

Job Description

Primary Information

Job Title	IT Graduate – Artificial Intelligence
Division	Tarmac
CRH Leadership Level	Individual Contributor
Location(s)	United Kingdom
Function	Transformation

Position Overview

The IT Graduate – Artificial Intelligence role is part of Tarmac's strategic digital transformation initiative. This position offers a unique opportunity to contribute to the development and deployment of AI and automation solutions within the essential materials industry. The role focuses on applying emerging technologies to optimise operations across asphalt plants, logistics, and materials production.

The graduate will be involved in shaping AI strategy, influencing technology decisions, and delivering solutions that drive operational efficiency. The programme is designed to provide hands-on experience in a fast-evolving environment, with exposure to high-impact use cases such as predictive maintenance, process automation, and data analytics.

Key Tasks and Responsibilities

- Identify and prioritise automation and AI opportunities across operational areas including asphalt, concrete, logistics, and quality control.
- Develop proof-of-concept AI solutions through rapid prototyping and iterative experimentation.
- Support data initiatives to enhance data quality, collection, and accessibility for scalable AI deployment.
- Collaborate with operational teams to understand business processes, constraints, and improvement opportunities.
- Document technical solutions and contribute to building AI literacy across the organisation.
- Assist in evaluating AI platforms and automation tools to ensure alignment with business needs.
- Contribute to the deployment and monitoring of AI workflows in live operational environments.
- Participate in cross-functional strategic initiatives aimed at transforming business operations.

Key Characteristics

- Strong analytical and problem-solving capabilities.
- Ability to work effectively in ambiguous and evolving environments.
- Excellent communication and collaboration skills.
- Process-oriented approach with the ability to map and analyse business workflows.
- Flexibility to work across multiple UK locations and within a hybrid working model.

Key Functional Competencies

We want our early careers programme joiners to be individuals who'll demonstrate -

- A drive to succeed - We **empower** our early careers joiners to bring the real 'you' to the workplace.
- Willingness to learn - We want you to **grow your own way**, within your day-to-day role, learning about the wider business and our industry.
- The ability to be agile - Demonstrating adaptability and having a **positive impact** within your teams.
- Excellent relationship building skills - **Better together!** You'll be someone who values the benefits of working within a team environment, and being part of a culture where you'll be encouraged to contribute

Tarmac / CRH Behaviours & Experiences

Behaviours

Shape our future	Customer Focus - Building strong customer relationships and delivering customer-centric solutions. Self-development - Actively seeking new ways to grow and challenge using both formal and informal development channels.
Drive our impact	Action Oriented - Taking on new opportunities and tough challenges with a sense of urgency, high energy and enthusiasm. Drives Value - Consistently achieving results, even under tough circumstances. Situational Adaptability - Adapting approach and demeanour in real time to match the shifting demands of different situations.
Inspire our people	Collaborates - Building partnerships and working collaboratively with others to meet shared objectives. Communicates Effectively - Developing and delivering multi-mode communications that convey a clear understanding of the unique needs of different audiences. Fosters Inclusivity - Recognises the value that different perspectives bring to an organisation. Instils Trust - Gaining the confidence and trust of others through honesty, integrity, and authenticity.
Experiences	
Delivering at Scale	Business partnering (Functions) Built respectful enduring relationships with internal and external stakeholders. Achieves outcomes that meet both their own needs and that of their stakeholders. Continuous improvement and operational excellence Suggested improvements to existing procedures. Driven greater efficiencies and streamlined processes within assigned area. Promoting a safety climate Improved the safety of products and production / operational processes. Dealt with an important safety related issue.
Broadening Perspective	Business exposure Has had exposure to a broader network of people at different levels across the organisation and outside of the organisation (professional or industry groups). Understands how different areas of the value chain impacts each other's performance.
Key Challenges	Communicating with senior stakeholders Experience interacting with and tailoring their communication to engage senior audiences. Domain expertise Holds relevant qualifications, knowledge and experience in their area of responsibility. Could include academic qualifications e.g. accountancy, IT programming languages. English language proficiency Has the English language skills required to do their job effectively.
Experience / Education	
- Final year student or recent graduate in Computer Science, Data Science, Artificial Intelligence, Software Engineering, or a related discipline. - Proficiency in Python, R, or similar programming languages. - Solid understanding of machine learning algorithms and data governance principles. - Desirable experience with ML frameworks (e.g., TensorFlow, PyTorch), automation platforms (e.g., UiPath, Power Automate), and data visualisation tools (e.g., Power BI, Tableau).	
Other (Key) Dimensions	
While learning in your day-to-day role, you will complete our Core Skills Graduate Development Programme. This programme is delivered through 8 modules over 2 years, designed to expand business knowledge, strengthen soft skills and offer networking opportunities to enable a successful transition to your destination role.	