ENGG400

Industry Experience

S1 External 2018

Dept of Engineering

Contents

General Information

Unit convenor and teaching staff
Lecturer
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By appointment

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Credit points
0

Prerequisites
(39cp at 100 level or above) including ENGG200

Corequisites

Co-badged status

Unit description
It is a requirement of the Bachelor of Engineering degree that students complete at least 12 weeks (ie, 60 days, full-time) of relevant work experience in industry before graduation. Students should enrol in this unit as soon as they complete the prerequisites. Please note that it is the personal responsibility of students to obtain industry work experience to satisfy the requirements of the Bachelor of Engineering degree. This unit is assessed on the basis of a Final Report and detailed records of work experience recorded in a dedicated log book. Students who have the opportunity to undertake professional experience for this unit at the same partner organisation where they will also complete technical work which results in the completion of a thesis for ENGG411, may be able to fulfill the distinct requirements of both this unit and ENGG411. These requirements involve not only the completion of professional and technical experience with an industry partner but also a thesis (ENGG411) and all relevant curriculum and assessments for this unit. Please consult with the unit convenor for more information.

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:

Develop engineering techniques and skills related to professional engineering applications

Build awareness of occupational health and safety issues in engineering workplaces

Develop professional conduct and learn workplace behavior as an early career engineer

Build strong communication skills through report writing and team work activity

General Assessment Information

4 x 2 hours workshops must be completed by all students over the course of enrolment in ENGG400. These are formally timetabled:

Workshop 1 26/2/2018: Introduction to ENGG400 and PACE

Workshop 2 5/3/2018: Career skills; Ethical Practice; Intellectual Property (IP)

Workshop 3 16/4/2018 (online mode): Reflective practice

Workshop 4 21/5/2018: De-brief and unit overview

Upon completion of 12 weeks (420 hours) of work experience, the following documents must be submitted electronically through ilearn in the appropriate submission space provided in ilearn:

1. Cover page and checklist (provided in ilearn)

2. Log book(s) – template provided in ilearn

3. Report (as specified in Unit Guide)

4. Certification form(s) (signed by industry partner(s)

Successful completion of this unit is based on the submission of the above documents where student scores at least 50% in the assessment tasks.

Student will receive 'S' (Pass - no mark) grade when these requirements are met.

Student who does not complete the requirement for ENGG400 in the enrolled session will be recorded as 'K' (enrolment continuing). This allows student to keep the enrolment active until the requirements for ENGG400 are met.

Students **must** prepare their report according to the format given.

Incomplete submission **will not** be assessed.

Please refer to the link below for further details and all the resources:

http://www.engineering.mq.edu.au/students/undergrad/work_experience/

Assessment Tasks

Name	Weighting	Hurdle	Due
Final Report	50%	Yes	8/6/2018
Logbook	30%	Yes	8/6/2018
Certificate	20%	Yes	8/6/2018

Final Report

Due: **8/6/2018**
Weighting: **50%**
This is a hurdle assessment task (see assessment policy for more information on hurdle assessment tasks)

Final report after 12 weeks of internship completion

On successful completion you will be able to:

- Develop engineering techniques and skills related to professional engineering applications
- Build awareness of occupational health and safety issues in engineering workplaces
- Develop professional conduct and learn workplace behavior as an early career engineer
- Build strong communication skills through report writing and team work activity

Logbook

Due: **8/6/2018**
Weighting: **30%**
This is a hurdle assessment task (see assessment policy for more information on hurdle assessment tasks)

Logbook of daily activities

On successful completion you will be able to:

- Develop engineering techniques and skills related to professional engineering applications
- Build awareness of occupational health and safety issues in engineering workplaces
- Develop professional conduct and learn workplace behavior as an early career engineer
- Build strong communication skills through report writing and team work activity

Certificate

Due: **8/6/2018**
Weighting: **20%**
This is a hurdle assessment task (see assessment policy for more information on hurdle assessment tasks)

Certificate From Industrial Supervisor

On successful completion you will be able to:

- Develop engineering techniques and skills related to professional engineering applications
- Build awareness of occupational health and safety issues in engineering workplaces
- Develop professional conduct and learn workplace behavior as an early career engineer
- Build strong communication skills through report writing and team work activity

Delivery and Resources

- ENGG400 is a PACE unit. PACE stands for Professional and Community Engagement. By connecting students with partner organisations, PACE gives Macquarie students the chance to contribute their academic learning, enthusiasm and fresh perspective to the professional workplace.
- PACE is Macquarie's way of integrating practical experience into your degree so it counts for credit, gives you the chance to work with different communities, and ultimately gives you the edge in your career.
- PACE is a key component of the University's strategic direction, emphasising the University's commitment to excellence in research, learning and teaching and community engagement. It is the third pillar of the undergraduate curriculum; People, Planet and Participation.
- PACE units provide an academic framework through which students can engage with the community, learn through participation, develop their capabilities and build on the skills that employers value. By completing a PACE unit, students develop all these skills and capabilities, and also gain academic credit towards their degree.

Please refer to the link below for further details and all the resources:

http://www.engineering.mq.edu.au/students/undergrad/work_experience/

- In this unit you will undertake a PACE activity – the experiential component of a PACE unit whereby students engage with the community through Participation. The activity may be carried out in a variety of modes such as block (a concentrated period) or

over the course of the whole semester (e.g. limited hours per week), depending on the design of the unit. Similarly, the timing of the PACE activity for each student or group of students may be different depending on arrangements with the community-based partner.

Unit Schedule

Date	Workshop
26/2/2018	Introduction to ENGG400 and PACE
5/3/2018	Career skills, Ethical Practice, Intellectual Property (online mode)
16/4/2018	Reflective practice (online mode)
21/5/2018	De-brief and unit overview

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). 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). 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).

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) 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

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.

Graduate Capabilities

Creative and Innovative

Our graduates will also be capable of creative thinking and of creating knowledge. They will be imaginative and open to experience and capable of innovation at work and in the community. We want them to be engaged in applying their critical, creative thinking.

This graduate capability is supported by:

Learning outcomes

- Develop engineering techniques and skills related to professional engineering applications
- Develop professional conduct and learn workplace behavior as an early career engineer
- Build strong communication skills through report writing and team work activity

Assessment task

- Final Report

Capable of Professional and Personal Judgement and Initiative

We want our graduates to have emotional intelligence and sound interpersonal skills and to demonstrate discernment and common sense in their professional and personal judgement. They will exercise initiative as needed. They will be capable of risk assessment, and be able to handle ambiguity and complexity, enabling them to be adaptable in diverse and changing environments.

This graduate capability is supported by:

Learning outcomes

- Build awareness of occupational health and safety issues in engineering workplaces
- Develop professional conduct and learn workplace behavior as an early career engineer
- Build strong communication skills through report writing and team work activity

Commitment to Continuous Learning

Our graduates will have enquiring minds and a literate curiosity which will lead them to pursue knowledge for its own sake. They will continue to pursue learning in their careers and as they participate in the world. They will be capable of reflecting on their experiences and relationships with others and the environment, learning from them, and growing - personally, professionally and socially.

This graduate capability is supported by:

Learning outcomes

- Develop engineering techniques and skills related to professional engineering applications
- Build awareness of occupational health and safety issues in engineering workplaces
- Develop professional conduct and learn workplace behavior as an early career engineer

Assessment tasks

- Final Report
- Certificate

Discipline Specific Knowledge and Skills

Our graduates will take with them the intellectual development, depth and breadth of knowledge, scholarly understanding, and specific subject content in their chosen fields to make them competent and confident in their subject or profession. They will be able to demonstrate, where relevant, professional technical competence and meet professional standards. They will be able to articulate the structure of knowledge of their discipline, be able to adapt discipline-specific knowledge to novel situations, and be able to contribute from their discipline to inter-disciplinary solutions to problems.

This graduate capability is supported by:

Learning outcomes

- Develop engineering techniques and skills related to professional engineering applications
- Develop professional conduct and learn workplace behavior as an early career engineer

Assessment task

- Final Report

Critical, Analytical and Integrative Thinking

We want our graduates to be capable of reasoning, questioning and analysing, and to integrate and synthesise learning and knowledge from a range of sources and environments; to be able to critique constraints, assumptions and limitations; to be able to think independently and systemically in relation to scholarly activity, in the workplace, and in the world. We want them to have a level of scientific and information technology literacy.

This graduate capability is supported by:

Learning outcomes

- Develop engineering techniques and skills related to professional engineering applications
- Develop professional conduct and learn workplace behavior as an early career engineer

Assessment task

- Final Report

Problem Solving and Research Capability

Our graduates should be capable of researching; of analysing, and interpreting and assessing data and information in various forms; of drawing connections across fields of knowledge; and they should be able to relate their knowledge to complex situations at work or in the world, in order to diagnose and solve problems. We want them to have the confidence to take the initiative in doing so, within an awareness of their own limitations.

This graduate capability is supported by:

Learning outcomes

- Develop engineering techniques and skills related to professional engineering applications
- Develop professional conduct and learn workplace behavior as an early career engineer

Assessment task

- Final Report

Effective Communication

We want to develop in our students the ability to communicate and convey their views in forms effective with different audiences. We want our graduates to take with them the capability to read, listen, question, gather and evaluate information resources in a variety of formats, assess, write clearly, speak effectively, and to use visual communication and communication technologies as appropriate.

This graduate capability is supported by:

Learning outcomes

- Develop engineering techniques and skills related to professional engineering applications
- Build awareness of occupational health and safety issues in engineering workplaces
- Develop professional conduct and learn workplace behavior as an early career engineer
- Build strong communication skills through report writing and team work activity

Assessment tasks

- Final Report
- Logbook

Engaged and Ethical Local and Global citizens

As local citizens our graduates will be aware of indigenous perspectives and of the nation's historical context. They will be engaged with the challenges of contemporary society and with knowledge and ideas. We want our graduates to have respect for diversity, to be open-minded, sensitive to others and inclusive, and to be open to other cultures and perspectives: they should have a level of cultural literacy. Our graduates should be aware of disadvantage and social justice, and be willing to participate to help create a wiser and better society.

This graduate capability is supported by:

Learning outcomes

- Build awareness of occupational health and safety issues in engineering workplaces
- Build strong communication skills through report writing and team work activity

Assessment tasks

- Logbook
- Certificate

Socially and Environmentally Active and Responsible

We want our graduates to be aware of and have respect for self and others; to be able to work with others as a leader and a team player; to have a sense of connectedness with others and country; and to have a sense of mutual obligation. Our graduates should be informed and active participants in moving society towards sustainability.

This graduate capability is supported by:

Learning outcome

- Build awareness of occupational health and safety issues in engineering workplaces