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 Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Mathematics

Print