

COURSE DETAIL

NUCLEAR AND PARTICLE PHYSICS

Country

United Kingdom - Scotland

Host Institution

University of Edinburgh

Program(s)

University of Edinburgh

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Physics

UCEAP Course Number

116

UCEAP Course Suffix**UCEAP Official Title**

NUCLEAR AND PARTICLE PHYSICS

UCEAP Transcript Title

NUCLR&PARTICLE PHYS

UCEAP Quarter Units

4.00

UCEAP Semester Units

2.70

Course Description

This course focuses on the consequences of quantum physics at high energies and short distances. The course also explores topics such as relativistic and quantum physics, the symmetries of fermions and bosons, and forces within the nuclear and particle physics domain. Fundamental particles and composite states are introduced, along with investigating the quantum numbers and symmetries associated with the interactions of these particles. Models used to describe the phenomena observed on the subatomic scale are discussed, along with explaining their successes and shortcomings. Experimental methods associated with the subatomic world are also introduced. This course covers the same nuclear and particle physics concepts as the 20-credit course, "Relativity, Nuclear and Particle Physics", however relativity is not covered.

Language(s) of Instruction

English

Host Institution Course Number

PHYS10106

Host Institution Course Title

NUCLEAR AND PARTICLE PHYSICS

Host Institution Course Details

Host Institution Campus

Edinburgh

Host Institution Faculty

Host Institution Degree

Host Institution Department

Physics and Astronomy

Course Last Reviewed

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