COURSE DETAIL

CRYPTOGRAPHY

Country
Taiwan

Host Institution
National Taiwan University

Program(s)
National Taiwan University

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Electrical Engineering

UCEAP Course Number
160

UCEAP Course Suffix

UCEAP Official Title
CRYPTOGRAPHY

UCEAP Transcript Title
CRYPTOGRAPHY

UCEAP Quarter Units
4.50

UCEAP Semester Units
3.00

Course Description

This course in cryptography introduces techniques used in secure communication, from historical ciphers to modern symmetric and asymmetric encryption schemes. The course begins with a guide through the necessary mathematical foundation for advanced cryptographic studies. The latest developments in computer cryptography, including the Rijndael algorithm chosen for the new Advanced Encryption Standard, the OAEP padding system for RSA and modern stream ciphers are covered. Key encryption, exchange, and digital signatures are also discussed. The course also looks at attacks on insecure cryptosystems and how to prove that a cryptosystem is secure.

Language(s) of Instruction
Chinese

Host Institution Course Number
EE5060

Host Institution Course Title
CRYPTOGRAPHY

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Electrical Engineering

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