# **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

**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 Campus**

**Host Institution Faculty** 

**Host Institution Degree** 

### Host Institution Department

<u>Print</u>