COURSE DETAIL

COMPUTER SIMULATION

Country
United Kingdom - Scotland

Host Institution
University of Edinburgh

Program(s)
University of Edinburgh

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Physics Computer Science

UCEAP Course Number
125

UCEAP Course Suffix

UCEAP Official Title
COMPUTER SIMULATION

UCEAP Transcript Title
COMPUTER SIMULATION

UCEAP Quarter Units
8.00

UCEAP Semester Units
5.30

Course Description

This course covers methods for solving scientific problems using computers. It provides a training in the computational modeling of scientific problems and their representation using computer graphics. It also provides a grounding in object-oriented programming through the practical application of the Python programming language. Students carry out extensive practical and project work. The course also covers key concepts of object oriented programming; analysis of problem statements to produce simple object oriented designs; object oriented programming using Python; use of packages for scientific programming and visualization in Python; and writing simple graphical applications in Python to visualize experimental results.

Language(s) of Instruction

English

Host Institution Course Number

PHYS08026

Host Institution Course Title

COMPUTER SIMULATION

Host Institution Campus

Edinburgh

Host Institution Faculty

Host Institution Degree

Host Institution Department

Physics and Astronomy

[Print](#)