



ECON6034

Econometrics and Business Statistics

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

Department of Economics

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>Unit Schedule</u>	8
<u>Policies and Procedures</u>	8

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

Hanbat Jeong

hanbat.jeong@mq.edu.au

Credit points

10

Prerequisites

Corequisites

Co-badged status

Unit description

This unit is designed to bring students with no econometrics background to an intermediate level in econometrics. Starting from first principles, the unit outlines standard econometric methods to the extent necessary for students to understand key concepts, apply basic methods, and interpret empirical research results in economics, finance and business. The unit material also includes elementary discussions of violations of the standard assumptions for a regression model, such as autocorrelation and heteroscedasticity.

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: Apply basic statistical techniques to different economic and business problems.

ULO2: Evaluate and use appropriate econometric tools to model, estimate and forecast economic data.

ULO3: Apply research skills to select, compare and utilise econometric models.

ULO4: Utilise appropriate practices to work effectively in a group.

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**.

Extensions

Automatic short extension: Some assessments are eligible for automatic short extension. You can only apply for an automatic short extension before the due date.

Special Consideration: If you need more time due to serious issues and for any assessments that are not eligible for Short Extension, you must apply for Special Consideration. Need help? Review the [Special Consideration page](#) for further details.

Assessment Tasks

Name	Weighting	Hurdle	Due	Groupwork/Individual	Short Extension	AI Approach
Skills development: Knowledge quiz	30%	No	Week 8	Individual	No	Observed
Skills development: Econometric analysis and modelling	30%	No	30/10/2026	Individual	Yes	Open AI
Formal examination	40%	No	University Exam Period	Individual	No	Observed

Skills development: Knowledge quiz

Assessment Type ¹: Problem-based task

Indicative Time on Task ²: 15 hours

Due: **Week 8**

Weighting: **30%**

Groupwork/Individual: Individual

Short extension ³: No

AI Approach: Observed

The purpose of this quiz is to help students reinforce their understanding of key statistical concepts and skills. Students will be given an hour to complete a quiz.

Skills in focus:

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

Deliverable(s): Quiz

Individual assessment

On successful completion you will be able to:

- Apply basic statistical techniques to different economic and business problems.
- Evaluate and use appropriate econometric tools to model, estimate and forecast economic data.

Skills development: Econometric analysis and modelling

Assessment Type ¹: Problem-based task

Indicative Time on Task ²: 15 hours

Due: **30/10/2026**

Weighting: **30%**

Groupwork/Individual: Individual

Short extension ³: Yes

AI Approach: Open AI

The purpose of this task is for students to develop skills in critically analysing data using econometric software and regression models.

Skills in focus:

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

Deliverable(s): Short-answer style written submission

Individual assessment

On successful completion you will be able to:

- Apply basic statistical techniques to different economic and business problems.
- Evaluate and use appropriate econometric tools to model, estimate and forecast economic data.
- Apply research skills to select, compare and utilise econometric models.
- Utilise appropriate practices to work effectively in a group.

Formal examination

Assessment Type ¹: Examination

Indicative Time on Task ²: 20 hours

Due: **University Exam Period**

Weighting: **40%**

Groupwork/Individual: Individual

Short extension ³: No

AI Approach: Observed

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

You will participate in a 2-hour, on-campus, closed-book exam 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:

- Apply basic statistical techniques to different economic and business problems.
- Evaluate and use appropriate econometric tools to model, estimate and forecast economic data.
- Apply research skills to select, compare and utilise econometric models.

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

Delivery format

Two hours of face-to-face lecture

One hour of face-to-face or online tutorial

Each week, there will be two hours of face-to-face lectures. Also, weekly one-hour tutorials will be held to review assigned problems. The problems covered in the tutorial sessions will reinforce the topics discussed in the main lectures.

REQUIRED AND RECOMMENDED TEXTS AND/OR MATERIALS

Wooldridge, Jeffrey M., Introductory Econometrics: A Modern Approach, 7th edition,

The textbook is available online via the Macquarie University Library. As the unit progresses, material such as lecture slides, examples, etc., will be made available on the unit website.

TECHNOLOGIES USED AND REQUIRED

The main software packages used are Python/R/Gretl.

Gretl: <https://gretl.sourceforge.net/>

Python/R: <https://colab.research.google.com/>

<https://jupyter.org/>

R: <https://posit.cloud/>

Also, refer to <https://www.kaggle.com/>

EMAIL USE

It is University policy that the University issued email account will be used for official University communication. All students are required to access their University account frequently. Only contact Macquarie University staff (including tutors), using your official MQ student's account because this is one method used to verify your identity.

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.

- [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/.

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 Schedule

Week 1 | Introduction & Descriptive statistics

Week 2 | Descriptive Statistics for data

Week 3 | Probability & Random Variables

Week 4 | Probability Distributions

Week 5 | Sampling Distributions

Week 6 | Sampling distribution & Hypothesis Testing

Week 7 | Hypothesis testing & Regression Analysis

Week 8 | Skills development: Knowledge quiz

Week 9 | Regression Analysis (Simple Linear Regression)

Week 10 | Multiple Linear Regression

Week 11 | Multiple Linear Regression Cont.

Week 12 | Regression Diagnostics

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 \(https://students.mq.edu.au/support/study/policies\)](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 2026.04 of the [Handbook](#)