

### **Think Construction Toolkit**

Careers in construction lessons for students aged 14-19

# Plan 3

# Construction Careers profile cards

## Construction Project Manager<sup>1</sup>

#### What do they do?

Make sure building projects are finished on budget, on time and in line with clients' requirements.

Main point of contact for subcontractors and the public.

Typically works for building companies and specialist contractors; government or utilities.

Day-to-day activities may include:

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

## **Entry requirements**

- Foundation or honours degree, HND, or industry experience in an area like:
  - Building or Civil Engineering
  - Surveying
  - Site management
  - Estimating
- Possible to get into this job through a higher or degree apprenticeship
- Possible to move into this job through gaining several years experience in other construction roles.

## **Salary**

Starter: £27,000 to £33,000

Experienced: £35,000 to £50,000

Highly Experienced: £60,000 or more

These figures are a guide.

## **Working hours and environment**

Usually standard hours Mon-Fri. Sometimes overtime to meet deadlines.

Spends time between project sites and meeting clients and contractors.

#### Skills required

- Good communication
- Strong team-working and leadership
- Project management
- · Maths and IT

## **Career path and progression**

Progress to senior management in a construction company, in contract management or consultancy.

# **Construction Project Management**

https://www.ciob.org/industry/constructionmanagement

## Case study

Construction Project Manager (2m 05):

https://www.youtube.com/watch?v=WuVRlc Wvbks&list=PLLtLm1g49pKU538o3TrUOkht 862pxABRx&index=1



#### Design Manager<sup>2</sup>

## What do they do?

Co-ordinates the design work across the entire construction process and plays a pivotal role in the design of sustainable buildings.

Ensures all necessary information is shared across the design and build teams so the end product delivers what the client expects.

Day-to-day activities may include:

- Reducing health and safety risks in the design
- Overseeing design teams and leading project meetings
- Working with clients to ensure their expectations are met and requirements fulfilled
- Managing design information and documenting all processes
- Ensuring compliance with changing laws and codes of practice.

#### **Entry requirements**

Possible to enter without formal qualifications though more accepted with:

- BTEC in Building Studies, Building Engineering/Management
- HNC/HND/degree in Construction Management or Architecture or their equivalent
- BSc in Design and Construction Management
- Possible to get into this job through an apprenticeship.

#### **Salary**

Starter: £30,000 to £45,000

Experienced: £40,000 to £60,000

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

These figures are a guide.

#### **Working hours and environment**

Usually standard hours Mon-Fri. Sometimes evenings, particularly in senior roles.

#### Skills required

- Strong technical ability
- Full understanding of design, legal and commercial issues
- Communication and people management
- Project management.

## **Career path and progression**

Progress into Building Information Modelling (BIM) or a project director.

#### Case study

Architect & Design Manager (3m 41):

https://www.youtube.com/watch? v=DoE7JSDNFoM&list=PLLtLm1g49p KU538o3TrUOkht862pxABRx&index=4

Senior Design Manager (2m 29):

https://www.youtube.com/watch?v=jIBoKew UU58&list=PLLtLm1g49pKU538o3TrUOkht862 pxABRx&index=8





#### Career profile cards - C

#### Contracts Manager<sup>3</sup>

## What do they do?

Responsible for building contracts, building costs and construction projects. May manage one large or several smaller contracts.

Works closely with quantity surveyors and planning engineers.

Day-to-day activities may 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.

# **Entry requirements**

- BTEC in Building Studies/Engineering/ Management
- HNC/HND/degree in Construction Management or Architecture
- BSc in Construction Management
- Possible to get into this job through an apprenticeship
- Can also start as a construction contracts assistant or administrator or with project or contract management experience from another industry.

#### **Salary**

Starter: £25,000 to £31,000

Experienced: £31,000 to £46,000

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

These figures are a guide.

## **Working hours and environment**

Usually standard hours Mon-Fri. Office based with site visits. Often requires a driving licence.

## **Skills required**

- Project management
- Strong maths and IT
- Budgeting
- Problem solving, communication, presentation, negotiation.

## **Career path and progression**

Progress into senior construction management; health and safety inspection or transfer into other sectors with contracting knowledge.

## **Case study**

Construction and Contracts Manager/ Administrator (5m 30):

https://www.youtube.com/watch?v=F6ow GGS73Jg&list=PLLtLm1g49pKU538o3T rUOkht862pxABRx&index=6



### **Building Surveyor**<sup>4</sup>

## What do they do?

Assess the condition and structure of buildings and advise on repairs or alterations.

Work on surveying, legal matters, planning and inspection. Clients range from homeowners to large companies.

Day-to-day activities may 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, fire safety and accessibility standards and energy efficiency retrofit requirements
- Dealing with planning applications and with improvement or conservation grants.

#### **Entry requirements**

- HNC/HND/Degree in Building Surveying
- An accredited degree in a related field such as geography, property or construction
- With an HNC, HND or foundation degree you could start as a surveying technician and take further qualifications
- Possible to get into this job through an apprenticeship.

## **Salary**

Starter: £22,000 to £26,000

Experienced: £28,000 to £40,000 Highly Experienced: up to £70,000

These figures are a guide.

## **Working hours and environment**

Usually standard hours Mon-Fri between office and site.

May require a driving licence.

## **Skills required**

- Problem solving, planning and prioritisation
- A high level of accuracy
- Data interpretation
- Strong communication, negotiation and presentation
- Understanding of construction technology.

## **Career path and progression**

Progress into project or senior management.

Move into private practice or consultancy or a related field like building control.

#### Case study

Building Surveyor (3m 01):

https://www.youtube.com/watch?v=CGPL QhyKXbA&list=PLLtLm1g49pKU538o3 TrUOkht862pxABRx&index=3

Home Improvement Agency Surveyor (2m 34):

https://www.youtube.com/watch?v=7yP-F-TX9ug&list=PLLtLm1g49pKU538o3 TrUOkht862pxABRx&index=10



## Building Information Modelling (BIM) Manager<sup>5</sup>

## What do they do?

Helps design and deliver a building using 3D computer models.

Ensures successful collaboration between the building designer, owner and facilities manager.

Deals in digital files and manages drawing production.

All public sector projects are now required to use BIM so this skill is in huge demand.

Day-to-day activities may include:

- 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.

#### **Entry requirements**

- Usually a degree in a relevant field like Construction and the Built Environment or Architecture
- You could also move into BIM with computer science and even a gaming background
- Possible to get into this job through an apprenticeship.

#### **Salary**

Starter: £20,000 to £30,000

Experienced: £30,000 to £50,000

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

These figures are a guide.

## **Working hours and environment**

Usually standard office Mon-Fri, sometimes evenings and weekends to meet deadlines. Mainly office based with some site working.

#### **Skills required**

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

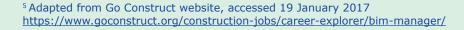
## **Career path and progression**

Progress to be a partner, managing director or consultant.

## Case study

BIM Manager (2m 22):

https://www.youtube.com/watch?v=99a DTM1ZFKU&list=PLLtLm1g49pKU538 o3TrUOkht862pxABRx&index=13





#### Sustainability Specialist<sup>6</sup>

#### What do they do?

Ensures the construction project has the best possible impact on the environment, the well-being of end users and the community.

Promotes sustainability best practice from design to construction right across the lifespan of a project.

Day-to-day activities may include:

- Liaising with engineers and designers to develop a sustainability plan
- Assessing the likelihood of achieving sustainability certifications
- Identifying any sustainability risks and opportunities to reduce them
- Preparing reports
- Recommending strategies for improvement
- Advising on low and zero-carbon technology
- Managing environmental management systems
- Making site waste management arrangements
- Meeting biodiversity requirements and social value.

## **Entry requirements**

- Usually a degree in a relevant field like:
  Environmental Management, Environment Science/ Geography, Surveying,
  Engineering, or Construction
- You could move into sustainability with related experience and qualifications e.g. in digital modelling software
- Possible to get into this job through an apprenticeship.

#### **Salary**

Starter: £25,000 to £35,000

Experienced: £35,000 to £50,000

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

These figures are a guide.

## **Working hours and environment**

Usually standard office Mon-Fri. Office based with significant travel between sites and clients.

#### Skills required

- · Detailed knowledge of sustainability
- · Strength in analysis and logic
- · Good communication
- Persuasiveness.

## **Career path and progression**

Progress to be a senior manager, managing director or consultant.

#### Case study

Sustainability Manager (2m 05):

https://www.youtube.com/watch?v=mree 5yjfAIM&list=PLLtLm1g49pKU538o3TrUO kht862pxABRx&index=9





## Construction Site Manager<sup>7</sup>

#### What do they do?

Manage the day-to-day running of a construction project.

Prepare sites before work begins, plan projects and oversee the work to ensure it meets specifications, budget and timescale.

Responsibilities vary with project size.

Day-to-day activities may include:

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

#### **Entry requirements**

- HNC or HND in Construction, Civil Engineering, Architecture or Building Surveying
- CIOB Level 4 in Construction Site Management
- NVQ in Construction Management
- Possible to get into this job through an apprenticeship.

#### **Salary**

Starter: £22,000 to £43,000

Experienced: £34,000 to £55,000

Highly Experienced: £40,000 or more

These figures are a guide.

## **Working hours and environment**

Standard Mon-Fri, sometimes overtime to meet deadlines. Between office and site. Often needs a driving licence.

#### Skills required

- Management
- Good communication
- Strong organisation
- IT.

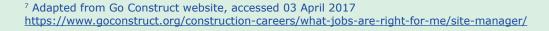
## **Career path and progression**

With experience move into construction project management.

#### **Case study**

Apprentice Site Manager (3m 14):

https://www.youtube.com/watch?v=EzRMzEy fCaQ&list=PLLtLm1g49pKU538o3TrUOkht 862pxABRx&index=5





#### Structural Engineer8

## What do they do?

Help to design and build large structures and buildings like hospitals, sports stadiums and bridges that are resilient to the impacts of climate change, such as extreme weather events.

Works with clients, architects and other building professionals.

Day-to-day activities may include:

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

#### **Entry requirements**

- Usually with a degree in Structural or Civil Engineering
- With a foundation degree, HNC or HND in Engineering you could start as an engineering technician and get fully qualified with training on the job
- Possible to get into this job through an apprenticeship.

#### **Salary**

Starter: £22,000 (graduate)

Experienced: £24,000 to £40,000

Highly Experienced: £50,000 (chartered

engineer)

These figures are a guide.

## **Working hours and environment**

Usually standard Mon-Fri.

Based between office and project site.

## **Skills required**

- Excellent maths, IT and science
- Creativity
- Project management
- Budget management.

## **Career path and progression**

Construction design or project management or academic teaching/research.

Become a consultant e.g. to building insurers or overseas engineering or disaster relief.

#### Case study

Site Engineer (1m 18):

https://www.youtube.com/watch?v=cvQ Twh6-G8&list=PLLtLm1g49pKU538 o3TrUOkht862pxABRx&index=7





#### **Quantity Surveyor9**

## What do they do?

Work out how much a building costs to construct and tracks the finances and quality standard of the project.

Typically work for building companies and contractors; property company; civil engineer; government.

Day-to-day activities 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.

## **Entry requirements**

- Usually a degree in Quantity Surveying
- A surveying-based apprenticeship that includes a relevant qualification and follow with an industry accredited degree.

#### **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.

#### **Working hours and environment**

Standard Mon-Fri, sometimes evenings and weekends to meet deadlines.

Split between site office and site working.

#### **Skills required**

- Management
- · Good communication
- Strong organisation
- IT.

## **Career path and progression**

Move into senior project or supply chain management or consultancy.

Move across to planning or specialise in property contract law.

#### **Case study**

Quantity Surveyor (1m 56):

https://www.youtube.com/watch?v=3g 5eIGot9XM&list=PLLtLm1g49pKU538o3 TrUOkht862pxABRx&index=2





#### Construction Planner<sup>10</sup>

#### What do they do?

Create a work programme to support successful completion of a building project.

Makes a time-plan for necessary activity on the project and the best method and technology for achieving it.

Emphasises cost and schedule control.

Day-to-day activities may include:

- 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.

## **Entry requirements**

- Usually an HNC or HND in Construction or a building-related area.
- Work and study part-time for a relevant qualification
- With experience in project planning and software, you could enter construction from another sector
- Possible to get into this job through an apprenticeship.

#### **Salary**

Starter: £25,000 to £35,000

Experienced: £45,000 to £55,000

Highly Experienced: £60,000 or more

These figures are a guide.

## **Working hours and environment**

Standard Mon-Fri, mainly office based with regular site visits.

#### Skills required

- Strong organisation
- Strong analysis
- Good listening
- · Attention to detail.

## **Career path and progression**

With experience become a senior planner or department head. Progress further to become a Project Director or Construction Director.

#### **Case study**

Construction Planner (2m 04)

https://www.youtube.com/watch?v= Oo QAGasO1c&list=PLLtLm1g49p KU538o3TrUOkht862pxABRx&index=12

