



REIGATE GRAMMAR SCHOOL



RGS Careers

Route to Studying Architecture 2015-2016



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RGS GUIDE TO ARCHITECTURE

So you are interested in studying architecture?

Did you know that there are several different architectural courses? To begin, perhaps it would be helpful to give a very brief overview of what these are. I have used the COA Careers Directory, which Fifth Form students who take the Preview careers profiling test receive, as well as the National Careers Service website (www.nationalcareersservice.direct.gov.uk) as my main sources for this..

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JOB PROFILES

Architect

Architects design new buildings and the spaces around them. They also work on the restoration and conservation of existing buildings. They manage the construction process, control budgets and deal with planning issues. If you are well organised, creative and interested in buildings and construction, this could be the perfect job for you. You will also need good computer aided design skills and the ability to work closely with other construction professionals. To be an architect you will have to complete a five-year university course and complete at least two years' professional experience.

Hours: 30-40 per week

Starting salary: £30,000+ per year

Architectural Technician/Technologist

Architectural Technicians and Technologists use their knowledge and expertise to make sure building designs become a reality. They work on domestic, commercial and industrial projects. To do this job you will need good drawing skills and lots of creative ideas. You will need to be able to understand technical drawings and you'll also need excellent computer design skills. You can get into this job by either studying for a higher education qualification before starting work, or by following a work-based route.

Hours: 30-40 per week

Starting salary: £15,000+ per year

Landscape Architect

Landscape architects plan, design, create and manage the landscapes we live and work in. In this role you will make practical, attractive spaces which are good for our health and wellbeing, and which protect the environment. You might work on public parks, green spaces in cities, housing developments or wildlife conservation areas. As a landscape architect you will need a flair for creativity and design. You also need good communication and IT skills. If you are interested in planning and design and how this links in with the way we live, this job could be for you. To get into this career you will need a degree or postgraduate level qualification which is recognised by the Landscape Institute (LI).

Hours: 37 per week

Starting salary: £20,000+ per year

Technical Architects/IT Systems Architect

Technical architects help plan and design IT systems for clients, and put them into place. For example, they might work to integrate several separate client

websites into one 'platform', that's available across different hardware, like PCs, tablets and mobile phones. If you enjoy working out the best way to do things using IT, can work as part of a team, and communicate ideas clearly, you'll find this to be a rewarding career. You'll need a logical approach and the ability to pay attention to detail. Employers tend to look for people with excellent technical skills and good commercial awareness. A computing qualification at degree level or higher will be helpful, along with experience of software development, business analysis or systems design.

Hours: 37-40 per week

Starting salary: £40,000+ per year

Naval Architect

As a naval architect you would design, build and repair ships, boats, other marine vessels, and offshore structures like drilling platforms. If you have an interest in engineering and design, and a creative mind, there could be opportunities for you in this career. You'll need good computer aided design skills and the ability to communicate well to get your ideas across. To become a qualified naval architect you would usually need a degree or postgraduate qualification that is recognised by the Royal Institution of Naval Architects (RINA).

Hours: 40 per week

Starting salary: £22,000+ per year

RELATED AREAS

Many architects elect to move into the following areas, so you may wish to research these too:

Real estate (property) development	Corporate facilities planning
Project management	Construction management
Civil engineering	Chartered Surveyor
Interior design	Structural engineer
Forest manager	Town planner

ENTRY REQUIREMENTS

These are all subject to individual universities, but this provides an overview:

Architect

- ◆ At least five GCSEs (A-C) including maths, English and physics or chemistry
- ◆ Three A Levels. Some universities prefer these to include maths or a science subject.

Architectural Technician/Technologist

- ◆ GCSE subjects that focus on technology subjects and science (art is also liked).
- ◆ A Levels liked are sciences and technology.

Landscape Architect

- ◆ GCSEs including English and either maths or science.
- ◆ Two A Levels or equivalent in a related subject like art, biology or geography.

Technical architects / IT systems architect

- ◆ Qualifications in IT at GCSE and A Level.

Naval Architect

- ◆ Three A Levels, including maths and physics.

Many course providers will also want to see a portfolio of your drawings and sketches. Entry requirements can vary and other qualifications may be accepted, such as an *Access to Higher Education* course. Check exact entry requirements with individual universities. The ARB website has details of courses throughout the UK.

NB: As always, my advice is that you should pick the A Levels that you enjoy most and think that you will do best in. This course of action is likely to give you the best options, because it is likely to yield the best grades. Remember that you have to spend an enormous amount of time studying these subjects, so you **MUST** want to take them.

TOP 10 ARCHITECTURE UNIVERSITY ENTRY REQUIREMENTS

Bath

A Level: A*AA

There is a strong preference for applicants who have qualifications that demonstrate a breadth and depth of learning which includes a combination of mathematics/sciences with arts/humanities. They do not require the submission of a portfolio as part of the selection process. They state that to ensure fairness to candidates they will not be able to use portfolio evidence if this is submitted. Undertaking an Art/Design qualification is the preferred option.

Cambridge

A Level: A*AA

Required by some Colleges but NOT all: A Level/IB Higher Level Mathematics or Physics, Art.

There's no prescribed combination of A Level (or equivalent) subjects required for the Architecture course. Applicants with backgrounds in either the arts/humanities or the sciences have been successful, although a combination of arts and science subjects is considered the best preparation.

The majority of applicants have studied Art or History of Art, which provide a better preparation for the course than subjects such as Design and Technology and Technical Graphics. Mathematics at A Level (or equivalent) is also encouraged.

A strong interest and commitment to the discipline is essential and all applicants are expected to show a portfolio of recent work at interview.

Edinburgh

A Level: AAA (and a strong set of GCSEs)

Minimum requirements: A Levels: ABB. GCSEs: English at Grade C and Mathematics at Grade A or Mathematics and Physics both at Grade B or Mathematics, Science plus an additional Science all at Grade B. Evidence of artistic ability is required.

Cardiff

A Level: AAA

They are looking for a balanced mix of core science and art subjects at A Level. All candidates must also have a GCSE Grade B in Mathematics and English Language or equivalent. They require all candidates to submit a small portfolio.

Sheffield

A Level: AAA

GCSE Maths and English, Grade C or above are required. They require all candidates to submit a small portfolio.

UCL

A Level: AAB

UCSE English Language and Mathematics at Grade C. No specific subjects. Comprehensive portfolio of creative work required at interview stage.

Kent

A Level: AAB

GCSE Mathematics at Grade C. They must show either a formal qualification such as A Level grade B in Art or Art Design or Design & Technology; or a portfolio which can cover a range of forms including painting, drawing, design, photography, models and textile design.

Newcastle

A Level: AAA

GCSE grade B in Mathematics and English required if not taken at a higher level. All candidates must submit a portfolio.

Strathclyde

A Level: ABB

Required subjects: Maths or Physics; GCSE English Literature or Language (A). Candidates may be asked to submit a portfolio

Liverpool

A Level: Typically AAA.

They will consider applicants with lower grades, subject to a strong portfolio submission. There are no specific subject requirements but you will be required to submit an art-based portfolio. GCSE Maths and English at Grade C is required.

ROUTES INTO ARCHITECTURE

The most common way to qualify as an architect involves:

- ◆ Five years' study on a university course recognised by the Architects Registration Board (ARB)
- ◆ two years' professional experience made up by the following steps:
 - ◆ **Part 1:** A three-year, full-time undergraduate BA or BSc degree in architecture; up to 12 months' paid professional experience in an architectural practice (known as Stage 1);
 - ◆ **Part 2:** A further two-year, full-time degree, for example a BArch, Diploma or March;
 - ◆ **Part 3:** At least one year's paid experience (known as Stage 2) and a professional exam.

As part of the qualifying process, you would document your progress on your Professional Experience and Development Record (PEDR). This would be signed off at regular intervals by your employment supervisor and Professional Studies Adviser from your university. Once you have completed the Parts 1, 2 and 3 you can register as an architect with the ARB and apply to become a Chartered Member of the Royal Institute of British Architects (RIBA). See the RIBA and ARB websites for full details.

ROUTES TO BECOME AN ARCHITECTURAL TECHNOLOGIST

Higher education routes

The Chartered Institute of Architectural Technologists (CIAT) recommends the following qualifications:

- ◆ Architectural technicians – HND or foundation degree in architectural technology, construction or the built environment.
- ◆ Architectural technologists – a CIAT-accredited degree in architectural technology.

Degree courses can take three to four years full-time (or the part-time equivalent). Four-year programmes often include a year's industry experience, which is a good way to gain practical experience and make contacts. You can apply to become a student member of CIAT while studying, which would give you access to extra study resources and networking opportunities. When you have completed an appropriate course you can apply for Associate membership of CIAT. This means you can apply for relevant work and complete the professional qualification stage of your training – see the Training and development section below.

Work-based routes

You may be able to progress through an Advanced Apprenticeship scheme. The range of apprenticeships available in your area will depend on the local jobs market and the types of skills employers need from their workers. To find out more, visit <https://www.gov.uk/apply-apprenticeship>, the Apprenticeships website.

ROUTES INTO LANDSCAPE ARCHITECTURE

You can become a landscape architect by completing a degree in Landscape Architecture accredited by the Landscape Institute (LI). Degrees you may study include:

- ◆ Landscape Architecture
- ◆ Garden Design
- ◆ Landscape Design and Technology
- ◆ Landscape Planning
- ◆ Environmental Conservation

If you already have a degree in a related subject, such as architecture, horticulture or botany, you may be able to take a LI accredited postgraduate course. The LI have an Advice and Guidance section on their website which you may find useful.

Being a full member of the Landscape Institute (MLI) is a recognised professional qualification. To achieve chartered status, you must first attain associate membership by completing your degree/postgraduate course and then gain two years' practical experience before taking a professional examination.

ROUTES TO BECOMING AN IT SYSTEMS ARCHITECT

A common route into this career is to start with a company in a role, such as programming, and to work your way up through internal promotion. You will normally be expected to have a degree or postgraduate qualification. Relevant subjects include:

- ◆ computer science or computer engineering
- ◆ information management systems
- ◆ business information systems
- ◆ software development
- ◆ Mathematics

Skills in different programming languages, frameworks and processes will be needed for this job. Here are just a few examples:

- ◆ C# (C sharp) and C++
- ◆ Java and J2EE
- ◆ .NET
- ◆ SQL Server
- ◆ Sharepoint, MS Exchange and cloud services
- ◆ Oracle and SAP business software applications.

Experience of project management methods like PRINCE2 will also be helpful along with a working knowledge of project development and information management practices like Agile and ITIL. For more details about careers in this field, see the websites for The Tech Partnership and The Chartered Institute for IT.

PERSON SPECIFICATION

Different strands of architecture will require different characteristics. In general, an architect needs to have the following skills and personality traits:

- ◆ Have good three-dimensional awareness and be able to explain complex structures as drawings
- ◆ Be creative and have technical skills
- ◆ Have good IT literacy
- ◆ Enjoy problem solving
- ◆ Be interested in how people react to different built up environments
- ◆ Be interested in current trends and fashions
- ◆ Be physically fit for site inspections
- ◆ Have an interest in conservation and concern for the environment
- ◆ (especially for landscape architecture)

IMPORTANT INFORMATION FOR A SUCCESSFUL ARCHITECTURE APPLICATION AND ADVICE FROM RGS

1. As you have not studied Architecture at A Level, it is crucial that you show the admissions department that you are well aware of what an Architect does, that you are fully informed about what is involved in an Architecture degree and that you have the enthusiasm and capability to take up the challenge. You will also need to be able to say what sparked your interest in Architecture.

Consequently:

- ◆ Try to find some work experience. This can help you to understand the role of an architect, and to be clearer about whether this is what you want to do and whether there are any particular areas of Architecture that appeal to you. Reflect upon this work experience in your personal statement, and make sure that you refer to anything specific that you achieved while on work experience.
- ◆ You will need to do some wider reading. The following link provides useful books that you might try: <http://www.kings.cam.ac.uk/study/undergraduate/offerholders/reading-lists/architecture.html>.
- ◆ Make sure that you have been on at least one course. There are several free one-day taster Design courses at London universities <http://www.london.ac.uk/tasters>. These will book up fast. Students should seek permission from Mr Jones if they need to miss a day of school. The Careers Department puts any information about any courses we hear about on the taster course link on www.rgsinfo.net.
- ◆ Go to any related talks that are arranged in school, or elsewhere.
- ◆ Talk to any architects that you know. Find out what they enjoy about the job, and what they consider the main challenges to be.

2. Any evidence of design and construction interest is useful:

- ◆ Include details of any projects that you have undertaken, especially if they have any slant towards architecture. Success in Maths or Science competitions can be useful; e.g. Maths Challenge, as well as any Design related prizes and scholarships.
- ◆ Read journals such as the ones found on the London Metropolitan University webpage <https://metranet.londonmet.ac.uk/services/sas/librar-services/subject-help/subjects/architecture/archjournals.cfm> and refer to specific articles that have interested you in your personal statement.

3. Architects often work on sites and they need to be good communicators. Try to provide evidence of your effective communication, such as feedback received or an outcome that resulted from your communication. Evidence of teamwork is also very important. Examples must be given and it is a good idea to stress what effect your contribution to the team had. Examples to support these areas could come from sport, Drama, Music, Duke of Edinburgh's Award, lessons or from anything else that you can think of. They do not have to come from work experience in Architecture.
4. Most admissions tutors want to see that you are well-rounded, so do refer to extra-curricular activities, but make sure that you don't just give a list. State what you have learnt from them.
5. Make sure that you show that you realise that Architecture is a challenging career, but that you are equipped and motivated to take up that challenge.
6. Research the websites of the individual universities that you are applying to, to see what they are looking for in an applicant. By all means ring up admissions tutors to find out what they are looking for.
7. Taking a Gap Year is no hindrance. Indeed, some universities are very encouraging of this, but do try and gain work experience during this time.

WHAT IS RGS DOING TO HELP?

- ◆ Mr Williams and Mrs Ellen are the contacts for Architecture, so do contact them or the Careers Department with any questions about Architecture applications. Look out for details of the Art & Design Careers evening for students and their parents. This will include Architecture and it will provide an opportunity to hear from, and talk to, Architecture students, recent graduates and career architects.
- ◆ The Careers Convention on 8 February 2016 will provide an opportunity for students and their parents to talk to an architect on a one-to-one basis.
- ◆ TSI Friday talks (on alternate Friday lunchtimes in S3) offer a wealth of enriching science presentations on a wide range of topics.
- ◆ Through *Network Reigation* we can put you in touch with former students, who are studying Architecture, so that you can find out from them first-hand about their course. Contact Mr Buzzacott for further information.
- ◆ After AS exams, we put on UCAS Days to help students to prepare their UCAS applications. As part of this we will invite some former students in to take your questions about university life.

- ◆ Via a developing database of work experience offers, so we may be able to help with placements if we can. Contact Mr Buzzacott or Mr Nicholson.

WHAT OLD REIGATIANS HAVE TO SAY

Architecture: Jonathan Withers

Course synopsis:

It is the seven-year course. Broken down into a four year (with a year in industry) bachelors degree; two-year masters and a further year to become accredited. You do not have to stay at the same university for all seven years.

What attracted you to the course?

When I was younger, it was mostly because I liked designing and building things. Later it was more about an interest in sustainability and reducing environmental impact.

How many years have you been studying architecture?

I have just finished the first two semesters of the first year.

What have you covered?

Waterproofing shelters – we built shelters from cardboard and spent the night in them. Introducing light into space. Origins of modern architecture. Ancient and medieval architecture. Construction basics. Ecological footprints of buildings. Drawing [properly] and sketching. Introductions to Photoshop and Computer Aided Design (CAD). This was just the first year out of 7, and I have learnt so much! We also went on a field-trip to Barcelona.

What do you enjoy?

Learning new things and putting them to use within the projects we are assigned. We get to be creative. I also enjoy working alongside my course-mates in the studios.

What do I not enjoy?

Architecture is subjective – like art. The marking is sometimes dependent on whether your tutor likes your work.

What A-levels are needed?

Maths, Physics, DT and Art are all useful A Levels for Architecture. You will need to look at the Entry Requirements on www.ucas.com because it varies from university to university.

What other skills are needed?

Creativity – but some students manage without this!

Any further advice?

Architecture is hard work – don't do it if you're not sure about it, and you don't want to push yourself. Architecture is incredibly fun, and I have enjoyed almost every moment of it, but it is not an "easy" subject. Before you start: Sketch! Get a sketchbook and fill every page with a drawing of something, anything! Good draughtsmanship is essential.

Architecture: Sam Bunn

I'm studying Architecture at the University of Bath and am coming to the end of my second year. I think that what first attracted me to Architecture was its great combination of science and creativity, having to understand a building structurally, as well as the design side of making something that has never been done before. It was also appealing to think that I could create something that would (hopefully) last for a long time, leaving a physical mark on the world.

The course at Bath is unique in that the department is combined with the civil engineering course. This means we do a lot of joint projects with engineers, with both parties learning from each other to help make us more aware of the engineer's point of view. From my placement I've started to realise how useful knowing where the engineer consultant is coming from helps in the design process.

The course involves a mixture of lectures teaching about environmental issues, structure, and history alongside studio work where we are given a design brief to create a building (detailed drawings and 3D models mostly) for a client or purpose. In terms of A Levels, different universities may want things like Art or DT but in general I think it is definitely necessary to have (and enjoy) a mix of sciences and arts. It does take a fair bit of commitment to do the course; it's long (seven years to qualify as an architect) and you end up doing a lot of all-nighters if you don't stay organised on project work as the course is coursework dominated.

So, advice I would give is that you need to have good self-discipline for work and really be enthusiastic about buildings and the design process, otherwise you may begin to feel overwhelmed (especially early on). I would also really emphasise the need to research universities you want to go to as the courses vary from heavily Art focused (UCL) to heavily science focused (Sheffield/Bath). It is important to know which one would suit you better.

However, if you are organised and enjoy it, it is one of the most fun degrees I believe you can do! You have an immense amount of freedom to create spaces and buildings that you believe in and there is no such thing as a bad idea. You end up knowing a lot about a great array of topics as each project is different and may require you to research about gorillas, for example, if you are designing a zoo, or why bamboo is becoming a great building material again if you are designing a building in Eastern Asia.

USEFUL WEBSITES

- ◆ www.ucas.ac.uk for details on all Architecture courses and links to individual university web-sites.
- ◆ www.unistats.com to help you to compare courses based on data such as student satisfaction, cost of living, contact time and employability prospects.
- ◆ <http://www.theguardian.com/education/universityguide> for league tables and comparisons between courses.
- ◆ www.architecture.com for the Royal Institute of British Architects.
- ◆ www.arb.org.uk for the Architects Registration Board.
- ◆ www.ribaappointments.com/Salary-Guide.aspx for the Architects Salary Guide.
- ◆ www.ciat.org.uk for the Chartered Institute of Architectural Technologists.
- ◆ www.bdonline.co.uk for Building Design Online.
- ◆ www.landscapeinstitute.org for the Landscape Institute.
- ◆ www.bali.co.uk for the British Association of Landscape Industries.
- ◆ www.sgd.org.uk for the Society of Garden Design.
- ◆ www.iwanttobealandscapearchitect.com
- ◆ www.rgsinfo.net Use the Taster Course to find courses to help you to find out more about Architecture.

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