



FCDO Services

APPRENTICESHIPS IN

Building Services Design Engineering

Discover what it takes to design building services for brand-new premises and maintain embassies from the 18th Century. Then, train in the skills to support our engineers, surveyors and architects on all kinds of construction projects. And along the way, you might just discover exactly what you're capable of, as you study towards a Level 6 Degree in Building Services Design Engineering and forge a path to become a fully qualified professional.

IT TAKES A DIVERSE TEAM
TO PROTECT A DIVERSE WORLD

VISIT OUR WEBSITE
[FCDOSERVICESCAREERS.CO.UK/APPRENTICESHIPS](https://fcdoservicescareers.co.uk/apprenticeships)

APPRENTICESHIPS IN BUILDING SERVICES DESIGN ENGINEERING

It's a big challenge – and an incredibly rewarding one. You'll help us to keep people in government departments safe and sound, wherever they are in the world. You'll learn the theory, the law, the processes of building services design engineering, and you'll use it to design, maintain and work on government buildings across continents.

Whether you're just starting out, returning to work after a career break, or looking to change careers, over the course of your apprenticeship, you'll take on increasing responsibility for projects that protect the UK's interests – and you'll use that experience to bolster your academic work too. It means when you finish your studies, you'll have in-depth experience, a nuanced understanding of your field, and full membership of a professional body such as the Chartered Institute of Building Services Engineers (CIBSE), or the Institute of Engineering and Technology (IET). Put another way: your future just got bigger.

YOUR PROGRAMME

If you're successful in your application, you'll start your apprenticeship in September, launching straight into a balance of academic study and live, practical work. You'll attend university on a day-release basis, over the course of your programme. Then, when you're not studying, you'll work with the teams at our Hanslope Park office, developing your skills alongside professional engineers, surveyors and project managers.

What might some of that learning look like? We'll get your CAD drawing skills up to scratch, as well as teach you how to use specialist building services design software such as IES, Amtech etc. Plus, you'll learn how to work within a multi discipline team to deliver projects worldwide.

KEY FACTS

- Level 6 degree apprenticeship working towards a BEng (Hons) in Buildings Services Design Engineering
- Based at Hanslope Park, Milton Keynes
- Opportunity for overseas travel
- 60-month programme – with a potential full-time role at the end
- Combination of practical work and study
- Open to all ages, but you will need:
 - Five GCSEs (or equivalent e.g. O levels) including Maths and English at grades 9-4 (A* - C)
 - A minimum of three A levels at grades BBC (or higher), including Maths and preferably Chemistry or Physics; or a BTEC National Diploma DDM; or Access to Engineering qualifications with 15 Distinctions and 30 Merits including Maths and Physical Science credit; or, equivalent Level 3 qualifications worth 128 UCAS points. Level 3 qualification must include Maths and preferably Physics or Chemistry; or you have completed a Level 3 Apprenticeship as a Building Services Design Technician
- Good communication skills and IT literacy
- A genuine interest in CAD and building services design engineering
- To be willing to travel overseas as part of your apprenticeship
- British citizenship, having lived in the UK for the last three years before the first day of the apprenticeship (aiming to start September 2023), and for at least five of the last ten years
- To be at least 16 years old by 30 April 2023 so you can complete the Security Clearance (SC) process before your start date
- Candidates will need to undergo Security Clearance (SC) before joining

APPRENTICESHIPS IN BUILDING SERVICES DESIGN ENGINEERING



Your university/college work will be a core part of how you develop. Some specific units within the Degree include:

- Advanced Engineering Mathematics, Construction Practice, Building Services Principles, Thermofluid Engineering, Refrigeration, Air Conditioning and Heat Pump Engineering, Project and Business Management, Electrical Services, Energy Management and Controls, Passive Building Design plus two modules from either electrical or mechanical routes
- Fundamental scientific principles that support the mechanical and electrical building services. How to operate and control heating, ventilation and air conditioning
- In the final year focus on sustainability: the dynamic thermal performance of buildings, energy resources, combined heat and power, wind power generation and lighting, electrical systems and distribution
- The appropriate scientific, technical and engineering principles relating to the design of building engineering services projects
- How to communicate effectively using a range of techniques
- The code of conduct of relevant professional bodies and institutions including ethics and their application in design and delivery of projects
- Sustainable development and contribution to economic, environmental and social wellbeing.

COMPLETING YOUR APPRENTICESHIP - AND BEYOND

Complete the apprenticeship, and you'll gain a Level 6 Degree in Building Services Design Engineering and achieve membership of a professional body. But where to next? You'll have a range of options to make your future bigger. We'll do our best to find you a permanent position with us, working as a professional either in the UK or overseas. Whatever you decide, we'll do all we can to help you explore your interests and set your sights on realising your ambitions.

Website: fcdoservicescareers.co.uk/apprenticeships

Email: fcdoservices.recruitment@fcdo.gov.uk

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