How to become a healthcare science professional

Working in healthcare science might be easier than you think. You could undertake study at university or find an apprenticeship that takes you straight into a job.

Whether you’d prefer to work in a laboratory or directly with patients, you'll help prevent, diagnose and treat a wide range of medical conditions.

Could healthcare science be the right career choice for you?

Healthcare science is broken down into four areas with different specialties within each:

- physiological sciences [1]
- life sciences [2]
- physical sciences [3]
- informatics [4]

Healthcare science levels and training

Whether you choose to stay working as an assistant or associate, or to progress your career with further study, healthcare science has something for everyone.

Whether you'd prefer to work in a laboratory or directly with patients, you'll help prevent, diagnose and treat a wide range of medical conditions.

In most healthcare science specialties you can work at the following levels:

- healthcare science assistant
- healthcare science associate
- healthcare science practitioner
- clinical scientist
- consultant clinical scientist

There are some areas where the career structure is a bit different, such as in clinical photography and audiology.
Professional registration

Within healthcare science there are two job roles that require professional registration with the Health and Care Professions Council \[5\] (HCPC \[6\]), with a number of routes into these roles:

- biomedical scientist
- clinical scientist

Biomedical scientist

To work towards being a biomedical scientist you can:

- complete an IBMS accredited degree with an integrated placement (the NHS Practitioner Training Programme in life sciences). This allows you to apply to the HCPC \[6\] to be a registered biomedical scientist once you graduate
- complete an IBMS accredited degree without an integrated placement, then complete an IBMS Registration Portfolio after graduation. This is often done while working as a trainee biomedical scientist
- work as a healthcare science assistant (medical laboratory assistant), in a job or by doing an apprenticeship, then complete a Healthcare Science degree apprenticeship in the life sciences.

If your biomedical science degree isn't accredited by the IBMS, you may need to take some extra modules before you can start your IBMS Registration Portfolio.

Clinical scientist

To work towards being a clinical scientist you can:

- work at healthcare science assistant or associate level, in a job or by doing an apprenticeship at level 2 (assistant) or 4 (associate)
- work at practitioner level by completing the undergraduate NHS Practitioner Training Programme (PTP \[7\]) - available as a full-time degree and increasingly, as an apprenticeship at level 6
- become eligible to work at clinical scientist level by completing the graduate-entry NHS Scientist Training Programme \[8\] (STP \[9\]) for graduates with a relevant degree in science or engineering
- go on to become a consultant clinical scientist by completing Higher Specialist Scientist Training \[10\] for registered and experienced clinical scientists
- use the equivalence process through the Academy for Healthcare Science \[11\] which can match your training, qualifications and experience to the accredited training programmes above.

Find out more about healthcare science apprenticeships on the National School of Healthcare Science website \[12\]

See the information below for details on how to start your career in healthcare science and
where your career could take you.

Apprenticeships and assistant/associate level jobs

Apprenticeship and job vacancies in healthcare science are advertised on the NHS Jobs website [13]. Assistant roles may be advertised as, for example, medical laboratory assistant or healthcare science assistant or technician so it's important to try different keywords when searching.

Entry requirements will vary depending on the level of the job or apprenticeship so it's important to check the person specification in the job advert.

There are apprenticeships available at levels 2, 4 and 6, enabling career progression and a work-based learning approach while gaining qualifications. If you can't see an apprenticeship available in the organisation you'd like to work in then you may want to get in touch with the apprenticeships lead to see if they have any opportunities coming up. Find out more [14] about apprenticeships in the NHS.

NHS Practitioner Training Programme (PTP)

If studying for a degree is right for you, the PTP [7] leads to an approved and accredited degree in one of five themes of healthcare science:

- cardiac, critical care, vascular, respiratory [15] and sleep sciences
- neurosensory sciences (audiology, neurophysiology, ophthalmic and vision science)
- life sciences (blood sciences, infection sciences, cellular sciences, genetics science)
- medical physics (radiotherapy [16] physics, radiation physics, nuclear medicine)
- clinical engineering (medical engineering, radiation engineering, renal technology, rehabilitation engineering)

If you do the PTP [7] as a full-time course it takes three years and integrates academic learning with 50 weeks of workplace-based training. After passing the PTP [7], you can
apply for work as a **healthcare science practitioner** or apply for the NHS Scientist Training Programme (STP) [9]. Practitioner roles will be advertised on the NHS Jobs website [13].

Entry requirements for healthcare science degree courses vary because each university sets its own entry criteria. You are likely to need three A-levels (or equivalent level three qualifications) including one or two science subjects or maths, plus supporting GCSEs. Contact universities directly to find out whether qualifications equivalent to A-levels and GCSEs are acceptable. Our course finder lists accredited degrees in healthcare science.

Find out more about the PTP on the National School of Healthcare Science website. [17]

### NHS Scientist Training Programme (STP)

If you already have a relevant degree, you can complete the Master's level STP [18] for qualification and registration with the HCPC [5] as a **clinical scientist** in the NHS.

It is three-year work-based programme which incorporates a Master's degree. Clinical scientist vacancies are advertised on the NHS Jobs website [13].

Find out more about the STP on the National School of Healthcare Science website. [19]

### Higher Specialist Scientist Training Programme (HSST)

To progress from clinical scientist level, the HSST [20] provides a doctorate-level pathway for clinical scientists to become **consultant clinical scientists**. It is a five-year work-based programme which incorporates a doctorate qualification. Consultant clinical scientist vacancies are advertised on the NHS Jobs website [13].

You can find out more about the HSST [21] on the National School of Healthcare Science website. [22]
Recruiting for values

If you’re applying for a job, apprenticeship, university or training programme leading to a role providing NHS healthcare, you’ll be asked to show how you think the NHS values would apply in your everyday work.

Find out more about NHS values. [23]