

Course Title:	Mathematics for Computing
Course Code:	MATH503
Descriptor Start Date:	31/01/2025
POINTS:	15.00
LEVEL:	5
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

Provides an introduction to the mathematical and statistical concepts required for an understanding of the analysis of data and applications in computing. Topics include sets, functions, relations, matrix operations, probability, probability distributions and statistical measures.

## LEARNING OUTCOMES

1. Define matrices and perform matrix operations.
2. Evaluate functions and relations.
3. Use sets to solve problems involving logical thinking.
4. Calculate probabilities involving counting and identify basic probability distributions.
5. Compute and interpret basic statistical measures.

## CONTENT

- Functions, relations and sets
- Matrices
- Matrix operations
- Basic probability
- Probability distributions
- Statistical measures

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

## LEARNING & TEACHING STRATEGIES

Lectures will be used to present the material, with computer labs to support individual and practical group exercises.

## ASSESSMENT PLAN

Assessment Event	Weighting %	Learning Outcomes
Portfolio	30.00	1,2,3,4,5
Assignment	25.00	1,2,3,4,5
Final Controlled Assessment	45.00	1,2,3,4,5

### 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

Recommended reading lists, including library resources, will be provided.

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

**Principal Programme:** AK3697, Bachelor of Computer and Information Sciences

**Related Programme/s:** AK2006  
AK3003  
AK3698  
AK3756  
HA1042  
HA1043  
ICE1  
INEXCH1  
SABRD1

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