COURSE DETAIL

COMPUTER SCIENCE 1015

Country
South Africa

Host Institution
University of Cape Town

Program(s)
University of Cape Town

UCEAP Course Level
Lower Division

UCEAP Subject Area(s)
Computer Science

UCEAP Course Number
30

UCEAP Course Suffix

UCEAP Official Title
COMPUTER SCIENCE 1015

UCEAP Transcript Title
COMPUTER SCIENCE

UCEAP Quarter Units
6.00

UCEAP Semester Units
4.00

Course Description

This course is an introduction to problem-solving, algorithm development, and programming in the Python language. It includes fundamental programming constructs and abstractions, sorting and searching techniques, and machine representations of data. The practical component covers input/output, conditionals, loops, strings, functions, arrays, lists, dictionaries, recursion, text files, and exceptions in Python. Students are taught testing and debugging, as well as sorting and searching algorithms, algorithm complexity, and equivalence classes. Number systems, binary arithmetic, Boolean algebra, and logic gates are also introduced. The course is offered in a blended learning format.

Language(s) of Instruction
English

Host Institution Course Number
CSC1015F,CSC1015S

Host Institution Course Title
COMPUTER SCIENCE 1015

Host Institution Campus
University of Cape Town

Host Institution Faculty
Science

Host Institution Degree

Host Institution Department
Computer Science

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