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 Campus

Trinity College Dublin

Host Institution Faculty

Host Institution Degree

Host Institution Department

Computer Science and Statistics

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