# AFIN8016

## Payments, Cryptocurrencies and Blockchain

Session 1, Online-scheduled-In person assessment, North Ryde 2022

*Department of Applied Finance*

## Contents

# General Information

Unit convenor and teaching staff
Unit Convenor
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Credit points
10

Prerequisites
Admission to MFin or MActPrac or (MBkgFin or MBusAnalytics and (ACST603 or ACST6003 or AFIN613 or AFIN6013))

Corequisites

Co-badged status

Unit description
The development of Cryptocurrencies, using the fundamentals of cryptography and blockchain, is predicted to have significant impact on banks, financial institutions, governments, economies and business in general. The decentralization of payment networks and the establishment of an ecosystem of various stakeholders results in various benefits and challenges that will influence their adoption and diffusion in the marketplace. This unit examines cryptocurrencies and blockchain and their emergence and role in financial markets. This unit discuss the technical underpinnings of blockchain and key concepts such as decentralization and consensus algorithms. Students will learn how these new financial instruments and technologies are disrupting traditional ways of doing business.

## 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:** Understand the fundamentals of blockchain and demonstrate knowledge of theoretical crypto-currency concepts and their applications.

**ULO2:** Critically evaluate the use of cryptocurrencies from a social and economic perspective with regard to regulatory frameworks that govern adoption and use.
**ULO3:** Apply different financial instruments and technology infrastructures including digital currencies and blockchain that facilitate the operation of financial markets.
**ULO4:** Compare and contrast how these new instruments and technologies are disrupting traditional ways of doing business in the financial industry.

# General Assessment Information

**Late submissions of assessments**

Unless a Special Consideration request has been submitted and approved, no extensions will be granted. There will be a deduction of 10% of the total available assessment-task marks made from the total awarded mark for each 24-hour period or part thereof that the submission is late. Late submissions will only be accepted up to 96 hours after the due date and time.

No late submissions will be accepted for timed assessments – e.g., quizzes, online tests.

***Table 1: Penalty calculation based on submission time***

| Submission time after the due date (including weekends) | Penalty (% of available assessment task mark) | Example: for a non-timed assessment task marked out of 30 |
|---|---|---|
| < 24 hours | 10% | 10% x 30 marks = 3-mark deduction |
| 24-48 hours | 20% | 20% x 30 marks = 6-mark deduction |
| 48-72 hours | 30% | 30% x 30 marks = 9-mark deduction |
| 72-96 hours | 40% | 40% x 30 marks = 12-mark deduction |
| > 96 hours | 100% | Assignment won't be accepted |

Other assessment criteria for assessment tasks will be provided on the unit iLearn site.

# Assessment Tasks

| Name | Weighting | Hurdle | Due |
|---|---|---|---|
| Online Quiz | 0% | No | Week 3 |
| Assignment 1 | 20% | No | Week 7 |
| Assignment 2 | 20% | No | Week 10 |
| Final Examination | 60% | No | University Examination Period |

## Online Quiz

Assessment Type [1]: Quiz/Test
Indicative Time on Task [2]: 1 hours
Due: **Week 3**
Weighting: **0%**

The online quiz will consist of 5 to 10 questions and will be available on iLearn. Please use the quiz result as an indicator of whether you are progressing satisfactorily in the unit.

On successful completion you will be able to:

- Compare and contrast how these new instruments and technologies are disrupting traditional ways of doing business in the financial industry.

## Assignment 1

Assessment Type [1]: Report
Indicative Time on Task [2]: 15 hours
Due: **Week 7**
Weighting: **20%**

The assignment will cover quantitative and/or qualitative analysis and students will be required to produce a report regarding their find(s). The report should not exceed 1,500 words.

On successful completion you will be able to:

- Understand the fundamentals of blockchain and demonstrate knowledge of theoretical crypto-currency concepts and their applications.
- Critically evaluate the use of cryptocurrencies from a social and economic perspective with regard to regulatory frameworks that govern adoption and use.
- Apply different financial instruments and technology infrastructures including digital currencies and blockchain that facilitate the operation of financial markets.
- Compare and contrast how these new instruments and technologies are disrupting traditional ways of doing business in the financial industry.

## Assignment 2

Assessment Type [1]: Project
Indicative Time on Task [2]: 19 hours

Due: **Week 10**
Weighting: **20%**

Students will conduct a quantitative analysis / financial modelling project and present their solutions and outcomes.

On successful completion you will be able to:

- Critically evaluate the use of cryptocurrencies from a social and economic perspective with regard to regulatory frameworks that govern adoption and use.
- Apply different financial instruments and technology infrastructures including digital currencies and blockchain that facilitate the operation of financial markets.
- Compare and contrast how these new instruments and technologies are disrupting traditional ways of doing business in the financial industry.

## Final Examination

Assessment Type [1]: Examination
Indicative Time on Task [2]: 20 hours
Due: **University Examination Period**
Weighting: **60%**

A two hour exam will be held during University Examination Period.

On successful completion you will be able to:

- Understand the fundamentals of blockchain and demonstrate knowledge of theoretical crypto-currency concepts and their applications.
- Critically evaluate the use of cryptocurrencies from a social and economic perspective with regard to regulatory frameworks that govern adoption and use.
- Apply different financial instruments and technology infrastructures including digital currencies and blockchain that facilitate the operation of financial markets.
- Compare and contrast how these new instruments and technologies are disrupting traditional ways of doing business in the financial industry.

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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

| | |
|---|---|
| **Required Text** | No prescribed textbook is required. The unit will utilise various library resources, including research papers, book chapters, case studies, etc. All materials will be provided via iLearn or during the lecture. |
| **Recommended Readings** | We will supplement the lecture materials with readings from journals and other textbooks. A list of relevant material will be provided via iLearn. |
| **Technology Used and Required** | Necessary technology: Computer with MS Excel and Word, scientific or business calculator and internet access. |

# Unit Schedule

Please refer to iLearn.

# 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 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.