COURSE DETAIL

COMPUTER ARCHITECTURE
Country Taiwan
Host Institution National Taiwan University
Program(s) National Taiwan University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Computer Science
UCEAP Course Number 127
UCEAP Course Suffix
UCEAP Official Title COMPUTER ARCHITECTURE
UCEAP Transcript Title COMP ARCHITECTURE
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description

This course covers the fundamental concepts of how computers perform at machine and assembly language level. It looks at the design of an instruction set architecture and figures out what makes a Reduced Instruction Set Computer (RISC) differ from a Complex Instruction Set Computer (CISC). The course discusses basic design principles by understanding the components in a computer and the performance of a computer system.

This course provides the required background for students who are interested in designing computer systems, doing serious development of operating system kernels and device drivers, and making better applications of computer systems.

Course prerequisites: A background in Digital Logic, C Language and Assembly Language is required.

Language(s) of Instruction
English

Host Institution Course Number
CSIE3340

Host Institution Course Title
COMPUTER ARCHITECTURE

Host Institution Course Details
https://nol.ntu.edu.tw/nol/coursesearch/print_table.php?course_id=902%2046100&c...

Host Institution Campus

Host Institution Faculty
College of Electrical Engineering and Computer Science

Host Institution Degree

Host Institution Department
Department of Computer Science and Information Engineering

Course Last Reviewed
2024-2025

Print