

Biomedical science

Biomedical scientists conduct laboratory and scientific tests to support the diagnosis and treatment of disease.

You'll be critical to the running of healthcare science laboratories, A&E, operating theatres, many other hospital departments and [NHS Blood and Transplant services](#) [1].

Male laboratory worker

Life as a biomedical scientist

Based in a laboratory, you'll investigate a wide range of clinical conditions from blood disorders and cancer to hepatitis and meningitis, providing results critical to patient care. In NHS Blood and Transplant, biomedical scientists ensure blood, tissue and organ safety for patients.

Biomedical scientists run, develop, validate and implement new tests, undertake research and service development, make essential reagents and components and manage the testing facilities needed to provide high quality healthcare to patients.

Your work will be extremely varied and demand both analytical and practical skills. You'll screen for diseases and be expected to identify diseases caused by bacteria and viruses, while monitoring the effects of medication and other treatments.

Confidence with technology is important as you'll work with computers, automated equipment, microscopes and other laboratory instruments.

You will support the accreditation of the laboratory by assessing and validating new laboratory tests, developing, reviewing and contributing to the development of standard operating procedures and quality assurance [2] systems. You'll have the opportunity to specialise often in one of three areas, which can include molecular pathology and genomic testing:

- infection sciences
- blood sciences
- cellular sciences

Ines de Jesus

Biomedical scientist

I like liaising with the microbiology consultants to find out more about a patient's condition. Knowing that you have contributed to a patient's improvement is very rewarding.

[Read Ines's story](#) ^[3]

Your work will be extremely varied and demand both analytical and practical skills.

How much can I earn?

You'll be employed on a national pay and conditions system called [Agenda for Change](#) ^[4] (AfC ^[5]).

There are nine pay bands and below are examples of the pay band you'll be on, depending on your role within biomedical science:

- apprenticeship salaries vary according to employer. The minimum apprenticeship wage is currently £7.55 per hour
- trainee biomedical scientist (band 5)
- biomedical scientist (band 5/6)
- senior biomedical scientist (band 7)
- principal biomedical scientist or laboratory manager from (band 8a)
- consultant biomedical scientist – (band 8c-d)
- biomedical Scientific Director (band 9)

How about the benefits?

- make a difference
- flexible and part-time working
- high income early in your career
- work anywhere in the world
- excellent pension scheme
- good holiday entitlement
- NHS discounts in shops and restaurants

How to become a biomedical scientist

Becoming a biomedical scientist might be easier than you think. You could undertake study at university or find an apprenticeship that takes you straight into a job.

There are assistant or level 2 apprenticeships, associate practitioner roles, level 4 apprenticeships, and degree, Master's degree and [Higher Specialist Scientist Training](#) ^[6] for registered and experienced healthcare scientists. If you already have a biomedical science degree, you'll need the IBMS Certificate of Competence.

See our [How to become a healthcare science professional page](#) ^[7] for the details.

Must-have skills

- excellent communication skills
- emotional resilience, a calm temperament and the ability to work well under pressure?
- teamwork and the capacity to lead multidisciplinary teams?
- problem-solving and diagnostic skills?
- outstanding organisational ability and effective decision-making skills?
- first-class time and resource management for the benefit of patients

Entry requirements

There are several different ways to start your career in biomedical science, depending on your experience and qualifications. Once qualified you will be registered with the [Health and Care Professions Council](#) ^[8] (HCPC ^[9]).

Apprenticeship

You could look for an entry level job/level 2 apprenticeship – typically GCSEs 9-4/A-C in maths, English and a science. If an apprenticeship feels right for you, you'll need 5 GCSEs at 9-4/A-C (or equivalent) including maths, English and science or Level 2 Diploma in Healthcare Science to start a level 4 apprenticeship.

Associate practitioner

An associate practitioner role is another route to a career in biomedical science. You'll likely require foundation degree, or equivalent experience with training and experience to NVQ level 3.

Trainee biomedical scientist

As a trainee biomedical scientist, you will complete on-the-job training that will require you to complete a portfolio of competence (and already hold an accredited degree that meets the requirements of the [HCPC](#) ^[9] biomedical scientists):

- IBMS accredited honours degree
- IBMS accredited Sandwich honours degree
- IBMS accredited Integrated honours degree
- [HCPC](#) ^[9]-approved honours degree

If you have a non-accredited degree qualification and/or professional experience beyond the level for [HCPC](#) ^[9] registration as a biomedical scientist, you'll need to complete a portfolio of competency by equivalence. See the [Institute of Biomedical Scientists \(IBMS\) website](#) ^[10] for full details of the different entry routes and requirements.

It's important to note that both accredited and non-accredited degree programmes are available in different universities, but only accredited degrees enable entry to the [HCPC](#) ^[9] register after completion of a portfolio of work demonstrating the required competencies.

If you haven't completed an accredited degree programme, you could be encouraged to complete the required modules to enable full accreditation and entry onto the [HCPC](#) ^[9] register while in post, but this is specific to individuals' learning requirements.

What are my chances of starting a career in biomedical science?

There are many opportunities for a career in biomedical science in the NHS, there are currently more than 40,000 posts in England alone. As this is also a growing area in the NHS there are likely to be many opportunities in the future.

Where a career in biomedical science will take you

A career in biomedical science has excellent career and promotion opportunities including specialist laboratory work, expert and consultant roles, research, education and management.

Biomedical scientists work in many different NHS, government and private laboratories, including hospital, NHS Blood and Transplant and the UK Health Security Agency laboratories. Biomedical scientists can progress to other roles within healthcare science specialising in quality, safety, laboratory management, or in the wider pharmaceutical and healthcare science sector.

• Find your course to become a biomedical science

Region	Type of qualification	Full or part time
- Any - ▼	- Any - ▼	Search <input type="text"/> ▼

Displaying 1 - 5 of 6 matches

Healthcare Science (Life Sciences)

University of Bradford

[View course](#) ^[11] Opens in a new window

- Qualification
 - Bachelor of Science (with Honours) - BSc (Hons)
- Study mode
 - Full-time
- Duration of the course
 - 3 Years
- Leading to a career in
 - Biomedical science, Healthcare science (Pathology sciences - blood sciences, infection sciences, tissue and cellular diagnostics, genetics)
- Contact details
 - admissionslife@bradford.ac.uk ^[12]
 - 01274 236088

- Region
 - Yorkshire and The Humber
- Admissions address
 - Richmond Road
 - Bradford
 - BD7 1DP
 - United Kingdom

Biomedical Science - accredited courses listed by Institute for Biomedical Science

View course ^[13] Opens in a new window

- Study mode
 - Full-time
- Duration of the course
 - Various
- Leading to a career in
 - Biomedical science
- Contact details
 - 020 7713 0214
- Region
 - All UK
- Admissions address
 - Biomedical Science Careers
 - 12 Coldbath Square
 - London
 - EC1R 5HL

BSc Healthcare Science (blood science, cellular science, infection science or genetic science)

University of Central Lancashire

View course ^[14] Opens in a new window

- Qualification
 - BSc (Hons)
- Study mode
 - Full-time
- Duration of the course
 - 3 years
- Leading to a career in
 - Biomedical science, Healthcare science (Pathology sciences - blood sciences, infection sciences, tissue and cellular diagnostics, genetics)
- Contact details
 - uadmissions@uclan.ac.uk ^[15]
 - +44(0)1772 201201
- Region

North West
Admissions address
Preston,
Lancashire, UK
PR1 2HE

BSc (Hons) Healthcare Science (blood science, cellular science, genetics science or infection science)

Cardiff Metropolitan University

[View course](#) ^[16] Opens in a new window

- Qualification
BSc (Hons)
- Study mode
Full-time
- Duration of the course
3 years
- Leading to a career in
Biomedical science, Healthcare science (Pathology sciences - blood sciences, infection sciences, tissue and cellular diagnostics, genetics)
- Contact details
askadmissionscourses@cardiffmet.ac.uk ^[17]
029 2020 5608
- Region
Wales
- Admissions address
Cardiff Metropolitan University,
Llandaff Campus,
Western Avenue,
Cardiff,
CF5 2YB

BSc (Hons) Healthcare Science (blood sciences, cellular sciences, genetic sciences or infection sciences)

University of Sunderland

[View course](#) ^[18] Opens in a new window

- Qualification
BSc (Hons)
- Study mode
Full-time
- Duration of the course
4 years
- Leading to a career in

Biomedical science, Healthcare science (Pathology sciences - blood sciences, infection sciences, tissue and cellular diagnostics, genetics)

- Contact details
student.helpline@sunderland.ac.uk ^[19]
0191 515 3000
- Region
North East
Admissions address
The University of Sunderland,
Edinburgh Building,
City Campus,
Chester Road,
Sunderland,
SR1 3SD
- [Load more Load more results](#) ^[20]

• Live vacancies

Find a vacancy

Enter your location or postcode

Show results within

Search

GUIDE

Get information on working in healthcare science straight to your inbox

We'll send you advice and tips on starting your NHS career including how to get work experience and applying for training and jobs.

[Sign-up](#) ^[21]

Other roles that may interest you

- [Infection sciences](#) ^[22]
- [Virology \(healthcare scientist\)](#) ^[23]
- [Experienced paramedic](#) ^[24]
- [Emergency care assistant](#) ^[25]

Source URL:<https://www.healthcareers.nhs.uk/Explore-roles/healthcare-science/roles-healthcare-science/life-sciences/biomedical-science>

Links

[1] <https://www.nhsbt.nhs.uk/> [2] https://www.healthcareers.nhs.uk/glossary#Quality_assurance [3] <https://www.healthcareers.nhs.uk/explore-roles/healthcare-science/roles-healthcare-science/life-sciences/biomedical-science/real-life-story-ines-de-jesus> [4] <https://www.healthcareers.nhs.uk/working-health/working-nhs/nhs-pay-and-benefits/agenda-change-pay-rates/agenda-change-pay-rates> [5] <https://www.healthcareers.nhs.uk/glossary#AfC> [6] <https://www.healthcareers.nhs.uk/career-planning/developing-your-health-career/nhs-higher-specialist-scientist-training> [7] <https://www.healthcareers.nhs.uk/explore-roles/healthcare-science/how-become-healthcare-science-professional> [8] <https://www.hcpc-uk.org/> [9] <https://www.healthcareers.nhs.uk/glossary#HCPC> [10] <https://www.ibms.org/registration/degree-assessment-for-hcpc-registration/> [11] <http://www.brad.ac.uk/study/courses/info/healthcare-science-bsc-3-years> [12] <mailto:admissionslife@bradford.ac.uk> [13] <https://www.ibms.org/accredited-degrees/accredited-degree-courses/> [14] <https://www.uclan.ac.uk/undergraduate/courses/healthcare-science-bsc> [15] <mailto:uadmissions@uclan.ac.uk> [16] [https://www.cardiffmet.ac.uk/sportandhealthsciences/courses/Pages/Healthcare-Science-BSc-\(Hons\).aspx](https://www.cardiffmet.ac.uk/sportandhealthsciences/courses/Pages/Healthcare-Science-BSc-(Hons).aspx) [17] <mailto:askadmissionscourses@cardiffmet.ac.uk> [18] <https://www.sunderland.ac.uk/study/health-clinical-sciences/undergraduate-biomedical-science/> [19] <mailto:student.helpline@sunderland.ac.uk> [20] <https://www.healthcareers.nhs.uk/printpdf/233?page=1> [21] <https://www.healthcareers.nhs.uk/user/register> [22] <https://www.healthcareers.nhs.uk/explore-roles/healthcare-science/roles-healthcare-science/life-sciences/infection-sciences> [23] <https://www.healthcareers.nhs.uk/explore-roles/healthcare-science/roles-healthcare-science/life-sciences/virology-healthcare-scientist> [24] <https://www.healthcareers.nhs.uk/explore-roles/ambulance-service-team/roles-ambulance-service/experienced-paramedic> [25] <https://www.healthcareers.nhs.uk/explore-roles/ambulance-service-team/roles-ambulance-service/emergency-care-assistant>