

COURSE DETAIL

DATA STRUCTURES AND ALGORITHMS

Country

United Kingdom - England

Host Institution

University of Sussex

Program(s)

University of Sussex

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Computer Science

UCEAP Course Number

120

UCEAP Course Suffix**UCEAP Official Title**

DATA STRUCTURES AND ALGORITHMS

UCEAP Transcript Title

DATA STRUCT&ALGOR

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course introduces data structures and algorithms for computer scientists. The course explores a number of fundamental data structures, including arrays linked lists, stacks, queues, trees, hash tables, and graphs. These are presented both abstractly, via the notion abstract data types, and concretely in terms of their implementation in an object-oriented framework. The data structures are discussed and analyzed in terms of efficiency of the basic operations they support and their application to program design problems. Consideration is given to important, fundamental algorithms for searching and sorting data.

Language(s) of Instruction

English

Host Institution Course Number

G5117

Host Institution Course Title

DATA STRUCTURES & ALGORITHMS

Host Institution Campus

University of Sussex

Host Institution Faculty

Host Institution Degree

Host Institution Department

Informatics

[Print](#)