## Year in industry.

If you do a Year in Industry course, you spend a year between level two and level three on a work placement. You can apply your physics knowledge in a scientific organisation, or apply the transferable skills from your degree to a role outside science.

You'll pay reduced fees for the year you're on placement, and earn a salary throughout.

Organisations where physics students have done their placements include:

- CERN, Switzerland
- Daresbury Laboratory, Science and Technology Facilities Council
- IBM
- Sellafield Ltd

## Study abroad.

If you do the Study
Abroad course, instead of completing our standard level three, you will spend your third year studying physics at a top university in the USA, Canada,
Australia or New Zealand.

Universities that Sheffield physics students have gone to include:

- McMaster University, Ontario, Canada
- Monash University, Melbourne, Australia
- University of Auckland, New Zealand
- University of Illinois at Urbana-Champaign, USA
- University of Texas at Austin, USA

# Physics with

## Philosophy.

On the Physics with
Philosophy degree, you'll
have similar core and
optional physics modules
as other physics students,
plus lots of philosophy
topics to choose from.
Options range from
religion, ethics and politics,
to feminism, the arts and

Visit our website to see the exact details of your core and optional modules.

# **Be Sheffield**

# Made.



The information given here is based on the current academic year. There may be some changes before you start your course. For the latest information, visit our website.

www.sheffield.ac.uk/physics www.youtube.com/sciencesheffield





In the first two years of your course, you'll cover the essential physics behind everything else you'll study. Lectures and lab classes are included in the same modules, so you'll run experiments to help you understand important theories even more clearly.

There are optional modules from the start of your degree and the choice only expands from there. We offer a range of project modules in level three, and MPhys students spend half of their final year working in one of our leading research groups.

## Level one.

#### Core modules:

- Mathematics for Physicists and Astronomers
- Fields and Quanta
- Motion and Heat

## Optional modules:

- Introduction to Astrophysics
- The Solar System
- Our Evolving Universe
- Frontiers in Physics
- The Physics of Sustainable Energy
- Physics of Living Systems 2
- Introduction to Electric and **Electronic Circuits**

## Level two.

#### Core modules:

- Classical and Quantum Physics
- Programming in Python
- Special Relativity and Subatomic Physics

### Optional modules:

- Aspects of Medical Imaging and Technology
- Astronomical Spectroscopy
- Detection of Fundamental Particles (except Study Abroad)
- Galaxies
- Physics of Materials

#### Stellar Structure and Evolution

- The Physics of Music
- Physics with Labview



#### Optional modules:

- Programming in
- Particle Physics
- Problem Solving and Advanced Skills in Physics

Level three.

Core modules:

Physics

Atomic and Laser

- Semiconductor Physics and Technology
- Solid State Physics
- Statistical Physics (optional on BSc)

## Advanced

- Python
- Astrobiology
- Dark Matter and the Universe
- Industrial Group Project in Physics
- Introduction to Cosmology
- Introduction to Soft Condensed Matter and Biological Physics'
- Mathematical Physics

#### Microscopy and Spectroscopy

Laboratory

- Nuclear Physics
- Origin of the Chemical Elements'
- Physical Computing
- Physics Education and Outreach
- Quantum Information Laboratory
- Research Project in Physics
- Physics in an Enterprise Culture

## Level four (MPhys only).

#### Core modules:

Research Project

## **Optional modules:**

- Advanced Electrodynamics
- Advanced Particle Physics
- Advanced Quantum Mechanics
- Advanced Soft Condensed Matter and Biological Physics
- An Introduction to General Relativity
- · Dark Matter and the Universe
  - Galaxy Formation and Evolution
  - Introduction to Cosmology

- Optical Properties of Solids
- Physics in an Enterprise Culture
- Quantum Optics and Quantum Computing
- Star Formation and Evolution
- The Development of Particle Physics
- The Physics of Soft Condensed Matter