# Computing Science and Physics

University of Aberdeen

## Venues

Old Aberdeen Campus

## Content

This programme follows a number of the core Computing Science courses undertaken as part of the straight BSc Computing Science degree and introduces key Physics components throughout all four years, in the form of a range of core and optional Physics courses. These include: Calculus, Optics and Electronics, Relativity and Quantum Mechanics, The Solid State, Nuclear and Semiconductor Physics and Modelling Theory.

First Year: First year students focus on the foundations of Computing Science, including: how to design and implement programs; relevant mathematical concepts, and some of the grand challenges of Computing Science. They also study two other subjects, depending on their degree choice.

Second Year: In second year, students are introduced to core topics in modern computing, with courses in Algorithmic Problem Solving, Data Management and Human Computer Interaction. Students further develop significant programming skills in a number of languages, and also gain a deeper understanding of related issues.

Third and Fourth Year (Honours): The third year includes a year-long Software Engineering Project. Working in teams, students develop a major software system, from an initial analysis to the final delivery. The project emphasises interpersonal teamwork skills as strongly as technical topics. Taught courses cover essential computing topics relevant to the chosen degree, with all Single Honours (Computing Science) students studying Knowledge-based Systems, Distributed Systems and Security, Operating Systems, Adaptive Interactive Systems, Languages and Computability, and Enterprise Computing.

The fourth year also involves a substantial project, but this time students work individually on a specific topic of interest to them; most projects are research-related. Many of the taught courses are also related to research activity, including advanced knowledge and internet technologies.

The optional Industrial Placement happens between third and fourth year, or after fourth year.

## Start Date

September

## Qualification

Degree

## Study Method

Full time

## Award Title

BSc Hons

## UCAS Code

IF13

## Course Length

4 years

## Faculty

Physical Science

## Department

Natural and Computing Sciences

## Entry Requirements

2027 entry requirements:

Standard entry:
4 Highers at BBBB including 2 maths and science subjects plus English, Maths and Chemistry or Physics at National 5.

For second year entry you would require Advanced Highers at AB.

Widening access entry:
3 Highers at BBC including 2 maths and science subjects plus English, Maths and Chemistry or Physics at National 5.

1 Foundation Apprenticeship is accepted in place of a non-essential Higher.

## SCQF Level

10

## Progression Routes

«ProgressionRoutes»

## Combination Courses

«htmlCombinationCourse» «htmlCombinationUCASCode»

## Address

King's College
Aberdeen
Aberdeen City
AB24 3FX

## Website

www.abdn.ac.uk