

ENGG8104

Engineering Project Implementation

Session 1, Weekday attendance, North Ryde 2021

School of Engineering

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Disclaimer

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Notice

As part of <u>Phase 3 of our return to campus plan</u>, most units will now run tutorials, seminars and other small group activities on campus, and most will keep an online version available to those students unable to return or those who choose to continue their studies online.

To check the availability of face-to-face activities for your unit, please go to <u>timetable viewer</u>. To check detailed information on unit assessments visit your unit's iLearn space or consult your unit convenor.

General Information

Unit convenor and teaching staff Lecturer June Ho june.ho@mq.edu.au School of Engineering, 50 Waterloo Road By appointment via email

Credit points 10

Prerequisites Admission to MEngMgt

Corequisites

Co-badged status

Unit description

This unit provides students with advanced knowledge and skills needed to successfully deliver a project. The subject matter covered is suitable for a broad range of engineering disciplines with an emphasis on building advanced skills in engineering project management. This is a core unit for the Master of Engineering Management program that delivers coherent learning skills with other units that can help students with advanced knowledge for effective leadership and management in engineering projects.

The context and the main model of this course follows the application of International Project Management Body of Knowledge Guideline. This course will prepare students with competencies to implement engineering projects in a range of industries. Furthermore, it provides knowledge of challenges and trends in modern project management practices including consulting engineering projects.

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: Employ a wide range of engineering project management techniques and tools needed for successful project implementation. Identify any issues in engineering project

management practices and provide solutions that enable successful completion of the project according to stakeholders' requirements

ULO2: Explore current practices and modern trends in project management

ULO3: Describe the management fundamentals with regard to consulting engineering practice and management

ULO4: Demonstrate the ability to think critically, to solve problem, and to work in team

General Assessment Information

Grading and passing requirement for unit

In order to pass this unit a student must obtain a mark of 50 or more for the unit (i.e. obtain a passing grade P/ CR/ D/ HD). For further details about grading, please refer below in the policies and procedures section.

Each unit guide where there is a final exam must provide information on supplementary exams. Please include this wording: If you receive special consideration for the final exam, a supplementary exam will be scheduled by the faculty during a supplementary exam period, typically about 3 to 4 weeks after the normal exam period. By making a special consideration application for the final exam you are declaring yourself available for a resit during the supplementary examination period and will not be eligible for a second special consideration approval based on pre-existing commitments. Please ensure you are familiar with the policy prior to submitting an application. Approved applicants will receive an individual notification one week prior to the exam with the exact date and time of their supplementary examination.

Assessment Tasks

Name	Weighting	Hurdle	Due
Progress mark	30%	No	Week 5 28/03/2021, week 8 02/05/2021, week 12 30/05/2021
Final exam	30%	No	Week 13
Group assignment	40%	No	Week 13 - 11:59pm 03/06/2021

Progress mark

Assessment Type ¹: Quiz/Test Indicative Time on Task ²: 30 hours Due: Week 5 28/03/2021, week 8 02/05/2021, week 12 30/05/2021 Weighting: 30%

Quiz or short answer

On successful completion you will be able to:

- Employ a wide range of engineering project management techniques and tools needed for successful project implementation. Identify any issues in engineering project management practices and provide solutions that enable successful completion of the project according to stakeholders' requirements
- Explore current practices and modern trends in project management
- Describe the management fundamentals with regard to consulting engineering practice and management
- Demonstrate the ability to think critically, to solve problem, and to work in team

Final exam

Assessment Type 1: Examination Indicative Time on Task 2: 20 hours Due: **Week 13** Weighting: **30%**

Written exam

On successful completion you will be able to:

- Employ a wide range of engineering project management techniques and tools needed for successful project implementation. Identify any issues in engineering project management practices and provide solutions that enable successful completion of the project according to stakeholders' requirements
- Explore current practices and modern trends in project management
- Describe the management fundamentals with regard to consulting engineering practice and management
- Demonstrate the ability to think critically, to solve problem, and to work in team

Group assignment

Assessment Type 1: Essay Indicative Time on Task 2: 40 hours Due: **Week 13 - 11:59pm 03/06/2021** Weighting: **40%** An essay on given topics in engineering project implementation practices.

On successful completion you will be able to:

- Employ a wide range of engineering project management techniques and tools needed for successful project implementation. Identify any issues in engineering project management practices and provide solutions that enable successful completion of the project according to stakeholders' requirements
- Explore current practices and modern trends in project management
- Describe the management fundamentals with regard to consulting engineering practice and management
- · Demonstrate the ability to think critically, to solve problem, and to work in team

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

Kerzner, H., 2017. *Project management: a systems approach to planning, scheduling, and controlling*. John Wiley & Sons.

Nicholas, J.M. & Steyn, H., 2017. *Project Management for Engineering, Business and Technology*, Routledge.

Project Management Institute, 2017. A guide to the project management body of knowledge (PMBOK guide).

Jeanette Cabanis-Brewin & Paul C. Dinsmore, 2014. *The AMA Handbook of Project Management, 4th Edition*, AMACOM.

Wickham, L. & Wilcock, Jeremy, 2016. *Management consulting: delivering an effective project / Louise Wickham, Jeremy Wilcock.*

Unit Schedule

Week	Content
Week 1 25/2/2021	Course introduction
Week 2 04/03/2021	Project Management Growth
Week 3 11/03/2021	Organization Behaviour
Week 4 18/03/2021	Project Communication Management
Week 5 25/03/2021	Project Definition and Planning
Week 6 01/04/2021	Project Scheduling Management
Week 7 22/04/2021	Project Cost Management
Week 8 29/04/2021	Project Quality Management
Week 9 06/05/2021	Project Risk Management
Week 10 13/05/2021	Project Procurement Management and Contracting
Week 11 20/05/2021	Project Selection and Portfolio management
Week 12 27/05/2021	Consulting Projects
Week 13 03/06/2021	Special Topics and Modern Development

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://policie s.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
- Grade Appeal Policy
- Complaint Management Procedure for Students and Members of the Public
- Special Consideration Policy

Students seeking more policy resources can visit <u>Student Policies</u> (<u>https://students.mq.edu.au/support/study/policies</u>). 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 <u>Policy Central</u> (<u>https://policies.mq.e</u> <u>du.au</u>) and use the <u>search tool</u>.

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 <u>eStudent</u>, (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 <u>eStudent</u>. For more information visit <u>ask.mq.edu.au</u> or if you are a Global MBA student contact globalmba.support@mq.edu.au

Student Support

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

Learning Skills

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

- · Getting help with your assignment
- Workshops
- StudyWise

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

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

If you are a Global MBA student contact globalmba.support@mq.edu.au

IT Help

For help with University computer systems and technology, visit <u>http://www.mq.edu.au/about_us/</u>offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the <u>Acceptable Use of IT Resources Policy</u>. The policy applies to all who connect to the MQ network including students.

Changes from Previous Offering

New unit - first time offering.