

Graduate Engineer
Starting salary £29,605 pa
Fixed Term Contract for two years

## JOB DESCRIPTION

## **JOB PURPOSE:**

The WMG Graduate scheme aims to provide a Graduate Trainee Engineer with a high-quality training and development programme via a series of rotational project placements across the key research areas and business functions of WMG.

We have 16 Research groups at WMG; Some of the research groups you may have the opportunity work with include Energy Systems Applications, Battery Systems, Intelligent Vehicles Power Electronics, E-Machines and Drives, Battery Materials and Cells, Automation Systems, Steels, Light Alloys and Ceramics, Polymers and Composites, Nanocomposites Manufacturing, Sustainable Materials & Manufacturing, Advanced Manufacturing Processes and Systems, and Data and Visualisation.

You may also wish to develop your commercial awareness and business acumen by undertaking a project rotation within one of our integral business functions such as Outreach, Marketing, Governance or Business Development.

As a Graduate Engineer you will work on a range of projects, providing you with a firm grounding in the principles of project engineering, research and project management. Each rotational project will offer a unique experience. Some projects may be lab based, others may have more of a focus on research or development. During year one of the Programme, each project duration will last between 3 and 6 months.

The Graduate scheme offers a diverse, high-quality programme providing the opportunity to work in collaboration with industry and academic partners in a project engineering focused role, within a commercial research and development setting.

## **DUTIES:**

- 1. To be actively involved in carrying out applied research and project work in a variety of research areas in the form of rotational projects.
- 2. To contribute and support projects with external and internal collaborators. This will include working under pressure, developing new knowledge and skills, and applying them to a real-life context.
- 3. To undertake and successfully complete a range of rotational projects (3-6 months in duration in Y1, 6-12 months in duration Y2) supporting research projects across WMG. This may involve, but not be limited to, providing technical recommendations, lab research, lab testing, computer modelling,

- simulation, literature reviewing. In addition to this you will be contributing to technical reports, presentations and research and disseminating information to relevant colleagues.
- 4. To work with the designated Project Supervisor to create and agree individual, project specific objectives to be completed during the agreed project duration. Progress to be recorded and monitored against targets and reported to line manager through the correct processes.
- 5. To develop an understanding of the role of external funding through research grants or contracts to support the research agenda, and potentially contribute to applications to support research priorities.
- 6. To gain a working knowledge of the role of a Project Manager in a research environment, to include funding streams and requirements, timescales and budgets, financial monitoring and reporting arrangements.
- 7. To provide necessary administration and project management during each project placement, this may include organising events, procurement, collating information on project activities, providing progress reports, and coordinating ethics and information governance activities.
- 8. To network and develop strong working relationships across the department, with peers, mentors current and future project supervisors, collaborators, stakeholders and other colleagues.
- 9. To liaise with and present information to project stakeholders, meeting deliverables within agreed timescales.
- 10. To develop an understanding of the work of all business functions within WMG, including Finance, HR and Recruitment, Project Management, Marketing, Business Development and Outreach through scheme led collaborations, projects and initiatives (this may involve very occasional work over a weekend).
- 11. To engage with and support the WMG outreach programme. Work closely with the Outreach team to develop and deliver outreach initiatives to support departmental objectives and encourage knowledge sharing in the wider community.
- 12. To create and submit a research/project report on completion of each rotational placement, recognising and identifying key skills, knowledge and understanding against the UK SPEC competencies. UK SPEC requires you to demonstrate the competence and commitment in five main areas: Knowledge and understanding. Design and development of processes, systems, services and products. Responsibility, management or leadership.
- 13. To support the Talent Development team with graduate engagement initiatives, including but not limited to: university presentations, recruitment and careers events, marketing and communications initiatives and support with assessment days and recruitment processes.



## PERSON SPECIFICATION

**POST TITLE:** Graduate Trainee Engineer

**DEPARTMENT:** WMG

REQUIREMENTS The post holder must be able to demonstrate:	ESSENTIAL (E) OR DESIRABLE (D) REQUIREMENTS	MEASURED BY: a) application form b) Test/Exercise c) Interview d) Presentation
A first degree (minimum 2:1) in Engineering (any specialism), Maths, Physics, Chemistry, Statistics or Computer Science or a relevant discipline to be eligible for the programme. (You must have graduated by September 2024)	E	a
A keen interest and understanding of research areas within WMG, and a clear demonstration of relevant commercial knowledge (current industry trends, challenges, threats, opportunities, market leaders, competitors etc.)	E	а, с
Ability to demonstrate a high level of professionalism at all times, including an advanced level of communication, organisation and self-awareness, with an ability to accept and adopt constructive feedback.	E	a,b,c
Ability to work to work autonomously, to your own initiative, and be pro-active whilst working on varied projects.	E	а, с
Ability to communicate clearly and effectively through oral and presentational skills.	Е	a, c
Excellent writing skills and an aptitude for producing succinct and clear reports and papers employing a range of analytical and research skills.	Е	а, с
Ability to take personal responsibility for own development, with a commitment to networking internally to secure relevant projects and future roles.	Е	a, c
Strong interpersonal and negotiation skills, including the ability to persuade and influence others and source and negotiate new project/development opportunities.	Е	a, c
Good team working skills and the ability to work effectively with staff in different teams, including senior management and key stakeholders.	Е	a, c, d
Good IT skills to include Microsoft office packages, with experience of relevant technical IT systems, or the ability to learn them.	Е	a, c, d

Strong organisational and time management skills, with experience of project planning and managing multiple deadlines/priorities.	E	а, с
Strong analytical and problem-solving skills, including the ability to use initiative to solve challenges.	Е	а, с
The ability to work in a fast-paced, creative, and innovative environment, can perform well under pressure to deliver outputs working to pressurised deadlines.	Е	а, с
Experience of working in a technical engineering or research environment is desirable.	D	a, c
Experience of taking part in Outreach initiatives is highly desirable.	D	а, с
Laboratory experience and skills (including experimental work and risk assessment) are desirable.	D	a, c
Experience of MATLAB, Python, Simulink, C+,C++ is desirable.	D	a, c