# **COURSE DETAIL**

### **COMPUTER ORGANIZATION AND ARCHITECTURE**

## **Country**

Mexico

#### **Host Institution**

National Autonomous University of Mexico

## Program(s)

National Autonomous University of Mexico

#### **UCEAP Course Level**

**Upper Division** 

## **UCEAP Subject Area(s)**

**Computer Science** 

### **UCEAP Course Number**

105

#### **UCEAP Course Suffix**

#### **UCEAP Official Title**

COMPUTER ORGANIZATION AND ARCHITECTURE

## **UCEAP Transcript Title**

**COMPUTER ORG&ARCH** 

## **UCEAP Quarter Units**

6.50

### **UCEAP Semester Units**

4.30

### **Course Description**

This course provides an overview of the structure and design of computer systems, emphasizing criteria that inform design decisions with favorable cost-benefit relationships. Topics include: quantitative principles of architecture design; representation of data in digital computers; Boolean algebra; combinational circuits and sequences; design of instruction set architectures; control unit; pipelining; hardware-software relationship; memory hierarchy; input/output and buses; multiprocessor systems; cutting-edge architectures.

## Language(s) of Instruction

Spanish

### **Host Institution Course Number**

1428

#### **Host Institution Course Title**

ORGANIZACIÓN Y ARQUITECTURA DE COMPUTADORAS

### **Host Institution Course Details**

**Host Institution Campus** 

**Host Institution Faculty** 

**Host Institution Degree** 

# **Host Institution Department**

Ciencias de la Computación, Facultad de Ciencias

#### **Course Last Reviewed**

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