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 Campus

sydney

Host Institution Faculty

Host Institution Degree

Host Institution Department

Mathematics

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