

MGMT11169 *Business Analytics*

Term 1 - 2026

Profile information current as at 16/03/2026 12:15 am

All details in this unit profile for MGMT11169 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

General Information

Overview

With today's digitisation and technology development, many organisations can collect and consolidate tremendous amounts of data and store them in databases and data warehouses with ease. In business analytics, you will use a variety of computational techniques and/or methods to evaluate and analyse huge sources of data in real time for trends, patterns, classification, relationship, and other useful information. You will learn and examine data sets for statistical inference, and conduct quantitative analysis, predictive modelling, regression, data mining, and optimisation. This is a practical based core unit and will provide you with foundation knowledge to contribute to the use of various data analytics for problem solving.

Details

Career Level: *Undergraduate*

Unit Level: *Level 1*

Credit Points: 6

Student Contribution Band: *10*

Fraction of Full-Time Student Load: *0.125*

Pre-requisites or Co-requisites

STAT11048 Essential Statistics is an anti-requisite for this unit MGMT11169 Business Analytics. Students who completed STAT11048 Essential Statistics should not enroll in this unit MGMT11169 Business Analytics.

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

Offerings For Term 1 - 2026

- Brisbane
- Melbourne
- Online
- Rockhampton
- Sydney

Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

Website

[This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.](#)

Class and Assessment Overview

Recommended Student Time Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

Class Timetable

Regional Campuses

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

Metropolitan Campuses

Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

1. Presentation

Weighting: 40%

2. Report

Weighting: 60%

Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the [University's Grades and Results Policy](#) for more details of interim results and final grades.

CQUniversity Policies

All University policies are available on the [CQUniversity Policy site](#).

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the [CQUniversity Policy site](#).

Previous Student Feedback

Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

Feedback from SUTE

Feedback

The pre-recorded lectures were consistently well organized and easy to understand. I learnt a lot of valuable lessons in Excel and data analytics. The assessments were also interesting and relevant, suitable for first year students

Recommendation

The learning resources will be maintained and continuously updated if necessary to meet students' expectations.

Feedback from SUTE

Feedback

Using an Excel spreadsheet for complex data analytics with some maths might be difficult for students who have never worked with this software before and need more Excel practical examples.

Recommendation

The weekly lesson plans will include additional Excel spreadsheet exercises to support students learn how to use Excel for complex data analysis.

Unit Learning Outcomes

On successful completion of this unit, you will be able to:

1. Analyse and reflect on key concepts of business analytics
2. Apply quantitative tools and techniques to analytically identify, examine, investigate and propose solutions to business problems
3. Synthesise data from a variety of sources and develop models to address practical problems in industry.

Alignment of Learning Outcomes, Assessment and Graduate Attributes

— N/A Level
  Introductory Level
  Intermediate Level
  Graduate Level
  Professional Level
  Advanced Level

Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes		
	1	2	3
1 - Presentation - 40%	•	•	•
2 - Report - 60%	•	•	•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes		
	1	2	3
1 - Communication	•	•	•
2 - Problem Solving		•	•
3 - Critical Thinking	•	•	•
4 - Information Literacy	•		
5 - Team Work			
6 - Information Technology Competence	•	•	•
7 - Cross Cultural Competence			
8 - Ethical practice			•
9 - Social Innovation			
10 - First Nations Knowledges			
11 - Aboriginal and Torres Strait Islander Cultures			

Textbooks and Resources

Textbooks

MGMT11169

Prescribed

Business Analytics

5th edition (International) (2024)

Authors: Jeffrey D. Camm, James J. Cochran, Michael J. Fry, Jeffrey W. Ohlmann

Cengage Learning

Boston, MA, US

ISBN: 9798214050294

Binding: Paperback

[View textbooks at the CQUniversity Bookshop](#)

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Excel spreadsheet software

Referencing Style

All submissions for this unit must use the referencing style: [American Psychological Association 7th Edition \(APA 7th edition\)](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Swee Kuik Unit Coordinator

s.kuik@cqu.edu.au

Schedule

Week 0 - 09 Mar 2026

Module/Topic	Chapter	Events and Submissions/Topic
Welcome Message and Excel Fundamentals	Welcome to Business analysis and decision making; and Importance of using Excel Spreadsheet for Analytics	Details of Moodle site and resources available. Expectations of student engagement with the unit. Overview of the Assessment Items.

Week 1 - 16 Mar 2026

Module/Topic	Chapter	Events and Submissions/Topic
Descriptive Statistics	Data types and statistics; and Lecture notes and material are available in Moodle.	

Week 2 - 23 Mar 2026

Module/Topic	Chapter	Events and Submissions/Topic
Data Visualisation	Charts and data visualisation; and Lecture notes and material are available in Moodle.	

Week 3 - 30 Mar 2026

Module/Topic	Chapter	Events and Submissions/Topic

Data Interpretation and Strategies	Importance of Data Insights and Communication	
Week 4 - 06 Apr 2026		
Module/Topic	Chapter	Events and Submissions/Topic
Modelling Uncertainty and Probability	Probability and modelling uncertainty and Lecture notes and material are available in Moodle.	Assessment 1 Oral Assessment Due Date: 10 April 2026, Friday, 11:45 pm AEST
Week 5 - 13 Apr 2026		
Module/Topic	Chapter	Events and Submissions/Topic
Continuous Probability Distributions	Modelling real world phenomena using continuous probability distributions and Lecture notes and material are available in Moodle.	
Vacation Week - 20 Apr 2026		
Module/Topic	Chapter	Events and Submissions/Topic
No classes will be held during this week.	No classes will be held during this week.	
Week 6 - 27 Apr 2026		
Module/Topic	Chapter	Events and Submissions/Topic
Discrete Probability Distributions	Modelling real world phenomena using discrete probability distributions and Lecture notes and material are available in Moodle.	
Week 7 - 04 May 2026		
Module/Topic	Chapter	Events and Submissions/Topic
Statistical Inference and Sampling	Understanding of point Estimation and sampling process and Lecture notes and material are available in Moodle.	
Week 8 - 11 May 2026		
Module/Topic	Chapter	Events and Submissions/Topic
Hypothesis Testing	Understanding of types of errors and hypothesis testing and Lecture notes and material are available in Moodle.	
Week 9 - 18 May 2026		
Module/Topic	Chapter	Events and Submissions/Topic
Modelling of Linear Regression	Regression modelling and relationships; and Lecture notes and material are available in Moodle.	
Week 10 - 25 May 2026		
Module/Topic	Chapter	Events and Submissions/Topic
Model Reporting and Analysis	Understanding of model analysis and Lecture notes and material are available in Moodle.	Assessment 2 Business Analytics Report Due Date: 02 Jun 2026, Tuesday 11:45pm AEST
Review/Exam Week - 01 Jun 2026		
Module/Topic	Chapter	Events and Submissions/Topic
Exam Week - 08 Jun 2026		
Module/Topic	Chapter	Events and Submissions/Topic
Vacation/Exam Week - 15 Jun 2026		
Module/Topic	Chapter	Events and Submissions/Topic

Assessment Tasks

1 Oral Assessment

Assessment Type
Presentation

Task Description

The assessment evaluates students' proficiency in applying fundamental data analytics techniques using Excel spreadsheet. A case application and numerical data file are available on the unit website.

You are required to prepare an 8-minute presentation on a data analytics case application. You must demonstrate your ability to analyse a dataset, extract meaningful insights, and present your findings in a clear and engaging manner. This assessment aims to evaluate your technical understanding of data analytics, your ability to interpret and visualize data, and your presentation skills.

Important Note:

Assessment 1 requires students to adhere to the guidelines on the use of artificial intelligence tools as specified in the Artificial Intelligence Assessment Scale (AIAS). Any misuse or lack of disclosure regarding the use of AI tools will be considered a breach of academic integrity.

Assessment 1 must be completed at AIAS Level 1. You must not use AI at any point to complete the assessment task.

Assessment Due Date

Due Date: 10 April 2026, 11:45 PM AEST and further information will be provided on Moodle in Week 2.

Return Date to Students

Date: 24 April 2026 Grades and feedback comments are released on the unit Moodle page.

Weighting

40%

Assessment Criteria

Assessment 1 will be assessed according to the following criteria.

- Excel Spreadsheet: Demonstrates proficiency in preparing and analysing data with accuracy to support data-driven decision-making: 15%
- Excel Spreadsheet: Exhibits competence in using relevant software tools and applications: 15%
- PowerPoint Slides: Presents ideas in a clear, logical, and well-structured manner: 15%
- Demonstrates accuracy and analytical reasoning in solving quantitative problems: 20%
- Demonstrates understanding of model content with clear integration of key concepts and recommendations.: 20%
- Exhibits communication and presentation skills with clear, confident, and engaging speech: 15%

Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

Submission

Online

Learning Outcomes Assessed

- Analyse and reflect on key concepts of business analytics
- Apply quantitative tools and techniques to analytically identify, examine, investigate and propose solutions to business problems
- Synthesise data from a variety of sources and develop models to address practical problems in industry.

2 Business Analytics Report

Assessment Type
Report

Task Description

This assessment evaluates students' mastery of data analytics techniques and business problem solving skills, as applied through the utilization of Excel spreadsheet software. Students are required to complete an in-depth analysis of a business application and scenario, accompanied by a numerical data file (accessible on the unit website), and subsequently write a clear and concise 1600-word data analytics report. Submissions must include a concise data analytics report, an Excel spreadsheet and/or calculations, and a cover sheet with the following information: unit name and number, assessment number, students' names, and student identification numbers

Important Note:

Assessment 2 requires students to adhere to the guidelines on the use of artificial intelligence tools as specified in the Artificial Intelligence Assessment Scale (AIAS). Any misuse or lack of disclosure regarding the use of AI tools will be considered a breach of academic integrity.

Assessment 2 must be completed at AIAS Level 1. You must not use AI at any point to complete the assessment task.

Assessment Due Date

Due Date: 02 Jun 2026, 11:45 PM AEST and further information will be provided on Moodle in Week 7.

Return Date to Students

Assessment feedback and grades are to be released upon certification of grades (refer to assessment policy).

Weighting

60%

Assessment Criteria

Assessment 2 report analysis, recommendations and presentation will be assessed according to the following criteria.

- Excel Spreadsheet: Demonstrated understanding of data preparation (e.g., missing values, imputation, removal etc.): 5%
- Excel Spreadsheet: Accurately develop model analysis, e.g. linear regression, hypotheses, correlation, statistical inference, predictive analysis etc.: 30%
- * Demonstrated a clear understanding of the question posed by conducting a thorough literature review: 15%
- Able to articulate and provide findings, insights and limitations of the model evaluation discussed: 20%
- Provide appropriate and well-structured, concise and clear expression of evaluation and analysis arguments: 10%
- Provide a clear flow of thought throughout the report, evidenced by succinct summary, intro, conclusion: 10%
- Adherence to APA reference format and in-text citation: 5%
- Clarity of written expression, grammar, spelling: 5%

Important Note:

- * At least 8 high-quality journal articles published within the last decade should be used.
- Submissions must include an Excel spreadsheet file by showing clear Excel formulas used and calculations, data visualisations, and data analytics.
- Submissions must be in Business Report format using Word with 1.5 line spacing and Times Roman 12-point font.
- Report length 1600-words (+/- 5%). However, the summary, table of contents, reference list and appendices are excluded from a report's word count.
- Late submissions will also be penalised at the rate of "five percent of the total marks available for the assessment each calendar day (full or part) it is overdue" (Policy: Assessment of Coursework section 3.2.4).

Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

Submission

Online

Learning Outcomes Assessed

- Analyse and reflect on key concepts of business analytics
- Apply quantitative tools and techniques to analytically identify, examine, investigate and propose solutions to business problems
- Synthesise data from a variety of sources and develop models to address practical problems in industry.

Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [Student Academic Integrity Policy and Procedure](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

Where can I get assistance?

For academic advice and guidance, the [Academic Learning Centre \(ALC\)](#) can support you in becoming confident in completing assessments with integrity and of high standard.

What can you do to act with integrity?



Be Honest

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



Produce Original Work

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem