

<b>Location:</b>	Bridge Innovation Centre, Pembrokeshire Science & Technology Park, Pembroke Dock
<b>Job Title</b>	Trainee Building Services Design Technician
<b>Type:</b>	2 Years Fixed term contract with a view to a permanent contract upon successful completion of training.
<b>Qualifications:</b>	Minimum of 5 GCSEs at grades A/B to include Maths, English and Physics. AS/A Levels also beneficial
<b>Hours:</b>	Mon-Fri, 9am-5pm (flexibility required)
<b>Salary:</b>	To be agreed

**Job Description:**

The role will involve assisting experienced Engineers with the design of the Mechanical & Electrical services in public and commercial buildings. This will involve liaising with Clients & Architects, visiting sites and drawing up designs using specialised IT & CAD packages.

After suitable training, the role will also include conducting energy audits, producing energy performance certificates, providing advice & designing renewable energy systems / savings etc. Candidates must be keen to learn, demonstrate enthusiasm, dedication, possess good communication skills, have an interest in building design & energy conservation and enjoy working as part of a team.

**Training:**

The successful candidate must be prepared to travel to Bridgend College on a weekly basis, in order to complete the relevant HNC qualification. There will also be the opportunity to progress onto a degree course in future years.

**Course Title:** HNC/D Building Services Engineering (Electrical & Mechanical)

**Length of Course:** HNC: 2 years commencing in September 2013

**Days & Times:** 1 Day/week 1pm – 9pm

**Course Description:**

The HNC consists of eight modules including Mathematics, Electrical Design Applications, Lighting Applications, Management & Profiling, Project, Air Conditioning, Heating, Manual Drawing & CAD and Thermo-fluids.

**Progression/Career Opportunities:**

Degree in Building Services Design

If you would like to express an interest in this vacancy please send your CV with a covering letter to:

Emma Lewis

Office Manager

[emma@bullockconsulting.co.uk](mailto:emma@bullockconsulting.co.uk)

**CLOSING DATE: 30<sup>th</sup> August 2013**

## **What is Building Services?**

Imagine yourself in the most fabulous building in the world. Now take away the lighting, heating and ventilation, the lifts and escalators, acoustics, plumbing, power supply and energy management systems, the security and safety systems...and you are left with a cold, dark, uninhabitable shell.

Everything inside a building which makes it safe and comfortable to be in comes under the title of 'Building services'. A building must do what it was designed to do - not just provide shelter but also be an environment where people can live, work and achieve.

**Building services are what makes a building come to life.**

They include:

- energy supply - gas , electricity and renewable sources
- heating and air conditioning
- water , drainage and plumbing
- natural and artificial lighting, and building facades
- escalators and lifts
- ventilation and refrigeration
- communication lines, telephones and IT networks
- security and alarm systems
- fire detection and protection

In every place that you see these services...building services engineers have designed, installed and maintain them in working order.

Imagine the air filtration systems you'd need in a forensic laboratory. The heating controls in a special care baby unit? How to control bacteria and humidity in an operating theatre? What about security systems at the headquarters of MI5? Lighting the new Wembley Stadium? Coping with a power cut in a 45 storey office block? This is everyday work for a building services engineer.



## Why choose a career in building services?

There are many reasons why becoming a building services engineer brings unrivalled **job satisfaction**.

No career in the world offers more **variety**. Sometimes you will be working on a highly sensitive environment like a forensic laboratory or a chemical engineering plant. Another day you'll be designing services for a small nursery school or a vast hypermarket.

Your next project could be in a 900 year old **listed building** like the Tower of London, where you will need to install **efficient** but **invisible** services which leave ancient structures intact.

Building services engineers also work in domestic **housing**, taking account of **psychological** aspects to design **user-friendly systems** which are **energy efficient** and make people feel at ease. The job can offer a unique combination of **technical planning** and **design** work together with hands-on **installation** and **problem solving**.

## Different every day

If you don't fancy being stuck in an **office** all day, consider this typical working week for a building services engineer. It could include

- **site visits** to see how your designs are working in practice
- spend time with a **manufacturer** to learn about new products and components
- **brief** a new client about how low carbon technologies can benefit their business
- a scoping study - early planning with **architects** at a new site where construction has not yet begun
- a **presentation** to potential clients of what your firm can offer
- helping an **installation** team on site
- **handover** of a completed project, in a brand new building
- manage the **operation** and **maintenance** of building services in a completed facility
- **advise the government** about new law and regulations to curb carbon emissions
- use the latest software packages to solve engineering problems, using **design, modelling and visualisation**.



## Make a Difference

As a Building Services Engineer you will be involved at the cutting edge of **new technology** where **intelligent buildings** already use their own **integrated control systems** to adjust conditions inside to the most comfortable and economical levels.

If you are concerned about **climate change**, building services engineering will give you the chance to choose and implement the **environmentally friendly energy systems** which can substantially reduce carbon emissions. Today, **buildings** account for nearly **half** of the total **carbon** released into the atmosphere as a result of burning fossil fuels. But there is a different way. Building services engineers can use energy from **renewable sources**. **Fuel efficient** systems are constantly being developed and improved.

As a building services engineer it will be up to **you** to specify the most energy efficient solutions to meet your clients' needs, and to advise them on optimum use of the systems you have provided, so that energy savings continue to be made into the future. In fact, designs for the **carbon-neutral house** already exist. But construction professionals need to put these designs into **action**. In the coming decades, **no other career will give you the chance to make such a big impact on saving our planet**