



# MMBA8014

## FinTech and Innovation

Term 4, Online-scheduled-weekday 2024

*Department of Applied Finance*

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#### **Disclaimer**

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## General Information

Unit convenor and teaching staff

Cynthia Cai

[cynthia.cai@mq.edu.au](mailto:cynthia.cai@mq.edu.au)

Credit points

10

Prerequisites

Admission to MBA or GradCertDigFin or MAppFin or GradDipAppFin

Corequisites

Co-badged status

Unit description

Technology has been transforming the finance industry, with the potential to disrupt traditional industry structure and practice. This unit introduces the main building blocks of FinTech (blockchain, big data, machine learning and artificial intelligence) and how these technologies could provide transformative solutions to underlying finance problems (including economic and psychological issues) and reshape the finance industry with innovations. Cutting-edge cases will be used to illustrate the core concepts.

## 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:** Identify fundamental economic and psychological issues in the current financial system.

**ULO2:** Explore fundamental techniques in blockchain, machine learning and artificial intelligence

**ULO3:** Work productively in a group to evaluate major advances in blockchain, machine learning and artificial intelligence are applicable to finance problems

**ULO4:** Analyse recent developments in FinTech and its impact in transforming the finance industry.

**ULO5:** Assess the risks arising from FinTech and understand the dynamics between the

innovations and regulations.

## General Assessment Information

*Late Assessment Submission Penalty (written assessments)*

Unless a *Special Consideration* request has been submitted and approved, a 5% penalty (of the total possible mark) will be applied each day a written assessment is not submitted, up until the 7th day (including weekends). After the 7th day, a grade of '0' will be awarded even if the assessment is submitted. Submission time for all written assessments is set at 11.55pm. A 1-hour grace period is provided to students who experience a technical concern.

For any late submissions of time-sensitive tasks, such as scheduled tests/exams, performance assessments/presentations, and/or scheduled practical assessments/labs, students need to submit an application for [Special Consideration](#).

## Assessment Tasks

Name	Weighting	Hurdle	Due
<a href="#"><u>Online Quiz</u></a>	10%	No	Week 3
<a href="#"><u>Online Quiz 2</u></a>	30%	No	Week 7
<a href="#"><u>Individual Capstone Project</u></a>	60%	No	Week 9

### Online Quiz

Assessment Type <sup>1</sup>: Quiz/Test

Indicative Time on Task <sup>2</sup>: 5 hours

Due: **Week 3**

Weighting: **10%**

The online quiz will consist of 10 randomised multiple-choice 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:

- Identify fundamental economic and psychological issues in the current financial system.
- Explore fundamental techniques in blockchain, machine learning and artificial intelligence
- Analyse recent developments in FinTech and its impact in transforming the finance industry.

## Online Quiz 2

Assessment Type <sup>1</sup>: Quiz/Test

Indicative Time on Task <sup>2</sup>: 15 hours

Due: **Week 7**

Weighting: **30%**

The online quiz will consist of 30 randomised multiple-choice 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:

- Identify fundamental economic and psychological issues in the current financial system.
- Explore fundamental techniques in blockchain, machine learning and artificial intelligence
- Analyse recent developments in FinTech and its impact in transforming the finance industry.

## Individual Capstone Project

Assessment Type <sup>1</sup>: Project

Indicative Time on Task <sup>2</sup>: 35 hours

Due: **Week 9**

Weighting: **60%**

Students are asked to pick one FinTech startup that they are interested in to research.

This project consists of two parts:

1. A Startup Business Report - professionally designed 2000 words limit business report
2. A video pitch (5 minutes)

On successful completion you will be able to:

- Identify fundamental economic and psychological issues in the current financial system.
- Explore fundamental techniques in blockchain, machine learning and artificial intelligence
- Work productively in a group to evaluate major advances in blockchain, machine learning and artificial intelligence are applicable to finance problems

- Analyse recent developments in FinTech and its impact in transforming the finance industry.
- Assess the risks arising from FinTech and understand the dynamics between the innovations and regulations.

<sup>1</sup> 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.

<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

## Delivery and Resources

<b>Required Text</b>	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.
<b>Recommended Readings</b>	We will supplement the lecture materials with readings from journals and other textbooks. A list of relevant material will be provided via iLearn.
<b>Technology Used and Required</b>	Necessary technology: Computer with MS Excel and Word, scientific or business calculator and internet access.

## Unit Schedule

Teaching Weeks	Topics
1	Introduction of FinTech: History and Today
2	Digital Transformation
3	Blockchain-A Disruptive Technology: Bitcoin and Cryptocurrencies
4	Blockchain-A Disruptive Technology: Beyond Coins
5	Machine Learning: from 'Traditional' to 'Deep'
6	Big Data: Harnessing Data with Artificial Intelligence
7	Issues of FinTech: Risks and Regulations
8	FinTech: Possible Improvements in Financial Behaviours

9	Financial Inclusion with Innovations
10	FinTech: The Future

## Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central \(https://policies.mq.edu.au\)](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 \(https://students.mq.edu.au/support/study/policies\)](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 \(https://policies.mq.edu.au\)](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 [connect.mq.edu.au](https://connect.mq.edu.au) or if you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto: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 Advocacy](#) provides independent advice on MQ policies, procedures, and processes

## Student Enquiries

Got a question? Ask us via the [Service Connect Portal](#), 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/](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.

Unit information based on version 2024.03 of the [Handbook](#)