Course Title:	**Programming Languages**
Course Code:	**COMP712**
Descriptor Start Date:	**31/01/2025**
Descriptor End Date:	**31/12/2025**

POINTS:	**15.00**
LEVEL:	**7**
PREREQUISITE/S:	**COMP603 or ENSE502**
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

This course introduces the principles underlying the design and implementation of modern programming languages that belong to programming paradigms such as imperative, functional, logic and object-oriented programming.

LEARNING OUTCOMES

1. Explain the role and principal aspects of programming languages.

2. Describe the steps and algorithms used by language translators.

3. Implement parts of the program translation process.

4. Compare and contrast compiled and interpreted execution models, and the role of intermediate languages.

5. Work with different programming paradigms and evaluate their differences, including procedural, object-oriented, functional, and logic languages

CONTENT

This course covers the following topics:
- Foundations of programming languages
- Principles of compilers and interpreters
- Programming paradigms

Disclaimer: Course descriptors may be amended between teaching periods/semesters

LEARNING & TEACHING STRATEGIES

Will include:
- Lectures
- Computer laboratory exercises and tutorials
- Assignments
- Student self-study

ASSESSMENT PLAN

Assessment Event	Weighting %	Learning Outcomes
Porfolio of Functional and Logic Programs	50.00	1,5
Interpreter/compiler project	50.00	2,3,4

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 achieve a minimum overall grade of C-.

LEARNING RESOURCES

A recommended reading list will be provided.

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

Principal Programme:	**DJ1041, Bachelor of Science**
Related Programme/s:	**AK3698**
	AK1041
	AK3001
	AK3003
	AK3756
	AK3706

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