

Architect

Job Profile

What do they do?

Architects plan, design and advise on the construction and alteration of buildings and other structures. Architects are responsible for designing to a given design brief.

What qualities do they need?

Architects need to be both practical and creative. They should be confident with maths and physics in order to calculate whether designs will work in the real world. Architects should be able to work well under pressure and meet deadlines. They need to be good at organising, planning and problem solving and should be able to communicate clearly.

What qualifications do they need?

An architect needs to complete many years of training before they are qualified. These are:

- a degree recognised by the Architects Registration Board (ARB)
- a year of practical work experience
- a further 2 years' full-time university course like B.Arch, Diploma, M.Arch
- a year of practical training
- a final qualifying exam

What do they earn?

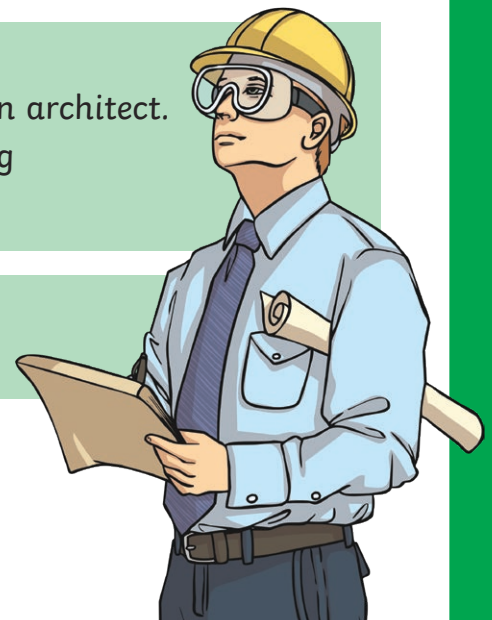
Pay starts at £27,500 and ranges up to £90,000 depending on experience and the type of role they do.

Where do they work?

All new builds or building improvements usually require an architect. They can work for local councils, large companies, building developers or even freelance.

What school subjects might be useful?

Maths, physics, computing and English.



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Environmental Scientist

..... Job Profile

What do they do?

Environmental scientists study the environment and how plants, animals and other organisms are affected by it. Environmental scientists also study human activities on the environment by conducting tests, analysing data and giving advice about how to prevent and reduce environmental problems.

What qualities do they need?

Environmental scientists need to be good communicators. They need to be analytical and creative thinkers who have good planning and organisation skills. Environmental scientists should want to create a sustainable future for the UK and the rest of the world.

What qualifications do they need?

To become an environmental scientist, you'll need to have a degree in a relevant subject such as environmental science, environmental engineering or environmental bioscience. It is also possible to get into this career with a related scientific degree such as microbiology, chemistry, geoscience or physics.

What do they earn?

Pay ranges between £19,000 and £39,000 for an environmental scientist in the UK depending on skills, experience and the type of work they do. The average salary is £26,000.

Where do they work?

An environmental scientist can be employed by a government department such as the Environment Agency or the Department for Environment, Food and Rural Affairs to conduct research on environmental issues. Some environmental scientists might be office based while others spend their time mainly on outdoor sites and in laboratories.

What school subjects might be useful?

All or any of the core science subjects (chemistry, biology or physics), geography and maths.



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Fashion Designer

Job Profile

What do they do?

Fashion designers sketch and design clothes. They create images and patterns for the product that they will make into a prototype. Fashion designers adapt patterns to a new style or create new patterns. They source fabrics and prints for clothing. There are three main areas of fashion: high street fashion, haute couture and ready-to-wear.

What qualities do they need?

A fashion designer must be creative, enjoy fashion and trends and be interested in colours and patterns. They must also be patient and accurate in their approach to designing and working. A fashion designer needs to be motivated and dedicated, adaptable and able to work well under pressure.

What qualifications do they need?

You will usually need a relevant higher education qualification, such as a foundation degree, HND or degree to be a fashion designer. A course that teaches both design and technical skills will give you the practical knowledge that you need to work in the industry. Courses that are widely available include:

- fashion design
- art and design
- textiles

What do they earn?

Pay ranges between £19,000 and £45,000 for a fashion designer in the UK depending on experience and skills. The average salary is £26,000. Some of the top fashion designers can earn up to £8 million a year!

Where do they work?

Fashion designers generally work for large companies. These could be in high street shops or under well-known designers. Some fashion designers work as freelance designers and can work for a range of different companies, and some work for catwalks and photoshoots. Some celebrities even employ their own fashion designers to create clothes with them in mind.

What school subjects might be useful?

Art and design and maths.



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Information Technology Systems Architect

Job Profile

What do they do?

IT architects help plan, design and build IT systems for businesses and clients. Their role usually includes communicating with clients; building new IT systems; obtaining suitable IT products to meet the needs of their clients; developing and carrying out tests to make sure everything works properly; making sure systems meet quality and security standards and advising senior managers about how to plan their future IT needs.

What qualities do they need?

An IT systems architect should have excellent knowledge and understanding of computer operating systems, applications, hardware and software. They need to have a good maths knowledge and analytical thinking skills. An IT architect also needs to be able to communicate well with people and pay attention to detail.

What qualifications do they need?

You will normally need a degree or postgraduate qualification in a relevant area, such as:

- computer science or computer engineering
- information management systems
- business information systems
- software development
- mathematics

What do they earn?

Pay ranges between £40,000 and £80,000 for an information technology architect in the UK depending on experience and skills.

Where do they work?

IT systems architects could work in an office or at a client's business.

What school subjects might be useful?

English, computing and maths.



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Pathologist

..... Job Profile

What do they do?

A pathologist studies human diseases and medical conditions. They test samples of blood, other bodily fluids and body tissue to diagnose health problems. They provide advice for other medical practitioners and might research diseases to try and find cures.

What qualities do they need?

Pathologists need to be hard-working and have an eye for detail. They need to be good problem-solvers who are able to analyse data and interpret findings. They need to be excellent communicators, both orally and in writing. Their work needs to be highly accurate. A pathologist needs to be confident with technological systems and processes.

What qualifications do they need?

In order to become a pathologist, you must complete:

- A degree in medicine (five years)
- A foundation course (two years)
- A specialist training programme (five or six years)

What do they earn?

Pay starts at £27,000 for a junior pathologist in their first year and ranges up to £105,000 for a consultant pathologist in the UK depending on experience and skills.

Where do they work?

Pathologists might work in a laboratory environment, a hospital ward setting or in a clinic. They might also be required to work in a mortuary, as well as travel within the UK and overseas to attend meetings, conferences and courses.

What school subjects might be useful?

To be accepted onto a medicine degree course, you need at least five good GCSEs above grade '4', and three 'A' levels that include maths, chemistry, biology or physics.



Police Officer

Job Profile

What do they do?

Police officers are trained to help and protect people. A police officer responds to emergencies and works to prevent, investigate, reduce and solve crime.

What qualities do they need?

To be eligible for police officer training you would need to have an interview and pass fitness and written tests. You also need to have medical checks, including an eyesight check. On completing your training, you will spend two years as a student officer before becoming a police constable. You can then decide whether you want to specialise in a particular type of policing, such as, criminal investigation department (CID), drugs or firearms, dog-handling or mounted policing.

- You could also get paid work as a police community support officer (PCSO) before applying for police officer training.

What qualifications do they need?

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You could also get paid work as a police community support officer (PCSO) before applying for police officer training.

What do they earn?

Pay starts at £21,000 and ranges up to £41,500 depending on experience and the type of role they do.

Where do they work?

A police officer could work on a patrol or at a police station. Their working environment may be outdoors in all weathers. It can be a physically and emotionally demanding job.

What school subjects might be useful?

English, maths, physical education and computing.



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Teacher

..... Job Profile

What do they do?

Teachers use their knowledge and skills to inspire and educate the next generation. They use a range of teaching methods to cater for lots of different learning needs and explore all kinds of learning opportunities. Primary school teachers will teach many different subjects. Secondary school teachers usually specialise in one particular subject.

What qualities do they need?

Teachers need to care about the young people in their classrooms. They need to be skilled at communicating clearly with pupils and adults from a range of cultures and backgrounds. Teachers need to be organised, good problem-solvers, enthusiastic and open-minded. They need to be able to motivate pupils and be adaptable and creative. Teachers need to be firm and fair and have a good sense of humour.

What qualifications do they need?

To become a teacher, you need to complete an undergraduate or postgraduate teacher training programme. Initial Teacher Education or Training (ITET) programmes across the UK are broadly similar, providing a combination of academic study and time in school, as you learn about key teaching methods.

What do they earn?

New entrants to the profession start on a salary scale, which rises incrementally from £23,720 to £35,008. After gaining experience and expertise, particularly skilled classroom teachers can, where the opportunities exist, apply to go on to become a leading practitioner, for which schools have the freedom to create higher paying posts. Salaries in this bracket start at £39,374, potentially rising to over £100,000.

Where do they work?

Teachers work in primary schools and secondary schools throughout the country. Some teachers have specialist roles that see them working in a range of schools with many different pupils.

What school subjects might be useful?

English, maths, science, PE, art, computing.



Animator

Job Profile

What do they do?

An animator creates multiple images, known as frames, which give an illusion of movement called animation when displayed in rapid sequence. Animators can work in a variety of fields including film, television and video games.

What qualities do they need?

In order to become an animator, you will need to take an animation or art-related course that will help you develop the skills and knowledge required for the job. If you really want to stand out in the job market you will need strong 2:1 or a first degree.

What qualifications do they need?

A tertiary qualification, such as a Bachelor of Creative Media Production, a Diploma in Animation or a Bachelor of Design majoring in visual communication design.

What do they earn?

Pay varies depending on the skills, experience and type of work an animator does. An animator may earn between £18,000 - £51,000 per year on average.

Where do they work?

They work for animation studios and film and video production studios, as well as gaming companies, web design firms, graphic design firms, and advertising agencies.

What school subjects might be useful?

- Art
- Illustration
- Graphic Design
- Computer Programming
- Model Making or Sculpture
- 3D Design
- Multimedia Design
- Mathematics or Physics



Zoologist

..... Job Profile

What do they do?

Zoologists study animals and their behaviour in the wild and in captivity. Zoologists study how animals interact with their environments and other species.

What qualities do they need?

Zoologists need to be passionate about animals and the natural world. They need to be good at problem-solving and be patient and logical. Zoologists need to be well organised and skilled at writing and presenting information. They must be able to think critically, or use evidence-based reasoning, to draw conclusions from observations and testing. A zoologist also needs to be physically fit. Many zoologists spend weeks or months at a time in the field gathering information and studying animals in their natural habitat.

What qualifications do they need?

Zoologists need a university degree in a subject such as zoology, animal ecology, animal behaviour or conservation.

What do they earn?

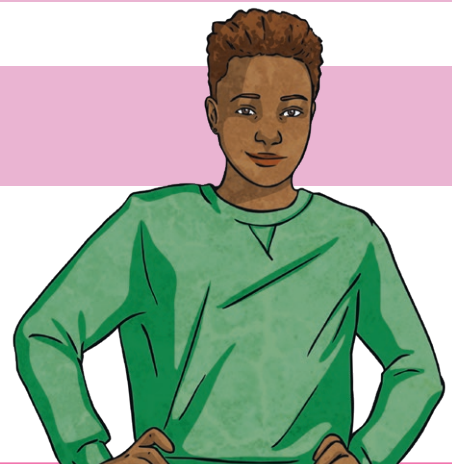
Pay starts at £21,000 and ranges up to £48,000 depending on experience and the type of role they do.

Where do they work?

Zoologists often work all over the world. They could work in a laboratory or at a research facility.

What school subjects might be useful?

Biology, chemistry, maths and English.



Mechanic

Job Profile

What do they do?

Mechanics are responsible for inspecting and repairing vehicles and machinery. These professionals carry out maintenance inspections, put together mechanical parts and perform repairs.

What qualities do they need?

Mechanics need to be physically and mentally fit and have a good knowledge of basic mechanic's tools and equipment. They should have a strong attention to detail as well as excellent communication and customer service skills.

What qualifications do they need?

To be a motor mechanic, you can complete an apprenticeship as a motor vehicle service and maintenance technician. You will do on-the-job training and spend time at a college or with a training provider. With experience, you could become a senior technician, workshop supervisor, garage manager or set up your own business.

What do they earn?

A mechanic's salary in the UK ranges between £18,000 to £35,000 per year. Location can have a significant impact on the potential earnings of a qualified mechanic.

Where do they work?

Mechanics usually work in garages that are indoors. There are also mobile mechanics who help repair vehicles on the roadside that have broken down.

What school subjects might be useful?

You will usually need some GCSEs (or equivalent), normally including English and Maths, for an intermediate apprenticeship and five GCSEs (or equivalent) at grades 9 to 4, including English and Maths, for an advanced apprenticeship.



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