

Options with biology

Your skills

Over the course of your degree you develop a good mix of subject specific and technical skills as well as transferable core skills. Consider these alongside other achievements, such as paid work, volunteering, family responsibilities, sport, membership of societies, leadership roles, etc. Think about how these can be used as evidence of your skills and personal attributes. Then you can start to market and sell who you really are, identify what you may be lacking and consider how to improve your profile.

Your specific knowledge of biology following your degree will be important if you are intending to pursue a career in a biology-related job (e.g. scientific research), but for all other jobs your ability to learn, together with other skills you gain as a consequence of studying at university (through your study and your personal university experience), is what will be important to secure a graduate job. Even if you are intending to use your biology knowledge directly in your career, you will be graduating with others who have exactly the same qualification as you. In order to stand out in the crowd, practical and interpersonal skills will distinguish you from others.

Skills associated with studying biology include: research; information/data handling, evaluation and interpretation; the ability to solve problems in an analytical and logical way; numeracy; written and oral communication skills; IT; project management; decision making and teamworking. Try to choose a course where you can carry out practical work, e.g. in the laboratory or the field. Employers will also value your ability to work methodically, efficiently and accurately. You will already have started to build up interpersonal skills at school through your hobbies, sports, social activities, or a casual job. You can carry on with these at university or change to do other things which interest you.

Employment prospects

Every year, statistics are collected to show what HE students do immediately after graduation. These can be a useful guide but, in reality, with the data being collected within just six months of graduation, many graduates are travelling, waiting to start a course, paying off debts, getting work experience or still deciding what they want to do. For further information about some of the areas of employment commonly entered by graduates of any degree discipline, check out 'What Do Graduates Do?' and the AGCAS Special Interest booklet 'Your Degree... What Next?'

Employers love scientists! Your curious, investigative minds are useful to all sorts of employment areas, not just in the science sector. In 2006, over half (54%) of biology graduates had entered full-time or part-time employment six months after graduation and nearly a third (29%) went on to do full or part-time further study.

Your degree is useful for careers in scientific research and development, analysis and investigation; technical support; teaching; health care; scientific writing and journalism; accountancy and other related financial professions. In 2006, the typical careers which biology graduates entered after graduation were in scientific research, management, teaching, finance, administration, and other professional and technical careers. Smaller numbers opted for careers in advertising, marketing, IT and law. Basically, the world is your oyster – but you may have to do some voluntary work or further study in addition to your biology course to get what you want in the end.

Job options

Bear in mind that it's not just your degree discipline that determines your options. Get hold of the AGCAS Special Interest booklet 'Your Degree... What Next?' from your careers service. This looks more generally at the options for today's graduates and offers informed advice on career planning. Or try 'What jobs would suit me?', an online career planning tool, at www.prospects.ac.uk/links/pplanner.

You can choose between jobs that are degree-related or those that appeal because they use other interests or elements of your degree.

Jobs directly related to your degree

Here is a list of types of biology-related jobs - these depend on your own interests and specialisation so use the links to investigate them further. You may have to gain further skills or do further study to enter and/or progress in some of these professions:

- [Research scientist \(life science\)](#) - analyses and interprets the results of experiments and field work and communicates findings to the scientific community by methods ranging from presentations at seminars and conferences to publishing work in specialist literature.
- [Research scientist \(medical\)](#) - plans and conducts experiments to increase the body of scientific knowledge on topics related to medicine and may also aim to develop new, or improve existing, drugs or other medicine-related products.
- [Pharmacologist](#) - investigates how drugs and chemicals interact with biological systems. A pharmacologist's aim is to understand drugs and their actions so they can be used effectively and safely. Pharmacologists also carry out research to aid drug development.
- [Secondary school teacher](#) - teaches one or more subjects to classes of pupils aged 11-16 or 11-18. The subjects are determined by the national curriculum but how they are taught depends on the professional judgment of the teacher.
- [Soil scientist](#) - interprets and evaluates soil and soil-related information to understand how soil contributes to agricultural production, environmental quality, human health issues, climate change and biodiversity.
- [Clinical molecular geneticist](#) - uses biochemical and molecular biology techniques to identify genetic abnormalities associated with disease. Individuals are screened both before and after the appearance of symptoms.
- [Nature conservation officer](#) - works to protect, manage and enhance the local environment, including promoting and implementing local and national biodiversity action plans in partnership with statutory and voluntary organisations.

Jobs where your degree would be useful

For non-biology-related jobs it's your skills and interests which will drive you towards particular career areas. You may have to do further study or demonstrate particular skills and experience gained through voluntary or paid work to enter these professions:

- [Programme researcher, broadcasting/film/video](#) - provides research support to the producer and production team for film, television and radio productions, either working on a wide variety of programmes or within one subject area.
- [Pensions adviser](#) - works as part of the financial services sector, providing advice on various aspects of pensions to

organisations and individuals to help them ensure their future financial provision. The advice offered may include current financial status, type of scheme and contribution levels.

- [Education administrator](#) - organises and oversees administrative activities and systems that support and facilitate the smooth running of an education institution. The majority are based in higher or further education (HE or FE), but opportunities are increasingly available in schools and private colleges.
- [Training and development officer/manager](#) - manages the learning of an organisation's workforce. The training element of the work gives staff the knowledge, understanding, practical skills and motivation to carry out particular work-related tasks.

Although for many graduates the jobs listed here might not be their first, they are among the many realistic possibilities with your degree, provided you can demonstrate you have the attributes employers are looking for. It's worth noting that many graduate vacancies don't specify particular degree disciplines.

To find out more about the above options and other jobs, see AGCAS Occupational Profiles and other sources of occupational information available in careers services. Occupational Profiles are also available on www.prospects.ac.uk/links/occupations.

Where are the jobs?

Biology-related jobs are most commonly found in universities and governmental research institutions (research scientists); pharmaceutical and biotechnology companies (research scientists; quality control; regulatory affairs; schools (teachers); hospitals (clinical biologists); and in outreach organisations such as museums, science centres, broadcast companies etc (science communicators).

Biology graduates who choose a non-biology-related career can cast their net more widely and so it is a good idea to look at the information on specific careers.

See the following sectors for more information:

- [Science](#);
- [Environmental, food chain and rural](#);
- [Health](#).

Career management is an ongoing process, one that you'll no doubt develop all your working life. For further information on all the above employment areas, visit www.prospects.ac.uk/links/sectorbs or ask to see the AGCAS Sector Briefings at your careers service.

Further study

A high percentage of biology graduates choose to do further study (for example, in 2006, 29% were doing full or part-time further study). Many biology graduates choose to study for postgraduate qualifications in a more specialised science in order to increase their expertise in a particular area of biology, for example resource management, clinical science, science communication.

Many go on to further study because, with an increasing number of graduates entering the job market each year, it gives them an advantage to have a higher qualification. It can also help with career progression. If you want a career as a research scientist or a university lecturer, you must do a PhD following your degree (which takes three years but is likely to be fully funded with a 'salary'). Studying at postgraduate level will enhance your employability by increasing your research skills, specialist knowledge and communication skills.

These trends show only what previous graduates in your subject did immediately upon graduating. Over the course of their career - the first few years in particular - many others will opt for some form of further study, either part-time or full-time. If further study interests you, start by taking a look at the AGCAS Special Interest booklet 'Postgraduate Study and Research' or the 'Further study' section of www.prospects.ac.uk. For a

comprehensive list of courses, see 'Prospects Postgraduate Directory'.

Refer too to the 'Prospects Postgraduate Funding Guide', the AGCAS Special Interest booklet 'Postgraduate Study and Research' and AGCAS Vocational Course Surveys for further details relating to finance and the application process.

Other options

Don't forget there are alternatives to entering employment or postgraduate study, such as taking time out, volunteering or travelling. Longer term, you may want to consider starting your own business. Check out the AGCAS Special Interest booklets 'Beyond Nine to Five: Flexible Working', 'Self-employment' and 'Working Abroad', all available from your careers service.

Doing voluntary work or taking short-term jobs during or after your degree course in certain job sectors, such as the environment or health sectors, can help to enhance your job prospects. There are voluntary conservation schemes you can take part in during gap years or you can approach organisations directly yourself. Relevant work experience is particularly important for jobs in the media and charities.

What next?

This should have started you thinking about your future. Whatever stage you are at, your careers service will be able to help you. A huge number of resources, including most of those mentioned here, plus a wide range of other services, including individual careers guidance, employer presentations and workshops on topics such as successful applications and interview techniques, are likely to be on offer.

A full list of useful resources plus case studies of graduates in this subject can also be found on www.prospects.ac.uk/links/options.

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