



University of  
**Sheffield**

Physics and Astronomy

careers guide.

Shape your future

from day one.

**Be Sheffield**

**Made.**

## More than a physics degree.

Physics graduates do lots of different things after their degrees, inside and outside science. In this careers guide, you can find out where University of Sheffield physicists have gone after graduation, and how the skills, support and opportunities you'll get at university will help you secure the right job for you.



### Develop the skills employers need.

By deciding to study physics, you're already off to a great start. As you train during your degree, you'll build a strong set of transferable skills that employers are looking for, including:

- ▶ analytical and creative problem-solving skills
- ▶ research and report writing
- ▶ numerical and data handling skills
- ▶ team working, presentation and other communication skills
- ▶ leadership skills and project management
- ▶ time management, planning and organisation

That's on top of all the specialist physics knowledge and skills that you'll gain from our expert scientists.

## Helping you get to where you want to go.

Along the way, you'll find out more about yourself and what you'd like to do. There's support available at every step, including:

- ▶ Modules with a focus on industry and enterprise
- ▶ Careers fairs: every year we help run – and regularly host – the UK's biggest physics careers fair
- ▶ CV and application workshops
- ▶ Mock assessment centres and practice interviews
- ▶ Placement year support
- ▶ Career Connect: our online platform for jobs and placement vacancies
- ▶ mySkills app: keep track of your achievements and skills development throughout your time at Sheffield
- ▶ eMentor scheme: talk to previous placement year students and recent graduates about their experience and successes
- ▶ One-to-one appointments for specialist guidance
- ▶ Employer events, networking sessions and lectures including talks from alumni

We want you to leave university ready for the future you want so that, when the time comes, you can talk confidently and with evidence about your skills, experiences and personal strengths on your CV, in applications and at job interviews.



**“Important skills I gained from studying physics, such as the ability to solve problems and analyse data, are important for a whole range of careers... People are usually impressed when you say that you studied physics at university and it's a degree that's very well respected around the world.”**

Alexander Chilton, Physics BSc  
Science Communications Manager,  
University of Liverpool

You won't be on your own once you finish your degree either – the University Careers Service will support you for as long as you need them after graduation.

# What can I do with a physics degree?

**As a physics graduate from the University of Sheffield you'll have lots of options open to you.**

Employers seek out our graduates because of their ability to grapple with complex ideas, solve problems and analyse data. This is great preparation for all kinds of careers, whether you want a job working at the cutting-edge of science and technology, or to make a difference in the business world, the charity sector or policymaking.

Where could your degree take you?



**Jothi Venkatesh**  
Physics with Medical  
Physics MPhys

Jothi secured a place on the competitive NHS Scientist Training Programme, and is now training to become a Clinical Scientist.



**Dr Josh McFayden**  
Physics MPhys

Josh did a project on the ATLAS experiment during his degree and after graduation secured a role as a researcher at CERN's Large Hadron Collider.



**Su Yuan Wu**  
Physics and  
Astrophysics BSc

After graduation, Su Yuan returned to Singapore and is now an Executive Scientific Officer at the country's National Environment Agency.

## Applying physics

Our physics students develop numerical, problem solving and data analysis skills that are useful in many graduate jobs, including computer programming, software engineering, data science, and research and development into new products and services. Their scientific expertise can be applied to many of the challenges and opportunities of the 21st century, from developing renewable energy technologies and improving medical treatments to creating quantum telecommunications systems and exploring outer space.



## Further study and research

If you're interested in postgraduate study, we'll help you to consider your options so you can specialise in an area you're fascinated by, learn new skills, or change direction. Some of our graduates choose to progress to a PhD, and have become researchers at top universities and major facilities such as CERN. Others begin postgraduate training in areas such as data science, engineering and renewable energy.

## Beyond physics

Sheffield is a World Top 100 University, and a good degree from a great university can also take you far beyond the subject you've specialised in. We have graduates working in fields including patent law, marketing, teaching and banking.

### Example job titles and employers

- ▶ **Assistant Relationship Director**, HSBC
- ▶ **Communications and Marketing Officer**, BP International Centre for Advanced Materials
- ▶ **Data Engineer**, Manchester United FC
- ▶ **Data Scientist**, Channel 4
- ▶ **Head of Photovoltaics**, Exawatt
- ▶ **Project Sales Engineer**, SSE Energy Enterprise Solutions
- ▶ **Quality Engineer**, Orchid Orthopedic Solutions
- ▶ **Research Engineer**, Rolls-Royce Civil Nuclear
- ▶ **Research Fellow**, European Space Agency
- ▶ **Research Fellow**, Space Telescope Science Institute
- ▶ **Scientist Training Programme**, NHS
- ▶ **Software Development Engineer**, Chameleon Technology
- ▶ **Test Analyst**, WorldPay

## Opportunities to enhance your CV.

**Graduation might seem a long way off but it's never too early to start thinking about how you can gain additional skills and experience to make yourself stand out from the crowd.**



Freya worked at CERN's Large Hadron Collider for her placement year.

## Work placements

A placement is a great opportunity to test out a career path that you're considering, whether you want to put your physics skills to the test in the real world or explore a different field entirely. It'll give you experience of applying for jobs as well as interview practice, and will make you stand out once you graduate. You can do this as a recognised part of your degree with our Industrial Placement Year courses.

Our students have previously completed their placements with organisations including CERN, IBM, Sellafield Ltd and other government research facilities.



Adam spent a summer doing a research project on neutrinos.

## Research placements

If you're considering a research career, a great way to get additional experience is to join the Sheffield Undergraduate Research Experience scheme. This gives you a bursary to spend six weeks working with one of our world-class research groups over the summer break. You'll be able to get first-hand experience of designing and carrying out a research project, and time to work out if a career in research is right for you.

## Go global



David spent a year of his degree at a telescope facility in the Canary Islands.

Spending time studying abroad is a great way to develop transferable skills. Our courses offer international opportunities, from spending a full year studying abroad at another institution, to attending an international summer school on a topic of your choice.

Employers are quick to recognise the personal growth that students go through when they study abroad, and that graduates who took this option can offer a fresh perspective.

## Jobs and volunteering



Students volunteering at Discovery Night as part of Science Week.

Outside of your studies, there are clubs and societies you can join, committee and student rep roles you can go for, and lots of opportunities to volunteer with local organisations and gain extra skills and experience. Sheffield has plenty of part-time work opportunities too. It all adds to your CV.

Many students choose to work with us to develop their science communication skills, by running science sessions for local school children and events for the public. It's a great way to build your confidence and make new connections.

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**“I find that talking about what makes my course interesting is easy and doing cool scientific demonstrations for a curious and eager audience is very gratifying.”**

Marina Sanz Orell, Physics with Philosophy  
BSc and Science Champion

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## Get down to details.

Because we want to keep our carbon footprint down, there's a lot we haven't included here. Find us online to learn more.

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

[physics.ucas@sheffield.ac.uk](mailto:physics.ucas@sheffield.ac.uk)



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