STAT1250

Business Statistics and Insights

Session 3, Online-scheduled-In person assessment, North Ryde 2024

School of Mathematical and Physical Sciences

Contents

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General Information

Unit convenor and teaching staff
Unit Convenor
Shobana Maheswaran
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Contact via Email
See iLearn
See iLearn for consultation hours

STAT1250 Admin
Administration
stat1250.admin@mq.edu.au
Contact via Email
No office location
No consultation hours

Credit points
10

Prerequisites

Corequisites

Co-badged status

Unit description
Data is the foundation of sound business decisions. In this unit, you will learn the fundamentals of analysing, solving and communicating business problems using quantitative information. Problems and examples will be drawn from current real-world experience. The unit will cover statistical and analytics tools that transform data to provide insights for decision-making and professional practice in business and commerce. The focus will be on tools and approaches that are used in contemporary business to enhance your data literacy and technical skills.

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: Use appropriate Excel tools to prepare data for analysis.

ULO2: Organise and summarise data graphically and numerically.

ULO3: Apply statistical techniques and data analytics to provide solutions to business problems.

ULO4: Generate actionable commercial insights from the results of data analysis for business to make informed decisions.

General Assessment Information

Requirements to Pass this Unit: To pass this unit, you must:

1. Attempt all assessment tasks
2. Achieve a total mark equal to or greater than 50%

Active Engagement In-Class Assessment (expectations, logistics, and special consideration):

Daily workshop participation is expected throughout the session. Students are expected to attend all workshops and participate in activities. Student performance in these activities will be assessed during class. The best 8 out of 12 workshop marks will count towards your unit grade. Despite this '8 out of 12' requirement, participation in all workshops will enhance your chances of success in the unit, as workshops are where we engage with the unit material via active learning, as well as preparation and revision for other unit assessments.

You do not need to submit a Special Consideration case unless you miss more than 4 workshops. If you do submit a Special Consideration case for the Active Engagement Assessment - in your case-ticket, you must specify how many workshops you have missed in total for this unit. Students who specify that they have only missed 4 or less workshops in total will have their cases automatically declined - as you still have the opportunity to have 8 submissions.

If you have a serious commitment that will arise during the session that could result in you missing one workshop as a one-off event, please email stat1250.admin@mq.edu.au to find an alternative arrangement - you can do this without submitting a Special Consideration case.

Late Assessment Submission Penalty:

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 11:55 pm. A 1-hour grace period is provided to students who experience a technical concern. For any late submission 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.

Assessments where Late Submissions will be accepted.

1. In-workshop Activity– NO, unless Special Consideration is granted

2. Report – YES, Standard Late Penalty applies

3. Test – NO, unless Special Consideration is granted

4. Final Exam – NO, unless Special Consideration is granted

Special Considerations: If you experience circumstances or events that affect your ability to complete the report, test or final exam in this unit on time, please submit a Special Consideration request through ask.mq.edu.au.

Assessment Tasks

Name	Weighting	Hurdle	Due
In-workshop activities	20%	No	Daily, from 2 to 13. Please ignore "weekly" in description.
Report	20%	No	Day 8
Test	20%	No	Day 11
Final Exam	40%	No	During University Examination Period

In-workshop activities

Assessment Type [1]: Practice-based task
Indicative Time on Task [2]: 6 hours
Due: **Daily, from 2 to 13. Please ignore "weekly" in description.**
Weighting: **20%**

Acquiring knowledge and skills is a continual process that necessitates regular practice. The weekly workshops provide a platform for you to practice and refine a diverse set of Excel and statistical techniques. You are expected to demonstrate your progress in developing knowledge and skills in these activities. Your final grade will be calculated based on the activities you complete in the 12 workshops, with the best 8 scores being used for the calculation.

On successful completion you will be able to:

• Use appropriate Excel tools to prepare data for analysis.

• Organise and summarise data graphically and numerically.

• Apply statistical techniques and data analytics to provide solutions to business problems.

• Generate actionable commercial insights from the results of data analysis for business to make informed decisions.

Report

Assessment Type [1]: Report
Indicative Time on Task [2]: 10 hours
Due: **Day 8**
Weighting: **20%**

An individual report where students use Excel to generate business insights, summarise and report the findings.

On successful completion you will be able to:

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Test

Assessment Type [1]: Quiz/Test
Indicative Time on Task [2]: 3 hours
Due: **Day 11**
Weighting: **20%**

A test will be held during class time during the session.

On successful completion you will be able to:

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Final Exam

Assessment Type [1]: Examination
Indicative Time on Task [2]: 21 hours
Due: **During University Examination Period**

Weighting: **40%**

Formal invigilated examination testing the learning outcomes of the unit. Students are advised that it is Macquarie University policy not to set early examinations for individuals or groups of students. All students are expected to ensure that they are available until the end of the teaching semester, i.e. the final day of the official examination period.

On successful completion you will be able to:

- Use appropriate Excel tools to prepare data for analysis.
- Organise and summarise data graphically and numerically.
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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

Classes

Students should enrol in the following classes each day:

- 1 x 90-minute lecture beginning in **Day 1**
- 1 x 90-minute workshop beginning in **Day 2**

The timetable for classes can be found on the University website at: https://publish.mq.edu.au

Enrolment can be managed using eStudent at: https://students.mq.edu.au/support/technology/systems/estudent

Method of Communication

We will communicate with you via your university email or through announcements on iLearn. Instructions for seeking assistance can be located on the STAT1250 iLearn page in a dedicated section.

COVID Information

For the latest information on the University's response to COVID-19, please refer to the Coronavirus infection page on the Macquarie website: https://www.mq.edu.au/about/coronavirus-faqs. Remember to check this page regularly in case the information and requirements change during the semester. If there are any changes to this unit in relation to COVID, these will be communicated via iLearn.

Recommended Textbooks

The following is the set text for this unit and will be referred to in daily readings:

- *Business Analytics and Statistics*, (Black et al., n.d.). (required)

- *Basic Business Statistics*, (Berenson et al., n.d.). (optional)

Technology Used and Required

All unit material is delivered through iLearn. The link may be found at http://ilearn.mq.edu.au

Unit Schedule

Day	Lecture Topic
1	Introduction to data, analytics, and Excel
2	Summarising data - Numerical and Graphical Summaries, including Charts in Excel
3	Conditional Formatting, Custom Formats and Sparklines for Visualisations
4	Named Ranges, Tables, and Slicers
5	Conditional Logic and Lookup Functions
6	PivotTables and PivotCharts
7	Data validation, Cleaning, and Preparation
8	Simple Linear Regression I
9	Simple Linear Regression II
10	Multiple Linear Regression
11	Specialised Charts
12	Dashboards
13	Revision Day

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 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/

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/.

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.

Changes from Previous Offering

No changes from Session 2, 2024.

At the Faculty of Science and Engineering (FSE), we value student feedback to be able to improve the way we offer our units continually. As such, we encourage students to provide constructive feedback via student surveys, to the teaching staff directly, or via the FSE Student Experience & Feedback link on the iLearn page.

Unit information based on version 2024.03 of the Handbook