



# MGMT20130 Operations Management and Business Analytics

## Term 1 - 2023

Profile information current as at 24/04/2024 06:37 pm

All details in this unit profile for MGMT20130 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

This is an advanced unit. It builds on other units in the Master of Business Administration including ACCT20077 Accounting for Management Decision Making and ECON20040 Economics and Finance for Business. Operations management and business analytics explores the contemporary principles and practices involved in the management of both service and manufacturing operations. Taking a strategic approach to operations, you will examine fundamental concepts such as process planning, design, control and Six Sigma continuous improvement; quality management and lean thinking; the role of the supply chain in modern operations; capacity and location principles as well as the use of project-based activities in an operational environment. You will utilise data from a variety of organisational sources including financial, economic and market information and develop mathematical models as part of the analytical process leading to more effective operational decisions. The unit also provides you with the opportunity to engage in independent research using evidence-based approaches to identify workplace issues and recommend viable solutions that enhance organisational effectiveness.

### Details

Career Level: *Postgraduate*

Unit Level: *Level 9*

Credit Points: 6

Student Contribution Band: 10

Fraction of Full-Time Student Load: 0.125

### Pre-requisites or Co-requisites

There are no requisites for this unit.

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 - 2023

- Brisbane
- Melbourne
- Online
- 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 Postgraduate 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. **Written Assessment**

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 Have your say

**Feedback**

Amazing teaching experience!

**Recommendation**

Continue using interactive and innovative learning materials for lectures, workshops and assessments.

#### Feedback from Have your say

**Feedback**

lecture and workshop being placed on the same day did not allow me time to review the lecture material prior to my workshop. The workshop needed to incorporate a summary of the lecture prior to moving into the exercises as it became somewhat confusing at times to complete workshop exercises if you had not yet become orientated with the lecture content.

**Recommendation**

For the next term/s, the lecture and workshops should have a gap of at least one day so that the student can get benefit from the key theoretical concepts to be applied in the following workshop.

#### Feedback from Have your say

**Feedback**

The unit delved deeper into Operations Management and provided beneficial practical insights that I'll be applying in my organisation

**Recommendation**

Continue incorporating practical insights into the lecture contents and workshops.

#### Feedback from Student feedback and discipline discussion.

**Feedback**

The assessment tasks must be updated and the assessment marking rubrics must be revisited to better align with the unit learning outcomes AQF levels.

**Recommendation**

It is recommended that the assessment tasks are updated and the assessment marking rubrics are revisited to better align with the unit learning outcomes AQF levels.

## Unit Learning Outcomes

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

1. Develop an advanced and integrated understanding of operations managements and business analytics
2. Critically analyse and reflect on key principles of operations analytics
3. Critically apply a complex systems approach to analytically identify, analyse and investigate the management of operational functions
4. Synthesise complex data from a variety of sources and develop mathematical models as part of the analytical process to identify and propose solutions to contentious workplace business problems
5. Interpret and successfully apply knowledge related to recent development of operations management in service and manufacturing industries.



## Textbooks and Resources

### Textbooks

MGMT20130

#### Prescribed

##### **Operations and Supply Chain Management for MBAs**

Edition: 7th (2020)

Authors: Jack R. Meredith and Scott M. Shafer

John Wiley & Sons Inc

New York , N.J , USA

ISBN: 978-1-119-23953-6

Binding: Paperback

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#### Prescribed

##### **Practical Management Science**

6th Edition (2017)

Authors: Wayne L. Winston and Christian S. Albright

Cengage Learning Inc

Boston , MA , United State of America

ISBN: 9781337406659

Binding: eBook

#### Additional Textbook Information

Textbooks can be accessed online at the CQUniversity Library website. If you prefer your own copy, you can purchase either paper or eBook versions at the CQUni Bookshop here: <http://bookshop.cqu.edu.au> (search on the Unit code)

[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 2016 with Add-in Solver

## 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

**Imran Ali** Unit Coordinator

[i.ali@cqu.edu.au](mailto:i.ali@cqu.edu.au)

## Schedule

### Week 1 - 06 Mar 2023

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to Operations Management	Lecture notes and materials are available in Moodle.	

<b>Week 2 - 13 Mar 2023</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
Process Planning and Design	Lecture notes and materials are available in Moodle.	
<b>Week 3 - 20 Mar 2023</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
Process Monitoring and Control	Lecture notes and materials are available in Moodle.	
<b>Week 4 - 27 Mar 2023</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
Managing the Supply Chain and Inventory	Lecture notes and materials are available in Moodle.	
<b>Week 5 - 03 Apr 2023</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
Forecasting, Capacity Planning and Facility Location	Lecture notes and materials are available in Moodle.	
<b>Vacation Week - 10 Apr 2023</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
<b>Week 6 - 17 Apr 2023</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
Introduction to Business Analytics	Lecture notes and materials are available in Moodle.	<b>Assessment # 1 Business Report</b> Due: Week 6 Monday (17 Apr 2023) 11:45 pm AEST
<b>Week 7 - 24 Apr 2023</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
Optimisation Modelling	Lecture notes and materials are available in Moodle.	
<b>Week 8 - 01 May 2023</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
Modelling and Sensitivity Analysis	Lecture notes and materials are available in Moodle.	
<b>Week 9 - 08 May 2023</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
Network Models and Decision Analytics	Lecture notes and materials are available in Moodle.	
<b>Week 10 - 15 May 2023</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
Quality Management	Lecture notes and materials are available in Moodle.	
<b>Week 11 - 22 May 2023</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
Just-in-time and Lean Systems	Lecture notes and materials are available in Moodle.	
<b>Week 12 - 29 May 2023</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
Project Management	Lecture notes and materials are available in Moodle.	<b>Assessment # 2 Business Report</b> Due: Week 12 Monday (29 May 2023) 11:45 pm AEST

## Review/Exam Week - 05 Jun 2023

Module/Topic	Chapter	Events and Submissions/Topic
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## Exam Week - 12 Jun 2023

Module/Topic	Chapter	Events and Submissions/Topic
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## Assessment Tasks

### 1 Assessment # 1 Business Report

#### Assessment Type

Written Assessment

#### Task Description

The assessment is designed for students to apply operations management principles, theories and models such as value chain analysis. The assessment involves writing a 2500-word business report responding to assessment criteria related to specific topics and/or case materials. Submit your 2500-word business report through Turnitin, and Moodle, with a cover sheet showing unit name and number, assessment number, your name and student number. Assessment details and guidelines will be provided on the unit website.

#### Assessment Due Date

Week 6 Monday (17 Apr 2023) 11:45 pm AEST

A late penalty @ 5% per day applies

#### Return Date to Students

Week 8 Friday (5 May 2023)

The feedback and grade will be released in Moodle

#### Weighting

40%

#### Assessment Criteria

Your report's analysis, recommendations and presentation will be assessed according to the following criteria:

- Demonstrated understanding of operations management frameworks and/or models that are related to the questions posed: 20%
- Able to evaluate and articulate practical implications, feasibility, justification and limitation: 20%
- Articulate appropriate and well-structured, concise and clear expression of operations management arguments in terms of theoretical and practical elements: 20%
- Provide a clear flow of thought throughout the business report, evidenced by succinct Executive Summary, Introduction, and Conclusion: 10%
- Critical evaluation and integration of relevant academic and literature to provide theoretical and practical aspects. Insights from a minimum of 15 academic journal articles must be incorporated in your critical analysis: 20%
- Adherence to APA Reference format: 5%
- Clarity of written expression, grammar, and spelling: 5%
- Report length 2500-words (penalty of 1% per 100-words that exceed the maximum 2750-words)
- Submissions must be in Business Report format using Word with 1.5 line spacing and Times Roman 12-point font.
- 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

#### Submission Instructions

Submit the assessment in Moodle

#### Learning Outcomes Assessed

- Develop an advanced and integrated understanding of operations managements and business analytics
- Critically analyse and reflect on key principles of operations analytics

- Critically apply a complex systems approach to analytically identify, analyse and investigate the management of operational functions
- Synthesise complex data from a variety of sources and develop mathematical models as part of the analytical process to identify and propose solutions to contentious workplace business problems
- Interpret and successfully apply knowledge related to recent development of operations management in service and manufacturing industries.

### **Graduate Attributes**

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Research
- Self-management
- Ethical and Professional Responsibility

## **2 Assessment # 2 Business Report**

### **Assessment Type**

Report

### **Task Description**

The assessment is designed for students to apply operations management principles and business analytics. The assessment involves writing the business report and responding to assessment questions related to specific topics and/or case materials in operations management. Submit your 3500-word Business Report and your quantitative outcomes based on the developed Optimisation Models using Excel Spreadsheets through Turnitin, and Moodle, with a cover sheet showing unit name and number, assessment number, your name and student number. Assessment details and guidelines will be provided on the unit website.

### **Assessment Due Date**

Week 12 Monday (29 May 2023) 11:45 pm AEST

A late penalty @ 5% per day applies

### **Return Date to Students**

The final results will be released after certification of grades

### **Weighting**

60%

### **Assessment Criteria**

Your report's analysis, recommendations and presentation will be assessed according to the following criteria.

- Demonstrated understanding of operations management frameworks and/or models that are related to the questions posed: 20%
- Accurately suggest and develop the model for detailed analysis in relation to the case applications: 10%
- Able to articulate and evaluate scenario modelling to provide insights and limitations based on quantitative outcomes: 10%
- Provide appropriate and well-structured, concise and clear expression of operations management arguments in terms of theoretical and practical elements 15%
- Provide a clear flow of thought throughout the business report, evidenced by succinct Executive Summary, Introduction, and Conclusion: 15%
- Critical evaluation and integration of relevant academic and literature to provide theoretical and practical aspects. Insights from a minimum of 15 academic journal articles must be incorporated in your critical analysis: 20%
- Adherence to APA Reference format: 5%
- Clarity of written expression, grammar, and spelling: 5%
- Report length 3500 words. (penalty of 1% per 100-words that exceed the maximum 4000-words)
- Submissions must be in Business Report format using Word with 1.5 line spacing and Times Roman 12-point font.
- 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



**Submission Instructions**

Submit the assessment in Moodle

**Learning Outcomes Assessed**

- Develop an advanced and integrated understanding of operations managements and business analytics
- Critically analyse and reflect on key principles of operations analytics
- Critically apply a complex systems approach to analytically identify, analyse and investigate the management of operational functions
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**Graduate Attributes**

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Research
- Self-management
- Ethical and Professional Responsibility
- Leadership

## 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