Course Title:	**Artificial Intelligence**
Course Code:	**COMP717**
Descriptor Start Date:	**28/02/2025**

POINTS:	**15.00**
LEVEL:	**7**
PREREQUISITE/S:	**COMP500 or equivalent programming course; 60 points at Level 6**
COREQUISITE/S:	**None**
RESTRICTION/S:	**None**

LEARNING HOURS

Hours may include lectures, tutorials, online forums, laboratories. Refer to your timetable and course information in Canvas for detailed information.

Total learning hours: 150

PRESCRIPTOR

The aim of this paper is to understand the nature of artificial intelligence and the latest developments in artificial intelligence techniques.

LEARNING OUTCOMES

1. Demonstrate detailed understanding of AI techniques.
2. Critically appraise the strengths and limitations of various AI techniques.
3. Apply appropriate AI techniques for solving a range of problems.
4. Discuss and evaluate the efficacy of AI techniques in relation to a variety of problem domains.
5. Demonstrate understanding of current and future trends in artificial intelligence.
6. Discuss and understand the ethical implications and consequences of AI.

CONTENT

The paper covers the general nature of artificial intelligence and various methods and techniques for solving problems. An indicative list of contents is provided below.

Introduction to AI
Game techniques
Rational decision making
Learning agents and methods
Logical agents and methods
Knowledge representation
Foundation models
AI Ethics and the future for AI

LEARNING & TEACHING STRATEGIES

1. Lectures – lectures will introduce and emphasize key concepts for each of the topics listed in the syllabus.
2. Each two-hour tutorial/laboratory workshop will have two parts: (a) Tutorials/laboratory workshops will introduce exercises to ensure that key concepts introduced in lectures are understood and methods applied. (b) Some laboratory workshops will focus on the assignments to help students prepare their assignments.

ASSESSMENT PLAN

Assessment Event	Weighting %	Learning Outcomes
Assignment 1 (Problem Solving and Report)	35.00	1,2,3,4
Assignment 2 (Problem Solving and Report)	35.00	1,2,3,4
Final Exam	30.00	3,4,5,6

Grade Map **MAP1**

A+ A A- Pass with Distinction
B+ B B- Pass with Merit
C+ C C- Pass
D Fail

Overall requirement/s to pass the course:

To pass this course, students must attempt all summative assessments and achieve a minimum overall grade of C-.

LEARNING RESOURCES

Recommendations for further reading on various AI topics will be provided at the end of lecture notes and workshops.

For further information, contact: Te Ara Auaha - Faculty of Design & Creative Technologies

Principal Programme:	**AK3697, Bachelor of Computer and Information Sciences**
Related Programme/s:	**AK1271** **AK1301** **AK1302** **AK2040** **AK3001** **AK3698** **AK3756** **HA1042** **HA1043** **ICE1** **INEXCH1** **SABRD1**