Course Title:	**Blockchain and Cryptocurrency Technology**
Course Code:	**COMP726**
Descriptor Start Date:	**28/02/2025**
POINTS:	**15.00**
LEVEL:	**7**
PREREQUISITE/S:	**None**
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

Explores advanced capabilities in an applied approach to the development of blockchain applications. Topics include consensus methods, applied cryptography, peer-to-peer distributed network architectures, relevant scaling solutions and privacy techniques.

LEARNING OUTCOMES

1. Explain applications that use existing blockchain and distributed network architectures
2. Compare and analyse consensus models for appropriate application
3. Critically analyse a use case for blockchain development
4. Demonstrate the ability to build a distributed software system that incorporates blockchains and related technologies

CONTENT

- Classification of blockchains and their applications
- Current blockchain architectures and development tooling
- Applications of domain-specific cryptographic methods
- Blockchain consensus methods
- Distributed networks: mining, forks, difficulty
- Relevant security attacks and mitigation
- User and data privacy

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

LEARNING & TEACHING STRATEGIES

Content delivered in lectures and tutorials. Additional content and resources delivered digitally.

ASSESSMENT PLAN

Assessment Event	Weighting %	Learning Outcomes
Technical Assessment Portfolio	25.00	1,2
Project Portfolio	60.00	1,2,3
Project Presentation	15.00	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 attempt all summative assessments and achieve a minimum overall grade of C-.

LEARNING RESOURCES

Readings will be supplied.

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

Principal Programme:	**AK3697, Bachelor of Computer and Information Sciences**
Related Programme/s:	**AK3698** **AK3756** **ICE1** **INEXCH1** **SABRD1**

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