

COURSE DETAIL

ALGEBRA AND APPLICATIONS

Country

New Zealand

Host Institution

University of Auckland

Program(s)

University of Auckland

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

138

UCEAP Course Suffix**UCEAP Official Title**

ALGEBRA AND APPLICATIONS

UCEAP Transcript Title

ALGEBRA&APPLICATNS

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course explores applications of modern algebra, number theory, and combinatorics to information theory, with a focus on cryptography, secret sharing and error-correction. The course covers numbers, complexity, cryptography, groups and elliptic curves, fields, polynomials, secret sharing, and error-correcting codes. Students gain experience using GAP, a system for computational algebra.

Language(s) of Instruction

English

Host Institution Course Number

MATHS 328

Host Institution Course Title

ALGEBRA AND APPLICATIONS

Host Institution Course Details**Host Institution Campus****Host Institution Faculty****Host Institution Degree****Host Institution Department**

Mathematics

Course Last Reviewed

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