

CONSTRUCTION CAREER PATHS FACILITATOR'S ACTIVITY NOTES

SUMMARY OF ACTIVITY

- Ask students to work in groups of 5
- Give each student the student instruction handout and two career profile cards (one set for each group)
- Students have to interview each other and guess the other's career in five questions or less.

LEARNING OBJECTIVES

- To make students aware of the range of professional roles involved in a construction project and the different career paths open to them
- To help students understand the different routes to enter construction.

AGE GROUP

14–19

GROUP SIZE

Up to 40 students

LENGTH

15–25 minutes

PREPARATION

Print off enough handouts and career profile cards so there is a complete set for each pair or group.

RESOURCES

- PowerPoint slide
- Career profile cards
- Student instruction handout
- Timing device.

Optional extras

- Internet access
- Computer
- Projector
- Screen.

SKILLS

Memory / Deduction

CONSTRUCTION SECTOR LINKS

Career paths

CONSTRUCTION CAREER PATHS SUGGESTED TIMINGS

5 MINS

INTRODUCE

- Explain that there is a wide range of different careers available in construction and that you're going to do an exercise to learn a bit about them
- Ask the class to name some jobs/careers in the construction industry and what they think they do
- Confirm or correct the students gently.

5–10 MINS

OPTIONAL EXTRA: VIDEO

- Show one of the videos, found in the kit, with one of the young professionals describing their role and how they got there
- Choose one which provides a contrast with your own job
- To set up the task, ask the students to say what they think this job involves
- Ask the students to take notes on the following:
 - What their job involves
 - What they like about it
 - How they got into this career.
- To round up the video, ask the students what they found interesting or surprising.

5 MINS

SETTING UP THE ACTIVITY

- Divide the students into groups of 5
- Explain that you're going to learn about 10 different careers and that you're going to give two career profile cards to each student
- Explain that once you hand out the cards the students can look at their own cards but shouldn't show anyone else in the group
- Explain that they're going to interview each other then try to guess what the career is
- Hand out the cards and explain that you're going to give them 5 minutes to read through their cards
- Whoever has card A should be the first in each group to be interviewed, then they should go around the group clockwise, asking one question each then guessing the career. This continues until all of the careers have been guessed.

**CONSTRUCTION CAREER PATHS
SUGGESTED TIMINGS (CONT.)**

5 MINS

STUDENTS TO READ THEIR CAREER PROFILES

Once you've handed out the cards, start the timer for 5 minutes.

5 – 10 MINS

STUDENTS TO INTERVIEW ONE ANOTHER

- Circulate among the groups to make sure they understand the activity
- Give a 2-minute warning.

5 – 10 MINS

FEEDBACK AND CLOSE

- To round up the activity, ask each group to tell the rest of the class about one job they didn't know about before or they want to find out more about
- Ask if they had any surprises about the jobs and what they required (skills/experience/entry route/qualifications etc)
- Give students the handout with all the profiles to take away.

GUESS THE CAREER STUDENT INSTRUCTION SHEET

- Look at your own cards but don't show anyone else in the group
- Take 5 minutes to read them and then interview each other to guess the other careers in five questions or less
- Whoever has card A should be the first in each group to be interviewed, then go around the group clockwise, asking one question each.

QUANTITY SURVEYOR

BUILDING INFORMATION MODELLING (BIM) MANAGER

DESIGN MANAGER

CONSTRUCTION PLANNER

BUILDING SURVEYOR

SUSTAINABILITY SPECIALIST

STRUCTURAL ENGINEER

CONTRACTS MANAGER

CONSTRUCTION PROJECT MANAGER

CONSTRUCTION SITE MANAGER

CAREER PROFILES A CONSTRUCTION PROJECT MANAGER¹



What do they do?

Construction managers make sure building projects are finished on budget, on time and in line with client's requirements.

You'll usually be employed by building companies and specialist subcontractors such as glazing, heating or air conditioning providers. You can also work for local authorities, government departments, and other organisations like utility and engineering firms.

Your day-to-day activities may include:

- Checking plans with architects, surveyors and engineers
- Hiring staff and buying materials
- Planning work schedules
- Monitoring building progress and costs
- Checking quality
- Reporting to clients
- Maintaining and promoting health and safety
- Managing people, budgets and costs.

You'll be the main point of contact for subcontractors and the public. As a senior manager, you may need to oversee several projects at the same time.

Working hours and environment

You'll usually work standard office hours, Monday to Friday. You may work evenings or weekends to meet deadlines.

You'll spend some of your time travelling between sites and meeting clients and contractors.

Salary

Starter: **£27,000** to **£33,000**

Experienced: **£35,000** to **£50,000**

Highly Experienced: **£60,000** or more

These figures are a guide.

Entry requirements

You'll usually need a foundation degree, HND or degree or several years' industry experience in an area like:

- Building engineering
- Surveying or civil engineering
- Construction engineering
- Construction site management
- Estimating.

You could get into this job through higher or degree apprenticeship.

Skills required

You'll need:

- Communication skills
- Teamworking and leadership skills
- Project management skills
- Maths and IT skills.

Career path and progression

With experience, you could progress into senior management in a construction company, contract management or consultancy.

You can improve your career prospects by getting chartered status, through an industry body like [The Chartered Institute of Building](https://www.cio.org.uk/).

¹ Adapted from National Careers Service website, under Open Government License v3.0 accessed 19 January 2017 <https://national-careersservice.direct.gov.uk/job-profiles/construction-manager>

CAREER PROFILES B DESIGN MANAGER²



What do they do?

A design manager is responsible for coordinating the design work involved across the entire construction process, from the work of design teams and architects, through the planning phases, to final construction.

They make sure that all necessary information is shared among all teams involved in both design and construction, so that the end product delivers everything the client expects.

As a Design Manager, you would be:

- Reducing health and safety risks in the design
- Managing the BIM information transfer
- Overseeing design teams and leading project meetings
- Working with clients to ensure their requirements are fulfilled and expectations met
- Making sure design information is available to those who need it, when they need it and documenting all processes
- Ensuring compliance with changing laws and codes of practice.

Working hours and environment

You'll usually work standard office hours, Monday to Friday. There may be times where you'd need to work late, particularly in more senior roles.

Salary

Starter: **£30,000** to **£45,000**

Experienced: **£40,000** to **£60,000**

Highly Experienced: **£70,000** to **£90,000**

Salaries typically range depending on location and level of responsibility. Salaries and career options improve with chartered status.

Entry requirements

You may be able to enter this role without formal qualification requirements, but it's generally more accepted if you complete one of the following qualifications:

- **BTEC in Building Studies, Building Engineering or Building Management**
- **HNC/HND/degree in Construction Management or Architecture or their equivalent**
- **BSc in Design and Construction Management.**

Further qualifications – and chartered status – can be gained through courses accredited by The Chartered Institute of Building (CIOB) or Chartered Institute of Architectural Technologists (CIAT).

Skills required

You'll need:

- **Strong technical skills**
- **A thorough understanding of legal and commercial issues as well as design considerations**
- **Good communications and people management skills**
- **Good project management skills.**

Career path and progression

You could progress to become a BIM manager or a Project Director.

² Adapted from Go Construct website, accessed 19 January 2017
<https://www.goconstruct.org/construction-jobs/career-explorer/design-manager/>

CAREER PROFILES C CONTRACTS MANAGER³



What do they do?

Construction contracts managers are responsible for building contracts, building costs and construction projects.

You may manage a large contract or several smaller ones. You'll be the main point of contact for clients, site managers and building contractors.

Responsibilities may vary depending on the size of the project but your day to day duties might include:

- Preparing legal documents for tenders
- Making sure suppliers meet the terms of their contracts
- Ensuring the project is meeting all legal requirements
- Helping to resolve disputes should they arise
- Reviewing costs alongside the Quantity Surveyor.

You'll work closely with other professionals, like construction managers, quantity surveyors and planning engineers.

Working hours and environment

You'll usually work standard office hours, Monday to Friday.

You'll have an office base but make regular site and client visits, within a region, nationally or internationally, depending on the construction project.

A driving licence is often required.

Salary

Starter: **£25,000** to **£31,000**

Experienced: **£31,000** to **£46,000**

Highly Experienced: **£46,000** to **£57,000**

The job often comes with a car allowance and other additional benefits.

These figures are a guide.

Entry requirements

You'll usually need:

- A foundation degree, HND or degree in civil or structural engineering, construction management or project management
- Experience of working with building contracts
- A legal degree (LLB).

You may be able to move into the construction sector if you have project or contract management experience from another industry.

You could also start out as a contracts assistant or administrator with a construction company and work your way up.

Skills required

You'll need:

- The ability to manage multiple projects
- Strong maths and IT skills
- Good budgeting skills
- Good problem-solving skills
- Excellent communication, presentation and negotiation skills.

Career path and progression

With experience, you could progress to senior construction management, consultancy or become a company director.

You could also move into support services, like health and safety inspection, or you could use your contracting knowledge to move into other sectors.

³ Adapted from National Careers Service website, accessed 19 January 2017 <https://nationalcareersservice.direct.gov.uk/job-profiles/construction-contracts-manager>

CAREER PROFILES D BUILDING SURVEYOR⁴



What do they do?

Building surveyors assess the condition and structure of buildings and advise on repairs or alterations.

You'll work in surveying, legal work, and planning and inspection. Your day-to-day duties might include:

- Surveying properties, identifying structural faults and making recommendations for repairs
- Advising clients on issues like property boundary disputes
- Checking properties to make sure they meet building regulations, and fire safety and accessibility standards
- Dealing with planning applications and with improvement or conservation grants.

Working hours and environment

You'll usually work standard office hours, Monday to Friday and your time will be split between office and site work. Some contracts may involve spending periods of time away from home.

Site work takes place in all weather conditions, and you may have to work on dangerous structures and at height. A driving licence may be required.

Salary

Starter: **£22,000** to **£26,000**

Experienced: **£28,000** to **£40,000**

Highly Experienced: up to **£70,000**

Partners and directors could earn more.

These figures are a guide.

Entry requirements

You will need:

- HNC or HND in Building Surveying
- BSc in Building Surveying
- A degree in a related field such as geography, property or construction – ideally one accredited by the Chartered Institute of Building (CIOB), the Royal Institute of Chartered Surveyors (RICS), or the Chartered Association of Building Engineers (CABE).

If you have an HNC, HND or foundation degree in surveying or construction, you may be able to start working as a surveying technician and then take further qualifications. Some employers may also offer a degree apprenticeship programme.

Skills required

You'll work with clients ranging from homeowners to large commercial and industrial companies. You'll need:

- Good problem-solving skills and ability to prioritise and plan effectively
- The ability to work to a high degree of accuracy
- The ability to interpret data
- Strong communication, negotiation and presentation skills
- Good understanding of construction technology.

Language skills might also be useful if you want to work overseas, or for a company with international clients.

Career path and progression

With experience, you could move into project or senior management. You could go into partnership in private practice, or become self-employment as a consultant. You could also move into a related field, like building control.

⁴ Adapted from National Careers Service website, accessed 19 January 2017 <https://nationalcareersservice.direct.gov.uk/job-profiles/building-surveyor>

CAREER PROFILES E

BUILDING INFORMATION MODELLING (BIM) MANAGER⁵



What do they do?

Building Information Modelling (BIM) is the process of designing and delivering a building collaboratively using 3D computer models.

The BIM manager communicates with the designer, owner and facilities manager to enable successful collaborations between all team members. He or she defines the content required in the model to achieve client ambitions, deals with digital files and manages drawing production.

The BIM manager may work closely with BIM technologists who are ultimately responsible for generating the model.

All public sector projects are now required to use BIM, leading to a huge increase in demand for this specialist skill set.

Day-to-day tasks can include:

- Managing and interpreting data
- Software training
- Overseeing the purchase of hardware
- Creating project templates
- Keeping control over electronic project documents and amendments
- Keeping up with technology updates to ensure the team is equipped with the best tools for the job
- Leading BIM meetings.

Working hours and environment

You'll usually work standard office hours, Monday to Friday although these hours may be exceeded to meet tight deadlines.

The work is usually office-based but you may also be required to work on-site.

Salary

Starter: **£20,000** to **£30,000**

Experienced: **£30,000** to **£50,000**

Highly Experienced: **£50,000** to **£80,000**

Salaries typically range depending on location, level of responsibility and chartered status.

Entry requirements

You would normally move into BIM having completed a degree in a relevant discipline such as construction and the built environment/architecture or even computer sciences.

Skills required

You will need:

- Knowledge and experience of all construction processes
- Detailed information on the BIM process
- The ability to interpret and manage data.

Career path and progression

A BIM manager could progress to be a Partner, Managing Director or Consultant.

⁵ Adapted from Go Construct website, accessed 19 January 2017
<https://www.goconstruct.org/construction-jobs/career-explorer/bim-manager/>

CAREER PROFILES F SUSTAINABILITY SPECIALIST⁶



What do they do?

Sustainability Specialists ensure the construction project has the best possible impact on the environment and the wellbeing of the end users and local community.

He or she advises other departments to ensure best practice is used across every area of design and construction across the lifespan of a project until its end of life.

Typical tasks include:

- Liaising with engineers and designers to develop a sustainability plan
- Assessing the likelihood of achieving sustainability certifications
- Identifying any sustainability risks and highlighting opportunities to reduce them
- Preparing sustainability assessment reports
- Recommending strategies for improvement
- Advising on low and zero-carbon technology.

You will often have extensive travel to visit different sites.

Working hours and environment

Typically, Sustainability Specialists work around 40 hours a week, usually between 9am and 6pm. It is uncommon for overnight or weekend work to apply but could in exceptional circumstances.

Salary

Starter: **£25,000** to **£35,000**

Experienced: **£35,000** to **£50,000**

Highly Experienced: **£50,000** to **£60,000**

Salaries typically range depending on location and level of responsibility.

Entry requirements

Most positions will require a degree in environmental management, surveying, engineering or construction or equivalent.

For a senior position a Masters Degree in a related subject could be needed, or chartered status with a relevant body.

Experience is often very important too, so entrants with other qualifications might be considered; for example, experience with modelling software.

Skills required

You'll need:

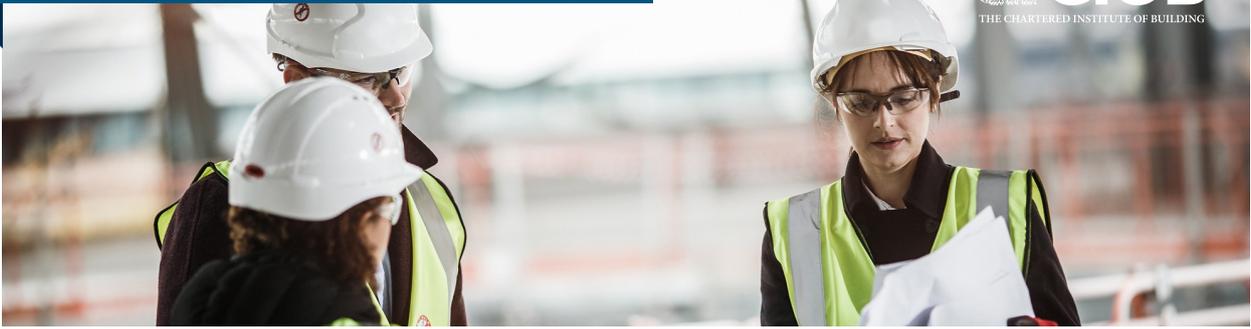
- A detailed knowledge of sustainability issues
- Strong analytical and logical skills
- Good communications skills
- Persuasiveness.

Career path and progression

For a senior position a Masters Degree in a related subject could be needed, or chartered status with a relevant body such as the Chartered Institute of Building or Chartered Engineer. Salaries and career options improve with chartered status.

⁶ Adapted from Go Construct website, accessed 19 January 2017
<https://www.goconstruct.org/construction-jobs/career-explorer/sustainability-specialist/>

CAREER PROFILES G CONSTRUCTION SITE MANAGER⁷



What do they do?

Site Managers are responsible for day to day running of a construction project. prepare sites for the start of construction work, plan projects and oversee building works on site to make sure they meet agreed specifications, budgets and timescales.

Your responsibilities may vary depending on the size of the project, but typical tasks include:

- Managing contracted construction workers
- Appointing subcontractors
- Running site management meetings
- Making safety inspections and ensuring construction and site safety
- Checking and preparing site reports, designs and drawings
- Maintaining quality control checks
- Motivating the workforce throughout the project
- Day to day problem solving
- Using specialist construction management computer applications.

Working hours and environment

You'll usually work regular office hours, but overtime may be required to meet construction deadlines.

Your work will be split between the office and outdoors on-site.

Salary

Starter: **£22,000** to **£43,000**

Experienced: **£34,000** to **£55,000**

Highly Experienced: **£40,000** or more

These figures are a guide.

Entry requirements

You will need:

- HNC or HND in a relevant subject such as construction, civil engineering, construction management, architecture or building surveying
- CIOB Level 4 in Construction Site Management
- NVQ in construction management.

As a school leaver, you can apply for an apprenticeship and study part-time for an HNC or HND.

Once you've got your construction qualifications and some experience you can also become chartered through The Chartered Institute of Building (CIOB). This is comparable to a bachelor's degree and is recognised globally.

You'll usually need a full driving licence to travel between sites.

Skills required

You'll need:

- Management skills
- Clear communication skills
- Organisational skills
- IT skills.

Career path and progression

With experience you could move into construction management.

⁷ Adapted from Go Construct website, accessed 03 April 2017
<https://www.goconstruct.org/construction-jobs/career-explorer/site-manager/>

CAREER PROFILES H STRUCTURAL ENGINEER⁸



What do they do?

Structural engineers help to design and build large structures and buildings, like hospitals, sports stadiums and bridges.

Your day-to-day duties may include:

- Working with clients, architects, and other engineering professionals
- Developing engineering plans and computer models
- Investigating the properties of building materials like glass, steel and concrete and advising on which material is best for the job
- Working out the loads and stresses on different parts of a building
- Designing structural elements of the project
- Inspecting unsafe buildings and deciding whether they should be demolished
- Preparing bids for contract tenders
- Supervising project teams.

Working hours and environment

You'll usually work standard office hours Monday to Friday, with a combination of office work and site visits.

You could work on projects overseas.

Salary

Starter: **£22,000** (graduate)

Experienced: **£24,000 to £40,000**

Highly Experienced: **£50,000** (chartered engineer)

These figures are a guide.

Entry requirements

You'll usually need a degree in structural or civil engineering.

You could also start as an engineering technician by completing an HNC, HND or foundation degree in an engineering subject. You can then become a fully qualified structural engineer with further training on the job.

Studying for an accredited qualification can help your career prospects. You'll find accredited courses from [Joint Board of Moderators](#) (JBM). Qualifications are recognised globally.

Skills required

You'll need:

- Excellent skills in maths, IT and science
- Creativity
- Project management skills
- The ability to manage a budget.

Career path and progression

You could move into construction design, project management, research and lecturing.

You could also move into consultancy work, like providing services to building insurers, or work overseas on construction and engineering projects with disaster relief agencies.

⁸ Adapted from National Careers Service website, accessed 19 January 2017 <https://nationalcareersservice.direct.gov.uk/job-profiles/structural-engineer>

CAREER PROFILES | QUANTITY SURVEYOR⁹



What do they do?

Quantity surveyors work out exactly how much a building costs to construct and keeps track of finances and the quality standard of the project.

You could work for a local authority, government department, building contractor, property company or civil engineering firm.

Your day-to-day tasks may include:

- Working out estimates for materials, time and labour costs
- Advise on costs and values of projects
- Negotiating and drawing up contracts
- Forecasting and monitoring costs of construction
- Reporting on finance to clients
- Advising clients on legal and contractual matters
- Keeping records, preparing work schedules and writing reports.

Working hours and environment

You'll usually work Monday to Friday, 9am to 5pm. You may work evenings or weekends.

You'll spend time in an office and visiting building sites.

SALARY

Starter: **£20,000** to **£25,000**

Experienced: **£30,000** to **£45,000**

Highly Experienced: **£50,000** to **£60,000**

These figures are a guide.

Entry requirements

Quantity surveyors usually hold a relevant, accredited degree in Quantity Surveying, or follow a work-based route doing a surveying apprenticeship that can include a qualification in surveying.

You can follow this with a degree accredited by the Chartered Institute of Building (CIOB) and/or the Royal Institution of Chartered Surveyors (RICS). This improves your chances of getting a job after your studies.

Skills required

You'll need:

- Budgeting skills
- Excellent IT and maths skills
- Organisational and planning skills.

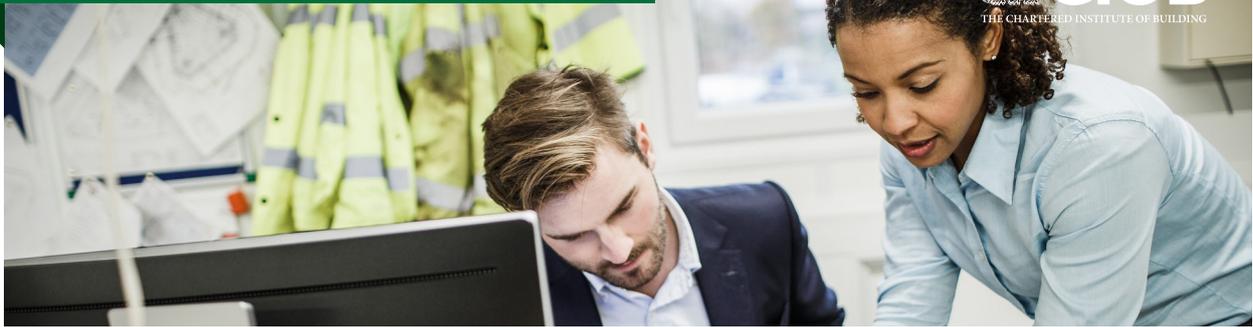
Career path and progression

With experience, you could move into senior project management, supply chain management, consultancy work or self-employment.

You could move into an area like planning, or you specialise in property contract law.

⁹ Adapted from National Careers Service website, accessed 19 January 2017 <https://nationalcareersservice.direct.gov.uk/job-profiles/quantity-surveyor> and GoConstruct <https://www.goconstruct.org/construction-jobs/career-explorer/quantity-surveyor/>

CAREER PROFILES J CONSTRUCTION PLANNER¹⁰



What do they do?

Planners create a programme of works to support the successful completion of a building project. With an emphasis on cost and schedule control, you will create a time-plan for required activities and the best methods and technologies for carrying them out. The role is varied and responsibilities may change depending on the size of the project but your day to day may involve:

- Defining work tasks, how long they'll take
- Determining how many people and what equipment are required to deliver projects
- Recommending improvements to processes
- Coordinating sub-contractor/supplier planning and scheduling.

Working hours and environment

You'll work normal office hours and will often be office-based, but you'll also carry out regular site visits.

Salary

Starter: **£25,000** to **£35,000**

Experienced: **£45,000** to **£55,000**

Highly Experienced: **£60,000** or more

These figures are a guide.

Entry requirements

- You would usually need an HNC or HND or a degree, ideally in a construction or building-related discipline
- A combination of work and part-time study to complete relevant construction qualifications could lead to a position as a planner

You could also enter the sector with experience in project planning, including specialist software, from another sector.

Skills required

You'll need:

- Knowledge of construction
- Organisational skills
- Strong analytical skills
- Good listening skills
- Attention to detail.

Career path and progression

With experience you could become a senior planner, head of department and with further training and experience a Project Director or Construction Director.

¹⁰ Adapted from Go Construct website, accessed 03 April 2017 <https://www.goconstruct.org/construction-jobs/career-explorer/planner2/>