MAJOR APPRENTICESHIP SCHEMES



Site Engineer: work out the exact measurements and locations of where a building is to be built along with reading the design plans to work out exactly where each part of the building is to be built. Continually check that the building is progressing in the correct position. Instruments used are laser levels, dumpy levels, EDMs and theodolites. You will need to use 3D and 4D CAD design software. Maths and physics are useful subjects for this role.

Site Manager: often referred to as construction managers, site agents or building managers and are responsible for the day to day running of a construction project. You will prepare sites prior to the start of construction work, ensure agreed specifications, budgets and timescales are met and oversee construction. You will also ensure the correct health and safety requirements are met.

Planner: Planners are construction professionals who produce the time plan or programme on a construction project. You will decide on the best methods for tackling a job and the most efficient order for doing the work. It is most likely that you will work in an office and visit site on occasion.

Design Manager: 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, using 3D and 4D CAD design software. You will be required to ensure that all necessary information is shared between the various teams involved, and that the end product delivers everything the client expects. **Digital Engineer:** optimise the performance of the built environment using models, technical software and visualisations. You will have the ability to communicate complex engineering principals to all stakeholders digitally.

Integrating construction data and information throughout the whole lifecycle of an asset adhering to industry standards and regulation of digital information commonly known as BIM.

You will also provide digital solutions with efficiency gains on traditional methods of construction.

Health and Safety Advisors: promote a positive safety culture, ensuring construction projects comply with legislation and industry standards.

You will assist in the preparation of health and safety documents such as risk assessments and method statements.

A large proportion of your time will be spent out on site identifying potential risks and promoting best practice to help change the way people think and work to prevent accidents. **Quantity Surveyors:** control the costs and finances of a construction project. You will usually be based in the site office, and will go on site to do measurements to find out quantities of materials required.

You will negotiate rates and set up contracts with subcontractors such as bricklaying, groundwork and mechanical and electrical engineering companies.

Good maths skills and a knowledge of contract law is useful.

Estimators: work out how much it will cost to build the project and prepare this information as a quote for the client. Usually you would work in the office but may go on site or visit the supply chain to look at materials, preparing full details of how much the project is likely to cost. Good maths and IT skills are needed for this role. **Civil Engineer:** design and build infrastructure projects such as roads, bridges, power stations, buildings, hospitals and schools. If you are more interested in design, then you are likely to be based in an office where you will develop the design using analysis tools and create 3 or 4 Dimensional CAD models detailing what is to be built.

If your interest lies in construction, then you will predominantly be based on site where you will plan and manage the construction of the works, working with contractors to ensure the works are built in accordance with the design.

For either a design or a construction role, a good understanding of maths and physics is important as you need to understand the basic principles of engineering.

Site Engineer: work out the exact measurements and locations of where a building is to be built.

You will read design plans to work out exactly where each part of the building is to be built, and continually checking that in the correct position.

Instruments used are laser levels, dumpy levels, EDMs and theodolites. You will need to use 3D and 4D CAD design software. Maths and physics are useful subjects for this role.

FUTURE JOBS / CAREER PATHWAY