



# COMP8440

## Automated Decision Making in Business

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

*School of Computing*

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#### Disclaimer

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## General Information

Unit convenor and teaching staff

Xiaohan Yu

[xiaohan.yu@mq.edu.au](mailto:xiaohan.yu@mq.edu.au)

Lecturer

Neda Sakhaee

[neda.sakhaee@mq.edu.au](mailto:neda.sakhaee@mq.edu.au)

Credit points

10

Prerequisites

COMP6200

Corequisites

Co-badged status

Unit description

Automation of decision making has been part of AI for a long time. It is becoming more important with the entrenched position of AI in modern life. In this unit students will be exposed to historical, foundational, cognitive, socio-cultural as well as implementational aspects of automatic decision making. Students will evaluate the kinds of decisions that are amenable to automation, the sources of data that are required, and the kinds of systems that can be built to complete the task.

Learning in this unit enhances student understanding of global challenges identified by the United Nations Sustainable Development Goals ([UNSDGs](#)) Industry, Innovation and Infrastructure.

## 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 tangible and intangible resources to understand requirements needed for automated decision making in business

**ULO2:** Demonstrate effective communication of AI generated decisions with various

stakeholders in a business

**ULO3:** Critically assess the positive and negative socioeconomic consequences and implications of automated decision making in an industry context

**ULO4:** Evaluate alternate AI technologies for use to support decision making in business.

## General Assessment Information

### Release

Assessment 1 - System Evaluation: To be released no later than 06/03/2026

Assessment 2 - Business Rules at work: To be released no later than 02/04/2026

Assessment 3 - Reflective Report: To be released no later than 01/05/2026

### Requirements to Pass this Unit

To pass this unit you must:

- Achieve a total mark equal to or greater than 50%.

### Late Submission Policy

- **5% penalty per day:** If you submit your assessment late, **5% of the total possible marks** will be deducted for each day (including weekends), up to 7 days.
  - *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 1 day late, you will lose 1.5 marks and receive **25.5/30**.
- **After 7 days:** Submissions more than 7 days late will receive a **mark of 0**.
- **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 [HERE](#)

Assessment 1 – YES, Late Submission Policy applies.

Assessment 2 – YES, Late Submission Policy applies.

Assessment 3 – YES, Late Submission Policy applies.

## Special Consideration

The Special Consideration Policy aims to support students who have been impacted by short-term circumstances or events that are serious, unavoidable and significantly disruptive, and which may affect their performance in assessment. If you experience circumstances or events that affect your ability to complete the assessments in this unit on time, please inform the convenor and submit a Special Consideration request through <http://connect.mq.edu.au/>.

## Generative AI

Assessment 1 in this unit is classified as **Observed**. This means students complete the assessment in a supervised environment, where the use of Generative AI tools is controlled and not permitted unless explicitly stated in the assessment instructions.

Assessments 2 and 3 are classified as **AI Open**. This means students may use Generative AI tools to support their work when completing these assessments in their own time.

## Assessment Tasks

| Name                                   | Weighting | Hurdle | Due        | Groupwork/Individual | Short Extension | AI Approach |
|----------------------------------------|-----------|--------|------------|----------------------|-----------------|-------------|
| <a href="#">System Evaluation</a>      | 35%       | No     | 28/08/2026 | Individual           | No              | Observed    |
| <a href="#">Business Rules at work</a> | 35%       | No     | 09/10/2026 | Individual           | Yes             | Open        |
| <a href="#">Reflective Report</a>      | 30%       | No     | 30/10/2026 | Individual           | Yes             | Open        |

## System Evaluation

Assessment Type <sup>1</sup>: Experiential task

Indicative Time on Task <sup>2</sup>: 27 hours

Due: **28/08/2026**

Weighting: **35%**

Groupwork/Individual: Individual

Short extension <sup>3</sup>: No

AI Approach: Observed

Evaluate an existing product or system for a given task using available data.

On successful completion you will be able to:

- Use tangible and intangible resources to understand requirements needed for automated decision making in business
- Critically assess the positive and negative socioeconomic consequences and implications of automated decision making in an industry context
- Evaluate alternate AI technologies for use to support decision making in business.

## Business Rules at work

Assessment Type <sup>1</sup>: Portfolio

Indicative Time on Task <sup>2</sup>: 27 hours

Due: **09/10/2026**

Weighting: **35%**

Groupwork/Individual: Individual

Short extension <sup>3</sup>: Yes

AI Approach: Open

Design and implement a set of business rules using an open-source rules engine, focusing on how these rules can be applied to automate decision-making processes in a business.

On successful completion you will be able to:

- Use tangible and intangible resources to understand requirements needed for automated decision making in business
- Demonstrate effective communication of AI generated decisions with various stakeholders in a business
- Evaluate alternate AI technologies for use to support decision making in business.

## Reflective Report

Assessment Type <sup>1</sup>: Reflection task

Indicative Time on Task <sup>2</sup>: 21 hours

Due: **30/10/2026**

Weighting: **30%**

Groupwork/Individual: Individual

Short extension <sup>3</sup>: Yes

AI Approach: Open

A reflective report on the student's experience in the unit and their vision of the impact of automated decision making on industry practice.

On successful completion you will be able to:

- Demonstrate effective communication of AI generated decisions with various stakeholders in a business
  - Critically assess the positive and negative socioeconomic consequences and implications of automated decision making in an industry context
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<sup>1</sup> 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.

<sup>2</sup> Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation.

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

## Delivery and Resources

### Week 1 Classes

In week 1, we will have on-site lecture. Practical will start from week 2.

### Methods of Communication

We will communicate with you via your university email and through announcements on iLearn. Queries to convenors can either be placed on the iLearn discussion board or sent to the unit convenor via the contact email on 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](https://connect.mq.edu.au) or if you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto: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.

## Changes from Previous Offering

We value student feedback to be able to continually improve the way we offer our units. 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 in the iLearn page.

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Unit information based on version 2026.03 of the [Handbook](#)