

# COURSE DETAIL

## ADVANCED COMPUTER SYSTEMS

**Country**

Denmark

**Host Institution**

University of Copenhagen

**Program(s)**

University of Copenhagen

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Computer Science

**UCEAP Course Number**

147

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

ADVANCED COMPUTER SYSTEMS

**UCEAP Transcript Title**

ADV COMP SYSTEMS

**UCEAP Quarter Units**

6.00

**UCEAP Semester Units**

4.00

## Course Description

This course offers an understanding of techniques in computer systems with a focus on correctness and adherence to system properties, such as modularity and atomicity, while at the same time achieving high performance. It highlights various system mechanisms, especially from distributed systems, database systems, and network systems. Topics include system abstractions and design principles; modularity with clients and services; performance; atomicity and transactions; concurrency control and recovery; reliability, fault-tolerance, and redundancy; distributed protocols for replication; and large-scale data processing. Prerequisites include basic principles of operating systems and/or databases and working knowledge of a standard programming language (Java, C#), including concurrency and communication mechanisms.

### Language(s) of Instruction

English

### Host Institution Course Number

NDAK15006U

### Host Institution Course Title

ADVANCED COMPUTER SYSTEMS

### Host Institution Campus

### Host Institution Faculty

Science

### Host Institution Degree

Master

### Host Institution Department

Computer Science

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