

Employability Profile:

Biomedical Science

What is employability?

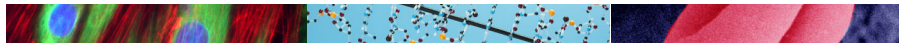
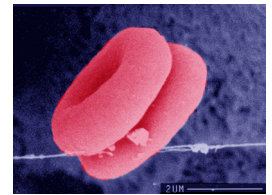
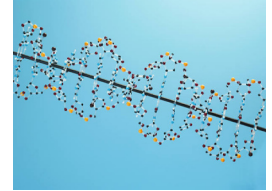
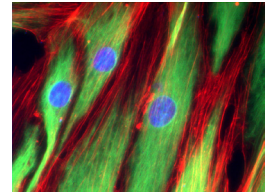
Employability can be defined as: “a set of achievements – skills, understandings and personal attributes that make graduates more likely to gain employment and be successful in their chosen occupations”. You may also hear employability skills referred to as transferable skills.

What is an employability profile?

An employability profile highlights the skills and qualities employers value and that you would be likely to gain during your degree.

How can I use it?

Studying a profile gives you the opportunity to tailor your CV or an application form to a specific job or simply consider the range of subject-specific and transferable skills you have developed, or could develop, during your degree.



What could I study in a biomedical science degree?

Biomedical science focuses on understanding the causes, diagnosis and treatment of disease in humans and plays an essential role in healthcare. It requires the integration of a wide range of subjects to understand the biology of disease; mainly anatomy, physiology, biochemistry, genetics, immunology, microbiology, pharmacology and molecular biology. More specific knowledge of disease processes comes from studying specialised biology such as cellular pathology, clinical biochemistry, clinical immunology, haematology, transfusion science and medical microbiology. Many of the subjects covered by a biomedical science degree are at the forefront of modern science and therefore attract leading-edge research activity. Biomedical Science is a rapidly evolving subject and very relevant to investigating and understanding current controversies and concerns within modern life; such as the use of genetically engineered products in healthcare and major health problems of international importance such as food safety, Creutzfeld-Jacob's disease, malaria, HIV infection, drug resistance of bacteria and cell cloning.



What could I expect to gain from a biomedical science degree?

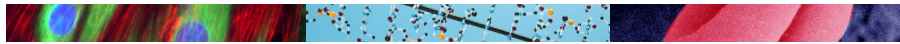
You could develop a wide range of both subject specific and more generic employability skills. Discipline specific skills could include:

- Knowledge of human anatomy and physiology, biochemistry, molecular genetics, immunology and microbiology
- An understanding of cellular pathology, clinical biochemistry, clinical immunology, haematology, immunohaematology and transfusion science, medical microbiology and the biology of disease
- An understanding of the factors and processes which contribute to human health and disease
- An understanding of how diseases develop and how they affect the normal function of the human body
- A knowledge base of key disciplines that could be used to further your understanding of research, diagnosis and management of a clinical disorder
- An understanding of the role of epidemiology in identifying risk and protective factors associated with disease development and the latest major advances in the scientific understanding of human health and disease

- Awareness of new methods for diagnosis, treatment and prevention of disease and their relevance in research or diagnostics.
- Knowledge of pharmacology and toxicology and methods for the treatment and management of diseases

Generic skills:

- The ability to apply your knowledge to analyse, interpret and critically evaluate biomedical data
- Lab skills and an understanding of how to plan and design experiments
- The ability to conduct independent research which generates data, and demonstrate critical analysis and application of results obtained during that research
- Being able to work safely in a lab, which will involve: acting in accordance with health and safety policies, good laboratory practice (GLP), ethical considerations and risk and Control of Substances Hazardous to Health (COSHH) assessments and also recognise the importance of quality control and quality assurance
- Using statistical techniques to analyse and interpret experimental data
- Effective use of transferable skills in communication, IT, numeracy and data analysis, teamworking, critical thinking, setting tasks, problem solving and self-management



What sort of job could I use these skills in?

As a graduate in biomedical science you could be employed in a wide range of areas in both the public and private sectors as your degree gives you an understanding and skills to work in both the biological sciences (in their broadest sense) and the medical sciences.

Major employment areas can include research in university, government, NHS or charity-funded laboratories; research and development for the pharmaceutical, diagnostics, medical devices and lab instrumentation industries; sales and marketing related to healthcare products; and teaching. Biomedical scientists may also be employed as scientific writers and editors and within banks and accountancy firms as financial and general managers.



Where can I find out more about employability?

The Centre for Bioscience student web page brings together employability resources from the Centre and links to careers and employability focussed websites: www.bioscience.heacademy.ac.uk/network/students.aspx

You may find the following career and further study related websites useful:

- Prospects; www.prospects.ac.uk
- Windmills; www.windmillsonline.co.uk
- Find-a-PhD; www.findaphd.com/ and find-a-masters; www.findamasters.com
- Institute of Biomedical Sciences; www.ibms.org/index.cfm?method=education_and_careers.careers
- Institute of Biology; www.iob.org/general.asp?section=education_careers/education_job/he

