



# CAREERS IN BIOLOGY

# What do I need to study Biology at Beths?

- **Requirements to access Sixth Form at Beths:**

- A minimum of seven full GCSE courses at grades 9-4, which must include English and mathematics (at grade 5 or above) and an average grade six across your seven best subjects

- **Requirements to study A-Level Biology:**

- A grade 7 in Biology or 7,7 in Combined Science
- A grade 6 in Maths



# Why work in a biology career?

- Biology opens the door to a huge range of careers that make a real difference to the world.
- Whether it's helping patients in healthcare, protecting endangered species, developing new medicines, or tackling global challenges like climate change and food security, biology gives you the knowledge to contribute to meaningful change.
- It's a subject that combines curiosity with problem-solving, offering careers that are rewarding, diverse, and constantly evolving as science advances.
- If you are interested in understanding how living things work and want a future where your work has impact, biology is an excellent place to start.



# HEALTH AND FITNESS

Salaries stated are per year, dependent on qualifications and experience.



# Nursing

- Nurses provide medical care for patients in hospitals, hospices and surgeries.
- In a hospital, it is nurses that provide most of the treatment prescribed by doctors.
- Nurses specialise in: › Adult Nursing › Child Nursing › Mental Health Nursing › Learning Disabilities

Unifrog Link:

<https://www.unifrog.org/student/careers/sectors/direct/nursing>



**Salary**  
£31,000-54,000

**Qualifications**  
BSc Nursing  
NMC Registration

# Doctor

- Doctors are responsible for diagnosing and treating patients in hospitals and doctors' surgeries.
- They specialise in a number of areas, including: › General Medicine › General Surgery › Cardiology › Emergency Medicine › Paediatrics

Unifrog Link:

[https://www.unifrog.org/  
student/subjects/direct/  
medicine](https://www.unifrog.org/student/subjects/direct/medicine)



## Salary

£32,300-119,000

## Qualifications

Medicine Degree  
UKFPO Foundation  
GMC Registration

# Dentist

- A dentist treats and prevents problems with the mouth, teeth and gums.
- They have to diagnose problems, educate patients on how to take care of their mouths and treat patients after accidents.
- They usually work in dental surgeries, but they sometimes work in hospitals.

Unifrog Link:

<https://www.unifrog.org/student/careers/direct/dentist>



## Salary

£38,000–£131,000

**Qualifications**  
Dentistry Degree  
GDC Registration

# Veterinarians

- Vets are responsible for the health and welfare of a variety of animals.
- Unlike doctors, vets do not focus on one species, although they may specialise in domestic, agricultural or even zoological animals.
- Domestic vets will usually work in surgeries, while agricultural vets will travel to their patients

Unifrog Link:

[https://www.unifrog.org/  
student/careers/direct/v  
et](https://www.unifrog.org/student/careers/direct/vet)



**Salary**  
£30,000-68,000

**Qualifications**  
BVetMed Degree  
RCVS Registration

# Paramedic

- Paramedics respond to emergency calls.
- If you have an accident or illness outside of hospital, a paramedic will often be the first person to treat you.
- They will have to diagnose the problem, decide on treatment, drive the patient to hospital and then communicate their decisions to the doctors

Unifrog Link:

<https://www.unifrog.org/student/careers/direct/paramedic>



## Salary

£23,000-50,000

## Qualifications

Paramedic Science  
Degree  
HCPC Registration

# Pharmacist

- Pharmacists are responsible for checking and supplying medications.
- They can also diagnose and suggest treatments to minor illnesses and injuries.
- They are experts in medicines – they have to be able to advise patients and spot when prescribed medicines may be dangerous.

Unifrog Link:

[https://www.unifrog.org/  
student/careers/direct/p  
harmacist](https://www.unifrog.org/student/careers/direct/pharmacist)



## Salary

£16,000 and £70,000

## Qualifications

A masters degree in pharmacy and registration with the General Pharmaceutical Council (GPhC).

# Physiotherapist

- A physiotherapist is a healthcare worker who helps people with problems with movement.
- These can have a lot of different causes, including sports injuries, accidents, strokes and diseases related to old age.
- They educate people on how to avoid problems and how to manage their own treatment.

Unifrog Link:

<https://www.unifrog.org/student/careers/direct/physiotherapist>



## Salary

£24,900-75,000

## Qualifications

BSc Physiotherapy  
HCPC Approved

# Dietician

- There's a lot of different information out there about what you should eat.
- Dietitians are qualified health professionals who work with both healthy and ill people to manage their diets properly.
- This may range from help with weight-loss to managing the needs of patients with long-term illnesses

Unifrog Link:

<https://www.unifrog.org/student/careers/direct/nutritionist>



## Salary

£23,000-60,000

## Qualifications

BSc Nutrition and  
Dietetics  
HCPC Registration

# Personal Trainer

- A personal trainer might work with ordinary people or professional athletes.
- They help make fitness plans for their clients to meet their goals – whether that's losing weight, gaining muscle or running faster.
- They need a good knowledge of biology to make these plans effective and safe

Unifrog Link:

<https://www.unifrog.org/student/careers/direct/personal-trainer>



## Salary

£17,000-80,000

## Qualifications

No single route  
Level 2 and 4 Personal Trainer Qualification  
Level 4 for specialisms

# RESEARCH

Salaries stated are per year, dependent on qualifications and experience.



# Research Scientist

- A scientist carries out experiments and analyses results to discover new things about the world around us. • They may work in a lab or out in the field.
- Researchers tend to focus on one area, such as: › Biomedical science › Neuroscience › Plant Science › Virology

Unifrog Link:

<https://www.unifrog.org/student/careers/direct/biomedical-scientist>

<https://www.unifrog.org/student/careers/direct/clinical-scientist>



## Salary

£26,000-72,000

## Qualifications

BSc in relevant subject  
MSc/PhD for  
progression

# Biotechnologist

- A biotechnologist looks at new ways to apply biology.
- These new applications may include producing more environmentally friendly fuels or plastics, developing new medicines and treatments for diseases or looking at how to make food more nutritious and long-lasting.
- Biotechnologists usually work in labs or in industry.

Unifrog Link:

<https://www.unifrog.org/student/careers/direct/biotechnologist>



## Salary

£19,000-60,000+

## Qualifications

BSc Biotechnology /  
Biochem / Molecular  
Biology  
MS/PhD useful

# Forensic Scientist

- A forensic scientist works with the police to collect evidence from crime scenes and analyse it.
- This may involve biology (blood or DNA analysis) or ICT (recovering and analysing computer data).
- Forensic scientists may work in the field with the police or in a lab

Unifrog Link:

<https://www.unifrog.org/student/careers/direct/forensic-scientist>



## Salary

Between £20,000 and £45,000, depending on experience.

## Qualifications

A degree in forensic science or biology.

# Agricultural Scientist

- A scientist who studies farming and food production. They research how to grow plants and crops more efficiently and discover ways to improve the health of the soil by adding nutrients.
- They investigate how plants use sunlight, water and nutrients in photosynthesis to increase the quality and yield of the food products produced. These scientists also research and develop methods of pest resistance in plants, to minimise the negative effects of pests and insects on crops.

Unifrog Link:

<https://www.unifrog.org/student/careers/direct/agronomist>



## Salary

£17,000-60,000

## Qualifications

A degree in Agriculture or Plant Science  
MSc/PhD for research roles

# ENVIRONMENT

Salaries stated are per year, dependent on qualifications and experience.



# Ecologist

- An ecologist studies how living creatures interact with the environment they live in.
- This can include how they are affected by climate change, how to reintroduce locally extinct animals or how to reduce the environmental effects of new buildings.
- They may work for the government, charities or universities.

Unifrog Link:

[https://www.unifrog.org/  
student/careers/direct/e  
cologist](https://www.unifrog.org/student/careers/direct/ecologist)



## Salary

322,000-75,000

## Qualifications

BSc  
Ecology/Environmental  
Biology

# Marine Biologist

- Most of our planet is covered by oceans and that is what a marine biologist studies.
- They may look at the effects of global warming, microplastics or over-fishing on marine life.
- A marine biologist will usually work for a university or government but much of their work may be carried out at sea.

Unifrog Link:

<https://www.unifrog.org/student/careers/direct/marine-biologist>



## Salary

Between £12,000 and £120,000 a year, depending on experience and qualifications.

## Qualifications

A degree in marine biology or ocean and earth science.

# Zoologist

- A zoologist studies animals – their environment, anatomy evolution and behaviour.
- They tend to specialise in particular types of animals.
- They may be involved in conservation of animals and their environments.
- Zoologists usually work for universities, zoos or animal charities and will often work in the field.

Unifrog Link:

[https://www.unifrog.org/  
student/careers/direct/  
zoologist](https://www.unifrog.org/student/careers/direct/zoologist)



## Salary

£22,000-48,000

## Qualifications

BSc Zoology/Animal  
Science  
MSc/PhD for research  
fieldwork

# INDUSTRY

Salaries stated are per year, dependent on qualifications and experience.



# Agriculture

- Farming uses domesticated plants and animals.
- Agricultural biologists study these plants and animals, as well as non-domesticated animals that have a positive or negative effect on farms.
- They may specialise in particular types of farming and usually work in industry, on farms or in universities

Unifrog Link:

<https://www.unifrog.org/student/careers/direct/farm-worker>



**Salary**  
£23,000-50,000

**Qualifications**  
Via apprenticeships or  
BSc Agriculture

# Food Production

- A lot of food produced today is processed. Biologists help design those processes to increase nutritional value while reducing cost and environmental damage.
- They develop new types of food which are resistant to heat or drought to reduce food shortages.
- They usually work in industry or universities.

Unifrog Link:

<https://www.unifrog.org/student/careers/direct/food-scientist>



**Salary**  
£24,000-45,000

**Qualifications**  
BSc Food Science  
HACCP Certified

# Bioengineering

- A bioengineer applies ideas from biology and engineering to solve real-world problems.
- Bioengineers design new technologies that aim to address current scientific issues, for example, new ways of growing food or using plants as fuels.
- Some bioengineers study photosynthesis in plants and algae in order to create renewable energy sources, as fossil fuel supplies diminish.

Unifrog Link:

<https://www.unifrog.org/student/careers/direct/biomedical-engineer>

<https://www.unifrog.org/student/careers/direct/biochemical-engineer>



## Salary

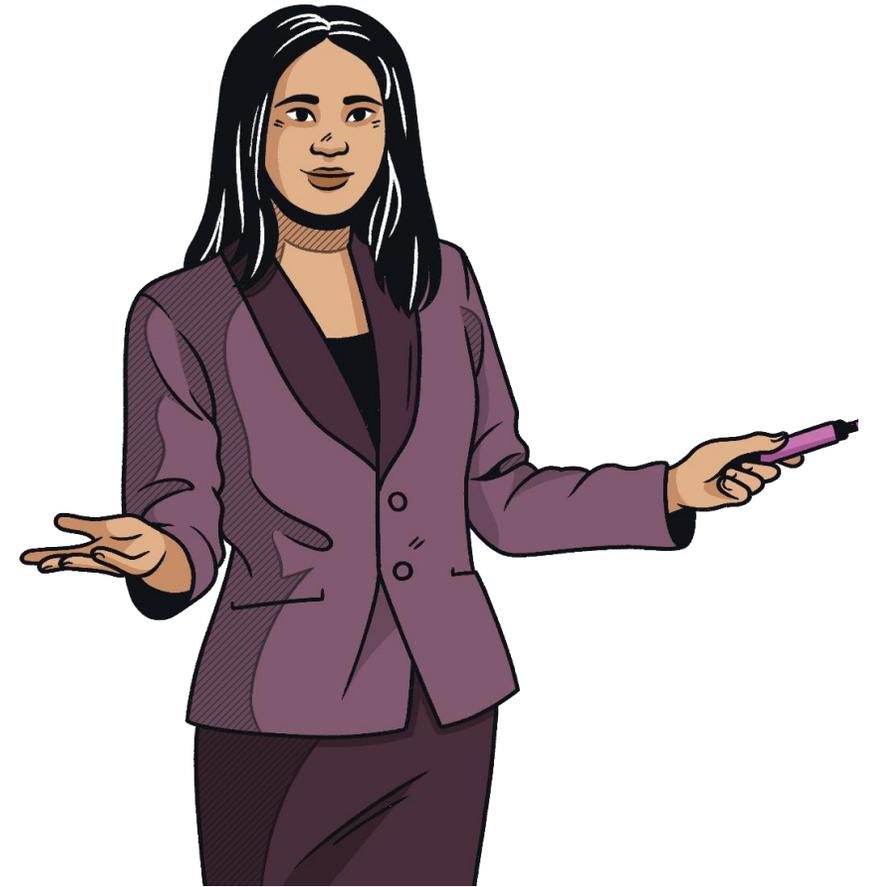
£21,000-£89,000

## Qualifications

BEng/MEng  
Biomedical/Bioengineering  
IBMS accredited

# COMMUNICATION

Salaries stated are per year, dependent on qualifications and experience.



# Science Writer

- The job of a science writer is to take the most complex, up-to-date research and explain it in a way that is clear and concise.
- You need to be an expert in the topic and also a great communicator.
- Science writers may be researchers themselves or may work for scientific journals, universities, newspapers or in industry

Prospects Link:

<https://www.prospects.ac.uk/job-profiles/science-writer>



## Salary

£26,000-51,000

## Qualifications

Any science degree or journalism masters

# Journalist

- A science journalist may work for a newspaper, a website, a blog or on TV, presenting new scientific developments to ordinary people.
- They need knowledge of the subject they are presenting and a good idea of how the scientific process works, to avoid misinterpreting or sensationalising the data.

Unifrog Link:

<https://www.unifrog.org/student/subjects/direct/journalism>



**Salary**  
£25,000-51,000

**Qualifications**  
Any science degree or journalism masters.

# Teacher

- A biology teacher or lecturer needs to be an expert in both biology and in how to communicate it. It's no good understanding biology if you can't help your students to understand it.
- You can teach biology in schools, colleges or universities.
- University lecturers may also carry out research alongside teaching.

Unifrog Link:

<https://www.unifrog.org/student/careers/direct/secondary-school-teacher>



**Salary**  
£31,500-56,000+

**Qualifications**  
Degree in  
Biology/related  
PGCE with QTS

- Biology and Biological Sciences Subject Library:  
<https://www.unifrog.org/student/subjects/direct/biology-and-biological-sciences>
- Earth Sciences:  
<https://www.unifrog.org/student/careers/sectors/direct/geographic-and-environmental-sciences>
- Healthcare Sciences:  
<https://www.unifrog.org/student/careers/sectors/direct/healthcare-sciences>
- Natural Sciences:  
<https://www.unifrog.org/student/careers/sectors/direct/natural-sciences>
- Allied Healthcare:  
[NHS England » Allied health professions](#)

Explore  
Further  
Careers

- **Student resources**

- [Becoming an osteopath : Courses](#)
- [what can you do with a degree in sciences webinar](#)
- [Employer profile: NHS, the UK's national health service : Know-how library](#)
- [Get on the ladder: science : Know-how library](#)
- [Sustainable degrees: Sciences : Know-how library](#)
- [Career specialisms: medicine : Know-how library](#)

- **Subjects library**

- [Allied health : Subjects library](#)
- [Animal science : Subjects library](#)
- [Biology and Biological sciences : Subjects library](#)
- [Biomedical engineering and Biotechnology : Subjects library](#)
- [Dentistry : Subjects library](#)
- [Genetics : Subjects library](#)
- [Horticulture and Botany : Subjects library](#)
- [Medical sciences : Subjects library](#)
- [Medicine : Subjects library](#)
- [Nursing and Midwifery : Subjects library](#)
- [Nutrition : Subjects library](#)
- [Ophthalmics and Optometry : Subjects library](#)
- [Pharmacy and Pharmacology : Subjects library](#)
- [Speech therapy and Audiology : Subjects library](#)
- [Veterinary medicine : Subjects library](#)
- [Zoology : Subjects library](#)

# Additional Links

- **Careers library**

- [Biochemical engineer : careers library](#)
- [Biochemist : careers library](#)
- [Biologist : careers library](#)
- [Botanist : careers library](#)
- [Epidemiologist : careers library](#)  
[Food scientist : careers library](#)
- [General Practice doctor \(GP\) : careers library](#)
- [Geneticist : careers library](#)
- [Marine biologist : careers library](#)
- [Medical physicist : careers library](#)
- [Microbiologist : careers library](#)
- [Molecular and cellular biologist : careers library](#)
- [Natural sciences : career sectors library](#)
- [Neuroscientist : careers library](#)
- [Orthopaedic surgeon : careers library](#)
- [Osteopath : careers library](#)
- [Zoologist : careers library](#)

## Additional Links