# **C**AtkinsRéalis

In the company of...

# **SOLVERS**



**Business area:** Transportation

### Our teams and what they do

#### **Rail Systems**

**Requirements:** Achieved or on track to achieve a minimum 2.2 Bachelor's or Master's in Electrical and Electronic Engineering, Aerospace and Aeronautical Engineering, Systems Engineering

**Locations:** Birmingham / Croydon / Epsom / Plymouth / Swindon

Our Rail Systems comprises five teams: Mainline Signalling, Mass Transit Signalling, Telecoms & Cyber, Control Systems Integration, and Transport Systems Integration teams. Our teams are at the forefront of innovation, driving the adoption of new digital train control systems, telecoms, and cyber security solutions. As part of our team, you'll play a crucial role in successful railway systems integration, working on exciting projects both in the UK and internationally, such as High Speed 2 (HS2), East Coast Digital Programme (ECDP), MTA New York City Transit and NEOM.

#### Key Responsibilities:

- Systems Integration: Collaborate with cross-functional teams to ensure seamless integration of various railway systems.
- Technical Expertise: Develop a deep understanding of railway system technologies, including the European Train Control System (ETCS), and apply this knowledge to project delivery.
- Consultancy Skills: Work closely with senior technical and engineering experts to enhance your consultancy skills, enabling you to provide valuable insights to clients.
- Project Delivery: Contribute to assignments that promote best practices in Digital Information Management, Automation, Carbon Reduction, and Net Zero initiatives.
- Professional Development: Begin your journey towards Chartership by gaining hands-on experience across different teams and projects.

# **Infrastructure Consulting**

**Requirements:** Achieved or on track to achieve a minimum 2.2 Bachelor's or Master's in Civil Engineering

Locations: Croydon

In our Infrastructure Consulting team, you'll work on complex station, depot and trackside civil engineering projects, ranging from the feasibility design stage through to detailed design and subsequent construction support. Our major projects include new stations for Wellington and Cullompton through our Wales & Western Framework with Network Rail, Hydrogen Test Track studies and the design of various platform extensions across the UK to accommodate new trains.

You'll be welcomed into a team of exceptional civil and track design engineers who will support you to develop your engineering problem solving expertise, with a focus on sustainability and Net Zero. Day to day, you'll derive design solutions, produce drawings, run structural calculations, bid for new projects and work closely with our Project Managers to help with commercial management.

As part of the team, you will receive the support and resources you need to develop as a civil/structural engineer and gain exposure to a variety of work which will be invaluable for your prioritised professional development towards Chartership. This will include the opportunity to undertake a secondment on site with a Principal Contractor to understand how designs are constructed and brought to life.

#### Rail Operations, Assurance and Asset Management

**Requirements:** Achieved or on track to achieve a minimum 2.2 Bachelor's or master's in engineering Disciplines (Aerospace and Aeronautical, Automotive, Chemical, Electrical and Electronic, General, Mechanical, Civil, Computer science and Systems), Chemistry, Communications, Maths, Physics, Project Management, Information technology, Rail Operations, Transport Management.

Locations: Birmingham / Derby / Manchester

Rail Operations & Asset Management is a diverse, interconnected, and multidisciplinary team consisting of:

- Rail Operations
- Business Analysis & Asset Management
- Safety Engineering & Independent Verification

We take a whole-systems approach, connecting our services and providing sustainable solutions to our clients. You will have the chance to get experience in different areas, developing your technical and consultancy skills and you will have the opportunity to pursue chartership. You will have the opportunity to rotate through the teams to enable you to choose your career path, whilst learning from experts in their field.

In Rail Operations you will be guided by colleagues with vast operational experience covering areas such as operational readiness and design of new rail systems. Our Business Analysis & Asset Management team focuses on optimizing asset performance and operational and asset management support. The Safety Engineering & Independent Verification team ensures that industry standards for safety are adhered to on the railways.

Significant Projects include:

- East Coast Digital Programme
- Trilink
- Performance Analysis for Eastern Region North London Line
- Rolling Stock and Engineering Vehicle commissions
- Safety Management System review for Tyne Metro
- Station Risk Assessments in Belfast

As part of the Rail Operations & Asset Management team, you will be joining a supportive team, working on a variety of projects where you can make a tangible impact and grow your industry knowledge across the railway network.

# **Digital Services**

**Requirements:** A minimum of a 2.2 Bachelor's or 2.2 Master's/MEng degree in Information Technology, Software Engineering, Computer Science, Web Development

Location: Derby

As software development experts, our Digital Services team delivers web-based applications and services for clients across the rail industry. You'll have the opportunity to work across our suite of 20+ applications that range from the collection and processing of energy metering data to real time train diagnostics, meaning you'll have a diverse project portfolio from early on in your career. Using mainly a Microsoft technology stack, we also provide data services via API, Azure cloud-based solutions, data analytics, machine learning and consultancy. As our software is used as part of the operational running of the railway, we also run a dedicated helpdesk service to support our clients, so you'll have plenty of on-the-job experience and become a master at problem solving!

## **Rolling Stock**

**Requirements:** Achieved or on track to achieve a minimum 2.2 Bachelor's in Engineering Disciplines (Aeronautical, Automotive, Electrical, Mechanical and Systems)

Locations: Derby

The Rolling Stock team offers a unique opportunity for passionate Graduate Engineers to make a significant impact in the rail industry. Our work is varied as we solve complex problems for our clients; you could find yourself carrying out feasibility studies for HS2, advising train operators on reducing carbon emissions, reverse engineering components for TfL or designing the installation of digital signalling systems onto heritage steam trains.

Our diverse and supportive team is dedicated to nurturing the next generation of experts in trains, trams, locomotives, and vehicles, offering a wide range of opportunities for you to become an engineering consultant in a variety of disciplines including mechanical/electrical systems, maintenance management, project engineering/management, systems, and strategy, structural/dynamic simulation as well as engineering design.

We prioritise placing our people in the right roles that align with their interests and expertise and we are fostering a culture of continuous development towards Chartership and beyond. This means that whilst you are with us on the Graduate Development Programme you will have the opportunity to move between teams and experience different types of work to ensure you are doing work that is enjoyable and develops you.

To apply, please return to the main job specification