

# COURSE DETAIL

## OPERATING SYSTEMS

**Country**

United Kingdom - England

**Host Institution**

Imperial College London

**Program(s)**

Imperial College London

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Computer Science

**UCEAP Course Number**

122

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

OPERATING SYSTEMS

**UCEAP Transcript Title**

OPERATING SYSTEMS

**UCEAP Quarter Units**

5.00

**UCEAP Semester Units**

3.30

## Course Description

This course explores the basic principles used in the design of modern operating systems. It examines device and I/O management functions in operating systems as part of a uniform device abstraction as well as disk organization and file system structure. Students are able to give the rationale for virtual memory abstractions in operating systems and understand the main principles and techniques used to implement processes and threads as well as the different algorithms for process scheduling. In addition, they understand the main mechanisms used for inter-process communication and understand the main problems related to concurrency and the different synchronization mechanisms available. Student gain the ability to evaluate security risks in operating systems and understand the role operating systems can and should play in establishing security.

## Language(s) of Instruction

English

## Host Institution Course Number

CO211

## Host Institution Course Title

OPERATING SYSTEMS

## Host Institution Campus

Imperial College London

## Host Institution Faculty

## Host Institution Degree

## Host Institution Department

Computing

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