

## Industrial Placement Year

If you do an Industrial Placement Year 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.

We are able to offer a small number of Physics and Astrophysics students placements at the **Isaac Newton Group of Telescopes** on La Palma in the Canary Islands, and the **Thai National Observatory**, atop Thailand's highest mountain.

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

Other 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 want to study abroad, you can apply to spend time in destinations including Australia, Canada, Europe, New Zealand and the USA after you've joined the University.

Universities that Sheffield physics students have gone to include:

- Australian National University, Canberra
- 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

## Be Sheffield Made.

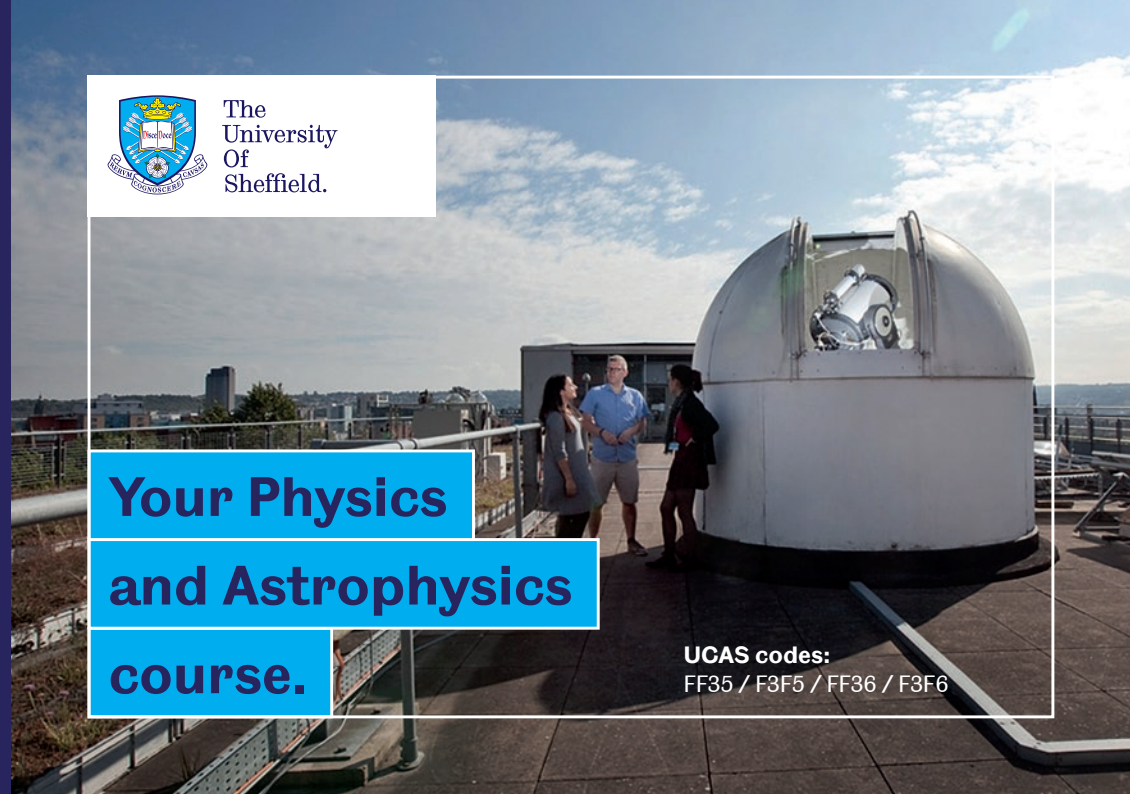
The information given here is based on the current academic year. There may be some changes before you start your course. For the latest information, visit our website.

[www.sheffield.ac.uk/physics](http://www.sheffield.ac.uk/physics)  
[www.youtube.com/sciencesheffield](http://www.youtube.com/sciencesheffield)



## Your Physics and Astrophysics course.

**UCAS codes:**  
FF35 / F3F5 / FF36 / F3F6



Your degree is split roughly 50/50 between astrophysics and the rest of physics. This starts in first year, with lectures on the Universe and solar system, practical sessions using the telescopes on our roof and computational mini-projects.

We offer a range of project modules and lots of other options in level three. MPhys students spend half of their final year working in one of our leading research groups. There is also an annual astrophysics field trip to international telescope facilities in the Canary Islands.

### Level one.

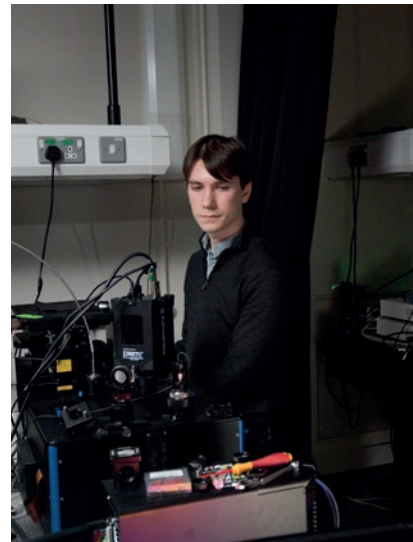
#### Core modules:

- Fields and Quanta
- Motion and Heat
- Introduction to Astrophysics
- Mathematics for Physicists and Astronomers (Introductory and Further)
- Observing the Night Sky
- Our Evolving Universe
- The Solar System

### Level two.

#### Core modules:

- Astronomical Spectroscopy
- Classical and Quantum Physics
- Galaxies
- Observational Astronomy
- Special Relativity and Subatomic Physics
- Stellar Structure and Evolution



### Level three.

#### Core modules:

- Astronomy Project
- Atomic and Laser Physics
- Introduction to Cosmology
- Particle Physics
- Problem Solving in Physics and Astronomy
- Solid State Physics
- Statistical Physics (optional on BSc)
- Stellar Atmospheres

#### Optional modules:

- Advanced Programming In Python (BSc only)
- Astrobiology
- Dark Matter and the Universe
- History of Astronomy
- Industrial Group Project in Physics
- Introduction to Soft Matter and Biological Physics (BSc only)
- Mathematical Physics (BSc only)
- Microscopy and Spectroscopy Laboratory
- Nuclear Physics
- Origin of the Chemical Elements
- Physical Computing (BSc only)
- Physics Education and Outreach
- Physics in an Enterprise Culture (BSc only)
- Quantum Information Laboratory
- Research Project in Physics
- Semiconductor Physics and Technology (BSc only)

### Level four (MPhys only).

#### Core modules:

- Galaxy Formation and Evolution
- Research Project
- Star Formation and Evolution

#### Optional modules:

- Advanced Electrodynamics
- Advanced Particle Physics
- Advanced Quantum Mechanics

- An Introduction to General Relativity
- Dark Matter and the Universe
- History of Astronomy
- Optical Properties of Solids
- Origin of the Chemical Elements
- Physics in an Enterprise Culture
- The Development of Particle Physics