

Broadcast Engineer

Broadcast engineers install, operate, maintain and repair the equipment used to make and broadcast radio and television programmes. They make sure that programmes are broadcast to the highest quality and on time.

The Work

You could be:

- maintaining, testing and aligning the equipment used in radio broadcasting, such as control and switching systems and audio frequency equipment
- responsible for the audio and video equipment used in television for studio recordings, network and outside broadcasts or webcasts
- installing new equipment and facilities or networks
- researching and developing new broadcasting techniques
- analysing and fixing technical faults
- maintaining the permanent cable and radio links which operate between studios and transmitters
- responsible for transmitting stations and the equipment based in them, such as receivers and test equipment
- advising on studio design, improving services and buying equipment
- maintain records and technical documentation.

Pay

The figures below are only a guide. Actual pay rates may vary, depending on:

- where you work
- the size of the company or organisation you work for
- the demand for the job.

As of September 2023, the starting salary on the BBC Engineering Degree Apprenticeship is £19,500.

The starting salary for broadcast engineers is around £30,000 a year, rising to around £40,000 to £50,000 with experience.

Conditions

- Many broadcasting engineers are based in major towns or cities, but if you are responsible for a transmitting station you may be based in a rural area.
- You could be working in an office, studio, control room or on an outside broadcast.
- Working hours can be long and irregular. Shift work covering evenings, weekends and nights is common. The media business is 24/7.
- Outside broadcast work can involve working in isolated locations and in poor weather conditions, but the work can be extremely varied and interesting.
- You may have to work abroad in dangerous situations, including conflict zones.

Getting In

- You normally start as a trainee broadcast engineer with a broadcasting company.
- For this, you usually need an HNC (SCQF Level 7), HND (SCQF Level 8) or degree (SCQF Level 9-10) in a relevant subject such as electrical engineering, electronic engineering, computing, physics, information technology or broadcast technology.
- For entry to an HNC or HND course you normally need 1-2 Highers plus some subjects at National 5. For a degree course you need 4-5 Highers normally including Maths and Physics or a technological subject.
- The BBC offers an engineering degree apprenticeship in Broadcast and Media Systems which involves completing a BEng degree and undergoing work placements across the BBC. You would need to be prepared to move around the UK. Entry requirements are 112 UCAS points, preferably including Maths and science or technological subjects, plus National 5 English and Maths.
- They also run a Postgraduate Engineer (Broadcast and Media Systems) scheme for graduates with a 2:2 Honours degree in electronics, computer science or other relevant discipline.
- You may be able to qualify by other training routes.
- You might start work as a runner for a broadcasting company and then apply for in-house engineering training.
- You usually need to have relevant work experience for entry. This could be unpaid work in a student film production, hospital radio or a work placement in broadcasting.

Most engineers in this field work for the BBC, ITV, STV, Sky or for independent radio or television companies and satellite, digital and cable broadcasters. Competition for jobs in broadcasting engineering is intense.

What Does It Take

You need to have:

- a strong interest in the media and broadcast technology
- good technical knowledge of broadcast systems and equipment
- good fault finding and problem solving skills
- excellent IT skills
- good communication skills
- stamina
- an understanding of health and safety and relevant legislation.

You need to be able to:

- understand system design and schematic diagrams
- understand and use technical manuals
- plan and organise programmes of work
- work to timetables and meet tight deadlines, usually under pressure
- work on your own and also as part of a team
- use your initiative and think on your feet
- be flexible and versatile – multi-skilling is important.

Training

- After gaining your HNC, HND or degree and some further training with an employer, you can register with the Engineering Council as a professional engineer - either as Incorporated Engineer (IEng) or Chartered Engineer (CEng).
- For IEng you need to have either a recognised Bachelor's degree or a recognised HNC or HND plus further study to Bachelor's degree level.
- For CEng you need to have a recognised Bachelor's degree with Honours plus a recognised Masters degree (or equivalent), or a recognised integrated Master of Engineering (MEng) degree (SCQF Level 11).
- If you do not have any of the above qualifications, you may still be able to achieve IEng or CEng by other approved routes. You can check these alternative routes with the Engineering Council or with the appropriate professional engineering institution.
- You will need to keep up to date with changes in technology and the introduction of new equipment.

Getting On

- Broadcast engineers who first qualify as IEng can progress to CEng after further training and experience. This can open up a wider range of opportunities.
- You would usually start as a junior engineer assistant and progress, as an engineer, through work in transmission or communications.
- You may need to move around the country to gain promotion.
- There may be opportunities to become self-employed and work freelance.
- Some engineers may move into teaching in colleges or universities.
- There may be opportunities to work abroad.

More Information

The [Tomorrow's Engineers](#) website has more information on careers in engineering.

Trainee Finder is ScreenSkills flagship new entrant programme which offers paid work placements across a range of roles in film and TV. Recruitment will usually begin around September of the year before placement. Find out more and apply online by visiting the [Film Trainee Finder website](#).

Contacts

BBC Recruitment

Website: careers.bbc.co.uk

X: [@BBCGetIn](#)

ITV Careers

Website: careers.itv.com

X: [@ITVCareers](#)

Facebook: www.facebook.com/ITVCareers

ScreenSkills

Tel: 020 7713 9800

Email: info@screenskills.com

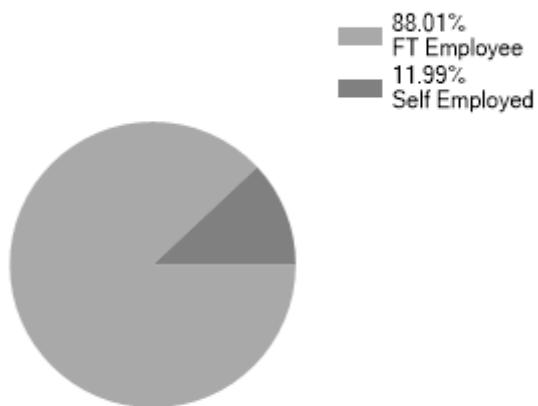
Website: www.screenskills.com

X: [@UKScreenSkills](#)

Facebook: www.facebook.com/UKScreenSkills

Statistics

Employment Status UK %

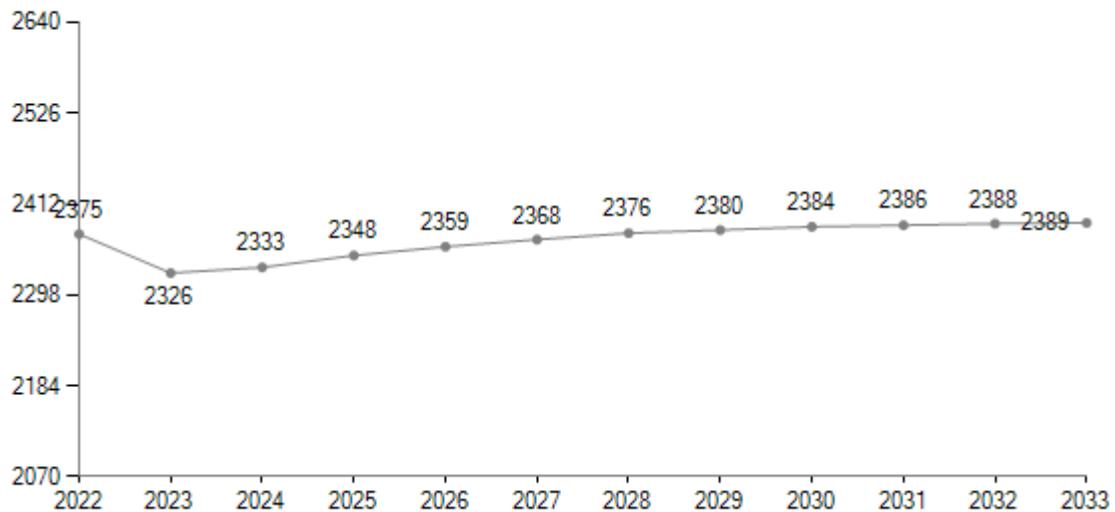


Past Unemployment - Scotland

No Claimant statistics available for Scotland.

LMI data powered by [LMI for All](#)

Predicted Employment in Scotland



LMI data powered by [Lightcast](#)