



<b>Business area:</b> Infrastructure
<b>Requirements:</b> Minimum 2.2 Master's/MEng in Civil Engineering, Structural Engineering or relevant degree discipline
<b>Our teams and what they do</b>
<p><b>Asset Planning and Solutions (Water, Wastewater, and Surface Water Infrastructure)</b></p> <p>Our multi-disciplinary team is one of the largest in the UK to provide Water and Wastewater Infrastructure services alongside Drainage Design and Surface Water Management. We collaborate with a variety of clients, both within the UK and internationally, including water companies, local authorities, highways/rail authorities, and developers.</p> <p>This is an exciting time to join our cutting-edge practice as we merge more traditional engineering skills with our innovative digital methods (as one of Atkins Digital Practices), in order to meet the challenges of the 21<sup>st</sup> Century, whilst providing high-quality technical and sustainable solutions to our clients.</p> <p>Supported by industry experts, you'll work on diverse projects that allow you to shape the environment around us, and find innovative, low-carbon solutions to maintain and enhance critical water-based infrastructure, both within the UK and around the world. We operate as a national practice with work shared across the country; examples of some of our typical projects are:</p> <ul style="list-style-type: none"> <li>• Sustainable Drainage (SuDS) Design / Surface Water Management for Local Authorities so as we can manage surface water runoff sustainably within our communities</li> <li>• Conceptual, Outline, and Detailed Design of Drainage for large-scale, Development / Transportation and Energy Projects</li> <li>• Conceptual, Outline, and Detailed Design for new and replacement water mains</li> <li>• Water, wastewater, and surface water hydraulic modelling and GIS including model verification and solution/options development</li> <li>• Optimisation of existing water and wastewater networks to improve their performance and efficiency</li> <li>• Development of large-scale water infrastructure solutions (using our innovative NetCreate tool)</li> <li>• Conceptual, Outline, and Detailed Design of flood alleviation and environmental improvement projects.</li> </ul> <p><b>Locations</b> Birmingham, Bristol, Edinburgh, Epsom (Surrey), Glasgow, Manchester, Peterborough</p>
<p><b>Building Structures</b></p> <p>Our Building Structures team is trusted to deliver technically excellent engineering solutions across the built environment – our clients depend on us to creatively solve complex problems to design a more sustainable world. Our collaborative and diverse team of engineers utilise an intelligent digital approach, alongside modern construction methods, for efficient application of steel, concrete, timber and other innovative materials.</p> <p>With a Master's in civil and/or structural engineering you'll be involved in detailed technical analysis, assessments and design on some of the most impactful and complex structures in our industry. We design and deliver across a wide range of sectors and prestigious projects including Cities and Development, Transport, Energy, Defence and Aviation markets in the UK and internationally.</p>

<p><b>Locations</b> Birmingham, Bristol, Cardiff, Epsom (Surrey), Glasgow, Leeds, London, Manchester, Newcastle, Warrington</p>
<p><b>Civil Major Projects and Structures</b></p> <p>Our civil and structural engineering teams come together to create all kinds of infrastructure, from power stations to tidal barriers to defence facilities. Our people plan, design, and oversee construction on large and complex projects, in the UK and internationally. We enjoy a variety of work collaborating with clients across sectors including energy, water, cities and development, aviation, and defence.</p> <p>Joining our team, you might plan the construction for a nuclear power station, solve the complex engineering challenges of a submarine maintenance facility, or design a major tidal barrier to protect homes and businesses from flooding – making a positive impact to people’s lives.</p> <p>You’ll be supported to develop general civil and structural engineering skills in buildings, structures, enabling works and construction, giving you the flexibility to work across various industries in multidisciplinary project teams.</p> <p><b>Locations</b> Belfast, Bristol, Epsom (Surrey), Glasgow, London, Warrington</p>
<p><b>Civil Infrastructure and Water</b></p> <p>Our civil engineering teams work together to create all kinds of infrastructure, from smart cities to water treatment works to pipelines. Our people plan, design, and oversee construction on projects of sizes large and small, in the UK and internationally. We enjoy a variety of work, collaborating with clients across sectors including energy, water, cities and development, aviation, and defence.</p> <p>Joining our team, you might help to tackle pollution with innovative wastewater treatment and sustainable drainage systems, design residential and commercial urban development schemes, or deliver essential drinking water systems to communities – making a positive impact to people’s lives.</p> <p>You’ll be supported to develop general civil engineering skills in water and wastewater, utilities and drainage, giving you the flexibility to work across various industries in multidisciplinary project teams.</p> <p><b>Locations</b> Belfast, Birmingham, Bristol, Epsom (Surrey), Exeter, Glasgow, Leeds, London, Warrington</p>
<p><b>Airport Planning and Airfield Civil Engineering</b></p> <p>We’re actively seeking graduates to join our growing internationally respected Airport team. We’re well established at all major UK airports, including Heathrow, Gatwick and Manchester and have a growing portfolio of overseas commissions, so can offer exciting opportunities to support on a wide range of UK and international airport projects.</p> <p>Whether you join the Airport Planning or Airfield Civil Engineering team, you’ll be supported by passionate industry experts to reach your potential. We’re committed to providing an inclusive culture, based on trust and transparency, where you’ll be encouraged to collaborate, share ideas and listen to different perspectives, ensuring our continued success.</p> <p><b>Airport Planning</b></p> <p>As an Airport Planning Graduate, you’ll be undertaking a variety of airport-related planning students and assessments. Holding an Air Transport related post graduate qualification, you’ll have knowledge and/or experience of airport planning, and an understanding of airfield planning, terminal</p>

planning, surface access planning, facilities planning and CAA, EASA, ICAO and IATA standards. You'll also have an understanding of the key drivers of Airport Planning and Development, including the interactions between aviation and airport operations, people and baggage movement, development, planning and design concept, retail, advertising, and surface access. You'll develop your capabilities in geometric design, Airport Modelling and Simulation tools plus spreadsheet and database skills.

Key responsibilities include:

- Developing airport masterplans
- Scoping and undertaking studies on airfield layout, apron configuration and passenger terminal planning and surface access planning
- Data analysis, demand and capacity assessment and interpretation thereof
- Benchmarking to support analysis, modelling and simulation
- Writing of technical reports and presentations
- Attending and presenting at project meetings
- Support to the marketing team in business development activities including input to tenders

Join us and you'll have opportunities for international travel, potentially spending extended periods outside of the UK and the support of a team with exemplary technical, engineering, operational and leadership backgrounds from across the aviation sector.

### **Airfield Civil Engineering**

As a Civil Engineering graduate with a demonstrable interest in airports and/or pavements, you'll be given opportunities to work on a variety of airport-related design projects. You'll collaborate closely with clients to understand their needs and develop communication skills to effectively engage with a range of stakeholders. You'll build a sound knowledge of aviation standards and regulations including EASA, CAA, and ICAO. You'll develop your database and spreadsheet skills, as well as design skills using AutoCad, particularly geometry.

Key responsibilities include:

- Engineering design for airfield engineering projects including:
  - Design of new airfield infrastructure projects including runway, taxiways and aircraft stands
  - Rehabilitation projects to extend the life of airport runways, taxiways and stands.
  - Planning airfield development projects
- Airfield asset surveys to understand pavement condition
- Writing technical reports and presentations
- Attending client meetings
- Presenting technical work to non-technical audiences
- Building new and nurturing existing client relationships
- Improving sustainability in the projects including carbon assessment and reduction
- Collaborating with the marketing team on business development activities including tenders
- Promoting digital developments in the Aviation Engineering sector

Our team will support you through our Institution of Civil Engineers training scheme to enable you to achieve Chartered Engineer status and beyond.

### **Locations**

Epsom (Surrey)

## **Advanced Technology – Computational Analysis, Structural Dynamics and Stress Analysis**

We're looking for graduate engineers with enquiring minds to join our team in Epsom. Our team work on a variety of projects from those of strategic national importance such as Hinkley Point C, HS2 and multiple defence projects to development projects to include South Teesworks Master-planning and Queen Elizabeth Olympic Park and renewables projects. Whilst you'll be based from our Epsom office, you'll have opportunities to work at client locations both in the UK and overseas.

Specialising in computational analysis, structural dynamics and stress analysis, our engineers use finite element analysis and other software to predict the behaviour of civil, structural and mechanical hardware. You'll collaborate across inter-disciplinary teams to find innovative solutions for our clients whilst developing expertise in the following areas: stress analysis, structural dynamics, fatigue and fracture analysis, thermal analysis, industrial vibration monitoring, wind monitoring, seismic engineering, blast and impact assessment, advanced materials, wind energy, wind loading effects, pedestrian and crowd loading and vehicle loading.

Join our team and you'll be supported to reach your potential. We're committed to providing an inclusive culture, based on trust and transparency, where you'll be encouraged to collaborate, share ideas and listen to different perspectives, ensuring our continued success.

### **Locations**

Epsom (Surrey), London

## **Ground Engineering and Tunnelling**

As a Graduate Geologist, Geotechnical or Tunnelling Engineer on our prestigious 3-year programme you could be involved in one of the most exciting sectors in civil and environmental engineering. You'll help to support and deliver the technical aspects of a variety of engineering and multidisciplinary designs across a range of challenging and exciting projects in the UK and internationally.

You could play a part in designing and constructing new and innovative infrastructure (such as mass transit systems, tunnelling and power supply), geohazard, underground storage and offshore geotechnics. Together we share knowledge and create a better, more sustainable future for all by safeguarding our natural resources. Whatever your ambitions we've a role to match your passion and degree, while our training will help you achieve Chartered status and develop industry skills that are highly sought after.

### **Ground Engineering**

Our Ground Engineering team is committed to providing world class geotechnical and engineering geology services to infrastructure and global energy clients, focusing on the engineering behaviour of the ground for complex new build and asset life extension projects. You'll get involved in a broad range of activities including site investigation, 3D ground modelling, geohazard & terrain evaluation, earth structures, foundation design and ground improvement, in both the onshore and offshore environments.

### **Locations**

Birmingham, Bristol, Cardiff, Cambridge, Croydon, Edinburgh, Epsom (Surrey), Glasgow, Leeds, London, Newcastle, Sheffield, Warrington

### **Tunnelling and Underground Space**

Our team provides technically excellent engineering design of tunnelling, underground, and heavy infrastructure, particularly focused on mass transit, rail and major project programmes. You'll be supported by a team with expertise in assessment of ground movements, design of complex foundations and 'ground-contacting' structures, in addition to the assessment of ventilation and fire

life safety aspects of utilising underground space. Here you'll get the opportunity to take on a wide range of interesting activities, including site work, design, asset impact assessments, life cycle/risk assessments and project management.

**Locations**

Epsom (Surrey), London

**Rivers, Coastal, Dams and Maritime**

Our team of civil engineers combines enthusiasm and passion with technical expertise to solve complex engineering challenges on a diverse range of rivers, coastal, dams and maritime projects. At the core of our work is the management of water, whether that be controlling its power, harnessing its energy or dynamically managing its flow and level. We achieve this through the design and monitoring of dam retaining structures, flood defences and hydraulic structures on rivers and exposed coastlines, infrastructure projects such as ports and offshore structures, and the provision of specialist technical support to multi-disciplined infrastructure projects.

You'll work on a diverse range of projects that allow you to share and broaden your skills and knowledge within an agile environment whilst protecting vulnerable people and communities. In delivering flood resilient infrastructure you'll create exciting public spaces which are sympathetic and sustainable to the natural environment alongside seas, rivers and waterways. If these things matter to you, as they do to us, a career with Rivers, Coastal, Dams and Maritime is the place where you can make a difference.

**Locations**

Bristol, Epsom (Surrey), Peterborough, Swansea, Warrington

**Water Management Consultancy**

Our Water Management Consultancy team connect people and the water environment; we collaborate with clients in the UK and around the world to understand how we can work together to provide innovative design solutions, research and advisory services for a sustainable future.

Our key services include: water resources and water quality planning; hydrogeology and groundwater management; flood risk management; natural capital and environmental economic appraisal; hydrology; hydraulic and coastal flood modelling and flood risk scheme appraisal; coastal and marine environmental appraisal; integrated catchment management; hydromorphology; river restoration, aquatic ecology, natural flood management and nature-based solutions; climate futures and resilience; environmental, hydraulic and civil engineering; regulation and assurance; strategic asset management; and data analytics.

We're at the forefront of new developments for the water industry; we've created new tools and approaches that are revolutionising how we plan for resilient and sustainable water management for the future. To build on our current success we're particularly keen to hear from candidates proficient in data analytics and coding; climate science; coastal and marine environmental appraisal; flood risk management; hydrogeology and groundwater management; nature-based solutions; and natural capital/environmental economics, to support our increasing portfolio of water management services.

**Locations**

Bristol, Birmingham, Derby, Edinburgh, Epsom (Surrey), Glasgow, London, Oxford, Peterborough, Swansea, Warrington

**To apply, please return to the main job specification**

