



# ENGG899

## Master of Research - Engineering

S1 Day 2018

*Dept of Engineering*

### Contents

<u>General Information</u>	2
<u>Learning Outcomes</u>	3
<u>Assessment Tasks</u>	3
<u>Delivery and Resources</u>	6
<u>Policies and Procedures</u>	6
<u>Graduate Capabilities</u>	7

#### **Disclaimer**

Macquarie University has taken all reasonable measures to ensure the information in this publication is accurate and up-to-date. However, the information may change or become out-dated as a result of change in University policies, procedures or rules. The University reserves the right to make changes to any information in this publication without notice. Users of this publication are advised to check the website version of this publication [or the relevant faculty or department] before acting on any information in this publication.

## General Information

Unit convenor and teaching staff

Senior Lecturer

Nikolaos Kopidakis

[nikos.kopidakis@mq.edu.au](mailto:nikos.kopidakis@mq.edu.au)

Contact via E-mail

E6B, Room 132

Tuesday, 10 am - 12 noon

Associate Professor

Sam Reisenfeld

[sam.reisenfeld@mq.edu.au](mailto:sam.reisenfeld@mq.edu.au)

Contact via E-mail

E6B, Room 113

Wednesday 3-5 pm

Ann Lee

[ann.lee@mq.edu.au](mailto:ann.lee@mq.edu.au)

Shujuan Huang

[shujuan.huang@mq.edu.au](mailto:shujuan.huang@mq.edu.au)

Credit points

32

Prerequisites

Corequisites

Co-badged status

### Unit description

The 800-level components of the Master of Research are not designed around units. The thesis together with four core research activities form a single coherent research unit based on individual research plans and will consist of the followings: 1. Research Frontiers 2: you will attend a number of department or faculty-run sessions and engage in a program of activities developing your knowledge of the sub-disciplinary field in which you want to situate your own research 2. Literature Review: you will attend sessions explaining how researchers in your field engage with previous research literature, and produce a draft of your own literature review for your thesis 3. Research Methods: with other students and led by academic staff, you will develop the research methods you will use in your research project 4. Research Planning: through a combination of group sessions and individual work with your supervision team, you will develop a plan for a large scale research project, part of which will be completed in the MRes 5. Thesis: you will complete a small research project, and write it up in a short thesis of about 20,000 words.

## Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at <https://www.mq.edu.au/study/calendar-of-dates>

## Learning Outcomes

On successful completion of this unit, you will be able to:

Ability to find appropriate references in the literature, read and understand the references, and use the references to create new research results.

Ability to identify the various components of a research activity, determine the required resources for each component, and schedule the start and completion dates of each component.

Ability to do original research.

## Assessment Tasks

Name	Weighting	Hurdle	Due
<a href="#"><u>Literature Review of Topic</u></a>	0%	Yes	30/4/2018
<a href="#"><u>Research Frontiers 2</u></a>	10%	Yes	21 May 2018
<a href="#"><u>Research planning</u></a>	0%	Yes	15/6/2018
<a href="#"><u>Master Thesis</u></a>	90%	Yes	October 2018

## Literature Review of Topic

Due: **30/4/2018**

Weighting: **0%**

**This is a hurdle assessment task (see [assessment policy](#) for more information on hurdle assessment tasks)**

Literature review of their specific topic. The students will submit a literature review to their supervisor and will upload the document to iLearn. The review is between 3,000 and 5,000 words of text. The literature review is a hurdle task and has a requirement of being marked as passed by the research supervisor.

On successful completion you will be able to:

- Ability to find appropriate references in the literature, read and understand the references, and use the references to create new research results.
- Ability to do original research.

## Research Frontiers 2

Due: **21 May 2018**

Weighting: **10%**

**This is a hurdle assessment task (see [assessment policy](#) for more information on hurdle assessment tasks)**

Student shall produce a reading list of recent (last 5 years) publications in the general discipline which contains their research topic.

The list of publications is developed in consultation with their specific research supervisor. The reading list will be presented in a general essay (3000 words) which outlines the ground-breaking developments in their research field. The essay is submitted to the research supervisor and uploaded to iLearn. The essay also describes how the specific research topic fits into the structure of ground-breaking developments in the research field. The essay is assessed both by the research supervisor and one additional assessor nominated by the research supervisor.

On successful completion you will be able to:

- Ability to find appropriate references in the literature, read and understand the references, and use the references to create new research results.
- Ability to do original research.

## Research planning

Due: **15/6/2018**

Weighting: **0%**

**This is a hurdle assessment task (see [assessment policy](#) for more information on hurdle assessment tasks)**

The student will work with their supervisor to produce a detailed research plan. The plan is submitted to their supervisor for approval. The report is 2 pages in written form and shall contain an Gantt chart of research activities.

On successful completion you will be able to:

- Ability to identify the various components of a research activity, determine the required resources for each component, and schedule the start and completion dates of each component.
- Ability to do original research.

## Master Thesis

Due: **October 2018**

Weighting: **90%**

**This is a hurdle assessment task (see [assessment policy](#) for more information on hurdle assessment tasks)**

The master's thesis will be assessed by two (or three) external assessors. The text has a maximum of 50 A4 pages in 12 point font, 2 cm margins, 1.5 line spaced, and text in references in 12 point font, 2 cm margins, single-spaced.

On successful completion you will be able to:

- Ability to find appropriate references in the literature, read and understand the references, and use the references to create new research results.

- Ability to identify the various components of a research activity, determine the required resources for each component, and schedule the start and completion dates of each component.
- Ability to do original research.

## Delivery and Resources

The delivery is individual work and collaboration with research supervisors obtained from meetings with the supervisors.

There are 3 hurdle tasks. Only one task has non-zero assessment weighting and has a 10% weighting.

90% of the weighting is obtained from marks from external assessors. The thesis is submitted for assessment in semester 2, 2018.

## Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central](https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central) (<https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central>). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- [Academic Appeals Policy](#)
- [Academic Integrity Policy](#)
- [Academic Progression Policy](#)
- [Assessment Policy](#)
- [Fitness to Practice Procedure](#)
- [Grade Appeal Policy](#)
- [Complaint Management Procedure for Students and Members of the Public](#)
- [Special Consideration Policy](#) (**Note:** *The Special Consideration Policy is effective from 4 December 2017 and replaces the Disruption to Studies Policy.*)

Undergraduate students seeking more policy resources can visit the [Student Policy Gateway](https://students.mq.edu.au/support/study/student-policy-gateway) (<https://students.mq.edu.au/support/study/student-policy-gateway>). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

If you would like to see all the policies relevant to Learning and Teaching visit [Policy Central](https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central) (<https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central>).

## Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: <https://students.mq.edu.au/study/getting-started/student-conduct>

## Results

Results shown in *iLearn*, or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in [eStudent](#). For more information visit [ask.mq.edu.au](#).

## Student Support

Macquarie University provides a range of support services for students. For details, visit <http://students.mq.edu.au/support/>

## Learning Skills

Learning Skills ([mq.edu.au/learningskills](http://mq.edu.au/learningskills)) provides academic writing resources and study strategies to improve your marks and take control of your study.

- [Workshops](#)
- [StudyWise](#)
- [Academic Integrity Module for Students](#)
- [Ask a Learning Adviser](#)

## Student Services and Support

Students with a disability are encouraged to contact the [Disability Service](#) who can provide appropriate help with any issues that arise during their studies.

## Student Enquiries

For all student enquiries, visit Student Connect at [ask.mq.edu.au](http://ask.mq.edu.au)

## IT Help

For help with University computer systems and technology, visit [http://www.mq.edu.au/about\\_us/offices\\_and\\_units/information\\_technology/help/](http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/).

When using the University's IT, you must adhere to the [Acceptable Use of IT Resources Policy](#). The policy applies to all who connect to the MQ network including students.

## Graduate Capabilities

### PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their professional and personal judgment. They will have the ability to make informed choices and decisions that reflect both the nature of their professional work and their personal perspectives.

This graduate capability is supported by:

## Learning outcomes

- Ability to find appropriate references in the literature, read and understand the references, and use the references to create new research results.
- Ability to identify the various components of a research activity, determine the required resources for each component, and schedule the start and completion dates of each component.
- Ability to do original research.

## Assessment tasks

- Literature Review of Topic
- Research Frontiers 2
- Research planning
- Master Thesis

## PG - Discipline Knowledge and Skills

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

## Learning outcomes

- Ability to find appropriate references in the literature, read and understand the references, and use the references to create new research results.
- Ability to do original research.

## Assessment tasks

- Literature Review of Topic
- Research Frontiers 2
- Research planning
- Master Thesis

## PG - Critical, Analytical and Integrative Thinking

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:



## Learning outcomes

- Ability to find appropriate references in the literature, read and understand the references, and use the references to create new research results.
- Ability to identify the various components of a research activity, determine the required resources for each component, and schedule the start and completion dates of each component.
- Ability to do original research.

## Assessment tasks

- Literature Review of Topic
- Research Frontiers 2
- Research planning
- Master Thesis

## PG - Research and Problem Solving Capability

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

## Learning outcomes

- Ability to find appropriate references in the literature, read and understand the references, and use the references to create new research results.
- Ability to identify the various components of a research activity, determine the required resources for each component, and schedule the start and completion dates of each component.
- Ability to do original research.

## Assessment tasks

- Literature Review of Topic
- Research Frontiers 2
- Research planning
- Master Thesis

## PG - Effective Communication

Our postgraduates will be able to communicate effectively and convey their views to different social, cultural, and professional audiences. They will be able to use a variety of technologically

supported media to communicate with empathy using a range of written, spoken or visual formats.

This graduate capability is supported by:

### **Learning outcomes**

- Ability to find appropriate references in the literature, read and understand the references, and use the references to create new research results.
- Ability to do original research.

### **Assessment tasks**

- Literature Review of Topic
- Research Frontiers 2
- Research planning
- Master Thesis

## **PG - Engaged and Responsible, Active and Ethical Citizens**

Our postgraduates will be ethically aware and capable of confident transformative action in relation to their professional responsibilities and the wider community. They will have a sense of connectedness with others and country and have a sense of mutual obligation. They will be able to appreciate the impact of their professional roles for social justice and inclusion related to national and global issues

This graduate capability is supported by:

### **Learning outcome**

- Ability to do original research.

### **Assessment tasks**

- Literature Review of Topic
- Research Frontiers 2
- Master Thesis