COURSE DETAIL

INTRODUCTION TO COMPUTER ARCHITECTURE

Country
Korea, South

Host Institution
Korea Advanced Institute of Science and Technology (KAIST)

Program(s)
Korea Advanced Institute of Science and Technology, KAIST

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Electrical Engineering Computer Science

UCEAP Course Number
118

UCEAP Course Suffix

UCEAP Official Title
INTRODUCTION TO COMPUTER ARCHITECTURE

UCEAP Transcript Title
INT COMPUTER ARCHIT

UCEAP Quarter Units
4.50

UCEAP Semester Units
3.00

Course Description

This course introduces the basic principles and hardware structures of a modern programmable computer. Students will explore computer architecture as the science and art of selecting and interconnecting hardware components to create a computer that meets functional, performance and cost goals.

Students will learn how to design the control and datapath for a pipelined RISC processor and how to design fast memory and storage systems. The principles presented in lecture are reinforced in the laboratory through design and simulation of a register transfer (RT) implementation of a RISC processor pipeline in Verilog.

Language(s) of Instruction
English

Host Institution Course Number
EE312

Host Institution Course Title
INTRODUCTION TO COMPUTER ARCHITECTURE

Host Institution Course Details
https://ee.kaist.ac.kr/en/node/13102/

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed
2024-2025

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