



BUSA6004

Introduction to Inference, Modelling and Forecasting

Session 2, In person-scheduled-weekday, North Ryde 2026

Department of Actuarial Studies and Business Analytics

Contents

<u>General Information</u>	2
<u>Learning Outcomes</u>	2
<u>General Assessment Information</u>	2
<u>Assessment Tasks</u>	3
<u>Delivery and Resources</u>	5
<u>Policies and Procedures</u>	6

Disclaimer

Macquarie University has taken all reasonable measures to ensure the information in this publication is accurate and up-to-date. However, the information may change or become out-dated as a result of change in University policies, procedures or rules. The University reserves the right to make changes to any information in this publication without notice. Users of this publication are advised to check the website version of this publication [or the relevant faculty or department] before acting on any information in this publication.

General Information

Unit convenor and teaching staff Masoud Talebian masoud.talebian@mq.edu.au
Credit points 10
Prerequisites
Corequisites
Co-badged status
Unit description This unit provides the quantitative/statistical research tools, data analysis and computer modelling necessary to assist managers with strategic planning, tactical decision-making, and resolving business problems. Students will develop research skills to solve problems.

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 and describe models of managing data.

ULO2: Use quantitative research tools to assess the implications of strategic decisions from a whole of entity perspective and across a range of stakeholders.

ULO3: Apply a range of research tools and models of business performance and productivity to measure and track sustainable value creation across organisational processes and projects.

General Assessment Information

Late Submission Penalties

If you submit your assessment late, 5% of the total possible marks will be deducted for each day (including weekends), up to 7 days. Submissions more than 7 days late will receive a mark of 0.

Example 1 (out of 100):

If you score 85/100 but submit **20 hours late**, you will lose **5 marks** and receive **80/100**.

Example 2 (out of 30):

If you score 27/30 but submit **20 hours late**, you will lose **1.5 marks** and receive **25.5/30**.

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	Groupwork/Individual	Short Extension	AI Approach
<u>Professional practice: Business inference, modelling, and forecasting report</u>	40%	No	18/10/2026	Individual	Yes	Open AI
<u>Skills development: Inference, modelling and forecasting quiz</u>	20%	No	Week 5	Individual	No	Open AI
<u>Formal examination</u>	40%	No	Exam Period	Individual	No	Observed

Professional practice: Business inference, modelling, and forecasting report

Assessment Type ¹: Professional task

Indicative Time on Task ²: 20 hours

Due: **18/10/2026**

Weighting: **40%**

Groupwork/Individual: Individual

Short extension ³: Yes

AI Approach: Open AI

The purpose of this assessment is for you to demonstrate your core knowledge and skills in inference, modelling, and forecasting.

You will be required to conduct data analysis and/or the modelling necessary to resolve business problems, make inferences, and assist in decision-making and forecasting.

Skills in focus:

- Discipline knowledge
- Digital skills
- Critical thinking and problem solving
- Work readiness

Deliverable(s): Written report with associated data file/s

Individual assessment

On successful completion you will be able to:

- Identify and describe models of managing data.
- Use quantitative research tools to assess the implications of strategic decisions from a whole of entity perspective and across a range of stakeholders.
- Apply a range of research tools and models of business performance and productivity to measure and track sustainable value creation across organisational processes and projects.

Skills development: Inference, modelling and forecasting quiz

Assessment Type ¹: Problem-based task

Indicative Time on Task ²: 10 hours

Due: **Week 5**

Weighting: **20%**

Groupwork/Individual: Individual

Short extension ³: No

AI Approach: Open AI

The purpose of this assessment is for you to demonstrate your core knowledge and skills in inference, modelling, and forecasting.

You will be tested on your understanding of statistics, data analytics tools, and models. Students will be tested on the inferences derived from the results of these statistical tests, tools, and models.

Skills in focus:

- Discipline knowledge
- Digital skills
- Critical thinking and problem solving

Deliverable(s): Online quiz.

Individual assessment

On successful completion you will be able to:

- Identify and describe models of managing data.
- Use quantitative research tools to assess the implications of strategic decisions from a whole of entity perspective and across a range of stakeholders.
- Apply a range of research tools and models of business performance and productivity to measure and track sustainable value creation across organisational processes and

projects.

Formal examination

Assessment Type ¹: Examination

Indicative Time on Task ²: 30 hours

Due: **Exam Period**

Weighting: **40%**

Groupwork/Individual: Individual

Short extension ³: No

AI Approach: Observed

The purpose of this assessment is for you to formally demonstrate the expertise you have gained in this unit.

You will participate in a 2-hour exam with 10 minutes reading time, held during the University Examination period. Important information about the exam will be made available on the unit iLearn page. You should also review the [MQ Exams website](#) for general tips.

Deliverable(s): Formal exam

Individual assessment

On successful completion you will be able to:

- Identify and describe models of managing data.
- Use quantitative research tools to assess the implications of strategic decisions from a whole of entity perspective and across a range of stakeholders.
- Apply a range of research tools and models of business performance and productivity to measure and track sustainable value creation across organisational processes and projects.

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
- [Academic Success](#) 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.

³ An automatic short extension is available for some assessments. Apply through the [Service Connect Portal](#).

Delivery and Resources

As per iLearn.

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 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/>

Academic Success

[Academic Success](#) provides resources to develop your English language proficiency, academic writing, and communication skills.

- [Ask a Study Coach](#)
- [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 <https://students.mq.edu.au/support/technology/service-desk>.

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 2026.03 of the [Handbook](#)