COURSE DETAIL

NUMBER THEORY AND CRYPTOGRAPHY
Country Australia
Host Institution University of Sydney
Program(s) University of Sydney
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Mathematics
UCEAP Course Number 107
UCEAP Course Suffix
UCEAP Official Title NUMBER THEORY AND CRYPTOGRAPHY
UCEAP Transcript Title NUM THEORY&CRYPTOGR
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description
Cryptography is the branch of mathematics that provides the techniques for confidential exchange of information sent via possibly insecure channels. This course introduces the tools that are needed to understand the mathematics underlying the most commonly used modern public key cryptosystems. Topics include the Euclidean Algorithm, Fermat's Little Theorem, the Chinese Remainder Theorem, Möbius Inversion, the RSA Cryptosystem, the Elgamal Cryptosystem, and the Diffie-Hellman Protocol.

Language(s) of Instruction
English

Host Institution Course Number
MATH2088

Host Institution Course Title
NUMBER THEORY AND CRYPTOGRAPHY

Host Institution Course Details
http://www.maths.usyd.edu.au/u/UG/IM/units.html#MATH2068

Host Institution Campus
sydney

Host Institution Faculty

Host Institution Degree

Host Institution Department
Mathematics

Course Last Reviewed
2024-2025

Print