

# **ENGG8106**

# **Engineering Entrepreneurship**

Session 1, In person-scheduled-weekday, North Ryde 2022

School of Engineering

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#### Disclaimer

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#### **General Information**

Unit convenor and teaching staff

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Credit points

10

**Prerequisites** 

Admission to MEngMgt or MEngElecEng

Corequisites

Co-badged status

#### Unit description

The aim of this unit is to provide students with entrepreneurial skills that are needed to build scalable startups in addition to entrepreneurial behaviours that are required to work in organisations within an engineering context. It will provide students with fundamental knowledge and procedures of creating successful ventures. The course will include the process of understanding customer requirements and converting these into specifications of a product and then designing a process to produce these. The course will also include other aspects that support entrepreneurship such as business planning, financial management, sources of finance, crowdfunding, entrepreneurial behaviour and technology management.

## Important Academic Dates

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

# **Learning Outcomes**

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

**ULO1:** Apply the fundamental knowledge and theoretical frameworks related to entrepreneurial behaviour in business management.

**ULO2:** Build an entrepreneurial mindset for value creation in existing business and create new business.

**ULO3:** Develop comprehensive knowledge business planning, financial management and technology management to develop successful ventures.

**ULO4:** Identify and pursue business opportunities, and create value for all stakeholders.

**ULO5:** Apply the process of capturing market and customer needs and converting these to a viable and sustainable products.

#### **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. Late submissions and Resubmissions For assignments handed in late, the following penalties apply 0-48hrs: -50%, >48hrs: -100%. Extenuating circumstances will be considered upon lodgement of a formal notice of disruption of studies. Resubmissions of work are generally allowed unless stated prior or otherwise.

#### **Assessment Tasks**

| Name                  | Weighting | Hurdle | Due                     |
|-----------------------|-----------|--------|-------------------------|
| Business Proposal     | 40%       | No     | Week 12                 |
| Midterm group project | 20%       | No     | Week 7                  |
| Case Studies          | 30%       | No     | Weeks 2, 5, 6, 10, & 11 |
| Active Engagement     | 10%       | No     | Week 8                  |

## **Business Proposal**

Assessment Type 1: Project

Indicative Time on Task 2: 30 hours

Due: Week 12 Weighting: 40%

Written report on a new venture with the purpose of gaining funding to start the business

On successful completion you will be able to:

- Apply the fundamental knowledge and theoretical frameworks related to entrepreneurial behaviour in business management.
- Build an entrepreneurial mindset for value creation in existing business and create new business.
- Develop comprehensive knowledge business planning, financial management and technology management to develop successful ventures.
- · Identify and pursue business opportunities, and create value for all stakeholders.
- Apply the process of capturing market and customer needs and converting these to a viable and sustainable products.

# Midterm group project

Assessment Type 1: Project

Indicative Time on Task 2: 16 hours

Due: **Week 7** Weighting: **20**%

Midterm group project and team work activity

On successful completion you will be able to:

- Apply the fundamental knowledge and theoretical frameworks related to entrepreneurial behaviour in business management.
- Build an entrepreneurial mindset for value creation in existing business and create new business.
- Develop comprehensive knowledge business planning, financial management and technology management to develop successful ventures.
- Identify and pursue business opportunities, and create value for all stakeholders.
- Apply the process of capturing market and customer needs and converting these to a viable and sustainable products.

#### **Case Studies**

Assessment Type 1: Case study/analysis Indicative Time on Task 2: 12 hours

Due: Weeks 2, 5, 6, 10, & 11

Weighting: 30%

Case studies on Engineering Entrepreneurship

On successful completion you will be able to:

- Apply the fundamental knowledge and theoretical frameworks related to entrepreneurial behaviour in business management.
- Build an entrepreneurial mindset for value creation in existing business and create new business.
- Develop comprehensive knowledge business planning, financial management and technology management to develop successful ventures.
- Identify and pursue business opportunities, and create value for all stakeholders.
- Apply the process of capturing market and customer needs and converting these to a viable and sustainable products.

## **Active Engagement**

Assessment Type 1: Simulation/role play Indicative Time on Task 2: 12 hours

Due: Week 8 Weighting: 10%

Active Engagement and Contribution in the tutorial activities

On successful completion you will be able to:

- Apply the fundamental knowledge and theoretical frameworks related to entrepreneurial behaviour in business management.
- Build an entrepreneurial mindset for value creation in existing business and create new business.
- Develop comprehensive knowledge business planning, financial management and technology management to develop successful ventures.
- Identify and pursue business opportunities, and create value for all stakeholders.
- Apply the process of capturing market and customer needs and converting these to a viable and sustainable products.

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

# **Delivery and Resources**

Technology Venture: From Idea to Enterprise (McGraw Hill), Fifth Edition

Thomas Byers, Richard Dorf, and Andrew Nelson

ISBN 978-1-260-08508-2

#### **Unit Schedule**

Refer to iLearn for more information.

#### **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.e du.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

<sup>&</sup>lt;sup>1</sup> If you need help with your assignment, please contact:

<sup>&</sup>lt;sup>2</sup> Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

#### Results

Results published on platform other than <a href="mailto:eStudent">eStudent</a>, (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 <a href="mailto:eStudent">eStudent</a>. For more information visit <a href="mailto:ask.mq.edu.au">ask.mq.edu.au</a> or if you are a Global MBA student contact <a href="mailto:globalmba.support@mq.edu.au">globalmba.support@mq.edu.au</a>

## **Academic Integrity**

At Macquarie, we believe <u>academic integrity</u> – 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 <u>online writing and maths support</u>, academic skills development and wellbeing consultations.

# Student Support

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

#### **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
- <u>Safety support</u> to respond to bullying, harassment, sexual harassment and sexual assault

· Social support including information about finances, tenancy and legal issues

# Student Enquiries

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

# IT Help

For help with University computer systems and technology, visit <a href="http://www.mq.edu.au/about\_us/">http://www.mq.edu.au/about\_us/</a> 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.