JOB DESCRIPTION

Job Title: Graduate Public / Environmental Health Engineer

Business Line: Building Engineering

Locations: London & St. Albans

Salary: Competitive

JOB SUMMARY

AECOM is built to deliver a better world. We design, build, finance and operate infrastructure assets for governments, businesses and organizations in more than 150 countries. As a fully integrated firm, we connect knowledge and experience across our global network of experts to help clients solve their most complex challenges. From high-performance buildings and infrastructure, to resilient communities and environments, to stable and secure nations, our work is transformative, differentiated and vital.
A *Fortune 500* firm, see how we deliver what others can only imagine at aecom.com and @AECOM.

Well-designed water and waste systems are essential to successful, healthy and sustainable buildings

As Environmental / Public Health Engineers, we design systems for water supply and sanitation that help buildings work better for occupants, owners and the environment.

We are perfectly positioned to address and help resolve water and energy related challenges.

In a rapidly changing world, we are faced with the challenge of supporting larger cities with increasingly scarce resources. For instance, water: all life is dependent on it but as global population levels continue to rise, this vital resource becomes ever more precious. As Environmental / Public Health Engineers, we are perfectly positioned to address and help resolve such water and energy related challenges.

The design of sustainable water management systems helps save water and the energy associated with its use, from pumping to heating. From sustainable drainage systems (SuDS) to water reuse, our expertise in the field of Environmental/ Public Health Engineering helps clients to make better use of water and energy, and to make their buildings more resilient.

We, as professional engineers, tackle diverse challenges – from sustainable strategies to fire suppression systems and from drainage in high-rise buildings to supplying ultra-pure water and piping specialist gases and fluids for healthcare, science and industry facilities.

Examples of projects the Environmental / Public Health Engineering teams are involved in include:

- **Sandwell Hospital (MMH), Birmingham**. AECOM are designing the medical gases, chemical waste drainage and very resilient domestic water distribution systems.
- **Tower upgrade projects**. AECOM are involved in residential sprinkler designs as part of several tower upgrade projects. Significant challenges include co-ordinating pipework with the existing structure.
- **1 Liverpool Street, London**. Public Health design includes an active Rainwater attenuation/harvesting system which reclaims rainwater to supply the evaporative cooling towers which formed part of the projects Sustainable Urban Drainage hierarchy.

- **Old War Office, London**. AECOM are designing a high pressure water mist fire suppression system instead of traditional sprinklers. This saves plant, riser and distribution space and limits impact on the elements of listed building that are to remain intact

JOB RESPONSIBILITIES

As part of our day to day role, we coordinate our design approach with mechanical and electrical engineers, providing integrated building services while collaborating with structural engineers and architects to ensure our systems are seamlessly integrated into the final design. External to the building curtilage, we also collaborate with water and civil engineers to ensure that plumbing and infrastructure work together, in sympathy with the complete water cycle.

As a discipline, our skills cover the following technical fields within the built environment:

- Hot and cold water systems
- Water conservation solutions
- Solar thermal hot water systems
- Borehole water systems
- Above ground foul systems and rainwater systems
- Below ground, sustainable and pumped drainage
- Rainwater harvesting and greywater recycling
- Specialist drainage (laboratories)
- Fuel gas, medical gases and vacuum systems
- Water and oil leak detection systems
- BREEAM, LEED and Ska Rating design integration
- Wet and dry riser systems, sprinklers, first aid hose reel systems, external fire hydrants
- Fire suppression (gaseous, water mist and foam)

REQUIREMENTS

- An accredited Bachelor degree (min 2:1 or equivalent) in Mechanical, Building Services, Architectural Engineering, Environmental Engineering or Public Health Engineering with honours
- A relevant Masters Degree or Engineering Doctorate (EngD) accredited by a professional engineering institution would be advantageous.
- Maths and Sciences A-Levels (or equivalent) would be advantageous, at grade ‘B’ or above
- Microstation, AutoCad and/or Revit would be advantageous
- Membership of CIBSE SoPHE (grade of student or above)

TRAINING

Our Graduate Development Programme (GDP) along with our huge scope of projects across the globe will challenge and inspire you to make a real difference to the world we live in. Our GDP forms a core part of our business strategy globally, designed to develop the best talent across numerous disciplines to lead our business into the future. We have over 750 graduates on our programmes across the UK & Ireland, from over 40 different disciplines, each and every one of them making a tangible difference to the environment we all live & work in.

We will provide you with all the tools and support you need to achieve your professional development ambitions, including Chartership with the relevant international professional institution – where we have graduates working towards over 30 professional institutions in the UK & Ireland. We will push you to achieve the highest standards and expect our graduates to pass their professional review first time. You will be assigned a mentor to support & guide your development, and undertake regular training modules throughout the programme. There will be on-the-job technical development and classroom training where required, and the opportunity to work on live client projects, with significant multi-disciplinary exposure.