# COURSE DETAIL

| COMPUTER SCIENCE 1015 |
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| **Country**<br>South Africa |
| **Host Institution**<br>University of Cape Town |
| **Program(s)**<br>University of Cape Town |
| **UCEAP Course Level**<br>Lower Division |
| **UCEAP Subject Area(s)**<br>Computer Science |
| **UCEAP Course Number**<br>30 |
| **UCEAP Course Suffix** |
| **UCEAP Official Title**<br>COMPUTER SCIENCE 1015 |
| **UCEAP Transcript Title**<br>COMPUTER SCIENCE |
| **UCEAP Quarter Units**<br>6.00 |
| **UCEAP Semester Units**<br>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 Course Details**
https://www.uct.ac.za/sites/default/files/media/documents/uct_ac_za/49/SCI_Hand...

**Host Institution Campus**
University of Cape Town

**Host Institution Faculty**
Science

**Host Institution Degree**

**Host Institution Department**
Computer Science

**Course Last Reviewed**

2023-2024

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