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# Entry requirements, skills and interests (clinical engineering)

You can enter clinical engineering as an undergraduate or as a graduate.

## Entry requirements

There are two entry points into clinical engineering:

- You'll need a good range of GCSEs at A-C grade plus at least two A-levels including a science subject to apply for the NHS Practitioner Training Programme (PTP) [1]. You must check with the universities you plan to apply to and confirm their exact requirements. Use our course finder [2] to search for accredited degrees
- You can apply for a place on the graduate-entry NHS Scientist Training Programme (STP) [3] for which you must have a 1st or 2.1 either in an undergraduate honours degree or an integrated master's degree in a pure or applied science subject relevant to the specialism for which you are applying.

If you have a 2.2 honours degree or better in any subject, you will also be considered if you have a higher degree\* that is relevant to the specialism for which you are applying.

(\*Higher degree as defined on page 17 of The Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies [4] Please note this does not include postgraduate diplomas or postgraduate certificates.)

Because of the extensive variation in degrees available, it isn't possible to provide a definitive list of relevant degrees for entry to the STP [5]. For STP [5] positions in the physical sciences and biomedical engineering (which include clinical engineering), the most commonly accepted degrees will be in pure or applied physics, engineering or applied mathematics.

You need to be sure that you've reviewed the job description and person specification for the training (on the National School of Healthcare Science's website [6]), and the information on this page. You then need to be sure to match the skills and knowledge required to the content of your degree and the specialism you wish to apply for.

For full details of entry requirements for the STP [5], including qualifications, scientific skills, transferable skills and physical requirements, please see the person specification on the National School of Healthcare Science's website [7].

For all candidates, evidence of research experience (e.g. in the form of a higher degree or equivalent evidence of scientific and academic capability) is considered desirable.

Find out more about the training you'll receive and registration for a career in clinical engineering [8].

## Skills, qualities and interests needed

To work in clinical engineering you'll need:

- an interest in engineering and manufacturing, a good academic background and an ability to update and test your knowledge against experience
- to be comfortable using modern technology and complex equipment
- meticulous attention to detail to produce highly accurate work even when under pressure
- good interpersonal skills as you may have direct contact with patients and you must respect their privacy, be sympathetic and have a friendly and professional attitude towards them
- to be able to work as part of a team.

If you work in a role with responsibility for resources (such as staff, budgets or equipment) you'll need excellent leadership skills and be able to use your initiative within the remit of your job role.

If you're applying for a healthcare science role or training position, either directly in the NHS or in an organisation that provides NHS services, you'll be asked to show how you think the NHS values apply in your everyday work.

The NHS values form a key part of the NHS Constitution [9].

Find out more about the NHS Constitution [10].

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**Source URL:**<https://www.healthcareers.nhs.uk/explore-roles/healthcare-science/roles-healthcare-science/physical-sciences-and-biomedical-engineering/clinical-measurement/entry-requirements-skills>

### Links

- [1] <https://www.healthcareers.nhs.uk/i-am/considering-or-university/studying-healthcare-science>  
[2] <https://www.healthcareers.nhs.uk/i-am/looking-course> [3] <https://www.healthcareers.nhs.uk/career-planning/study-and-training/graduate-training-opportunities/nhs-scientist-training-programme>  
[4] <http://www.qaa.ac.uk/docs/qaa/quality-code/qualifications-frameworks.pdf>  
[5] <https://www.healthcareers.nhs.uk/glossary#STP> [6] <http://www.nshcs.hee.nhs.uk/>  
[7] <http://www.nshcs.hee.nhs.uk/join-programme/nhs-scientist-training-programme/important-documents>  
[8] <https://www.healthcareers.nhs.uk/explore-roles/physical-sciences-and-biomechanical-engineering/clinical-engineer/training-development>  
[9] [https://www.healthcareers.nhs.uk/glossary#NHS\\_Constitution](https://www.healthcareers.nhs.uk/glossary#NHS_Constitution)  
[10] <https://www.healthcareers.nhs.uk/about/working-health/nhs-constitution>