



The  
Careers  
Service.

## Career resources - Department of Physics and Astronomy

### Deciding what to do after your degree

#### Careers Service

Many Physics and Astronomy graduates enter employment that makes use of their discipline, either directly or by using their numerical, analytical and problem solving skills. Graduate level job areas have included scientists in the nuclear industry, trainee healthcare scientist or medical physicists (NHS), 'engineers' in the petrochemicals industry, engineering in the energy sector, scientific writing, physics technician in education, software engineering, games development and web development. Another option is Postgrad secondary teacher training to become a Physics/Science teacher in UK schools as well as abroad (e.g. TEFL). Some graduates choose employment in areas outside of their discipline – examples are as diverse as self-employment (e.g. sound engineer), auditor, charity fundraising, sales, marketing and general management.

A high proportion of Physics and Astronomy students continue into further study with many embarking on a PhD / MPhil perhaps with a view to a career in academia or research institute. Masters programmes relating to their subject are also popular. Some of these graduates may then move on to a PhD or enter research-related employment. A small number of those completing PG courses choose alternatives which require a high level of scientific knowledge such as Patent Attorney or Science Communication.

For further information about using your degree, explore the Careers Service's '*Explore your options /Use your subject*' webpage: <http://www.sheffield.ac.uk/careers/explore/subject/phy> Here you'll find information on the career paths of recent UoS Physics graduates, case studies as well as national data on what Physics graduates to and an RSS feed to some relevant job adverts as well as other vacancy courses – including research based opportunities.

For support with deciding how to choose what career direction is right for you, investigate the *Understand yourself and your options* section: <http://www.sheffield.ac.uk/careers/explore/understand>. Have a go at the 'Looking for that perfect career?' quiz on Prospects' website. Take your time completing this online questionnaire to generate more meaningful suggestions of what jobs might suit your interests, skills and motivations. If you need more in-depth help thinking about your skills, interests, personality and motivations, have a go at the *Profiling for Success* activities under the *Psychometric tests* section <http://www.sheffield.ac.uk/careers/applications/psy> (you'll need access codes for this, available via the 'Careers' webpages. Or use **CareerConnect via MUSE to book an appointment** to see a Careers Adviser via to discuss your individual options and what will suit you best <https://www.sheffield.ac.uk/careers/services/support>.

#### Institute of Physics

The Institute of Physics (IOP) has a useful careers section, which has information about job sectors that might appeal, along with a brief guide to Masters courses and PhDs: [www.iop.org/careers/directions/index.html](http://www.iop.org/careers/directions/index.html).

#### Institute of Physics and Engineering in Medicine

The Institute of Physics and Engineering in Medicine (IPEM) has careers information for those wishing to pursue careers in areas such as medical physics or clinical technologist jobs (eg, in areas such as radiotherapy, bioengineering, dialysis, laser procedures, magnetic resonance imaging and ultrasound):

[www.ipem.ac.uk/careers/Pages/default.aspx](http://www.ipem.ac.uk/careers/Pages/default.aspx).

#### Royal Astronomical Society

The Royal Astronomical Society website has notes on studying and working in astronomy and planetary sciences in the UK, including advice on becoming a professional astronomer. As Astronomy is predominantly an academic research field, the RAS has advice about finding a suitable PhD or Master's degree to help your career prospects:

[www.ras.org.uk/education-and-careers](http://www.ras.org.uk/education-and-careers)

## Prospects, Target Jobs, Inside Careers

All of these websites can be used to explore a variety of career options:

[www.prospects.ac.uk/options\\_physics\\_your\\_skills.htm](http://www.prospects.ac.uk/options_physics_your_skills.htm).

[targetjobs.co.uk/career-sectors](http://targetjobs.co.uk/career-sectors)

[www.insidecareers.co.uk](http://www.insidecareers.co.uk)

## Work experience

### Student Jobshop

As well as helping you decide what to do next after your degree, the Careers Service can give you help with finding placements and other work experience opportunities along with part-time or holiday jobs whilst you are a student:

<http://www.sheffield.ac.uk/careers/jobs/index>. Visit the **Student Jobshop** on Level 3 of the Students Union, next to SSiD or speak to one of our team: <http://www.sheffield.ac.uk/careers/jobs/jobshop>

If you plan to get work experience of any kind, use the experience to demonstrate to future employers that you have the necessary skills to function in the workplace by taking part in **The Sheffield Graduate Award** – especially if you are also involved in extra-curricular activities like sports, clubs, societies or volunteering:

<http://www.sheffield.ac.uk/thesheffieldgraduateaward>

## Vacancy websites/ agencies specialising in science-related vacancies

Below are details of useful websites to help with your graduate job search:

- **CareerConnect** portal via your MUSE– Vacancies <https://careerconnect.sheffield.ac.uk/service/home.html> (work experience, placements and graduate vacancy listing maintained by the Careers Service with local, national and international opportunities. Alternatively, see <http://www.sheffield.ac.uk/careers/jobs/index>.)
- Prospects website - **www.prospects.ac.uk** (see 'My Prospects' for a searchable database and also links to other vacancy sources via the occupational profiles [www.prospects.ac.uk/types\\_of\\_jobs.htm](http://www.prospects.ac.uk/types_of_jobs.htm))
- Target – **targetjobs.co.uk**
- YorkshireGraduates (for graduate jobs in the region) - <https://www.yorkshiregraduates.co.uk/>
- Brightrecruits (IOP) – **brightrecruits.com**
- IPEM jobs - **www.ipem.ac.uk/jobs**
- New Scientist - **jobs.newscientist.com/en-gb**
- Matchtech - **www.matchtech.com**
- Jobs in Science - **www.jobsinscience.com**
- Total Jobs - **www.totaljobs.com**
- SRG - **www.srg.co.uk**. For other agencies, search the Consultancy Finder on the REC website: **www.rec.uk.com/jobseeker**
- H.E. Research/Academic jobs - **www.jobs.ac.uk**
- ECM Selection - **www.ecmselection.co.uk**
- NHS jobs - **www.jobs.nhs.uk**
- Government jobs: **www.civilservice.gov.uk; www.jobsgopublic.com; www.lgjobs.com**
- Earthworks - **www.earthworks-jobs.com**
- Nature Jobs - **www.nature.com/nature/careers/index.html**
- Research gate - **www.researchgate.net/jobs/research**
- For jobs further afield, check out 'myInternational Career' - **www.shef.ac.uk/careers/students/inter**
- Guardian Careers: **careers.guardian.co.uk**

Talk to your tutor or the CLO/DEL as they (or others in your department) may have some useful contacts for you to follow up.

Don't limit your chances by only looking at online jobs databases or vacancy listings. Find out which organisations operate in your area of interest and check out their website - if you can't find a jobs page, contact them directly. The Careers Service and your department can help you identify organisations. Or use Professional Associations (e.g. IOP, IPEM, Association of the British Pharmaceutical Industry - <http://careers.abpi.org.uk/your-career/undergraduates/Pages/Graduate-Schemes.aspx>, Energy Institute - **www.energyinst.org/education;**

Nuclear Industry Association - [www.niauk.org/education-skills-training](http://www.niauk.org/education-skills-training); Chartered Institute of Patent Attorneys: [www.cipa.org.uk](http://www.cipa.org.uk)). Or try a search on Yellow Pages - [www.yell.com](http://www.yell.com).

Use a professional, targeted speculative application (CV and covering letter) to tap into the 'hidden' jobs market: <http://www.sheffield.ac.uk/careers/jobs/finding> and boost your online profile to potential recruiters by using social media: <http://www.sheffield.ac.uk/careers/jobs/social>

Don't just aim for the larger, well known organisations but also consider employment with **Small and Medium Sized Enterprises (SMEs)**, who make up an increasing proportion of UK-based science graduate employers.

## National employers who recruit physics graduates

The following section lists some UK employers who have recruited our physics graduates (UG and PG courses) in the past. NB: this list is by no means exhaustive - use it as a starting point to appreciate the breadth of occupations and employers open to you.

Company Title	Area of Work	Website
Actavis	Pharmaceutical production	<a href="http://www.actavis.co.uk/en/default.htm">www.actavis.co.uk/en/default.htm</a>
Actuarial profession	Actuarial work	<a href="http://www.actuaries.org.uk">www.actuaries.org.uk</a>
AECOM	Energy industry	<a href="http://www.aecom.com/Careers/Student+Connections/Graduates">www.aecom.com/Careers/Student+Connections/Graduates</a>
Alstom	Energy supply work	<a href="http://www.alstom.com">www.alstom.com</a>
Amec Nuclear	Engineering consultancy	<a href="http://www.amec.com">www.amec.com</a>
American Museum of Natural History	Astronomy research scientist	<a href="http://www.amnh.org">www.amnh.org</a>
AREVA	Risk management (nuclear)	<a href="http://www.areva.com">www.areva.com</a>
Appco Group UK	Sales / marketing	<a href="http://www.appcogroup.co.uk">www.appcogroup.co.uk</a>
Atkins	Construction / engineering	<a href="http://www.atkinsglobal.com/graduates">www.atkinsglobal.com/graduates</a>
AWE	Atomic weapons	<a href="http://www.awe.co.uk">www.awe.co.uk</a>
BAE Systems	Aerospace / defence systems	<a href="http://www.baesystems.com/careers-rzz">www.baesystems.com/careers-rzz</a>
British Antarctic Survey	Research	<a href="http://www.antarctica.ac.uk">www.antarctica.ac.uk</a>
BT	Telecommunications	<a href="http://www.btplc.com">www.btplc.com</a>
BG Group	Energy (gas)	<a href="http://www.bg-group.com/Careers/Pages/WorkWithUs.aspx">www.bg-group.com/Careers/Pages/WorkWithUs.aspx</a>
Bluefin	SAP consultancy	<a href="http://www.bluefinsolutions.com/careers/graduates">www.bluefinsolutions.com/careers/graduates</a>
BP	Petrochemical industry	<a href="http://www.bp.com">www.bp.com</a>
Capita Symonds	Construction / engineering	<a href="http://www.capitasymonds.co.uk">www.capitasymonds.co.uk</a>
CERN	Scientific research (particle physics)	<a href="http://public.web.cern.ch/public">public.web.cern.ch/public</a>
Charities	Charity administration	<a href="http://www.wfac.org.uk">www.wfac.org.uk</a>
Cobham PLC	Aerospace / defence systems	<a href="http://www.cobham.com">www.cobham.com</a>
Custom Solar	Energy (renewable)	<a href="http://www.customsolar.co.uk">www.customsolar.co.uk</a>
Detica (BAE Systems)	IT / technical consultancy	<a href="http://www.baesystemsdetica.com/careers">www.baesystemsdetica.com/careers</a>
Dorset Software	Computer programmer / analyst	<a href="http://www.dorsetsoftware.com">www.dorsetsoftware.com</a>
DSTL	Defence	<a href="http://www.dstl.gov.uk/pages/150">www.dstl.gov.uk/pages/150</a>
EADS Astrium	Satellite technology	<a href="http://www.astrium.eads.net/en/careers">www.astrium.eads.net/en/careers</a>
EDF Energy	Energy	<a href="http://www.eisforedfenergy.co.uk">www.eisforedfenergy.co.uk</a>
eDigitalResearch	Market research (ICT)	<a href="http://www.edigitalresearch.com">www.edigitalresearch.com</a>
Enterprise-Rent-A-Car	Management trainee	<a href="http://www.enterprisealive.co.uk">www.enterprisealive.co.uk</a>
E.ON	Energy (gas & electricity)	<a href="http://www.eon-uk.com/careers">www.eon-uk.com/careers</a>
ESRF (France)	Scientific research (photons)	<a href="http://www.esrf.eu">www.esrf.eu</a>
Fluid Gravity Engineering	Scientific research (computational physics)	<a href="http://www.fluidgravity.co.uk">www.fluidgravity.co.uk</a>
GORS	Government Operational Research Service	<a href="http://www.operational-research.gov.uk/recruitment">www.operational-research.gov.uk/recruitment</a>
Helios	Technical & management consultancy (traffic)	<a href="http://www.askhelios.com">www.askhelios.com</a>
Hexel	IT support / engineering	<a href="http://www.hexel.net">www.hexel.net</a>
Home Office: Centre for Applied Science & Tech.	Scientific Research (crime, surveillance, public security)	<a href="http://www.homeoffice.gov.uk/science-research/cast/">www.homeoffice.gov.uk/science-research/cast/</a>
HMGCC	Government (cyber security)	<a href="http://www.hmgcc.gov.uk">www.hmgcc.gov.uk</a>
JA Kemp	Patent attorney	<a href="http://www.jakemp.com">www.jakemp.com</a>
Lockheed Martin	Defence systems	<a href="http://www.lockheedmartin.co.uk">www.lockheedmartin.co.uk</a>
Marks and Clerk	Patent attorneys	<a href="http://www.marks-clerk.com">www.marks-clerk.com</a>
Mathys & Squire	Patent attorneys	<a href="http://www.mathys-squire.com">www.mathys-squire.com</a>
Max Fordham	Construction engineers	<a href="http://www.maxfordham.com">www.maxfordham.com</a>
MBDA	Defence	<a href="http://www.mbdacareers.co.uk">www.mbdacareers.co.uk</a>
Met Office	Weather forecasting	<a href="http://www.metoffice.gov.uk">www.metoffice.gov.uk</a>
Museum of Science and	Science communication	<a href="http://www.mosi.org.uk">www.mosi.org.uk</a>

Industry		
NHS	Medical Physics (trainee or assistant healthcare scientist)	www.nhscareers.nhs.uk
NPL	Measurement standards	www.npl.co.uk
Oclaro	R&D engineer (optical)	www.oclaro.com/index.php
PA Consulting	Mgt./Syst./Tech. Consulting	www.paconsulting.com
Pilkington	Glass manufacture	www.pilkington.com
QinetiQ	Defence & security	www.QinetiQ.com
Reading Scientific Services	Scientific Research (food/consumer goods)	www.rssl.com
Redwood Technologies	IT hardware / software	www.redwoodtech.com
Renishaw PLC	Metrology Equipment	www.renishaw.com
Rolls Royce	Engineering	www.rolls-royce.com
Royal HaskoningDHV	Consult. Eng. & Env. Sci.	www.royalhaskoning.com
Schlumberger	Petroleum industry	careers.slb.com
Science & Technology Facilities Council	Scientific research (various)	www.stfc.ac.uk
SELEX Systems	Defence / transport	www.selex-si-uk.com
Sellafield	Safety / Technical Support / Project Management	www.sellafieldsites.com/careers/graduates
Shell	Energy	www.shell.com/home/content/careers
Siemens	Engineering, IT & business	www.siemens.co.uk/careers/en
STMicroelectronics(R&D)	Semiconductor technology	www.st.com
Tata Steel	Steel manufacture	www.tatasteeleurope.com/en
Tesco	IT graduate trainee (retail)	www.tesco-careers.com
TEFL	Teaching English as a Foreign Language	www.tefl.com; www.interacnetwork.com/recruit; www.cactustefl.com; etc
Tessella	Technology & consulting	www.tessella.com
Testled	Web / mobile development	testled.com
Thales	Defence / transportation	www.thalesgroup.com
Toshiba Europe	Research scientist (electronics)	www.toshiba.eu
Transport Research Lab.	Transport research / consultancy	www.trl.co.uk
TWI Ltd	Research / consultancy	www.twi.co.uk
Tynemarch Systems Engineering	software eng / consultancy (environmental / water)	www.tynemarch.co.uk
UK Atomic Energy Authority	Government body (fusion research)	www.uk-atomic-energy.org.uk
United Utilities	Water and wastewater	www.unitedutilities.com
Universities & research institutes	Research fellow / post-doc	www.jobs.ac.uk

N.B. The above companies are looking to recruit graduates with degrees in Physics or related subjects. In addition over 60% of vacancies advertised for graduates in the UK don't ask for specific degree subjects. All these positions are **also** open to Physics and Astronomy graduates.

## Meet Employers

The Careers Service and your Faculty/ Department organise and host a wide range of employers who come onto campus both semesters – especially in semester one for the big Graduate Recruitment Fairs in The Octagon. Book on and attend events and workshops we run in your Department as well as centrally.

Find out what events are coming up via our online MUSE portal: CareerConnect <https://www.sheffield.ac.uk/careers/services/events/employers>. These events are great opportunities to meet recent Physics or other Science graduates from the University of Sheffield who have successfully made the transition to graduate level employment or research positions recently – and want to pass on their tips to you!

And make sure you attend the annual (October) WRIPA Physics Industry Recruitment and Placement Fairs. <http://wripa.ac.uk/student-info/careers-fair-2016/>

## Applications, interviews and assessment centres

Competition for jobs is often strong. Ensure your applications and interview techniques are effective by getting help from the Careers Service: <http://www.sheffield.ac.uk/careers/jobs> which includes link to help with CVs, covering letters, application forms, interviews and assessment centres.

## Graduates

University of Sheffield graduates can use the Careers Service for up to three years after graduation.

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