COURSE DETAIL

3.00

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**

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 Course Details

https://nol.ntu.edu.tw/nol/coursesearch/print_table.php?course_id=921%20U 2780&c...

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Electrical Engineering

Course Last Reviewed

2022-2023

Print