

AFIN2070

Financial Data Analytics

Session 1, In person-scheduled-weekday, North Ryde 2025

Department of Applied Finance

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General Information

Unit convenor and teaching staff

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Credit points

10

Prerequisites

AFIN1002 and (STAT1250 or STAT1170 or STAT1371)

Corequisites

Co-badged status

Unit description

This unit introduces students to the fundamental process of data analytics in finance. It focuses on developing critical computational, statistical, and other contemporary analytical skills that are essential for people conducting data-driven financial analytics. With an emphasis on applied learning informed by a strong theoretical foundation, the lectures use real-data examples to discuss contemporary topics such as data management and visualisation, financial risk analysis and prediction, regression and classification methods, and clustering. Students will practice their learned concepts and analytical skills through applied data-driven case studies using computer software tools and industry-standard financial databases.

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: Critically examine core predictive and classification methods in financial data analytics

ULO2: Evaluate and apply data analytics skills using computer software tools to solve real-world problems in the finance industry.

ULO3: Apply working knowledge of data analytics to extract and report insights from financial data in various forms.

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
Quizzes	30%	No	Week 8
Assignment	30%	No	Week 6
Data Project	40%	No	Week 13

Quizzes

Assessment Type 1: Quiz/Test Indicative Time on Task 2: 20 hours

Due: Week 8 Weighting: 30%

Online Quizzes will be held during the session.

On successful completion you will be able to:

- Critically examine core predictive and classification methods in financial data analytics
- Evaluate and apply data analytics skills using computer software tools to solve real-world problems in the finance industry.
- Apply working knowledge of data analytics to extract and report insights from financial data in various forms.

Assignment

Assessment Type 1: Case study/analysis Indicative Time on Task 2: 20 hours

Due: Week 6 Weighting: 30%

Students will develop skills in finance industry databases and apply this to a financial data analytics task.

On successful completion you will be able to:

- · Critically examine core predictive and classification methods in financial data analytics
- Evaluate and apply data analytics skills using computer software tools to solve real-world problems in the finance industry.

Data Project

Assessment Type 1: Project Indicative Time on Task 2: 30 hours

Due: Week 13 Weighting: 40%

Students will conduct quantitative and qualitative analysis and present their findings.

On successful completion you will be able to:

- Critically examine core predictive and classification methods in financial data analytics
- Evaluate and apply data analytics skills using computer software tools to solve real-world problems in the finance industry.
- Apply working knowledge of data analytics to extract and report insights from financial data in various forms.

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

¹ If you need help with your assignment, please contact:

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

Please find the details of delivery and resources in 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 <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 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.mg.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>connect.mq.edu.au</u> or if you are a Global MBA student contact globalmba.support@mq.edu.au

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 http://students.mq.edu.au/support/

Academic Success

<u>Academic Success</u> 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 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/.

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 since First Published

Date	Description
18/ 02/ 2025	Change to assessment to comply with the requirement that there are no more than three assessments in total for this unit. The "multiple online quizzes" assessment will be changed to a single online quiz. The quiz dates will be changed from "Week 4, 8, and 11" to Week 8 only.

Unit information based on version 2025.05 of the Handbook