



# ECFS880

## Infrastructure and Property

AFC Term 3 City 2019

*Department of Applied Finance*

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#### **Disclaimer**

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## General Information

Unit convenor and teaching staff

Unit Convenor / Lecturer

David Wing

[david.wing@mq.edu.au](mailto:david.wing@mq.edu.au)

Contact via Email

Credit points

2

Prerequisites

(Admission to MAppFin or MAppFin(Adv) or GradDipAppFin) and ECFS866

Corequisites

Co-badged status

Unit description

This unit focuses on the principles, issues and documentation involved in structuring and arranging finance for property developments and infrastructure projects. It complements ECFS877 by focusing on the application of project financing principles and techniques to property developments and smaller infrastructure projects in non-traditional areas – especially social infrastructure. It examines the structuring and arranging of capital for property developments and in tendering of certain classes of infrastructure projects. It also examines the latest developments in infrastructure delivery methods such as PPPs.

## 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:

Demonstrate and explain the key principles, issues and documentation required to structure and arrange capital for property development and infrastructure projects.

Identify and evaluate current market practices and procedures used for real estate development and infrastructure projects.

Apply and evaluate a range of project financing principles for a variety of infrastructure projects.

Critically analyse the key risks in property development and infrastructure projects and

the connection between those underlying risks and their components of return.

Explain and evaluate the latest developments in public private partnerships and other infrastructure delivery methods, including the key risks and appropriateness of each.

## General Assessment Information

To pass this unit the student needs to (1) Achieve an aggregate mark of 50 or more, and; (2) Pass the Final Exam.

## Assessment Tasks

Name	Weighting	Hurdle	Due
<u>In Class Exercise</u>	10%	No	To be advised in class
<u>Case Study</u>	30%	No	Refer to iLearn
<u>Final Exam</u>	60%	Yes	Refer to Timetable

### In Class Exercise

Due: **To be advised in class**

Weighting: **10%**

#### Summary of Assessment Task

**Individual / Group:** Individual.

**Due Date:** To be advised in class by Lecturer.

**Submission Method:** In class.

**Duration:** 30-60 minutes.

#### Extension Requests:

- Students who do not attend receive a mark of zero. This penalty does not apply in cases where an application for Special Consideration has been made and approved.
- Note: Applications for Special Consideration must be made within 5 (five) business days of the due date and time.
- Refer to MAFC Program Rules at <https://mafcstudents.mq.edu.au/> for information on the University's [Special Consideration Policy](#).

#### Other Information:

- Assignment question will be distributed in class.
- Data for spreadsheet analysis will be placed on iLearn.

On successful completion you will be able to:

- Identify and evaluate current market practices and procedures used for real estate development and infrastructure projects.
- Critically analyse the key risks in property development and infrastructure projects and the connection between those underlying risks and their components of return.
- Explain and evaluate the latest developments in public private partnerships and other infrastructure delivery methods, including the key risks and appropriateness of each.

## Case Study

Due: **Refer to iLearn**

Weighting: **30%**

### Summary of Assessment Task

**Individual / Group:** In groups subject to enrolments.

**Due Date:** Refer to iLearn.

**Submission Method:** Via Turnitin on iLearn.

**Duration:** Refer to Assignment coversheet.

### Extension Requests:

- No extensions will be granted. There will be a deduction of 10% of the total available marks made from the total awarded mark for each 24 hour period or part thereof that the submission is late (for example, 25 hours late in submission incurs a 20% penalty). This penalty does not apply for cases in which an application for Special Consideration is made and approved.
- Late submissions will be accepted up to 96 hours after the due date and time.
- Note: Applications for Special Consideration must be made within 5 (five) business days of the due date and time.
- Refer to MAFC Program Rules at <https://mafstudents.mq.edu.au/> for information on the University's [Special Consideration Policy](#).

On successful completion you will be able to:

- Demonstrate and explain the key principles, issues and documentation required to structure and arrange capital for property development and infrastructure projects.
- Identify and evaluate current market practices and procedures used for real estate development and infrastructure projects.
- Apply and evaluate a range of project financing principles for a variety of infrastructure projects.

- Critically analyse the key risks in property development and infrastructure projects and the connection between those underlying risks and their components of return.

## Final Exam

Due: **Refer to Timetable**

Weighting: **60%**

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

### Summary of Assessment Task

**Individual / Group:** Individual.

**Due Date:** Refer to Timetable.

**Submission Method:** As per MAFC Program Rules at <https://mafcstudents.mq.edu.au/>.

**Duration:** 2 hours plus 10 minutes reading time.

### Examination Conditions:

- All examinations are closed book. However, permitted Calculators are allowed, as noted under 'Calculators' below.
- Exam times and locations are noted in the unit timetable at <https://www.mq.edu.au/about/about-the-university/faculties-and-departments/business/study-with-us/macquarie-applied-finance-centre/timetables>.
- Refer to MAFC Program Rules at <https://mafcstudents.mq.edu.au/>.

### Extension Requests:

- You are expected to present yourself for examination at the time and place designated in the relevant MAFC Timetable at <https://www.mq.edu.au/about/about-the-university/faculties-and-departments/business/study-with-us/macquarie-applied-finance-centre/timetables>.
- Deferral of an examination is not permitted unless an application for Special Consideration is made and approved.
- Students who do not attend receive a mark of zero. This penalty does not apply in cases where an application for Special Consideration has been made and approved.
- Note: Applications for Special Consideration must be made within 5 (five) business days of the due date and time.
- Refer to MAFC Program Rules at <https://mafcstudents.mq.edu.au/> for information on the University's [Special Consideration Policy](#).

On successful completion you will be able to:

- Demonstrate and explain the key principles, issues and documentation required to structure and arrange capital for property development and infrastructure projects.
- Identify and evaluate current market practices and procedures used for real estate development and infrastructure projects.
- Apply and evaluate a range of project financing principles for a variety of infrastructure projects.
- Critically analyse the key risks in property development and infrastructure projects and the connection between those underlying risks and their components of return.
- Explain and evaluate the latest developments in public private partnerships and other infrastructure delivery methods, including the key risks and appropriateness of each.

## Delivery and Resources

### **CLASSES**

**Face-to-Face Teaching:** Generally 20 hours.

**Timetable:** Detailed timetable for classes are available at <https://www.mq.edu.au/about/about-the-university/faculties-and-departments/business/study-with-us/macquarie-applied-finance-centre/timetables>.

#### **Consultation Times:**

Students who wish to contact any of the teaching staff may do so through:

- The unit's iLearn site, in relation to general queries (so that all students may benefit); or
- Individual consultation with the lecturer by email in the first instance, if necessary.

### **REQUIRED AND RECOMMENDED TEXTS AND/OR MATERIALS**

**Text:** Nil

#### **Additional Readings:**

- Additional readings are included in the unit reader.
- **Students should assume these readings are examinable unless otherwise advised.**

**Lecture Notes:** Available via iLearn.

**Pre-unit Materials:** Information papers on statistics, regression, accounting and other material may be found at <http://mafcstudents.mq.edu.au/new-to-mafc/pre-course-materials/>. Students should work through this material prior to commencing the degree. The material will remain a useful reference as students progress through the program.

#### **Useful References:**

- Bruce, McKern, et al, 1997, *Handbook of Australian Corporate Finance*, 5<sup>th</sup> edn,

Butterworths, Sydney.

- There are books available to help develop your Excel skills, which are needed for assignments. Two helpful books are:
  - Craig W. Holden, *Excel Modelling in Corporate Finance*, 2nd ed., Pearson Prentice Hall, 2005; or
  - Michael Rees, *Financial Modelling in Practice*, Wiley, 2008.

**Calculators:** In examinations, hand held calculators are permitted. Mobile phones and computers are not permitted.

**Assumed Access:** Access to a computer with word processing and spreadsheet capability is assumed, as is general student computer literacy.

## **TECHNOLOGY USED AND REQUIRED**

### **Unit iLearn Site:**

- Found by logging on to iLearn [ilearn.mq.edu.au](https://ilearn.mq.edu.au), then clicking on **ECFS880 Infrastructure and Property**.
- This is where you will find forums, downloadable resources and links to important pages.
- The forum allows you to communicate with other students and lecturer(s) and may provide supplementary material.

### **Important:**

- It is important that you familiarise yourself with iLearn.
- Students should check iLearn regularly (minimum twice a week and prior to all lectures) and look for updates and distribution of materials (including case studies) related to the unit or assessments and, if relevant, participate in forum discussions.

## **Unit Schedule**

### **SESSION 1 – PROPERTY DEVELOPMENT**

#### **Topics:**

- Introduction to the development process
- Participants
- Property as an asset class
- Property markets generally
- Concepts of value and valuation
- Steps in the development process

### **SESSION 2 – PROPERTY FINANCE**

#### **Topics:**

- Types of finance
  - Equity
  - Debt
  - Mezzanine
- Participants and their role
- Providers of finance
- Construction arrangements
  - Construction only
  - Design and construct
  - Design, construct and finance
  - Turnkey

## **SESSION 3 – STRUCTURING A PROPERTY FINANCE TRANSACTION I**

### **Topics:**

- Introduction to structuring issues
- Legal issues and taxation considerations in the choice of development/ownership structure
- Basic forms of legal documentation required
- Risks and their allocation
- Financing structures generally

## **SESSION 4 – STRUCTURING A PROPERTY FINANCE TRANSACTION II**

### **Topics:**

- Project evaluation
  - Financial
  - Risks
  - Security
  - Margins and fees
- Exit strategies
  - Put options
  - Take-outs
  - Syndication
  - Securitisation
- Case studies



## SESSION 5 – INFRASTRUCTURE PROJECTS

### Topics:

- Historical perspective
- Recent trends
- Types of infrastructure projects
- Infrastructure transactions generally
- Tender process
- Forming a bidding consortium
- Risk allocation
- Capital raising
- Legal documentation/negotiation
- Implementation
- General structure of a BOOT transaction
- Parties
- Risk allocation
- Capital raising
- Legal documentation
- Implementation
- Case studies

## SESSION 6 – PUBLIC PRIVATE PARTNERSHIPS

### Topics:

- Rationale for private sector participation
- The development of private sector participation models
- The Australian experience of private sector participation
- The development of alternative models
- The private financing initiative
- Public Private Partnerships (PPP)
- Key features of a PPP
- Typical agreements
- Are PPPs new?
- The concept of partnership
- The contractual framework
- Allocation of risk
- Quality of service

- Other issues
- Case studies

## Learning and Teaching Activities

### Strategy

The Master of Applied Finance degree adopts a deep teaching and learning strategy, in which students acquire and retain knowledge and also are able to make sense of the issues and concepts and apply them in the “real world”. The degree relies heavily on student engagement and participation by: (a) Continuous learning throughout the term. This is encouraged through a combination of students undertaking prescribed reading throughout the units and/or completion of practice problems, case studies, assignments, class presentations etc and interaction via forums in the unit’s iLearn site; and (b) Assessments, which enable the student to demonstrate his/her understanding of the learning objectives achieved through the continuous learning.

### Student Participation

Students participate in this unit by: (a) Attending lectures and participating in class discussion; (b) Before each class, completing the recommended readings of notes and text, and working systematically through suggested problem sets; (c) Interacting on the unit’s iLearn site; and (d) Completing all assessment tasks and exams. On average, the unit will require students to complete, for every hour of class time, approximately 3 hours private study.

## 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](#) ([http](https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central)

[s://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 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](https://ask.mq.edu.au) or if you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto:globalmba.support@mq.edu.au)

Students should also consult the MAFC Program Rules at <https://mafcstudents.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](https://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 enquiry service (MAFC-specific)

For all student enquiries, please contact [studentsupport@mafc.mq.edu.au](mailto:studentsupport@mafc.mq.edu.au)

## 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](https://ask.mq.edu.au)

If you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto:globalmba.support@mq.edu.au)

## IT Help

For help with University computer systems and technology, visit [http://www.mq.edu.au/about\\_us/](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 - 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**

- Demonstrate and explain the key principles, issues and documentation required to structure and arrange capital for property development and infrastructure projects.
- Identify and evaluate current market practices and procedures used for real estate development and infrastructure projects.
- Apply and evaluate a range of project financing principles for a variety of infrastructure projects.
- Explain and evaluate the latest developments in public private partnerships and other infrastructure delivery methods, including the key risks and appropriateness of each.

#### **Assessment tasks**

- In Class Exercise
- Case Study
- Final Exam

### **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**

- Identify and evaluate current market practices and procedures used for real estate development and infrastructure projects.
- Apply and evaluate a range of project financing principles for a variety of infrastructure

projects.

- Critically analyse the key risks in property development and infrastructure projects and the connection between those underlying risks and their components of return.
- Explain and evaluate the latest developments in public private partnerships and other infrastructure delivery methods, including the key risks and appropriateness of each.

## **Assessment tasks**

- In Class Exercise
- Case Study
- Final Exam

## **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**

- Identify and evaluate current market practices and procedures used for real estate development and infrastructure projects.
- Apply and evaluate a range of project financing principles for a variety of infrastructure projects.
- Critically analyse the key risks in property development and infrastructure projects and the connection between those underlying risks and their components of return.
- Explain and evaluate the latest developments in public private partnerships and other infrastructure delivery methods, including the key risks and appropriateness of each.

## **Assessment task**

- Case Study

## **Important Notice**

This Unit Guide may be subject to change. Students will be advised, via an "Announcement" on iLearn, if the Unit Guide is changed.

The latest version is available at <https://unitguides.mq.edu.au/>.

Students should read the Unit Guide carefully at the start of term. It contains important information about the unit. If anything is unclear, please consult one of the unit lecturers.