

# COURSE DETAIL

## CONCURRENT SYSTEMS AND OPERATING SYSTEMS

**Country**

Ireland

**Host Institution**

Trinity College Dublin

**Program(s)**

Trinity College Dublin

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Computer Science

**UCEAP Course Number**

103

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

CONCURRENT SYSTEMS AND OPERATING SYSTEMS

**UCEAP Transcript Title**

CONCURRENT & OP SYS

**UCEAP Quarter Units**

4.00

**UCEAP Semester Units**

2.70

## **Course Description**

The first part of this course introduces students to concurrency and concurrent programming. Students learn to develop concurrent software systems using standard techniques and constructs. To achieve this, students must have a thorough understanding of common problems that arise in concurrent systems and how those problems can be avoided. This course teaches the use of tools and techniques for modeling and verifying the correctness of concurrent systems, applying this through practical laboratory exercises in which small concurrent software systems are developed. The second part of the course addresses various aspects of the design of modern operating systems. Students explore how programmers can apply a knowledge of operating system features to the design of efficient applications. This is achieved by examining common algorithms and policies used by modern operating systems, as well as the facilities provided to application programmers. This knowledge is then applied in laboratory exercises.

## **Language(s) of Instruction**

English

## **Host Institution Course Number**

CS2016

## **Host Institution Course Title**

CONCURRENT SYSTEMS AND OPERATING SYSTEMS

## **Host Institution Course Details**

<https://www.tcd.ie/students/orientation/visiting-exchange/module-directory/Comp...>

## **Host Institution Campus**

Trinity College Dublin

## **Host Institution Faculty**

## **Host Institution Degree**

## **Host Institution Department**

Computer Science and Statistics

**Course Last Reviewed**

2018-2019

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