

WMG Graduate Trainee Engineer Programme 2024 Recruitment

Theo Teasdale
Ed Griffin



Theo Teasdale, 2023 Warwick Physics Graduate

- Highlights of Physics degree: Plasma Physics and Fusion, Quantum mechanics, Condensed Matter Physics
- 3rd year dissertation on 2D semiconductors, implementing lab work and lots of microscopy
- Started the graduate programme in September 2023

Ed Griffin, 2018 Warwick Physics Graduate

- Warwick Physics BSc (2015-2018)
- WMG Graduate Engineer (2018-2020)
- Project Engineer in Electrical Machine Design for Manufacture



<https://www.safran-group.com/products-services/engineustm> [accessed 29/02/2024]

About WMG

4

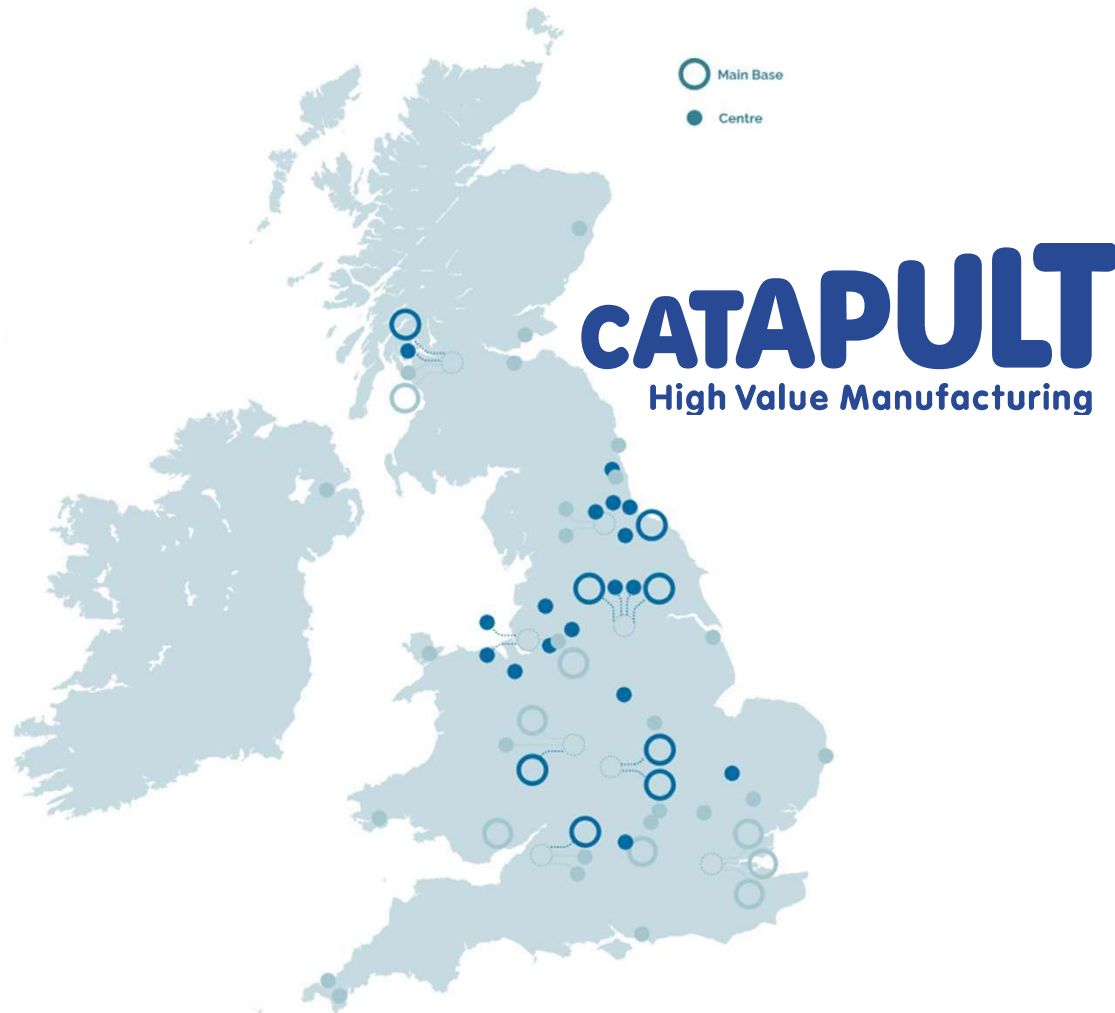
Founded in 1980 by Lord Bhattacharyya

Became a founding member of High Value Manufacturing Catapult in 2011.

Works with a wide range of businesses and industries: from SMEs to international, industry leading companies

Currently employs over 800 employees and rapidly growing





WMG impact

A BWI report found that since 2018, despite the COVID pandemic and subsequent economic slump, the WMG SME Group have helped to achieve:

Additional Employment of 464

Safeguarded Employment of 1,629



WMG Industry Partners

AIRBUS



AstraZeneca 



BAE SYSTEMS



Norton



1921

ARUP



SIEMENS







Year 1 – Three rotational projects of your choice with different teams across the organisation

Year 2 – One or two specialist projects of your choice which suit your interest

Where Could This Lead?

- **Project Engineer** or **Project Manager**
- **Further Study** – Masters or PhD
- Career in **industry**

100% of graduates offered a Project Engineer position at the end of the programme

What's in it for me?

9



Post Graduate Certificate in field of interest



Project Planning Management and Control qualification



Work closely with **industry partners** such as Jaguar Land Rover, Dyson, TATA Steel, Norton, Rolls Royce and BAE Systems



Outreach opportunities and **industry events**



Build a network of academic and industry contacts



Assigned graduate **mentor/buddy**



Personal development plan with free learning courses



Progression to Project engineer after 2 years

Starting salary of £29,605

- 26 days paid annual leave, plus 4 customary days over Christmas
- Excellent pension scheme





Materials and Manufacturing



Smart, Connected, Autonomous Vehicles



Energy Innovation



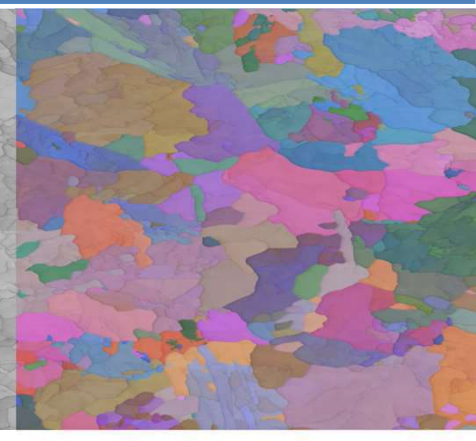
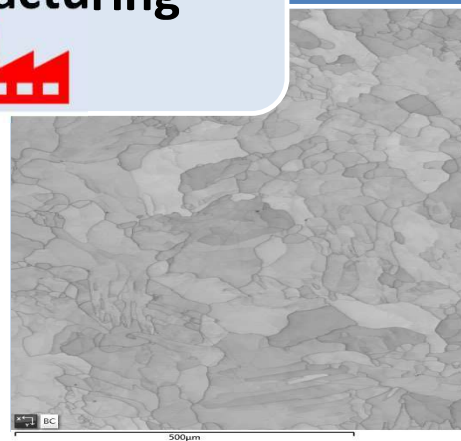
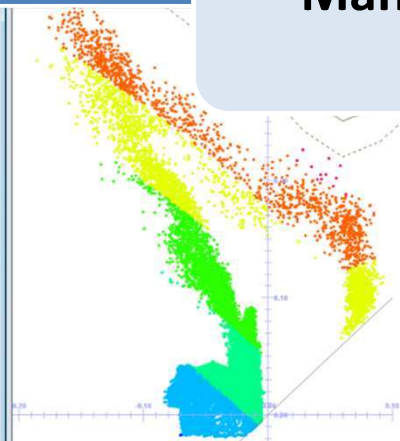
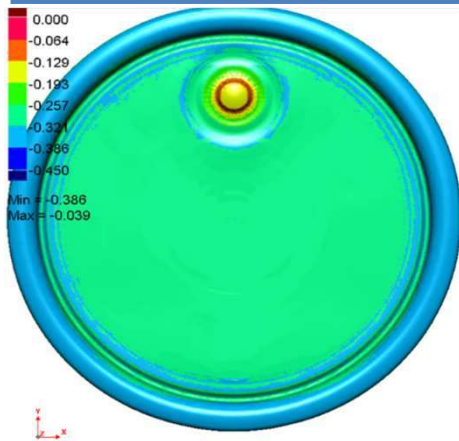
Materials and Manufacturing

- Research into all steps of the manufacturing process
- Work on a wide range of materials: Polymers, composites, metals etc
- Improving the environmental impact of materials by lightweighting, forming techniques, end-of-life concerns, design

Developing novel formability tests for packaging steel and characterising steel

Phase identification of microstructure in steel microstructure using Electron Back Scatter Diffraction (EBSD)

Materials & Manufacturing





Smart, Connected, Autonomous Vehicles

- Development of vehicle-to-vehicle and vehicle-to-infrastructure systems
- Improvement of user experience for autonomous vehicles
- Real world tests of autonomous vehicles

Robust Automated Driving in Extreme Weather (ROADVIEW)

The Cloud Assisted Real-time Methods for Autonomy (CARMA)

**Smart, Connected,
Autonomous Vehicles**







Energy Innovation

- Research into battery performance through useful life cycles
- Power Electronic, Machines and Drives
- Battery chemistry at end-of-life
- Battery abuse testing

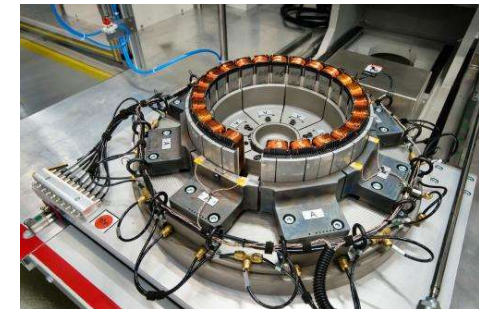
Energy Innovation



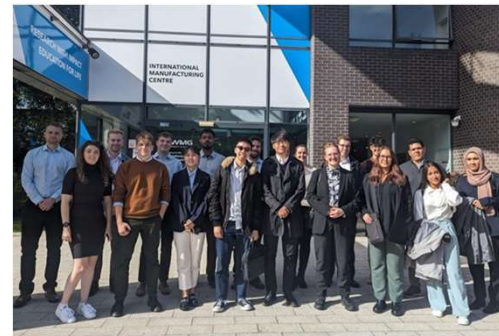
- Aerospace Manufacturing Capability for Electrical Machines (AeroMC)
- Compact EDU with Advanced-Technology (CompETe)
- Very Light Rail



<https://www.safran-group.com/products-services/enginestm> [accessed 29/02/2024]



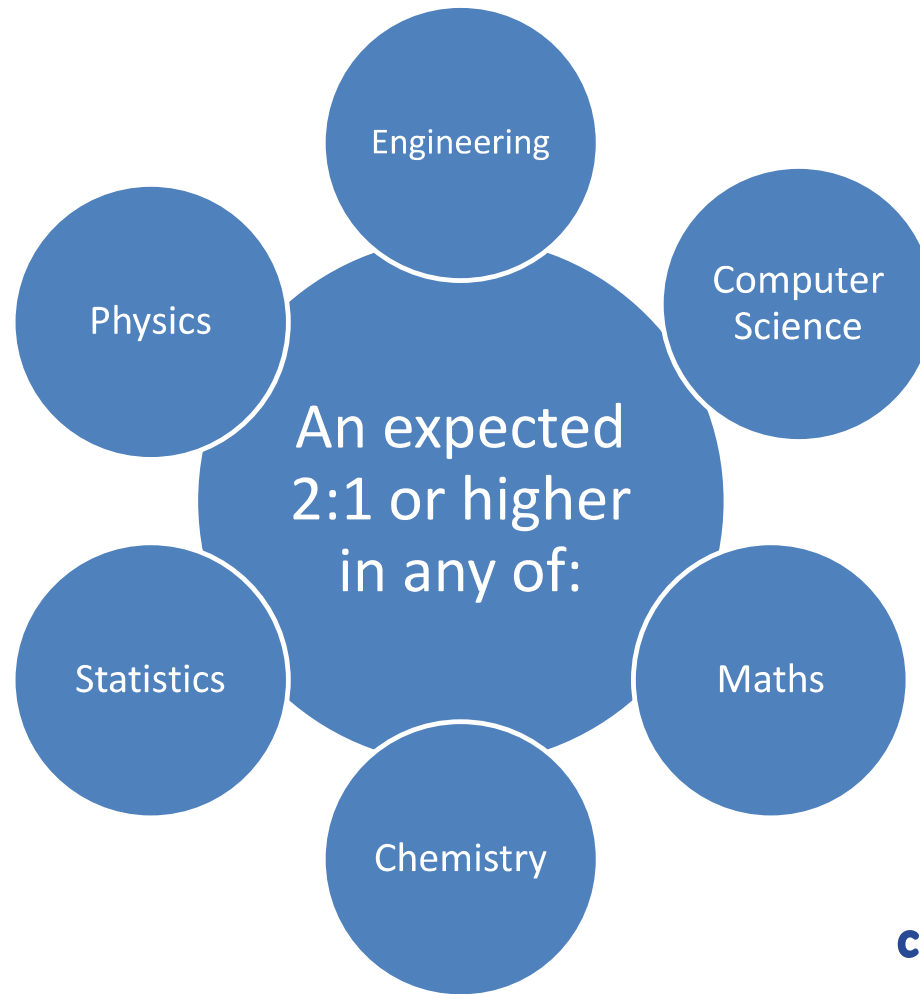
Experience so far



- The graduate program is the perfect opportunity to bridge the gap between disciplines
- Crossover experiences/skills:
 - Independent research
 - Knowledge from modules (Condensed matter physics, Electromagnetism, Python/Coding modules)
 - Enthusiasm to learning
 - Working within groups/sharing ideas
- A physicist's take on a problem is different to an engineers: this is invaluable to WMG

We are looking for...

20



Applications are open from
March 2024 to April 2024

Submit an **online application**
and **CV** via our website

Assessment Centre in May 2024
(including an **interview**)

Final Results

September 2024 Start Date!

Application Form and CV

We want to understand your **motivation** for applying to WMG and your chosen pathway. Demonstrating **commercial knowledge** will make your application stand out.

Assessment Centre

Re-read the Job Description and Person Specification, and consider how you can demonstrate the **key skills and competencies** that are essential to the role.

Interview

It is important that you do some **research** about WMG's business, partners and the market we operate in. Be prepared to discuss your **soft skills** and **technical knowledge**.

Any Questions?

23

Thank you for joining us!

Any questions?

Apply Now

24



Reach out to the WMG Graduate Scheme team
wmg-graduatescheme@warwick.ac.uk

Find us on Gradcracker
<https://www.gradcracker.com/hub/861/wmg-university-of-warwick>

CATAPULT
High Value Manufacturing

WMG
THE UNIVERSITY OF WARWICK