

COURSE DETAIL

COMPILERS AND COMPUTER ARCHITECTURE

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

102

UCEAP Course Suffix**UCEAP Official Title**

COMPILERS AND COMPUTER ARCHITECTURE

UCEAP Transcript Title

COMPLRS & COMP ARCH

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course explores key ideas in the implementation of compilers for modern programming languages such as Java, including lexical analysis, parsing, semantic analysis based on types and type checking, syntax-directed translation using abstract syntax trees, intermediate languages, and code generation. Students also discuss run-time issues such as garbage collection. This course addresses key ideas in processor architecture such as stack machines and register machines, RISC vs CISC processors, and processor caching.

Language(s) of Instruction

English

Host Institution Course Number

G5035

Host Institution Course Title

COMPILERS AND COMPUTER ARCHITECTURE

Host Institution Campus

University of Sussex

Host Institution Faculty**Host Institution Degree****Host Institution Department**

Engineering and Informatics

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