

COURSE DETAIL

SCALABLE SYSTEMS AND DATA

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

175

UCEAP Course Suffix**UCEAP Official Title**

SCALABLE SYSTEMS AND DATA

UCEAP Transcript Title

SCALABLE SYS & DATA

UCEAP Quarter Units

5.00

UCEAP Semester Units

3.30

Course Description

The course provides an overview of data center technologies, the infrastructure needed to run a variety of workloads, and the design decisions when engineering scalable distributed applications. Students analyze the full system stack for managing and scheduling data-center resources. Further, they discuss the design principles for scalable systems; investigate concepts and techniques to build large scale systems, with a focus on distributed storage, coordination, computation and resource allocation. They get an overview of NewSQL and NoSQL technologies, learn new data models, their associated query languages and systems, and discuss new storage technology and its impact on query execution and data management systems in general.

Language(s) of Instruction

English

Host Institution Course Number

COMP70022

Host Institution Course Title

SCALABLE SYSTEMS AND DATA

Host Institution Course Details

<https://www.imperial.ac.uk/computing/current-students/courses/70022/>

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Computing

Course Last Reviewed

2024-2025

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