FOSE7901

STEM research placements

Session 2, In person-scheduled-weekday, North Ryde 2024

Science and Engineering Faculty level units

Contents

Disclaimer

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General Information

Unit convenor and teaching staff
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Credit points
10

Prerequisites
Admission to BPhil/MRes

Corequisites
10cp at 7000 level

Co-badged status

Unit description
This unit provides opportunities for hands-on research experience in STEM. Students will actively participate in two distinct research experiences over the session and navigate typical situations encountered as members of a research team. During each placement students will explore research opportunities in areas relating to their research interests in consultation with research mentors. Students will reflect on new skills in the context of their professional goals.

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:

ULO1: Apply knowledge of your WHS, ethical and other legal obligations to create a risk assessment and management plan for your research.

ULO2: Identify, apply and evaluate research methods.

ULO3: Demonstrate competence in the skills and techniques required to undertake your research.

ULO4: Maintain appropriate records of your research activities and utilise these records to reflect on your initial project plan.

ULO5: Work professionally with a research mentor, and other research collaborators as required, to plan and undertake research.

General Assessment Information

Requirements to Pass this Unit

To pass this unit you must achieve a total mark equal to or greater than 50%.

Engagement – please read, as this is very important

As a BPhil / MRes Yr 1 student you are becoming part of our community of researchers. You need to be an active participant in the unit activities. You will be expected to be an active particpant in discussions, ask questions and engage with you cohort, and proactively work to find your place in our diverse research community.

Academic Honesty

Presenting the work of another person as one's own is a serious breach of the University's rules and carries significant penalties. In this unit, we will be checking written work for plagiarism using TURNITIN. Penalties for plagiarism may include a zero mark for the assignment or in more extreme cases, failure of the unit. Plagiarism WILL be noted on your academic record. (link: Academic Integrity Policy)

Due dates and assessement topics

This unit is flexible by design. Each student will be undertaking a unique project with different academic mentors. Each student may have very different project deliverables that should be multi-part. See iLearn for more information about placement plans, but your placement plan will specify the due date and the content for each of your unit deliverables.

Late Assessment Submission Penalty

Unless a Special Consideration request has been submitted and approved, a 5% penalty (of the total possible mark of the task) will be applied for each day a written report or presentation assessment is not submitted, up until the 7th day (including weekends). After the 7th day, a grade of '0' will be awarded even if the assessment is submitted. **The submission time for all uploaded assessments is 11:55 pm.** A 1-hour grace period will be provided to students who experience a technical concern. For any late submission of time-sensitive tasks, such as scheduled tests/exams, performance assessments/presentations, and/or scheduled practical assessments/labs, please apply for Special Consideration.

Assessments where Late Submissions will be accepted

In this unit, late submissions will accepted for written work, but:

- All training and inductions MUST be completed prior to starting work.
- Seminar and discussion particiation and discussion leadership must take place at the agreed / scheduled times unless a special consideration is granted.
- See marking guidance on iLearn or consult the convenor for additional information.

Special Consideration

The Special Consideration Policy aims to support students who have been impacted by short-

term circumstances or events that are serious, unavoidable and significantly disruptive, and which may affect their performance in assessment. If you experience circumstances or events that affect your ability to complete the assessments in this unit on time, please contact the convenor prior to submitting a Special Consideration request through ask.mq.edu.au.

Assessment Tasks

Name	Weighting	Hurdle	Due
Training & inductions	0%	Yes	Week 1 & 7
Placement 1 plan	5%	No	Week 1
Placement 1 deliverable	35%	No	As agreed in placement plan 1
Placement 1 reflection	5%	No	Week 7
Placement 2 plan	5%	No	Week 7
Placement 2 deliverable	35%	No	As agreed in placement plan 2
Placement 2 Reflection	15%	No	Week 13

Training & inductions

Assessment Type [1]: Portfolio
Indicative Time on Task [2]: 7 hours
Due: **Week 1 & 7**
Weighting: **0%**
This is a hurdle assessment task (see assessment policy for more information on hurdle assessment tasks)

Complete required WHS, ethics and other required training and induction prior to starting research work.

On successful completion you will be able to:
• Apply knowledge of your WHS, ethical and other legal obligations to create a risk assessment and management plan for your research.
• Identify, apply and evaluate research methods.
• Work professionally with a research mentor, and other research collaborators as required, to plan and undertake research.

Placement 1 plan

Assessment Type [1]: Plan

Indicative Time on Task [2]: 4 hours
Due: **Week 1**
Weighting: **5%**

Create a plan for your research placement including: your proposed activities, time-line, data records and reporting format.

On successful completion you will be able to:

- Identify, apply and evaluate research methods.

- Demonstrate competence in the skills and techniques required to undertake your research.

- Work professionally with a research mentor, and other research collaborators as required, to plan and undertake research.

Placement 1 deliverable

Assessment Type [1]: Report
Indicative Time on Task [2]: 17 hours
Due: **As agreed in placement plan 1**
Weighting: **35%**

Your placement 1 plan will outline the format and the content of your project deliverable. Typical this is a short report on the research experience. It should include records of your research activity as appropriate for the research undertaken.

On successful completion you will be able to:

- Identify, apply and evaluate research methods.

- Demonstrate competence in the skills and techniques required to undertake your research.

- Maintain appropriate records of your research activities and utilise these records to reflect on your initial project plan.

- Work professionally with a research mentor, and other research collaborators as required, to plan and undertake research.

Placement 1 reflection

Assessment Type [1]: Reflective Writing
Indicative Time on Task [2]: 7 hours
Due: **Week 7**
Weighting: **5%**

A short reflection on your research experience in the context of your individual research and career goals.

On successful completion you will be able to:

- Identify, apply and evaluate research methods.
- Maintain appropriate records of your research activities and utilise these records to reflect on your initial project plan.
- Work professionally with a research mentor, and other research collaborators as required, to plan and undertake research.

Placement 2 plan

Assessment Type [1]: Plan
Indicative Time on Task [2]: 4 hours
Due: **Week 7**
Weighting: **5%**

Create a plan for your second research placement including: your proposed activities, time-line, data records and reporting format.

On successful completion you will be able to:

- Identify, apply and evaluate research methods.
- Work professionally with a research mentor, and other research collaborators as required, to plan and undertake research.

Placement 2 deliverable

Assessment Type [1]: Report
Indicative Time on Task [2]: 17 hours
Due: **As agreed in placement plan 2**
Weighting: **35%**

Your placement 2 plan will outline the format and the content of your project deliverable. Typical this is a short report on the research experience. It should include records of your research activity as appropriate for the research undertaken.

On successful completion you will be able to:

- Identify, apply and evaluate research methods.
- Demonstrate competence in the skills and techniques required to undertake your research.
- Maintain appropriate records of your research activities and utilise these records to reflect on your initial project plan.
- Work professionally with a research mentor, and other research collaborators as required, to plan and undertake research.

Placement 2 Reflection

Assessment Type [1]: Reflective Writing
Indicative Time on Task [2]: 7 hours
Due: **Week 13**
Weighting: **15%**

A short reflection on your second research placement in the context of your individual research and career goals. In addition a comparison of the two placements in the context of your individual needs as a researcher.

On successful completion you will be able to:
- Identify, apply and evaluate research methods.
- Demonstrate competence in the skills and techniques required to undertake your research.
- Maintain appropriate records of your research activities and utilise these records to reflect on your initial project plan.
- Work professionally with a research mentor, and other research collaborators as required, to plan and undertake research.

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[1] If you need help with your assignment, please contact:

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- the Writing Centre for academic skills support.

[2] Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

Delivery and Resources

Finding research mentors:

You are encouraged to be proactive in seeking potential mentors, but school advisor and the unit convenor are here to help. In addition there are a some resources that are worth looking at:

- Macquarie University Research Portal
- Macquarie University Supervsor Database (note this links the above)
- FSE MRes placement sharepoint list (note this is still being populated)
- Previous / current students

You are expected to try out a couple different research mentors / research groups / research topics. We specifically use the term "mentor" rather than "supervisor" to make a clear distinction

between a year 2 supervisor, and the year 1 mentors who you will work with in this unit. Working with a particular mentor during a year 1 placement does not obligate you (or your mentor) to supervise you in a year 2 project. We want you to use this opportunity to help find the best possible supervisor / topic match for you.

Unit Schedule

As such most of this unit will take place in consultation with your mentor / outside of the time tabled locations & times. The unit convenor is available to help you navigate the transition to an active participant in your research group, but the goal is to let you and your mentor opperate as independently as possible!

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://policies.mq.edu.au). 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
- Assessment Procedure
- Complaints Resolution Procedure for Students and Members of the Public
- Special Consideration Policy

Students seeking more policy resources can visit Student Policies (https://students.mq.edu.au/support/study/policies). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit Policy Central (https://policies.mq.edu.au) and use the search tool.

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/admin/other-resources/student-conduct

Results

Results published on platform other than eStudent, (eg. iLearn, Coursera etc.) 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 or if you are a Global MBA student contact globalmba.support@mq.edu.au

Academic Integrity

At Macquarie, we believe academic integrity – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free online writing and maths support, academic skills development and wellbeing consultations.

Student Support

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

The Writing Centre

The Writing Centre provides resources to develop your English language proficiency, academic writing, and communication skills.

- Workshops
- Chat with a WriteWISE peer writing leader
- Access StudyWISE
- Upload an assignment to Studiosity
- Complete the Academic Integrity Module

The Library provides online and face to face support to help you find and use relevant information resources.

- Subject and Research Guides
- Ask a Librarian

Student Services and Support

Macquarie University offers a range of Student Support Services including:

- IT Support
- Accessibility and disability support with study
- Mental health support
- Safety support to respond to bullying, harassment, sexual harassment and sexual assault
- Social support including information about finances, tenancy and legal issues
- Student Advocacy provides independent advice on MQ policies, procedures, and processes

Student Enquiries

Got a question? Ask us via AskMQ, or contact Service Connect.

IT Help

For help with University computer systems and technology, visit 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.

Unit information based on version 2024.02 of the Handbook