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# **Clinical engineering**

Clinical engineering staff check and maintain medical equipment to make sure it is safe to use and operating correctly.

Hospitals and NHS staff in the community rely on an increasingly wide range of medical equipment to provide excellent care to patients, so your role is vitally important.

# Life as a clinical engineer

You'll need a background in electronic or mechanical engineering and the confidence and willingness to take a hands-on approach.

You'll enjoy a varied and exciting role maintaining and ensuring the safety of a wide range of medical equipment. This could range from simple devices such as nebulisers to sophisticated and life-saving equipment like radiotherapy [1] linear accelerators.

With experience, you can develop your role and gain greater responsibility to modify and construct equipment.

You will be responsible for managing medical equipment through its life cycle, ensuring that parts are replaced, guaranteeing that machines are always safe to use.

A typical day may include:

- testing new equipment
- · introducing equipment and devices into service
- · advising on the correct use of equipment
- addressing patient safety issues
- safely disposing of old devices

#### Hollie Owen

Apprentice medical engineer

It makes me feel good knowing that the equipment I fixed will go and help a patient get the treatment they need.

Read Hollie's story [2]

# How much can I earn?

You'll be employed on a national pay and conditions system called Agenda for Change (AfC) [3]

. Below are examples of the pay band you'll be on, depending on your role within neurophysiology:

- healthcare science assistant B2/3
- healthcare science associate B4
- healthcare science practitioner B5
- Cclinical scientist B6/7/8a
- consultant clinical scientist B8a-d

# 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 clinical engineer

Starting your career in clinical engineering 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 a wide variety of entry levels into clinical engineering such as assistant or level 2 apprenticeships, associate practitioner roles, level 4 apprenticeships.

There are also Bachelor degrees/degree apprenticeships, Master's degrees and Higher Specialist Scientist Training.

See 'How to become a healthcare science professional' [4] for details.

# **Must-have skills**

- excellent communication skills to manage a wide range of relationships with colleagues, patients and their families?
- 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 clinical engineering, depending on your experience and qualifications.

# 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 clinical engineering. You'll likely require foundation degree, or equivalent experience with training and experience to NVQ level 3.

# **Degree-level qualification**

A level 6 apprenticeship or degree course require relevant level 3 qualifications, for example three A-levels (including at least one science subject) or an Access to higher education course.

# Post-graduate

To start the NHS Scientist Training Programme, you'll need a 1st or 2:1 in relevant first degree or relevant higher degree and 2:2 in a relevant subject.

Higher Specialist Scientist Training is available for registered clinical scientists with relevant MSc or specialist diploma.

# Where a career in clinical engineering can take you

Working in clinical engineering can lead to registration as a Clinical Scientist. You can then move into senior and consultant Clinical Scientist roles, through the <u>Higher Specialist Scientist</u> <u>Training (HSST) programme</u> [5].

It can also lead to careers in academia, research, industry, management and leadership and training.

# • Live vacancies

# Find a vacancy

#### Enter your location or postcode

#### Show results within

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#### • Medical Engineering Technician

317 02 Royal Victoria Infirmary, NE1 4LP

Salary: £31049.00 to £37796.00 Type: Permanent Employer: The Newcastle upon Tyne Hospitals NHS Foundation Trust Apply now on NHS Jobs for Medical Engineering Technician job (opens in a new window) [6]

#### • Clinical Engineer

Manchester, M13 9WL

Salary:

£31049.00 to £37796.00

Type:

Fixed-Term

Employer:

Manchester University NHS Foundation Trust Apply now on NHS Jobs for Clinical Engineer job (opens in a new window) [7]

#### • Clinical Engineer

317 01 Freeman Hospital, NE7 7DN

Salary:

£47810.00 to £54710.00

Type:

Permanent

Employer:

The Newcastle upon Tyne Hospitals NHS Foundation Trust Apply now on NHS Jobs for Clinical Engineer job (opens in a new window) [8]

# • Senior Medical Engineer - Royal Site

Liverpool, L7 8YE Salary: £38682.00 to £46580.00 Type: Permanent Employer: Liverpool University Hospitals NHS Foundation Trust Apply now on NHS Jobs for Senior Medical Engineer - Royal Site job (opens in a new window) [9]

#### • Specialist Clinical Engineer

Blackburn, BB2 3HH

Salary:

£38682.00 to £46580.00

Type:

Permanent Employer:

East Lancashire Hospitals NHS Trust

Apply now on NHS Jobs for Specialist Clinical Engineer job (opens in a new window) [10]

# • Clinical Engineering Administrator

Brighton, BN2 5BE

Salary:

£27485.00 to £30162.00

Type:

Permanent

Employer:

University Hospitals Sussex NHS Foundation Trust (279) Apply now on NHS Jobs for Clinical Engineering Administrator job (opens in a new window) [11]

# • Band 6 Medical Engineering Technician Specialist

London, NW3 2QG Salary: £46419.00 to £55046.00 Type: Fixed-Term Employer: Royal Free London NHS Foundation Trust Apply now on NHS Jobs for Band 6 Medical Engineering Technician Specialist job (opens in a new window) [12]

### • Junior Clinical Engineer - EBME

Stevenage, SG1 4AB Salary: £27485.00 to £30162.00 Type: Permanent Employer: East and North Hertfordshire Teaching NHS Trust Apply now on NHS Jobs for Junior Clinical Engineer - EBME job (opens in a new window) [13]

### Medical Device Engineering Team Driver

```
Alfreton, DE55 7RG
Salary:
	£24465.00
Type:
	Permanent
Employer:
	East Midlands Ambulance Service NHS Trust
<u>Apply now on NHS Jobs for Medical Device Engineering Team Driver job (opens in</u>
a new window) [14]
```

#### • Band 4 - Clinical Engineering, Environment

Watford, WD18 0HB Salary: £27857.00 to £30570.00 Type: Permanent Employer: West Hertfordshire Teaching Hospitals NHS Trust Apply now on NHS Jobs for Band 4 - Clinical Engineering, Environment job (opens in a new window) [15]

#### Clinical Technologist - Rehabilitation Engineering Technician

317 Trustwide, NE7 7DN

Salary: £31049.00 to £37796.00 Type: Permanent Employer:

The Newcastle upon Tyne Hospitals NHS Foundation Trust Apply now on NHS Jobs for Clinical Technologist - Rehabilitation Engineering Technician job (opens in a new window) [16]

#### • Maintenance Engineer

Tadworth, KT20 5RU Salary: £38000.00 Type: Permanent Employer: The Children's Trust Apply now on NHS Jobs for Maintenance Engineer job (opens in a new window) [17]

#### • Mechanical Engineer

Exeter, EX2 5DW

Salary:

£27485.00 to £30162.00

Type:

Permanent

Employer:

Royal Devon University Healthcare NHS Foundation Trust Apply now on NHS Jobs for Mechanical Engineer job (opens in a new window) [18]

#### • Radiotherapy Engineer

Middlesbrough, TS4 3BW

Salary: £38682.00 to £46580.00 Type: Permanent Employer: South Tees Hospitals NHS Foundation Trust Apply now on NHS Jobs for Radiotherapy Engineer job (opens in a new window)

# • Infrastructure Engineer (Cloud)

Location to be confirmed at interview, CF11 9AD

Salary: £48527.00 to £55532.00 Type: Permanent Employer: Digital Health and Care Wales <u>Apply now on NHS Jobs for Infrastructure Engineer (Cloud) job (opens in a new</u> <u>window)</u> [20]

#### • IT Operations Engineer

Crowborough, TN6 1XP Salary: £24826.00 to £30673.50 Type: Permanent Employer: Horder Healthcare Apply now on NHS Jobs for IT Operations Engineer job (opens in a new window)

# Senior Radiotherapy Engineer

Exeter, EX2 5DW

Salary: £47810.00 to £54710.00

Type:

Permanent

Employer:

Royal Devon University Healthcare NHS Foundation Trust Apply now on NHS Jobs for Senior Radiotherapy Engineer job (opens in a new window) [22]

# • Senior Network Engineer

Tooting, SW17 0QT

Salary:

£56276.00 to £63176.00

Type:

Permanent

Employer:

St George's University Hospitals NHS Foundation Trust

Apply now on NHS Jobs for Senior Network Engineer job (opens in a new window) [23]

# Ambulance Vehicle Engineer

Coventry, CV6 6JR

Salary:

£29970.00 to £36483.00

Type:

Permanent Employer:

West Midlands Ambulance Service University NHS Foundation Trust Apply now on NHS Jobs for Ambulance Vehicle Engineer job (opens in a new window) [24]

# Senior Clinical Technologist/Dialysis Technical Services Engineer

Cardiff, CF14 4HY

Salary:

£39263.00 to £47280.00

Type:

Permanent

Employer:

Cardiff and Vale University Health Board Apply now on NHS Jobs for Senior Clinical Technologist/Dialysis Technical Services Engineer job (opens in a new window) [25]

# • Maintenance Engineer Electrical Technician

Poole, BH15 2JB Salary: £31049.00 to £37796.00 Type: Permanent Employer: University Hospitals Dorset NHS Foundation Trust Apply now on NHS Jobs for Maintenance Engineer Electrical Technician job (opens in a new window) [26]

# • Electrical/Mechanical Engineering Craftsperson

Bangor, LL57 2PW Salary: £31516.00 to £38364.00 Type: Permanent Employer: Betsi Cadwaladr University Health Board <u>Apply now on NHS Jobs for Electrical/Mechanical Engineering Craftsperson job</u> (opens in a new window) [27]

# • Plumbing and Heating Engineer

Abergavenny, NP7 7EG

Salary:

£31516.00 to £38364.00

Type:

Permanent

Employer:

Aneurin Bevan University Health Board Apply now on NHS Jobs for Plumbing and Heating Engineer job (opens in a new window) [28]

#### • Windows 11 Network Engineer

Derby, DE24 8JE

Salary: £46148.00 to £52809.00 Type: Fixed-Term Employer: DHU Healthcare Apply now on NHS Jobs for Windows 11 Network Engineer job (opens in a new window) [29]

### Nova Digital Field Engineer

Basildon, SS16 5NL

Salary: £31049.00

£31049.

Type:

Fixed-Term Employer:

Mid and South Essex NHS Foundation Trust

Apply now on NHS Jobs for Nova Digital Field Engineer job (opens in a new window) [30]

# • Senior Digital Infrastructure Engineer

Southend on Sea, SS2 6GE Salary: £55690.00 Type: Permanent Employer: Mid and South Essex NHS Foundation Trust Apply now on NHS Jobs for Senior Digital Infrastructure Engineer job (opens in a <u>new window)</u> [31]

# • IDT Senior Systems Engineer

Tooting, SW17 0QT Salary: £56276.00 to £63176.00 Type: Permanent Employer: St George's University Hospitals NHS Foundation Trust Apply now on NHS Jobs for IDT Senior Systems Engineer job (opens in a new window) [32]

### • Vehicle Technician/Fleet Engineer - Nursling

Southampton, SO16 0YU Salary: £39150.31 to £45805.00 Type: Permanent Employer: South Central Fleet Services Ltd Apply now on NHS Jobs for Vehicle Technician/Fleet Engineer - Nursling job (opens in a new window) [33]

#### • Vehicle Technician/Fleet Engineer - Didcot

Didcot, OX11 8RY
Salary:
£39150.31 to £45805.00
Туре:
Permanent
Employer:
South Central Fleet Services Ltd
Apply now on NHS Jobs for Vehicle Technician/Fleet Engineer - Didcot job (opens
in a new window) [34]

# • Mechanical Engineering Technologist L4 Apprentice

London, WC1E 6DB Salary: £27082.00 to £27658.50 Type: Fixed-Term Employer: University College London Hospitals NHS Foundation Trust <u>Apply now on NHS Jobs for Mechanical Engineering Technologist L4 Apprentice</u> job (opens in a new window) [35]

### • Engineering Tradesperson – (Core Trade Electrical)

Merthyr Tydfil, CF47 9DT Salary: £31516.00 to £38364.00 Type: Permanent Employer: Cwm Taf Morgannwg University Health Board Apply now on NHS Jobs for Engineering Tradesperson – (Core Trade Electrical) job (opens in a new window) [36]

### Deployment Engineer - End User Technology

```
London, EC1V 2PD
Salary:
	£37259.00 to £45356.00
Type:
	Fixed-Term
Employer:
	Moorfields Eye Hospital NHS Foundation Trust
Apply now on NHS Jobs for Deployment Engineer - End User Technology job
(opens in a new window) [37]
```

#### • Clinical Fellow - Medical Specialities

Chelmsford, CM1 7ET Salary: £44170.00 to £57397.00 Type: Permanent Employer: Mid and South Essex NHS Foundation Trust Apply now on NHS Jobs for Clinical Fellow - Medical Specialities job (opens in a new window) [38]

#### Medical Secretary and Clinical Coder

Newcastle Upon Tyne, NE6 3BS

Salary: £24930.00 to £26592.00 Type: Permanent Employer: Walker Medical Group Apply now on NHS Jobs for Medical Secretary and Clinical Coder job (opens in a <u>new window)</u> [39]

#### Consultant in Clinical or Medical Oncology

Reading, RG1 5AN

Salary:

£105504.00 to £139882.00

Type:

Permanent

Employer:

Royal Berkshire NHS Foundation Trust

Apply now on NHS Jobs for Consultant in Clinical or Medical Oncology job (opens in a new window) [40]

#### • Clinical Fellow in Paediatric Medical Specialties - Hospital at Night

Birmingham, B4 6NH

Salary:

£65048.00

Type:

Fixed-Term

Employer:

Birmingham Women's and Children's NHS Foundation Trust Apply now on NHS Jobs for Clinical Fellow in Paediatric Medical Specialties -Hospital at Night job (opens in a new window) [41]

#### Senior Clinical Fellow Emergency Medicine 80:20 Medical Examiner

Bristol, BS2 8HW

Salary:

£61825.00 to £70425.00

Type:

Fixed-Term

Employer:

University Hospitals Bristol and Weston NHS Foundation Trust (UHBW) Apply now on NHS Jobs for Senior Clinical Fellow Emergency Medicine 80:20 Medical Examiner job (opens in a new window) [42]

#### Medical Secretary - Medical Oncology

York, YO31 8HE

Salary:

£27485.00 to £30162.00

Type:

Permanent

Employer:

York and Scarborough Teaching Hospitals NHS Foundation Trust Apply now on NHS Jobs for Medical Secretary - Medical Oncology job (opens in a <u>new window)</u> [43]

# Medical Photographer/Trainee Medical Photographer

317 02 Royal Victoria Infirmary, NE1 4LP

Salary:

£31049.00 to £37796.00

Type:

Permanent

Employer:

The Newcastle upon Tyne Hospitals NHS Foundation Trust Apply now on NHS Jobs for Medical Photographer/Trainee Medical Photographer job (opens in a new window) [44]

# Oakley Medical Practice Medical Secretary / Administrator

Leeds, LS11 5HT Salary: £12.48 Type: Permanent Employer: South and East Leeds GP Group <u>Apply now on NHS Jobs for Oakley Medical Practice Medical Secretary /</u> <u>Administrator job (opens in a new window)</u> [45]

# Medical Secretary

Sleaford, NG34 7HD

Salary:

Negotiable

Type:

Permanent

Employer:

Sleaford Medical Group Apply now on NHS Jobs for Medical Secretary job (opens in a new window) [46]

# Further information

• Academy for Healthcare Science [47]

- Health and Care Professions Council [48]
- Institution of Physics and Engineering in Medicine [49]
- National School of Healthcare Science [50]
- UCAS [51]

# Other roles that may interest you

- <u>Clinical or medical technology in medical physics</u> [52]
- Medical device risk management and governance [53]
- Knowledge and library services [54]
- Health records staff [55]

**Source URL:**<u>https://www.healthcareers.nhs.uk/Explore-roles/healthcare-science/roles-healthcare-</u>science/physical-sciences-and-biomedical-engineering/clinical-engineering

#### Links

[1] https://www.healthcareers.nhs.uk/glossary#Radiotherapy [2] https://www.healthcareers.nhs.uk/exploreroles/healthcare-science/roles-healthcare-science/physical-sciences-and-biomedical-engineering/medicalengineering/real-life-story-hollie-owen [3] https://www.healthcareers.nhs.uk/working-health/workingnhs/nhs-pay-and-benefits/agenda-change-pay-rates [4] https://www.healthcareers.nhs.uk/exploreroles/healthcare-science/how-become-healthcare-science-professional [5] https://www.healthcareers.nhs.uk/career-planning/developing-your-health-career/nhs-higher-specialistscientist-training [6] https://beta.jobs.nhs.uk/candidate/jobadvert/C9317-25-1017 [7] https://beta.jobs.nhs.uk/candidate/jobadvert/C9349-25-2417 [8] https://beta.jobs.nhs.uk/candidate/jobadvert/C9317-25-1057 [9] https://beta.jobs.nhs.uk/candidate/jobadvert/C9287-25-1213 [10] https://beta.jobs.nhs.uk/candidate/jobadvert/C9435-25-0301 [11] https://beta.jobs.nhs.uk/candidate/jobadvert/C9279-25-1405 [12] https://beta.jobs.nhs.uk/candidate/jobadvert/C9391-25-1557 [13] https://beta.jobs.nhs.uk/candidate/jobadvert/C9361-25-0484 [14] https://beta.jobs.nhs.uk/candidate/jobadvert/C9335-25-0115 [15] https://beta.jobs.nhs.uk/candidate/jobadvert/C9360-25-0443 [16] https://beta.jobs.nhs.uk/candidate/jobadvert/C9317-25-1068 [17] https://beta.jobs.nhs.uk/candidate/jobadvert/B0474-25-0098 [18] https://beta.jobs.nhs.uk/candidate/jobadvert/C0023-25-1398 [19] https://beta.jobs.nhs.uk/candidate/jobadvert/C9328-25-0788 [20] https://beta.jobs.nhs.uk/candidate/jobadvert/M9025-25-0068 [21] https://beta.jobs.nhs.uk/candidate/jobadvert/B0237-25-0042 [22] https://beta.jobs.nhs.uk/candidate/jobadvert/C0023-25-1454 [23] https://beta.jobs.nhs.uk/candidate/jobadvert/C9200-25-0879 [24] https://beta.jobs.nhs.uk/candidate/jobadvert/C9217-083-25-26 [25] https://beta.jobs.nhs.uk/candidate/jobadvert/H9001-25-0641 [26] https://beta.jobs.nhs.uk/candidate/jobadvert/C9153-25-0823 [27] https://beta.jobs.nhs.uk/candidate/jobadvert/H9050-25-2244 [28] https://beta.jobs.nhs.uk/candidate/jobadvert/H9040-25-1087 [29] https://beta.jobs.nhs.uk/candidate/jobadvert/M0051-25-0068 [30] https://beta.jobs.nhs.uk/candidate/jobadvert/C9390-25-1769 [31] https://beta.jobs.nhs.uk/candidate/jobadvert/C9390-25-1782 [32] https://beta.jobs.nhs.uk/candidate/jobadvert/C9200-25-0887 [33] https://beta.jobs.nhs.uk/candidate/jobadvert/M9195-25-0036 [34] https://beta.jobs.nhs.uk/candidate/jobadvert/M9195-25-0038 [35] https://beta.jobs.nhs.uk/candidate/jobadvert/C9309-25-0754 [36] https://beta.jobs.nhs.uk/candidate/jobadvert/H9110-25-1188 [37]

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