

## COURSE DETAIL

### THE FUNDAMENTALS OF COMPUTER PROGRAMMING (PYTHON)

**Country**

China

**Host Institution**

Tsinghua University

**Program(s)**

Tsinghua University

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Computer Science

**UCEAP Course Number**

182

**UCEAP Course Suffix****UCEAP Official Title**

THE FUNDAMENTALS OF COMPUTER PROGRAMMING (PYTHON)

**UCEAP Transcript Title**

COMP PROGR PYTHON

**UCEAP Quarter Units**

4.50

**UCEAP Semester Units**

3.00

## Course Description

This course, as one of key cornerstones of computer programming, based on Python language, focuses on concepts, methodologies and thinking pattern of computer programming. The main objective of the course is to help students to master basic programming skills, and to promote their abilities of logical, systematical and abstract thinking. The course mainly involves the basic concepts of computer programming, the basis of Python language and Python program structures, mathematical and numerical calculations, string and file operations, lists and data manipulation, functions and recursive functions, branch structures and loop structures, programming methodologies, procedure-oriented programming and object-oriented programming, graphical user interface programming methods and algorithm design, etc.

### Language(s) of Instruction

Chinese

### Host Institution Course Number

00740282

### Host Institution Course Title

THE FUNDAMENTALS OF COMPUTER PROGRAMMING (PYTHON)

### Host Institution Campus

### Host Institution Faculty

### Host Institution Degree

### Host Institution Department

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