

Business area: Transportation

Requirements: On track to achieve a minimum 2.2 Bachelors/BEng degree or 2.2

Masters/MEng in Civil or Structural Engineering

Our teams and what they do

Bridges & Civils

Industrial placement locations: Birmingham, Derby, Leeds, Manchester, Newcastle, Swansea, Swindon

Summer placement locations: Belfast, Birmingham, Cardiff, Croydon, Epsom, Newcastle, Stockton, Swansea. York

As a member of our Bridges & Civils team you'll gain experience of all phases of design and assessment including initial concept designs, further design development and construction support.

Within this exciting and varied role you'll undertake a variety of technical tasks including technical report writing, design calculations, site working, computer aided modelling and drawing preparation amongst other project-related tasks. Opportunities may include project management or construction, as well as the experience of working with other disciplines such as geotechnical and environmental engineering.

Our teams work on a broad array of projects within the rail, highways, and local transport markets. This ranges from flagship projects such as High Speed 2, East West Rail and across the Highways England East Region, to essential maintenance and renewal projects on our road and railway networks.

Highways Infrastructure

Industrial placement locations: Aylesbury, Manchester, Newcastle, Trowbridge

Summer placement locations: Aylesbury, Belfast, Bristol, Cambridge, Chelmsford, Derby, Edinburgh, Epsom, Glasgow, Leeds, London

As a valued member of our Transportation Highway Infrastructure team, you'll gain exposure to the fundamentals of highway and traffic engineering, including roads, bridges, transit systems and active travel. In this varied role you will develop yourself within technical, management, commercial and leadership areas.

Upon joining the highway practice you'll gain experience of all phases of infrastructure design, from initial concept design through to construction. We'll empower you to develop your skills within a technical role, undertaking a variety of project-related tasks including technical report writing, site working, computer aided modelling and drawing preparation

Our teams work together on a broad array of projects within the local and strategic highway markets. We deliver a range of projects including active travel projects that create new walking and cycling infrastructure, essential maintenance and renewal projects on our road networks and flagship projects such as the A14 Cambridge to Huntingdon highway improvement scheme. You'll work as part of a team tasked with transforming transport infrastructure while providing net-zero emissions, helping to achieve the UK's sustainable development goals.

Central Rail Systems Alliance

Industrial placement locations: York

The Central Rail Systems Alliance is formed by partners Network Rail, Balfour Beatty, Atkins, and TSO. Together we are responsible for the delivery of multi-disciplinary railway upgrade projects on the North West & Central, and Eastern regions of Network Rail's recently devolved routes.

The programme of works delivered by the teams is valued at £2bn and manages the development, design and delivery of Switches and Crossings and Plain Line renewals as its core business but is also responsible for the delivery of major enhancement projects.

As a valued member of the team, you will play a role in improving the railway industry for passengers and freight.

You will have the opportunity to apply your civil engineering knowledge and gain a broad range of experience working in a multi-disciplinary team of experts. This is a fantastic opportunity to support in delivering a variety of civil design packages for both core renewals and enhancement schemes while working closely with other disciplines to ensure a fully integrated design is achieved.

Rail

Industrial placement locations: Derby, Glasgow

Summer placement locations: Derby, Birmingham

Our team provides a range of services from design concept to early feasibility, consultancy advice for any Rail related project work, through to detailed designs and the management of on-site construction support.

Our projects include developing new stations and depot design as well as other work such as alignments for new railway corridors and renewals or enhancements of the existing network. We continuously innovate to implement journey time improvements across the high speed, heavy, metro, light rail, and tramways networks.

We've a broad range of clients, from local transport markets such as Transport for London and local authorities through to the UK heavy rail network such as Network Rail, Transport Scotland, HS2, Transport for the North and train operating companies. We also work on a number of international projects supporting overseas railway infrastructure and metro projects.

Our interesting and varied pipeline of works will allow you to develop quickly, backed by a well-established and strong technical network.

Digital Asset Management (DAM)

In Digital Asset Management, we help our road, rail, water and energy customers to get the most out of their built infrastructure assets. We provide the information they need to make key plans and decisions about the future, such as when to invest in their assets and what maintenance activities to prioritise. We help clients understand their data and bring it to life, using tools such as FME and Power BI.

We also advise clients on the implementation of national guidance and best practice, such as the uptake of risk-based approaches to asset management. This often involves working closely with clients to understand their needs and aspirations, followed by developing and implementing improvement or transformation plans. The projects we work on are varied, dynamic and stimulating, providing plenty of opportunity for new challenges and personal growth.

Opportunities are available in two of our sub-teams (please select the team names below within your application). Here's a little about what they do:

Pavements and Structures

Industrial placement locations: Birmingham

 Provide pavement technical advice and support to various road authorities across the UK to help manage and maintain their road network

- Technical delivery of a wide range of pavement design schemes, from feasibility studies to detailed design
- Develop robust pavement design solutions to suit varying budgetary scenarios for both new construction and maintenance projects
- Carry out pavement condition surveys and data analysis to develop optimal cost-effective maintenance design to deliver lowest whole life cost
- Working on innovative research & monitoring projects to assess materials performance to improve pavement durability and efficient scheme delivery
- Provide support in the development of asset management approaches for pavements
- Development and implementation of decision support tools and lifecycle planning

Strategic Advice

Industrial placement locations: Birmingham

Within our Strategic Advice team your responsibilities will include:

- Providing advice to infrastructure owners in the development of their asset management policies, strategies, and overall improvement plans to achieve efficient asset management
- Providing technical and contractual advice to Local Authorities, Department for Transport and Strategic Transport Authorities across the UK
- Working with infrastructure owners to help them assess risk and improve the resilience of their networks and their assets
- Developing and producing national asset management guidance
- Working as part of strategic change, service redesign or improvement programmes focused on asset management
- Working with strategic and local transport authorities to better understand the value of the assets they own

To apply, please return to the main job specification