

Graduate Trainee Engineer

HVM Catapult Projects

Starting salary £27,929 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 areas of WMG including Energy, Connected and Autonomous Vehicles, Automation and Project Management. As a Graduate Trainee Engineer, you will work on a range of projects, with a variety of research and development teams, providing you with a firm grounding in the principles of project engineering and project management. Each rotational project will offer a unique experience. The Graduate Trainee Engineer will gain experience of working with a wide range of key stakeholders on a variety of groundbreaking research projects. 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, during each project the Graduate Trainee Engineer will work to a unique set of individualized objectives to be achieved by the end of each placement.

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 at a hands-on level in carrying out research in the areas of Smart Connected and Autonomous Vehicles, Energy Innovation, HVM Catapult Projects and Materials and Manufacturing.
- 2. To contribute and support projects with external and internal collaborators. This will include working under to deadlines, 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, four month projects in Y1, and 1 12 month project in 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 and writing academic papers. 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.
- 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, collating information on project activities, providing progress reports, and coordinating ethics and information governance activities.
- 8. To develop strong working relationships on each rotational project with the designated project supervisor, collaborators, stakeholders and other staff.
- 9. To liaise with and present to project stakeholders, meeting deliverables within timescales and writing technical reports for customers.
- 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 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 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.
- 14. To complete a portfolio of PG courses and modules, including a Project Management qualification and PG Certificate in Automotive Technology. Also, complete post module assignments (PMA's) as required.



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 of graduated by September 2023)	E	а
A keen interest and understanding in the technical aspects of Connected and Autonomous Vehicles/Energy Innovation/Catapult/Materials and Manaufacturing.	E	a, c
A good understanding of the current developments within industry (for your chosen pathway) partnered with a good commercial knowledge of the challenges, opportunities and competitors within your chosen pathway is advantageous.	Е	a,b,c
Ability to work to work autonomously, to your own initiative, and be pro-active whilst working on varied projects.	Е	a, c
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	a, c
Ability to take personal responsibility for own development, with a commitment to study towards further professional qualifications	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 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	Е	а, с
Strong analytical and problem-solving skills.	Е	a, c
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
Knowledge or Experience of Systems Engineering	D	a, c
Laboratory experience and skills are desirable for our Energy stream.	D	a, c
Experience of using MATLAB, Python, Simulink or any other relevant software packages or hardware. Experience of coding, completing data analysis, modelling and simulations.	D	a,c