-institutional study

(1) Cross-institutional study and international exchange may be available by means of formal partnership agreements.
(2) In exceptional circumstances cross-institutional study to a maximum of 24 credit points may be available to candidates outside of formal partnership agreements, subject to prior approval by the Faculty.

8 Credit for previous study

(a) A candidate may be granted credit in recognition of prior learning. Candidates may be eligible for credit of up to 24 credit points for relevant subjects at the discretion of the Dean or Associate Dean.
b) A candidate who has completed the Bachelor of Science as part of the Bachelor of Science/Master of Mathematical Sciences at The University of Sydney will receive a reduction in the volume of learning of a maximum of 24 credit points of 3000 level or above units from the Mathematical Sciences program.

c) A candidate who has completed a Bachelor of Science (Honours) at The University of Sydney or equivalent qualification may be eligible to receive up to 48 credit points of advanced standing subject to the discretion of the Dean or Associate Dean.

d) Notwithstanding any credit granted, in order to qualify for an award a student must complete at least 50 per cent of the course requirements whilst enrolled in the award course.

9 Course transfer

A candidate for the Master of Mathematical Sciences may elect to discontinue study and graduate with a shorter award from this embedded sequence, with the approval of the Faculty, and provided the requirements of the shorter award have been met.
Minor Course Amendment Proposal

Faculty: Faculty of Science

Contact person: Mary Myerscough

1. Name of award course
   Vertically integrated Bachelor of Science/Master of Mathematics

2. Purpose of proposal
   The purpose of this proposal is to change the name of the degree from Bachelor of Science/Master of Mathematics to Bachelor of Science/Master of Mathematical Sciences

3. Details of amendment
   The School of Mathematics and Statistics has received approval for a two-year coursework Masters to be introduced in 2019 which could be vertically integrated with both the BSc and the BA. Similar postgraduate coursework degrees are offered by institutions both in Australia and overseas under various names. The degree was named Master of Mathematics pending market research with prospective postgraduate and undergraduate students. This market research has now been completed.

   This research showed that Master of Mathematical Sciences was regarded as the title with the best fit and most liked for the degree by prospective postgraduate students. This title was also regarded as a good fit and well-liked by prospective undergraduate students for the vertically integrated masters with the BSc and BA.

   Both cohorts preferred Master of Mathematical Sciences to Master of Mathematics.

   The title Master of Mathematical Sciences captures the breadth of choice within the degree well, as students have the opportunity to focus on Mathematics, Statistics, Statistical Data Science, or Financial Mathematics and Statistics.

   The proposed amendment is to change every occurrence of Bachelor of Science/Master of Mathematics in the degree resolutions to Bachelor of Science/Master of Mathematical Sciences and to change every occurrence of the abbreviation BSc/MMath to BSc/MMathSci.

4. Transitional arrangements
   No transitional arrangements are required as the degree has not been offered yet

5. Other relevant information

6. Signature of Dean

   Prof T W Hambley
   Dean, Faculty of Science

   Version 01.10.2014
Bachelor of Science / Master of Mathematical Sciences

These resolutions must be read in conjunction with applicable University By-laws, Rules and policies including (but not limited to) the University of Sydney (Coursework) Rule 2014 (the 'Coursework Rule'), the Coursework Policy 2014, the Resolutions of the Faculty, the University of Sydney (Student Appeals against Academic Decisions) Rule 2006 (as amended), the Academic Honesty in Coursework Policy 2015 and the Academic Honesty Procedures 2016. Up to date versions of all such documents are available from the Policy Register: http://sydney.edu.au/policies.

Course resolutions

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</tr>
</thead>
<tbody>
<tr>
<td>BPSCIMTH-01</td>
<td>Bachelor of Science / Master of Mathematical Sciences</td>
</tr>
</tbody>
</table>

2 Attendance pattern

The attendance pattern for the Bachelor of Science is full time or part time according to candidate choice. The attendance pattern for the Master of Mathematical Sciences is full time or part time according to candidate choice.

3 Streams

1. The Bachelor of Science/Master of Mathematical Sciences is a vertically integrated degree and is only available in the following streams:
   (a) Advanced
   (b) Dalyell

2. Completion of the advanced stream is a requirement of the Bachelor of Science/Master of Mathematical Sciences. The requirements for the completion of the Dalyell stream are in Table S of the Shared Pool for Undergraduate Degrees.

4 Masters type

The masters degree in these resolutions is an Advanced Learning Master's course, as defined by the Coursework Policy.

5 Admission to candidature

1. Admission to this course is on the basis of a secondary school leaving qualification such as the NSW Higher School Certificate (including national and international equivalents), tertiary study or an approved preparation program. English language requirements must be met where these are not demonstrated by sufficient qualifications taught in English. Special admission pathways are open for mature aged applicants who do not possess a school leaving qualification, educationally disadvantaged applicants and for Aboriginal and Torres Strait Islander people. Applicants are ranked by merit and offers for available places are issued according to the ranking. Details of admission policies are found in the Coursework Rule and Coursework Policies.

2. Admission to the Dalyell stream requires achievement of a minimum tertiary admission rank (ATAR) set by the Board of Interdisciplinary Studies, or equivalent.

6 Requirements for award

1. The units of study that may be taken for the course are set out in:
   (a) Table A for the Bachelor of Science and;
   (b) Table S of the Shared Pool for Undergraduate Degrees; and
   (c) Table O of the Shared Pool for Undergraduate Degrees.

2. In these resolutions, except where otherwise specified, Table A, Table S and Table O mean Table A, Table S and Table O as specified here.

3. To qualify for the award of the Bachelor of Science/Master of Mathematical Sciences, a candidate must successfully complete 216 credit points, comprising:
   (a) 144 credit points to qualify for the award of the Bachelor of Science as specified in the resolutions for the Bachelor of Science, including:
      (i) 12 credit points of mathematics degree core units, as set out in Table A (students may count the units from their major(s) or minor(s) to fulfil this requirement); and
      (ii) DATA1002 and 6 additional credit points of science core units of study (excluding units listed as mathematics degree core) as set out in Table A (students may count the units from their major(s) or minor(s) to fulfil this requirement); and
      (iii) 60 credit points of the Mathematical Sciences program as defined in Table A, and
      (iv) A minor (36 credit points) or second major (48 credit points) as defined in Table A or Table S, and
      (v) 12 credit points of units of study in the Open Learning Environment as listed in Table O; and
      (vi) Where appropriate, elective units from Table A and Table S; and
      (vii) If enrolled in the Dalyell stream, complete the requirements for the stream as specified in Table S.
   (b) 96 credit points to qualify for the award of the Master of Mathematical Sciences as specified in the Table of units for the Master of Mathematical Sciences from the Faculty of Science including:
      (i) No more than 24 credit points of 3000 level electives; and
      (ii) No more than 48 credit points of 4000 level electives; and
      (iii) At least 12 credit points of 5000 level electives, and
      (iv) 24 credit points of research core project units
Progression rules

1. Progression within the Bachelor of Science
   a. Candidates must complete all the requirements for the degree of Bachelor of Science, within three years full time or six years on a part-time basis excluding any authorised periods of suspension, in order to progress to the Master of Mathematical Sciences degree.
   b. Candidates must achieve a Weighted Average Mark (WAM) of at least 65.0 in each year of study in the Bachelor of Science to continue in the integrated course. The requirement for progression to the Master of Mathematical Sciences is at least a distinction average in 24 credit points of units in Mathematical Sciences program as defined in Science Table A at 3000 level or above.
   c. Failure to maintain the minimum progression requirements will result in candidates being transferred from the integrated degree program to a Bachelor of Science degree with full credit for all units of study successfully completed.

2. Progression within the Dalyell Stream
   a. With the permission of the Dalyell coordinator of the School of Mathematics and Statistics, candidates in the Dalyell Stream may attempt units of study at higher levels than the usual sequence.
   b. Candidates must achieve a WAM at a level determined by the Board of Interdisciplinary Studies in each year of study to continue in the Dalyell Stream. Candidates who do not maintain a WAM at the level determined by the Board of Interdisciplinary Studies may continue in the Bachelor of Science component of the degree, but will not remain in the Dalyell Stream.

3. Progression within the Master of Mathematical Sciences
   a. Progression within the Master of Mathematical Sciences is as specified in the resolutions for the Master of Mathematical Sciences.

Award of the degree

1. The Bachelor of Science is awarded as a Pass degree.
2. The Master of Mathematical Sciences is awarded as a Pass degree only.

Course transfer

A student may abandon this course and elect to complete the Bachelor of Science in accordance with the resolutions governing that degree. Completion of the Master of Mathematical Sciences in the future will require a new application for admission to that course and completion in accordance with the resolutions governing that degree.

Transitional provisions

1. These resolutions apply to persons who commenced their candidature after 1 January, 2018.
Resolutions of the Senate

1 Degrees, diplomas and certificates of the Faculty of Science

(1) With the exception of the Doctor of Science, the Doctor of Philosophy, the Doctor of Agricultural Economics, the Doctor of Science in Agriculture, and the Doctor of Veterinary Science, the Senate, by authority of the University of Sydney Act 1989 (as amended), provides and confers the following degrees, diplomas and certificates, according to the rules specified by the Faculty of Science. The Doctor of Science, the Doctor of Philosophy, the Doctor of Agricultural Economics, the Doctor of Science in Agriculture, and the Doctor of Veterinary Science, are provided and conferred according to the rules specified by the Senate and the Academic Board.

(2) This list is amended with effect from 1 January, 2018. Degrees, diplomas and certificates no longer open for admission will be conferred by the Senate according to the rules specified by the Faculty at the time.

2 Degrees

<table>
<thead>
<tr>
<th>Code</th>
<th>Course title &amp; stream</th>
<th>Abbreviation</th>
<th>Credit points</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHSCIENCE-01</td>
<td>Doctor of Science</td>
<td>DSc</td>
<td>Published Work</td>
</tr>
<tr>
<td>RHAGRECO-01</td>
<td>Doctor of Agricultural Economics</td>
<td>D Agr Ec</td>
<td>Published Work</td>
</tr>
<tr>
<td>RHSCAGRI-01</td>
<td>Doctor of Science in Agriculture</td>
<td>D Sc Agr</td>
<td>Published Work</td>
</tr>
<tr>
<td>RHVETSCI-01</td>
<td>Doctor of Veterinary Science</td>
<td>D VSc</td>
<td>Published Work</td>
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<tr>
<td>RPPHDSCI-01</td>
<td>Doctor of Philosophy</td>
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<td>Published Work</td>
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<tr>
<td>RPPHDAGR-01</td>
<td>Doctor of Philosophy (no new intake from 2017)</td>
<td>PhD</td>
<td>Published Work</td>
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<tr>
<td>RPPHDVET-01</td>
<td>Doctor of Veterinary Science (no new intake</td>
<td>PhD</td>
<td>Published Work</td>
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<tr>
<td>RMFMLSCI-01</td>
<td>Master of Philosophy</td>
<td>MPhil</td>
<td>Research</td>
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<tr>
<td>RMFMLLAGR-01</td>
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<td>MPhil</td>
<td>Research</td>
</tr>
<tr>
<td>MASCIENCE-01</td>
<td>Master of Science (no new intake from 2017)</td>
<td>MSc</td>
<td>Research</td>
</tr>
<tr>
<td>RMSCVESC-01</td>
<td>Master of Science in Veterinary Medicine</td>
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<td>Research</td>
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<tr>
<td>RMVETCLS-01</td>
<td>Master of Veterinary Clinical Studies</td>
<td>M Vet Clin St</td>
<td>Research</td>
</tr>
<tr>
<td>RMVETSCI-01</td>
<td>Master of Veterinary Science (no new intake</td>
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<tr>
<td>MASCPSMC-01</td>
<td>Master of Science in Coaching Psychology</td>
<td>MSc (Coach Psyc)</td>
<td>48</td>
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<tr>
<td>MAMASMCMG-02</td>
<td>Master of Marine Science and Management</td>
<td>M Mar Sci Mgt</td>
<td>72</td>
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<tr>
<td>MAMATHEM-01</td>
<td>Master of Mathematical Sciences</td>
<td>M Math Sc</td>
<td>96</td>
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<tr>
<td>MAENVSCI-01</td>
<td>Master of Environmental Science</td>
<td>M Envi Sc</td>
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<tr>
<td>MAENSCLA-02</td>
<td>Master of Environmental Science and Law</td>
<td>M Envi Sc Law</td>
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<td>MAMEDPHY-01</td>
<td>Master of Medical Physics</td>
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<tr>
<td>MANUTDIE-01</td>
<td>Master of Nutrition and Dietetics</td>
<td>M Nut Di</td>
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<tr>
<td>MASTSUST-01</td>
<td>Master of Sustainability</td>
<td>M Sust</td>
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<td>MACLIIPSY-01</td>
<td>Master of Clinical Psychology</td>
<td>M CP</td>
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<td>MAAGIRENV-01</td>
<td>Master of Agriculture and Environment</td>
<td>M Agr Env</td>
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<tr>
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<td>M Anim Sc</td>
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<td>MAASCABM-01</td>
<td>Animal Breeding Management (available by distance online only) (no new intake from 2018)</td>
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<tr>
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<tr>
<td>Code</td>
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<td>Abbreviation</td>
<td>Credit points</td>
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<tr>
<td>MAVETSTD-03</td>
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<tr>
<td>MAWHPM-01</td>
<td>Master of Wildlife Health and Population Management (no new intake from 2018)</td>
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<tr>
<td>MAVETMED-01</td>
<td>Doctor of Veterinary Medicine</td>
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<td>192</td>
</tr>
<tr>
<td>BPLAARSC-01</td>
<td>Bachelor of Liberal Arts and Science*</td>
<td>BLAS</td>
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<tr>
<td>BPMEDSCI-02</td>
<td>Bachelor of Medical Science* (no new intake from 2018)</td>
<td>B Med Sc</td>
<td>144</td>
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<tr>
<td>BPPSYCHO-02</td>
<td>Bachelor of Psychology*</td>
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<tr>
<td>BPSCIENCI-02</td>
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Dalyell
Medical Science

Advanced* (no new intake from 2018) B Sc (Advanced) 144
Advanced Mathematics* (no new intake from 2018) B Sc (Advanced Mathematics) 144

BUAGRECO-01  | Bachelor of Agricultural Economics (no new intake from 2015)* | B Agr Ec                      | 192           |
| BUDAGBU-01  | Bachelor of Food and Agribusiness* (no new intake from 2018)  | B Food Agrib                  | 192           |
| BPENVSYS-01 | Bachelor of Environmental Systems (no new intake from 2017)* | B Env Sys                     | 144           |
| BURESECN-01 | Bachelor of Resource Economics (no new intake from 2015)*     | B Res Ec                      | 192           |
| BUSCAGRI-01 | Bachelor of Science in Agriculture* (no new intake from 2018) | B Sc Agr                      | 192           |
| BUANVEBI-01 | Bachelor of Animal and Veterinary Bioscience* (no new intake from 2018) | B Ar Vet Bio Sc               | 192           |
| BUSCVETE-01 | Bachelor of Science (Veterinary)* (no new intake from 2018)    | B Sc (Vet)                    | 48            |
| BPVETBIO-01 | Bachelor of Veterinary Biology (exit only)                  | B Vet Biol                    | 144           |

* may be awarded with honours following a further year of study.

Combined degrees

<table>
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<th>Code</th>
<th>Course title &amp; stream</th>
<th>Abbreviation</th>
<th>Credit points</th>
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<tbody>
<tr>
<td>BPCOMSCI-02</td>
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<td>BPENGSCI</td>
<td>Bachelor of Engineering Honours* and Bachelor of Science*</td>
<td>B E/B Sc</td>
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Dalyell
Medical Science

<table>
<thead>
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<th>Code</th>
<th>Course title &amp; stream</th>
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<th>Credit points</th>
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<tbody>
<tr>
<td>BPITCMSC-01</td>
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<tr>
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<td>Bachelor of Science* and Bachelor of Laws*</td>
<td>B Sc/ LLB</td>
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Dalyell
Medical Science

<table>
<thead>
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<th>Code</th>
<th>Course title &amp; stream</th>
<th>Abbreviation</th>
<th>Credit points</th>
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<tr>
<td>BPSCLMTH-01</td>
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<td>B Sc/ M Math Sc</td>
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<td>BUSCINUR-02</td>
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<td>B Sc/ M N</td>
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<td>Code</td>
<td>Course title &amp; stream</td>
<td>Abbreviation</td>
<td>Credit points</td>
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<tr>
<td>192</td>
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<td>BSc/BAdvStudies</td>
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<tr>
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<td>Agriculture</td>
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<tr>
<td>Animal and Veterinary Bioscience</td>
<td><strong>Animal and Veterinary Bioscience</strong></td>
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<tr>
<td>Dalyell</td>
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<td>BSc/BAdvStudies</td>
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<tr>
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<td>Equine Medicine</td>
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<td>Equine Medicine</td>
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<td>Equine Surgery</td>
<td><strong>Equine Surgery</strong></td>
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<td>Veterinary Anaesthesia</td>
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<td>Veterinary Dermatology</td>
<td><strong>Veterinary Dermatology</strong></td>
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<tr>
<td>Veterinary Diagnostic Imaging</td>
<td><strong>Veterinary Diagnostic Imaging</strong></td>
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<tr>
<td>Veterinary Emergency Medicine and Critical Care</td>
<td><strong>Veterinary Emergency Medicine and Critical Care</strong></td>
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<tr>
<td>BPVBLVMD-01</td>
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<td>BvetBiol/DVM</td>
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*may be awarded with honours following a further year of study.

4 Double degrees

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<th>Credit points</th>
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<tr>
<td>MACLLPHD-01 / RPPHDSCI-04</td>
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<td>Bachelor of Medical Science* and Doctor of Medicine (no new intake from 2018)</td>
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<tr>
<td>BPSCADMD-01</td>
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<td>Bachelor of Science and Doctor of Dental Medicine</td>
<td>BSc/DMD</td>
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<td><strong>Adjunct</strong>: Bachelor of Medical Science and Doctor of Dental Medicine</td>
<td>BMedSc/MD</td>
<td>336</td>
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<tr>
<td>BPSCINUDD-01</td>
<td>Bachelor of Science* and Master of Nutrition and Dietetics</td>
<td>BSc/MND</td>
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<tr>
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<td>BMedSc/MD</td>
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</tr>
<tr>
<td>BPSCAMED-01</td>
<td>Bachelor of Science (Advanced)* and Doctor of Medicine (no new intake from 2018)</td>
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<td>BSc/MD</td>
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*may be awarded with honours following a further year of study.
## 5 Graduate diplomas

<table>
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<th>Course title &amp; stream</th>
<th>Abbreviation</th>
<th>Credit points</th>
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<tbody>
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<td>GNSYCOA-01</td>
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<td>GradDip(CoachPsyc)</td>
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<tr>
<td>GNASCSCMG-02</td>
<td>Graduate Diploma in Marine Science and Management</td>
<td>GradDipMarSciMgt</td>
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<tr>
<td>GNENVCSCI-02</td>
<td>Graduate Diploma in Environmental Science</td>
<td>GradDipEnviSci</td>
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<tr>
<td>TBD</td>
<td>Graduate Diploma in Mathematical Sciences (exit only)</td>
<td>GradDipMathSci</td>
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<tr>
<td>GNMDPPHY-01</td>
<td>Graduate Diploma in Medical Physics</td>
<td>GradDipMedPhy</td>
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<td>GNPSCYCHO-02</td>
<td>Graduate Diploma in Psychology</td>
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<td>GNSCIENC-01</td>
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<td>GNSUSTAI-01</td>
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<td>GNAGRENV-01</td>
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<tr>
<td>GNASCABM-01</td>
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<td>GNVETPHE-01</td>
<td>Graduate Diploma in Veterinary Public Health (no new intake from 2017)</td>
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<tr>
<td>GNVEPMMA-01</td>
<td>Graduate Diploma in Veterinary Public Health Management (no new intake from 2018)</td>
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<tr>
<td>GNVESTD-01</td>
<td>Graduate Diploma in Veterinary Studies (no new intake from 2018)</td>
<td>GradDip Vet Stud</td>
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<td></td>
<td>Small Animal Clinical Studies</td>
<td>GradDip Vet Stud (Small Animal Clinical Studies)</td>
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<tr>
<td>GNWHEPM-02</td>
<td>Graduate Diploma of Wildlife Health and Population Management (no new intake from 2018)</td>
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## 6 Graduate certificates

<table>
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<th>Course title &amp; stream</th>
<th>Abbreviation</th>
<th>Credit points</th>
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</thead>
<tbody>
<tr>
<td>GCPSCYCOA-01</td>
<td>Graduate Certificate in Coaching Psychology</td>
<td>GradCert(CoachPsyc)</td>
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<tr>
<td>GCSCSCMG-01</td>
<td>Graduate Certificate in Marine Science and Management</td>
<td>GradCertMarSciMgt</td>
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</tr>
<tr>
<td>TBD</td>
<td>Graduate Certificate in Mathematical Sciences (exit only)</td>
<td>GradCertMathSci</td>
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</tr>
<tr>
<td>GCENVCSCI-01</td>
<td>Graduate Certificate in Environmental Science</td>
<td>GradCertEnviSci</td>
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<tr>
<td>GCSCSHIPS-01</td>
<td>Graduate Certificate in Science (History and Philosophy of Science)</td>
<td>GradCertSc(HPS)</td>
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<td>GCSUSTAI-01</td>
<td>Graduate Certificate in Sustainability</td>
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<tr>
<td>GCAGRENV-01</td>
<td>Graduate Certificate in Agriculture and Environment</td>
<td>GradCertAgrEnv</td>
<td>24</td>
</tr>
<tr>
<td>GCANMSCI-01</td>
<td>Graduate Certificate in Animal Science (no new intake from 2018)</td>
<td>GradCertAnimSc</td>
<td>24</td>
</tr>
<tr>
<td>GCASCABM-01</td>
<td>Animal Breeding Management (available by distance online only) (no new intake from 2018)</td>
<td>GradCertAnimSc(ABMgt)</td>
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Non-Confidential

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<tr>
<th>Author</th>
<th>Professor Ross Coleman, Director Graduate Research</th>
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<tbody>
<tr>
<td>Reviewer/Approver</td>
<td>Professor Pip Pattison, Deputy Vice-Chancellor (Education)</td>
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<tr>
<td>Paper title</td>
<td>Increasing engagement opportunities for HDR students</td>
</tr>
<tr>
<td>Purpose</td>
<td>To seek endorsement of a plan for the University to provide more opportunities for HDR students to participate in engagement experiences.</td>
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RECOMMENDATION

That the Graduate Studies Committee recommend that the Academic Board endorse the recommendations of the plan "Increasing Engagement Opportunities for HDR Students", as presented.

EXECUTIVE SUMMARY

The University Strategy 2016-2020 (the Strategy) outlines ambitions for the University to increase its engagement with the wider communities of which it is a part. This reflects a strong push to increase Australian universities’ research engagement, with interactions between researchers and industry a necessary precursor to innovation.

BACKGROUND

The University Strategy 2016-2020 (the Strategy) identifies engagement with industry and the wider community as an important objective to promote excellence in research. As part of this, it is necessary to increase the engagement opportunities of HDR students. During 2017, a process of University-wide consultation was undertaken, including seeking input from Associate Deans Research Education on current opportunities. These were categorised into four broad types and the attached plan was developed to increase their availability and take-up across the University (Attachment 1).

ISSUES

The proposed recommendations aim to improve the menu of engagement opportunities available to HDR students, establish networks of coordination across the University to effectively link students with partners offering engagement opportunities, and establish the supporting technical infrastructure to manage and report on engagements. The recommendations are:

Recommendation 1: Increase the availability and take-up of short-term intensives

Short-term intensives are activities that may be as short as 24-48 hour ‘hackathons’ or up to a week or two in duration. They are often focused on generating possible solutions to a particular problem and involve participants working in multi-disciplinary teams. By participating in these intensive activities, students broaden the applicability of their developing research skills and knowledge to a novel problem outside the domain of their immediate research focus and also experience generating ideas in combination with others who have different forms of expertise. Intensives of this kind therefore complement the primary research experience by requiring rapid, creative, group-based response in contrast to the often sustained, careful, individual response characteristic of the HDR research experience.

An added benefit is that students experience a new way in which HDR graduates can contribute to industry. Intensives are also the most flexible engagement opportunities available to HDR students. They take little time away from candidature, and can fit with students’ scholarly studies and practical research in the laboratory, field or archives. This flexibility means that intensive engagement events can be taken up by students from
many different fields of study, and may be suitable for inclusion in the new HDR coursework curriculum, to be introduced progressively from 2019.

For this reason, it is recommended that the University move to increase the number, availability, and uptake of these opportunities. To do so, the following steps are proposed.

• The Higher Degree by Research Administration Centre (HDRAC) should ensure that details of intensive engagement opportunities offered to HDR students are centrally collected and publicised, with online enrolment available to all students.
• The Education portfolio should target funding support to the creation of intensives, whether these will sit within the HDR curriculum or outside of it as a co-curricular activity. As part of this, the possibility of short-term intensives being made available as for-credit units of study within the HDR curriculum should be explored during 2018 with possible introduction in 2019.

Recommendation 2: Continue to work with external partners to develop internships, industry PhDs and shared-candidature models

Longer-term engagement opportunities such as internships, industry PhDs and shared-candidature models are successful where they are appropriate to the field of study or even the project undertaken by a particular student, and where there is strong interest from partners in participating in such models. For these reasons, it is proposed that an increase in these types of engagement opportunities be sought via the following mechanisms.

• A joined-up communication and responsibility framework along the lines of that outlined below (section 3) should be implemented to ensure that as partnerships are established and developed by the various parties with responsibility for the University’s external engagement, opportunities for HDR students to be involved with these partners are identified and communicated.
• The University Executive – Research Education (UE-RE) committee should consider implementation of the recommendations of the internships working party (attachment 1), particularly those that pertain to internship agreements, the Annual Process Review, and accessibility.

Recommendation 3: Promote the value of engagement to HDR students and supervisors

Current barriers to increased HDR student participation in engagement opportunities should be addressed. These are often a result of a perception that such experiences will reduce the time available to the student to complete the thesis or meet research goals. The University should work to ensure that such perceptions are reduced over time by taking the following steps.

• Ensure that the rationale and evidence for the impact of engagement as well as engagement case studies are communicated via supervisor training, UE-RE showcases, and once-a-year special events for supervisors across the University.
• Ensure that HDR supervision practices support the development of graduate qualities, including engagement activities.
• Ensure that supervisors’ involvement in HDR engagement activities is recognised in academic performance and promotion schemes.

Recommendation 4: Improve data on HDR student participation in engagement activities

At present, the University has no way to record HDR student participation in the various engagement opportunities that are currently available. This means we are unable to meet government reporting requirements that will be in place from 2018, and will affect the evaluation of the University’s HDR activities. Collecting data on the extent and duration of HDR student participation in engagement is therefore vital and will also allow monitoring of level of HDR student engagement. Such data would then permit the University to track the success and impact of initiatives to increase engagement.

• Summary data on the extent of student participation should be reported annually to the University Executive – Research Education (UE-RE) committee.
• Options for recording of student participation in engagement activities and from which data can be extracted for annual HEIMS reporting should be explored.

CONSULTATION

The Pro Vice-Chancellor (Research – Enterprise and Engagement), Pro Vice-Chancellor (Education – Enterprise and Engagement), Associate Deans Research Education and HDRAC team were consulted to develop the HDR engagement plan. This paper will also be presented to the University Executive – Research Committee for endorsement.
ATTACHMENTS

Attachment 1: Increasing Engagement opportunities for HDR Students
Increasing Engagement opportunities for HDR Students
Executive Summary

The University Strategy 2016-2020 (the Strategy) outlined an intention to triple the University's investment in research, and to capitalise on the breadth and depth of disciplinary excellence available to us to solve the most important problems facing society and explore new ways of living. To do so, it is necessary that the University engages with the end users of research, continuing its work to build partnerships with the wider community that enable our research to make a difference at local and global scales.

For Higher Degree by Research (HDR) students, developing skills to interact with and understand settings in which research problems are generated and research outcomes are utilised adds to students' capacity to produce new thinking to solve complex challenges. It also builds understanding of some of the challenges of research translation and impact. These broader capabilities, captured in the University's graduate qualities for PhD students, are arguably developed by engagement with such settings.

This paper presents a series of recommendations intended to increase HDR engagement opportunities and hence respond to the Strategy’s ambitions for investing in the development of HDR students (Initiative 2.2). These recommendations aim to ensure that the majority of HDR students at the University can participate in an engagement experience during their candidature, while ensuring that such experiences do not detract from the achievement of research goals and timely completion of a thesis. This will necessitate an immediate focus on expanding short, intensive engagement opportunities and making sure these are made available across the University (Recommendation 1).

This approach should not lose sight of the significant value to students and the University of deeper and longer engagement activities, such as internships, shared candidature models, and industry PhDs. Development of these more extended experiences relies on external partnerships, and the recognition in these partnerships of opportunities for HDR student involvement. To recognise and grow such opportunities will require coordination between the various areas responsible for managing the University's partnerships (Recommendation 2).

One barrier to HDR student participation in engagement is believed to be a concern on the part of supervisors that engagement may distract students from their primary research goals and delay completion of the research thesis. Such concerns should be addressed through careful monitoring, evaluation and dissemination of HDR student engagement and its impacts. Successful approaches to student engagement should also be communicated widely. It will be important also to recognise the role of engagement in the HDR student experience and the value that supervisors add in guiding students to suitable and rewarding engagement activities during candidature (Recommendation 3).

Finally the success of this plan in increasing meaningful engagement of HDR students necessitates the collection and provision of reliable data. Recommendation 4 is to ensure that the University finds a way to reliably monitor and report student participation in engagement activities.
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Abbreviations

ACOLA  Australian Council of Learned Academies
AMSI  Australian Mathematical Sciences Institute
ARC  Australian Research Council
CDIP  Commercial Development and Industry Partnerships team (Research portfolio)
Go8  Group of Eight universities
HDR  Higher Degree by Research
HDRAC  Higher Degrees by Research Administration Centre (Registrar portfolio)
HEIMS  Higher Education Information Management System
LMS  The university’s Learning Management System
NISA  National Innovation and Science Agenda
OECD  Organisation for Economic Cooperation and Development
RBG  Research Block Grant
RTP  Research Training Program
STEM  Science, Technology, Engineering and Mathematics
UE-RE  University Executive – Research Education committee
Recommendations

The following recommendations are a mixture of immediate actions the University should take in order to increase the availability of engagement opportunities to all higher degree by research (HDR) students, and longer-term changes. These recommendations are intended to be sensitive to the field of study in which a HDR student is studying and the needs and interests of the University’s external partners.

Recommendation 1: Increase the availability and take-up of short-term intensives

Short-term intensives are activities that may be as short as 24-48 hour ‘hackathons’ or up to a week or two in duration. They are often focused on generating possible solutions to a particular problem and involve participants working in multi-disciplinary teams. By participating in these intensive activities, students broaden the applicability of their developing research skills and knowledge to a novel problem outside the domain of their immediate research focus and also experience generating ideas in combination with others who have different forms of expertise. Intensives of this kind therefore complement the primary research experience by requiring rapid, creative, group-based response in contrast to the often sustained, careful, individual response characteristic of the HDR research experience.

An added benefit is that students experience a new way in which HDR graduates can contribute to industry. Intensives are also the most flexible engagement opportunities available to HDR students. They take little time away from candidature, and can fit with students’ scholarly studies and practical research in the laboratory, field or archives. This flexibility means that intensive engagement events can be taken up by students from many different fields of study, and may be suitable for inclusion in the new HDR coursework curriculum, to be introduced progressively from 2019.

For this reason, it is recommended that the University move to increase the number, availability, and uptake of these opportunities. To do so, the following steps are proposed.

- The Higher Degree by Research Administration Centre (HDRAC) should ensure that details of intensive engagement opportunities offered to HDR students are centrally collected and publicised, with online enrolment available to all students.
- The Education portfolio should target funding support to the creation of intensives, whether these will sit within the HDR curriculum or outside of it as a co-curricular activity. As part of this, the possibility of short-term intensives being made available as for-credit units of study within the HDR curriculum should be explored during 2018 with possible introduction in 2019.

Recommendation 2: Continue to work with external partners to develop internships, industry PhDs and shared-candidature models

Longer-term engagement opportunities such as internships, industry PhDs and shared-candidature models are successful where they are appropriate to the field of study or even the project undertaken by a particular student, and where there is strong interest from partners in participating in such models. For these reasons, it is proposed that an increase in these types of engagement opportunities be sought via the following mechanisms.

- A joined-up communication and responsibility framework along the lines of that outlined below (section 3) should be implemented to ensure that as partnerships are established and developed by the various parties with responsibility for the University’s external engagement, opportunities for HDR students to be involved with these partners are identified and communicated.
- The University Executive – Research Education (UE-RE) committee should consider implementation of the recommendations of the internships working party (attachment 1), particularly those that pertain to internship agreements, the Annual Process Review, and accessibility.
Recommendation 3: Promote the value of engagement to HDR students and supervisors

Current barriers to increased HDR student participation in engagement opportunities should be addressed. These are often a result of a perception that such experiences will reduce the time available to the student to complete the thesis or meet research goals. The University should work to ensure that such perceptions are reduced over time by taking the following steps.

- Ensure that the rationale and evidence for the impact of engagement as well as engagement case studies are communicated via supervisor training, UE-RE showcases, and once-a-year special events for supervisors across the University.
- Ensure that HDR supervision practices support the development of graduate qualities, including engagement activities.
- Ensure that supervisors’ involvement in HDR engagement activities is recognised in academic performance and promotion schemes.

Recommendation 4: Improve data on HDR student participation in engagement activities

At present, the University has no way to record HDR student participation in the various engagement opportunities that are currently available. This means we are unable to meet government reporting requirements that will be in place from 2018, and will affect the evaluation of the University’s HDR activities. Collecting data on the extent and duration of HDR student participation in engagement is therefore vital and will also allow monitoring of level of HDR student engagement. Such data would then permit the University to track the success and impact of initiatives to increase engagement.

- Summary data on the extent of student participation should be reported annually to the University Executive – Research Education (UE-RE) committee.
- Options for recording of student participation in engagement activities and from which data can be extracted for annual HEIMS reporting should be explored.
1. Introduction

The University Strategy 2016-2020 (the Strategy) outlines ambitions for the University to increase its engagement with the wider communities – local, national and international – of which it is a part. This aim of increasing engagement applies to both the research and the education activities of the University, and has already led to number of changes, including the appointment of Pro Vice-Chancellors Enterprise and Engagement in each of the Research and Education portfolios, as well as a Vice-Principal of External Relations. One of the critical ways in which research and education are integrated at the University is through higher degrees by research (HDR): the PhD, other research doctorates and Masters by Research. This paper outlines a plan to increase engagement opportunities for students within these degrees.

The Strategy defines engagement as the unification of education and research with the wider work of the disciplines and the life of the various communities that connect with the University. For researchers, and research students, this is usually understood as any activity that results in researchers interacting with the end-users of research, often collectively referred to as ‘industry’. ‘Industry’ in this sense is meant broadly, and can apply to community groups, government and the general public.

Over the past decade or so there has been a strong push to increase Australian universities’ research engagement. High-quality research, from basic through to applied and translational, is the driver of national innovation, and interactions between researchers and industry are a necessary precursor to this innovation. While Australia ranked ninth in the Organisation for Economic Cooperation and Development (OECD) for production of research in 2013, it was close to the bottom of OECD rankings in industry-university collaboration, a gap that needs to be bridged if we are to realise the full benefits of our public investment in research. As HDR students produce a substantial amount of Australia’s research output, working in contexts that build connections with, and an understanding of, the end-users of research is an important way to address this gap, whether or not they go on to careers as academic researchers or choose employment within industry.

In a bid to encourage universities to drive such engagement, the Australian Government has recently made changes to research funding structures to give increased weight to funding success in categories 2, 3 and 4 – that is, funding from industry and non-Australian Research Council (ARC)/National Health and Medical Research Council government sources. As part of the same National Innovation and Science Agenda (NISA), the government announced changes to the Research Training Program (RTP), now half of the Research Block Grant (RBG) the University will receive. For the RTP, categories 3 and 4 will drive 25% of funding, and for the Research Support Program, the other half of the RBG, 50%.

Starting in 2018, the University will be required to report to government HDR student engagement with industry through new Higher Education Information Management System (HEIMS) elements. Required reporting in 2018 includes student participation in internships (for periods of 30 days or longer) and co-supervision of HDR students by industry. Eventually, further elements will be required, including joint or full funding of a student by industry, formal training for students in industry engagement, and other commercialisation or industry engagement activities.

The ARC’s Excellence in Research for Australia ranking is also adding an impact and engagement measure. This was trialled during 2017, and will be implemented in full during 2018. The pilot report, released in November 2017 recommends that use of the HEIMS element measuring co-supervision of HDR students by industry partners be delayed until after the 2018 ranking. This is expected to commence from the next assessment of this measure, however, in line with the HEIMS reporting implementation.

These changes to research and research training funding as well as performance measures were partly prompted by two reviews which took place during 2015, the Review of Research Policy and Funding Arrangements (the Watt Review) and the Australian Council of Learned Academies Review of Australia’s Research Training System (the ACOLA Review). Both reviews focused on the issues of research translation, and were accepted in full by government through the NISA. In doing so, the government is aiming to increase engagement between universities and industry in order to drive innovation.
Students too, likely with an eye to the changing employment market or due to strong interest in how their research can address real-world problems, have expressed desires to see an increase in engagement opportunities. A number of qualitative comments made in the 2016 Graduate Outcomes Survey (GOS) and the Student Experience Survey (SES) requested further connections with industry, opportunities to do internships, or commented on the lack of these during their degree.

In considering how to increase the engagement activities available to HDR students, initiative 2.2 of the Strategy commits the University to creating new opportunities for joint PhD programs with leading global partners in business, industry and community organisations. This includes opportunities for students to spend time working with industry and community partners, both local and global, and the possibility for more industry sponsored PhDs. Simultaneously, the University proposes to provide greater support for PhD students to participate in start-up and incubator programs.

This plan outlines the ways in which four broad types of engagement activities are currently accessed and used across the University (section 2); and proposes ways in which an increase in the availability and uptake of these activities may be encouraged for HDR students, particularly within the PhD (section 3).

The four types of activities considered differ in the average duration of the engagement experience and the variety of engagements which might be experienced by any one student, which are inversely related as shown in figure 1. The ‘industry PhD’ discussed in the ACOLA Review and recognised in the Strategy is the longest in duration. A student undertaking one of these is unlikely to be able to afford time to participate in many other engagement activities or to embed themselves in ‘industry’ types or organisations other than the primary partner with whom they are working for their PhD. ‘Shared candidature’ models are shorter in duration, and therefore can provide a slightly higher chance that students may participate in more than one type of engagement activity. Internships can vary widely in duration, but generally are shorter again than the current ‘shared candidature’ model used at the University, and so students may experience one or more internships or combine these with another type of engagement activity. Finally, ‘intensives’, which is a catch-all term used to describe ‘hackathons’, ‘challenges’ and the like, are the shortest in duration and students could easily participate in multiple different intensives or combine this with another shorter-term experience.

**Figure 1.** The four broad types of engagement opportunities discussed here. The depth of engagement with an end-user of research is correlated to the duration of engagement activities, while the range of opportunities a single student may participate in, and the overall number of opportunities is inversely correlated with these measures.

### 1.1 The PhD Graduate Qualities

During 2017, the University agreed a set of graduate qualities for the PhD (table 1) that describe the skills, attributes and qualities a graduate of a Sydney PhD will develop. The quality of ‘engagement’ is included here, with the intent that PhD graduates should display high-level capabilities in disseminating research, and the ability to understand their own research in a broader context. An obvious route to developing this quality in PhD students is to ensure they take part in engagement activities. Such activities would also help to ensure that students are given opportunities to develop many of the other graduate qualities. For example, engagement experiences can help students to build their interdisciplinary effectiveness, by developing a wider perspective on their research and an improved understanding of the wider research community. Engagement opportunities can also build a student’s influence, by helping them to contextualise their research, and perhaps allowing them to make a
positive contribution to a current societal challenge. The very skills that make our researchers attractive to industry – critical thinking, inventiveness and digital prowess – can all be developed and improved by working with industry.

It is important then, not to see engagement as a single quality that can be ‘ticked off’ by completing an activity, but more to consider engagement initiatives as additional means by which our PhD candidates can develop all of the graduate qualities.

<table>
<thead>
<tr>
<th>PhD qualities</th>
<th>Purpose</th>
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<tbody>
<tr>
<td>Deep expertise</td>
<td>To possess expert, world standard knowledge in an area of specialisation, a mastery of relevant research methods and the capability to contribute to scholarship and knowledge discovery</td>
</tr>
<tr>
<td>Broader skills:</td>
<td></td>
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<tr>
<td>Critical thinking and problem solving</td>
<td>To display high level capabilities in critical thinking and problem solving and a commitment to lifelong learning and discovery</td>
</tr>
<tr>
<td>Communication (oral and written)</td>
<td>To have excellent oral and written communication skills relevant to specialist and general audiences</td>
</tr>
<tr>
<td>Information/digital literacy</td>
<td>To evaluate and utilise contemporary digital tools, resources and technologies</td>
</tr>
<tr>
<td>Inventiveness</td>
<td>To be innovative and creative in response to novel problems, and to be willing to take risks</td>
</tr>
<tr>
<td>Engagement</td>
<td>To display high level capabilities in disseminating research, and build understanding of own research in a broader context by participating in engagement with end-users of research</td>
</tr>
<tr>
<td>Project planning and delivery</td>
<td>To plan, manage and deliver research projects effectively</td>
</tr>
<tr>
<td>Cultural competence</td>
<td>To display high levels of cultural competence and embody best practice with regard to cultural competence in research</td>
</tr>
<tr>
<td>Interdisciplinary effectiveness</td>
<td>To work effectively in interdisciplinary settings to develop broader perspective, innovative vision and the capacity to work effectively within national and international research and innovation systems</td>
</tr>
<tr>
<td>Professional, ethical, personal identity</td>
<td>To exercise integrity, confidence and resilience</td>
</tr>
<tr>
<td>Influence</td>
<td>To be professionally and socially responsible and make a positive contribution to society; Recognise and promote the implications of own research in a broader societal context</td>
</tr>
</tbody>
</table>

Table 1. The University of Sydney’s PhD Graduate Qualities.
2. Current Engagement

In general, access to engagement opportunities for HDR students at the University is minimal. Levels of access also vary widely, however, with some faculties, schools, or fields of study highly engaged with industry and providing many opportunities for their students, and others providing almost none. For students, it can be difficult to find opportunities if they are not directly related to their field of study, or managed by their supervising school. While the below is not a comprehensive survey of all opportunities currently available at the University, it is an attempt to describe this highly variable landscape, with a particular focus on the four types of engagement activities identified in section 1.

2.1 Industry PhDs

Industry PhDs occur where the research project completed by the student is directly aligned with the work of an industry partner. The industry partner is actively involved in the education of the student through supervision, hosting off-campus work, career development activities and mentorship. This is necessarily a ‘whole of candidature’ model. The purpose of an industry PhD is to do research that contributes to solving a particular problem. Examples of projects students might complete range from working on pharmaceutical drug development, to quantum computing for a technology company or ore body discovering for mining companies. The research topic is usually closely linked to commercial objectives.

At the University, there are currently 130 accounts which support industry PhD students at the University to a total amount of $2.36M. These may support more than one student, but this is still a relatively low number given the total number of HDR students at the University – around 4% of the 3,600 2017 EFTSL. A key factor in the creation of industry PhDs is the supervisor’s or school’s existing research relationships with industry. For some fields of study this can be very strong but for others, further relationship building is necessary to strengthen these links. As identified in the Strategy the University has historically not had a strongly diversified funding profile for research, and there is a need to bolster research that directly addresses the problems of industry. For these reasons, the Strategy proposed increasing investment in the Commercial Development and Industry Partnership (CDIP) team. A result of the implementation of that proposal is new CDIP business development managers embedded in each faculty to support staff to pursue industry engagement and commercialisation. This support will be material in building the connections essential to developing more industry PhDs.

2.2 Shared Candidature PhDs

In 2016 the Group of Eight (Go8) universities in partnership with Westpac developed the Westpac STEM PhD. This PhD program allows students to continue their research part time while also working at Westpac. Westpac is not directly involved in the research activities of the student and there are no intellectual property implications, as can be the case with industry PhDs. Instead, Westpac benefits through access to the University’s top students, who can apply high-level STEM skills and innovation to solving commercial problems. Students benefit from work experience, professional development, and mentoring, whilst being paid a pro-rata salary.

At present, this is a small volume scheme and focused on STEM disciplines. It is also a new model, and evaluating the experiences and success of the first group of students participating, as well as considering the experiences of the partner and of the University will be key to further refining and improving it.

The shared candidature PhD does not provide additional research income to the University from industry (thus affecting Research Block Grants), nor does it necessarily directly enhance research outcomes. The model does, however, further strengthen the University’s partnerships with industry and benefits our students through providing them with a meaningful industry experience.
2.3 Internships

Internships are available across the University to students enrolled in undergraduate degrees, postgraduate coursework degrees, and higher degrees by research. Probably the fewest are offered to HDR students, as opportunities are mostly offered as units of study, which have historically not been a part of HDR degrees. Internships on offer tend to be between four weeks to twelve months in duration, with the majority less than twelve weeks long. Partners who currently offer internships to our students include businesses, social enterprises and government agencies, who offer various types of internships, including international industry internships, legal clerkships and industry mentoring.

The largest internship program focused on HDR students is the Australian Mathematical Sciences Institute (AMSI) intern program, which is designed for PhD students and matches students with specific industry projects for periods of up to three months. In taking up the ACOLA Review’s recommendations, the Australian Government has supported expansion in this program such that it can provide internships for up to 1400 students per year across the country. Unfortunately, rates of uptake of this program at the University have been low (section 3.3).

While HDR students are welcome to undertake internships with the agreement of their supervisor, there is no current reporting or recording of the activities that a student completes outside of their PhD. This is problematic for the University in that there is no way of knowing how many of our students are participating in these opportunities, assuring the quality of the experiences thus offered, and addressing gaps where students and supervisors who might like to participate in internship opportunities are unaware of how to access these. It is also worth noting that reporting on internships for HDR students will be the only measure of HDR engagement activity during 2018.

2.4 Intensives

Intensive engagement activities are those that take place over a short period of time (from as little as a day to up to twelve weeks), tend to be multidisciplinary in nature, and require students to apply their skills and knowledge to solving a particular problem. The University currently offers a number of opportunities that would fall into this category. One example is ‘Inventing the Future’ a course held over six weeks of day-long sessions, where postgraduate coursework and HDR students work in multidisciplinary teams (drawn from a subset of faculties) on one of three real-world briefs provided by academics or industry partners. The course takes students through the innovation process, from ideation to prototyping and industry pitch.

Other examples include hackathons, such as that hosted by the Sydney University Law Society during 2017. Sponsored by a law firm, this brought together not only students of law and coding, but was open to students from all faculties. Students worked in teams to win prizes, supported by project managers and professional developers provided by the sponsors. The AgDataChallenge is another example, where a team of University PhD students were led and mentored by a faculty member to win second prize in 2016, while the winning team was led by a second University PhD student. Students who participated in the latter commented on the value of the experience in understanding how their own research should consider the end use and the end user.

While there has been significant interest in this space, particularly in relation to encouraging entrepreneurship and commercialisation, opportunities are currently developed on an ad-hoc basis, often in response to the interests and passion of individual academic staff. This means that there is a lack of University-wide coordination of such opportunities, and that as a result, intensives can be hard to for students to discover and access.
3. Ways to Increase Engagement Opportunities

In response to the Strategy’s ambitions to increase HDR engagement opportunities, it is proposed that the University look to increase the availability of short-term intensives as a first priority. By focusing on short experiences, it is more likely that more students, across more of the University’s fields of study, can be involved. This widespread coverage will increase the likelihood that students graduating from a Sydney PhD will understand the settings in which research problems are generated, and research outcomes utilised.

It is also important that students have the opportunity to participate in more than one engagement experience. Student perceptions of career trajectories often change during candidature, and by providing a range of engagement activities students can use these to explore their interests and capabilities and prepare for careers that may or may not involve the academy. By building an understanding of the challenges of research translation and impact, students will be better equipped to address these whatever their future career pathway.

This focus on a wide variety of intensive engagement opportunities aims to reach the majority of our HDR students and to allow all to participate in some way. Longer experiences are often incredibly valuable for students, however, as well as providing benefit to the industry partner and the University. For these reasons, while these will always be fewer in number and reach a smaller proportion the student body, improvement in the number of these offered at the University is also sought.

Many of the challenges in realising these aims are shared between the types of engagement activities, but as the longer-term activities are usually the result of other forms of partnership between industry and the University, these have some particular challenges. Reforms are suggested here that will address these, particularly the issues of coordination and communication, and steps that may address the cultural barriers within the University that discourage both students and supervisors from participating in engagement.

3.1 Short-term intensives

While some intensives are currently offered at the University, these are currently patchily distributed, with many opportunities faculty specific and difficult for students to find (section 2.4). Students may also experience difficult accessing opportunities where they are peripheral to their field of research and viewed by their supervisor as external to their main project.

By investing in intensives, the University can ensure that more students can take part in innovation-thinking, entrepreneurship development and thus develop an enhanced understanding of the needs of end-users of research. Many intensive activities are focused on solving problems of industry partners and so students are challenged to integrate knowledge and skills in unfamiliar but realistic contexts. Some intensives are also incubators, focused on start-ups, and can help students develop skills in commercialisation of research.

Some steps have already been taken to increase student access to intensives as part of the implementation of the Strategy. These include the University’s new Innovation Week, which includes a student innovation challenge hosted by Incubate, a University of Sydney Union accelerator. As part of the University’s emerging entrepreneurship ecosystem, Incubate works with early stage startups to develop business direction, moving through to a pitch stage. The Business School’s Genesis StartUp program also provides support for students, staff and alumni to develop ideas to the prototype and pitch stage. The Innovation Hub, now in the Education portfolio, offers further start-up assistance to students, guiding them through the early stage start-up phase. The University is also a shareholder in Cicada Innovations which takes start-up companies to successful businesses.

Entrepreneurship programs such as the above are focused on those who have already formed an idea they think might be suitable for business development. Other types of intensives can be broader in focus. Some might help students develop the sort of thinking that may lead to an idea suitable for start-up support through one of the above programs. The Inventing the Future is a good example of...
this sort of intensive experience, and is one that could be developed into a within-curriculum opportunity for HDR students to come together in multidisciplinary teams and work on an authentic problem with the potential for commercialisation. The University should consider whether this model can be either expanded or replicated as the HDR curriculum is developed.

Many intensives are run as co-curricular activities, however, and are agnostic to the background of the student undertaking them. Analysis of innovation ecosystems has shown that diversity of background is often key to successful innovations, with breakthrough innovations usually coming from those peripheral to, rather than deeply immersed, in a particular field of study. For these reasons, while the possibility of including intensives within the HDR curriculum, most likely as a 2 credit point OLE unit, should be further explored, the majority are likely to remain co-curricular, with the incentives for student participation interest in the topic at hand or in engagement, entrepreneurship, commercialisation or innovation. The challenge then, lies in ensuring that students can discover these opportunities, whether taken for-credit or not. This will require a central coordinating point, such as the HDRAC, to be notified of all relevant opportunities, and to find some way of communicating these to students to enable their participation.

3.2 Longer-term opportunities

A focus on internships is clear in the Australian Government’s implementation of the NISA, with both the HEIMS collection data focusing initially on internships for HDR students, and the ARC’s impact and engagement metric looking to include this measure. This is prompted by the ACOLA review, which suggested that by including internship opportunities for as many students as possible, PhD students would be better prepared for future careers. For students, other advantages of undertaking an internship include a better understanding of how research is accessed and used by industry and opportunities to build networks. For industry partners, internships provide access to talent to solve pressing problems, greater connections with academia, and a potential recruitment opportunity for a high-quality future worker.

While concerns are sometimes raised regarding the potential for internships to distract a student from the core HDR deliverable of an examinable thesis within desired completion times, overseas experience has shown the impact of internships on completions to be minimal (ACOLA Review, 2015). During 2017 a University Executive – Research Education (UE-RE) working party on HDR internships recommended a number of steps be taken to increase the number of internships available (attachment 1). These include the development of a standardised internship agreement, inclusive of intellectual property arrangements; ensuring opportunities are discussed as part of students’ Annual Performance Review process; and ensuring students across all fields of study are able to access opportunities.

Shared candidature models, could also be scaled up from the single existing scheme to many versions of the model, pending evaluation of the outcomes from the initial cohort. To do so will require a good understanding of our partners and their needs, and for the University to work to develop a clear statement of benefit for the partner in engaging in such a model. In the Westpac scheme, the University came together with the other Go8 universities to offer a national company their best students in every capital city. Similar schemes could be offered to partners whose business is on a national scale, and collaboration with other universities through the Go8 or other networks could again be leveraged to ensure the partner’s needs are met. While the focus of the Westpac scheme was on STEM students, the humanities and creative disciplines also have much to offer the business world and the University should work to develop clear statements of value for partners to consider. This type of engagement model is suitable for a large company that wants to invest in people over an extended period of time.

Finally, while industry PhDs are the most in-depth and therefore likely to be the rarest of the models to be used for engagement at the University, these should be pursued where appropriate and can likely be much expanded over their current numbers. For students, benefits of such a model are the development of industry knowledge, understanding and contacts as well as post-candidature career opportunities. For the University, benefits are the establishment of a relationship with industry that can

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1 Peter Svensson, ‘Openness and Innovation: Possibilities for NSW’ Science and Research Breakfast Seminar 8 November 2017
lead to further research opportunities and the creation of a body of knowledge and expertise in areas with commercialisation opportunities. While there are some limitations on industry PhDs regarding intellectual property and constraints to the scope of the research, these can be managed through research agreements, which the CDIP team supports faculties in developing.

To increase the number of industry PhDs offered, the University should consider actively seeking these as part of partnership agreements. This will require work to ensure those involved in establishing such agreements are aware of the University’s priorities in this regard, and will necessitate good coordination (section 3.3). As outlined in the Strategy, work to increase the number of Cooperative Research Centres the University leads should also provide industry PhDs opportunities as research relationships with industry in general are strengthened.

3.3 Remove barriers to HDR engagement

The University has worked in recent years to reform its ‘front door’ for engagement with industry and the management of partnerships. Since 2016, a Vice-Principal of External Relations, a Pro Vice-Chancellor Education – Enterprise and Engagement and a Pro Vice-Chancellor Research – Enterprise and Engagement have all been appointed. The role of these executives is to oversee the University’s engagement efforts and coordinate the various types of engagement and its purposes. In addition, in response to the ambitions of the Strategy to focus research effort on the problems of industry, the CDIP team has embedded business development managers in each faculty. As the University seeks to increase the engagement opportunities for HDR students, it will be vital to ensure that these opportunities are within scope for partnership discussions at all levels, and that there is a common understanding of priorities.

Partnerships for research and partnerships for education both have the potential to provide opportunities for HDR students. For these reasons, it will be necessary that each of the research and education engagement groups are involved in identifying opportunities and passing them on to a central coordinating point that can review these and ensure they are made available to the appropriate students. This review would need to take into account the partners’ needs, and to find the appropriate model for embedding the opportunity into the student experience, whether as a short-term intensive made available to multi-disciplinary teams or a targeted internship made available to students in specific fields of study. This assessment should be made by the Education portfolio, in consultation with the relevant faculties. Where the opportunity is to be embedded within curriculum, it would need to find a faculty partner, and be endorsed by the Graduate Studies Committee of the Academic Board.

For both short- and long-term experiences, reforms are needed to ensure students can discover opportunities. This should be coordinated by the HDRAC, who would also manage communications, and ensure that the appropriate participation information can be captured for reporting purposes – both to the Australian Government and for the University’s own internal purposes. As the University expands activities in this area, and gathers its own data on the impact of engagement on the HDR experience, success rates and so forth, these data could eventually be used by UE-RE to set and monitor HDR student engagement targets.

Technical support for a number of these processes would be welcome. The External Relations portfolio is currently investigating solutions for Client Relationship Management that can provide a common platform for engagement teams to manage partnerships. It will be important that any such solution ensure a way is found to identify and direct HDR opportunities to the Education portfolio for review.

Similarly, while communicating opportunities to students can currently be managed via student-facing webpages, there is no current way to track how many HDR students are undertaking engagement experiences or their type. Such reporting is necessary starting in 2018 for HEIMS, and will be essential to managing targets for engagement opportunities. As the new HDR curriculum is developed for 2019, Sydney Student will be used to enrol students in curriculum opportunities through units of study, and can be used to report these opportunities, but such a system will fail to capture those that are not offered in this manner. It is therefore recommended that further work be undertaken during 2018 to investigate potential ways in which these can be managed.
Finally, it will be necessary to communicate successes and benefits flowing from HDR engagement activities across the University. Current uptake of HDR opportunities may be affected by supervisor concerns about the potential for distraction from a students' primary research goals and the completion of the thesis. Such perceptions may be partially responsible for the University's poor performance in the 2017 AMSI internships. The University hosted and co-funded a coordinator to distribute the government-funded AMSI internships in the Sydney region, along with the University of Technology Sydney. One hundred internships were on offer across the Sydney basin, but only one University of Sydney student ultimately participated. The coordinator noted that the low uptake of these internships appeared to be driven by supervisor concerns regarding the time spent by students on 'non-research' activities.

These concerns are not uncommon – in the UK, the Biotechnology and Biological Sciences Research Council noted a similar issue when they required all of their funded students to take part in three month internships unrelated to their research programs. An early evaluation of this program has instead found that students often return to their research reinvigorated, and that the internship has a positive effect on student success.\textsuperscript{2} Other studies have reported significant gains in candidates' creativity, cognitive abilities, knowledge base and self-management.\textsuperscript{3}

With the focus on short-term intensives, and the possibility that internships as well as the intensives can fit within the to-be-developed HDR curriculum, it is unlikely that the majority of the experiences to be offered will significantly reduce the time a student has available to develop their thesis. Nevertheless, as reliable data becomes available within the University, it will be important to monitor the impact of engagement activities on student success. Additionally, the experiences of students and supervisors who have participated in engagement activities and found them beneficial should be disseminated widely so that successful models may be replicated. Finally, consideration could be given to recognising the value that supervisors can add by including appropriate HDR student engagement activities as part of candidature. This could be done by ensuring that HDR supervision is understood within the performance, promotion and recognition criteria, as a process of ensuring the development of the PhD graduate qualities in HDR students, including through engagement activities.


\textsuperscript{3}Pope, C. (2016) Doctoral Internships. Fun times but was it a good learning experience. Researcher Education & Development Conference. University of Sheffield.

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<tr>
<td>Reviewer/Approver</td>
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<tr>
<td>Paper title</td>
<td>HDR Internships Working Party Report</td>
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<tr>
<td>Purpose</td>
<td>To provide advice and recommendations to the University Executive Research Education Committee from the Higher Degree by Research Internships Working Party.</td>
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RECOMMENDATION

That the University Executive Research Education Committee:

(1) Note the advice in the Higher Degree by Research (HDR) Internships Working Party Report.

(2) Request the Director-Graduate Research to propose means by which HDR students may undertake internships with industry, including such options as:

   a. Implementing a non-credit bearing module in the Learning Management System (LMS) to act as a shell unit for HDR internship activities.
   b. Refining the APR process to help the APR panel and candidate have a discussion about the suitability and relevance of an internship for a given student’s candidature.
   c. Develop and distribute supporting documentation to faculties and students that addresses internship standards, university responsibilities, Intellectual Property (IP), and insurance.
   d. Produce a means by which students can access information about internship opportunities and perhaps enrol in opportunities of interest.

(3) Seek advice from the DVC-Registrar’s portfolio, notably the HDRAC, on the best way to collect data on student involvement with internships and then propose a solution to the committee.

(4) Discuss whether student participation in internship activities should be included on the transcript.

EXECUTIVE SUMMARY

The University Executive Research Education Committee recommended that a Working Party be established under the Committee to investigate and develop a University-wide mechanism to support HDR students to undertake internships. A Working Party was established in August and addressed a variety of issues relating to HDR internships including a statement of responsibilities, developing a shell unit for internships to be hosted on the learning management system, data collection, including the internship experience on a student’s academic transcript, and different internship models and recording options.

BACKGROUND / CONTEXT

The ACOLA review suggested that the Australian PhD could better prepare students for their working life by including internship opportunities for as many students as possible. Such internship opportunities may involve students working in industry on discrete projects that differ from their own research questions. The advantage for the student was proposed as arising from better readiness to join the workforce, better understanding of how the end-users of research work, opportunities to build networks, and a better awareness of the societal gains from an expert-thinker workforce. The industry

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partner gains by having access to new talent to solve pressing problems, greater connections with academia, and a potential pipeline for high-quality human capital. Universities gain by increasing the level of engagement with industry partners, which is both academically and financially beneficial.

Currently, internships as part of HDR candidatures are occurring across the university without a governance structure, feedback, or record of what activities are completed by the student. In addition, the Commonwealth has indicated its intention to capture data about how HDR students are engaging with end-users of research through the introduction of a new HEIMS data element (593). Therefore, it is recommended that the University develops mechanisms to both promote internship opportunities for HDR students and capture information about how students are engaging with industry while undertaking internships.

The Department of Education and Training has provided a broad definitional outline of industry engagement for HDR students which includes:

- 'an HDR student working on an industry defined research problem,
- an HDR student supervised by an employee in industry,
- an HDR student working on the student’s own HDR project in an industry setting, and
- an HDR student undertaking a formal cadetship, internship or employment with an industry employer (undertaken either at the same time as the HDR project or during a break in the HDR). 5

The Working Party examined issues relating to internships with a broad understanding of what constitutes HDR student and industry engagement, which generally aligned with the scope outlined above. Whether academic placements within degree programmes should constitute an internship for the purpose of encouraging and collecting data about internships was also discussed and considered to be outside the scope of the Working Party’s definition of HDR student internship experiences. Furthermore, if an organisation is eligible to receive research grants (for example, Australian Research Council Grants), then such an organisation may not be considered ‘industry’.

ISSUES/OPTIONS

The following issues and proposed solutions were considered by the HDR Internships Working Party.

Completions
While industry internships contribute to the student experience, appropriate checks should be implemented to ensure internships do not impact on individual completions. To prevent additional pressure on students that are at risk of not completing, a HDR student’s suitability for taking an internship could be discussed at each APR panel. Students that receive a ‘marginal’ or ‘unsatisfactory’ progress review rating would not be considered suitable to receive additional encouragement at the APR to undertake an industry internship. Additionally, the working group recommended that faculties provide final quality assurance and there should be continued supervisor contact with the HDR student.

Internship uptake
Due to the Commonwealth’s proposed data collection changes relating to industry engagement by HDR students, the Working Party considered options for encouraging and supporting student uptake of internships.

The Working Party considered whether a question about a HDR student’s intention or interest in undertaking an internship be included in the PhD application form. This proposal ensures that the possibility of undertaking an internship is raised immediately with the student. However, the HDR student may not be best placed at the pre-candidature stage to decide if an industry internship is an option they will pursue.

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5 Australian Government Department of Education and Training (Jan 2017) ‘New research block grant data requirements – Consultation Paper’
Ibid. p. 13
Alternatively, supervisors could be encouraged through faculties to discuss the option of an internship with the student during the first three months of candidature. This approach would ensure that the student and the supervisor can make an informed decision about the additional requirements involved in undertaking an internship after the student is accustomed to the workload involved in undertaking a PhD.

The Working Party also recommends that there is an opportunity for internship options to be discussed at the APR panel. Including internships as a section for discussion at the APR ensures there is a University-wide approach to encouraging internships. The APR is an ideal discussion point during candidature as it would allow for a well-informed and considered appraisal of whether a particular student would benefit from industry engagement.

A key challenge for the institution is how to disseminate information about internship opportunities to students such that potential participants can access the challenge of the task, the relevance of the activity to his/her candidature and the benefits provided. Any proposed solution to this challenge should not constrain opportunities by faculty or discipline – HDR students from across the campus should be able to assess any opportunity for suitability for their candidature.

Recording of internships

The University does not currently have a means of identifying how many HDR internships are occurring and what activities are performed. This is problematic given the increased emphasis by the Commonwealth on incentivising research and industry collaboration, and it inhibits the University’s ability to ensure there are widespread opportunities for HDR students to enhance their skills through industry engagement. The question arises then, what does the University need to know about a given internship activity? At a minimum, we need to report to the Commonwealth on the number of students undertaking internships, the nature of the internship host and the duration of the internship.

Additionally, as an institution we may want to understand how any given internship opportunity helped an individual HDR student meet the graduate qualities. Therefore, the Working Party recommends that the University develop a means of recording a student’s achievements, work and development whilst undertaking an internship, and the relationship of these to the graduate qualities. The recording should involve the student, academic supervisor and industry professional. This could take the form of a standardised tool in which the student and industry supervisor records what activities occurred and what skills were gained, while the University supervisor and student agree on how this experience relates to the graduate qualities. This mechanism would also be used to support data submissions to the Commonwealth regarding HDR end-user engagement as required.

Consideration has been given to students that require assistance to engage with industry, however there are likely to be HDR students that source internships without University support. The mechanism will need to ensure that these students are captured during data collation for potential reporting to the Department of Education and Training. Furthermore, while internships are available during candidature, some HDR students may wish to undertake an internship post-submission, and the reporting mechanism will need to ensure that data relating to these students is also captured. Therefore, during APR and supervisor discussions students should be reminded of the proposed LMS module and the post-internship form that is completed by the student, supervisor and industry professional.

The Working Party also identified a bipartite HDR-internship arrangement: internships that contribute to the overall project (completed within candidature), and others that are industry based (not thesis or project-related) that would be undertaken outside of candidature or after submission. While some internships may be incorporated in the appendix or chapter of a thesis or project, others may be related to graduate qualities and develop a student’s skills without directly relating to the HDR thesis, resulting in the student undertaking an internship without a record from the University. Therefore, to ensure that all students have an acknowledgement of their completion of an internship as a University of Sydney student, it is proposed that internships are recorded on academic transcripts.

HDR student-industry agreements

Whilst structured internship programmes such as AMSI Intern and the CRC programs have standardised agreements, the more ad-hoc opportunities will need management. Such internship opportunities cannot
proceed with an internship agreement that has been checked by the Office of General Counsel (OGC) and the Commercialisation and Development Unit (CDIP). Care should be taken that any agreements identify the intellectual property implications of the internship activity. We recommend that a draft template agreement be produced to fit the University's requirements after discussion with the OGC and CDIP.

**Intellectual Property**
There is a risk that HDR students may inadvertently share IP while undertaking an internship. The Working Party considered a variety of solutions to this issue including providing links to a clear framework for IP for HDR students, a link on the HDR portal that contains online IP training for students, and the availability of an internship agreement as discussed above.

**Insurance – Statement of Responsibilities**
The University will need to develop an explicit statement delineating the responsibilities of the University and the industry provider regarding insurance coverage. This statement is intended to protect the student and the University. The principles within the statement would be incorporated in the LMS module and covered in the contract a HDR student signs with the industry partner prior to undertaking the internship. We recommend that the Director- Graduate Research obtain written clarification from the Audit and Risk Management Unit on the insurances applicable to students whilst involved in internships.

**Industry partner as a supervisor**
The Working Party identified an opportunity to encourage communications between the University and industry partner during the period of a student’s internship. This could include meetings among supervisors and partners leading to a series of networking and knowledge exchange events, or potentially an annual special award ceremony to recognize efforts of our best industry partners. Fostering collaborative strategic relationships would not only assist in ensuring positive internship experiences for students who partake in the program and attract new participants, it could also potentially lead to Linkage Projects, Industrial Transformation Research Hubs, or Cooperative Research Centres.

**Compulsory internships**
The Working Party considered whether recommendations should be made regarding compulsory internships. This was discussed because it would ensure that broader skills are developed, engagement with industry occurs, and assists with declining employment opportunities in academia for PHD students post-study. However, given the limited number of internships available within industry for HDR students, the multifaceted nature of internship models across disciplines, and other implementation issues it was decided that undertaking an internship should not be compulsory as it is one means by which a student could meet the graduate qualities. An alternative suggestion is a formal process about recording what activities occur and what skills are developed, and encouraging students to consider whether they wish to undertake an industry internship at the APR panel. Therefore, rather than making an internship compulsory, the mechanism would ensure that every student has the opportunity to engage with the end users of research and support their needs should they wish to do an internship.

**CONSULTATION**
The recommendations are based on consultation with the below HDR Internships Working Party members:

- Ross Coleman (Director, Graduate Research)
- Samuel Mueller (Associate Dean Research Education, FacSci)
- Ruth Phillips (Associate Dean Postgraduate Research, FASS)
• Martin Mackey (Associate Dean Research Education, FHS)
• Maria Ishkova (nominee, PVC Research – Enterprise & Engagement)
• George Carayannopoulos (Head, Higher Degree Research Administration Centre)
• Hugh O’Dwyer (Policy and Project Officer, DVC-Education)

RISKS

The linking of Commonwealth higher education and research funding with HDR student-industry engagement data requirements poses a financial risk to the university.

The University does not currently have a means of identifying the extent of industry engagement with and supervision of HDR students that undertake internships.
Non-Confidential

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<td>Reviewer/Approver</td>
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<td>Paper title</td>
<td>UPDATE ON THE SCHEDULE FOR INTRODUCING THE STANDALONE MASTER OF ADVANCED STUDIES DEGREE</td>
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<tr>
<td>Purpose</td>
<td>To provide an update on the schedule for introducing the standalone Master of Advanced Studies degree</td>
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RECOMMENDATION

That the Graduate Studies Committee note the update on the Master of Advanced Studies, including the revised schedule for introducing the standalone degree.

EXECUTIVE SUMMARY

Since it was last discussed by the Graduate Studies Committee (GSC), the schedule for introducing the standalone Master of Advanced Studies has changed. Rather than fast-tracking the degree to commence in 2019, it will instead commence in 2020, at the same time as the vertically integrated master degree (VIM). This change has been made in response to advice from the Department of Education and Training (DET) received in December 2017. The DET confirmed the Australian Government's national scheme for Commonwealth Supported Place (CSP) 'scholarships' for sub-bachelor and postgraduate coursework would not go ahead for 2019. This means there is no advantage to fast-tracking the standalone Masters of Advanced Studies degree in 2019, as originally planned. The DET also indicated that without a change in government policy, vertically-integrated bachelor/master degrees will no longer be eligible for CSP from 2019. The Education Portfolio will continue to seek advice and assess the new operating environment for VIMs, including the Bachelor/Master of Advanced Studies.

To enable both the standalone and VIM Master of Advanced Studies to commence in 2020, faculties will have until June/July 2018 to approve 'faculty specialisations' needed for course proposals. Course proposals will be considered by the GSC on 4 September 2018. A full approval schedule is described in 'Implementation', below.

BACKGROUND

The new research-track degree, the Master of Advanced Studies ([discipline]), is designed to prepare students for entry into a PhD. It will be offered as a Masters by Coursework with both advanced coursework, research training, units at 5000 level in the Open Learning Environment and a research project.

The curriculum framework for both the standalone and vertically integrated Bachelor/Master of Advanced Studies (Attachment 1) was approved by the Academic Board on 28 November 2018. The Board also approved the necessary amendments to the Coursework Policy 2014 to embed this framework in policy. At the moment, the admission pathway is via transfer at the end of the second year of the Bachelor degree, rather than admission straight from completion of secondary education.

The Master of Advanced Studies degrees will be governed by the Board of Interdisciplinary Studies (BIS) as with the Bachelor of Advanced Studies. The BIS will own and approve the degree resolutions, while faculties will own and approve the content of the curriculum components within the degrees (provisionally called 'specialisations'). The BIS will approve the inclusion of these specialisations in the Master of Advanced Studies, and recommend them to the Academic Board.
Non-Confidential

Funding for the Master of Advanced Studies has been uncertain since mid 2017, when the Australian Government indicated that the distribution of postgraduate CSPs might be reconfigured to become a merit-based scholarship scheme for students. They also indicated they would close the loophole that allowed vertically integrated masters degrees to be funded by undergraduate CSPs subject to the demand-driven system. The possibility of these changes were signalled in the Federal budget, by the introduction of the Higher Education Support Legislation Amendment (A More Sustainable, Responsive and Transparent Higher Education System) Bill 2017 (the Bill) and subsequent discussions with the Department of Education and Training held during September and October 2017. The Bill was not supported when considered by the Senate on 18 October 2017, and the deferment of the scholarship scheme was confirmed after the Mid Year Fiscal and Economic Outlook statement on 18 December 2017. It is still unclear whether students enrolling in pathway and graduate entry programs will have access to CSPs, but is unlikely.

ISSUES

To enable the Master of Advanced Studies to be introduced in 2020, a full course proposal for both the standalone and integrated research-track degrees will need to be submitted to the CCPC by 26 June 2018. The estimated approval schedule is:

- CCPC: 26 June 2018
- Faculty Boards: June/July 2018 (must approve the content of ‘specialisations’)
- University Executive: 12 August 2018
- BIS: 14 August 2018
- USC/GSC: 4 September 2018
- Academic Board: 2 October 2018