

National Manufacturing Institute Scotland - Industry Doctorate Programme in Advanced manufacturing

Title: Lightweight composite structures for high-performance applications.

Industry Sponsor: Williams Advanced Engineering Limited

University: The University of Edinburgh

Williams Advanced Engineering Limited (“Williams”) is the technology and engineering services business of the Williams Group (<https://www.williamsfl.com/advanced-engineering>). The company provides world class technical innovation, engineering, testing and manufacturing services to deliver energy efficient performance across multiple industry sectors.

To help Williams address some the most difficult engineering challenges of the 21st century, the company together with the University of Edinburgh are looking for an enthusiastic PhD candidate to develop novel, lightweight, high-performance composite structures and materials for application within multiple industry sectors.

<https://www.williamsfl.com/pages/careers/wae/industrydoctorateprogrammeinadvancedmanufacturing>

The Project will comprise a comprehensive study of the structural performance and behaviours of novel composite materials at different length scales and will encompass composite manufacture, testing (environmental/mechanical), characterisation and computation modelling. The candidate will be required to undertake parametric studies to evaluate the influence of, amongst other things, material properties, topological properties, and manufacturing processes on the final behaviours of the materials under investigation.

The successful candidate will benefit from exposure to Williams’ vast expertise in advanced lightweight structures and access to world-class facilities at its Oxfordshire HQ together with access to the University of Edinburgh’s advanced research facilities at the Institute for Infrastructure and Environment, where experimental characterisation through simulation and testing will be carried out.

To be eligible to apply for the Industry Doctorate Programme in Advanced Manufacturing funded by National Manufacturing Institute of Scotland, the candidate should be a UK/EU citizen and have achieved a 2:1 undergraduate degree in Engineering (or equivalent). The grant will cover tuition fees and stipend of £16k/year over the 4 years duration of the PhD.

Prior knowledge of material testing, CAD, and Finite Element Analysis would be advantageous, but is not essential.

To apply please submit your CV to francisca.mhergueta@ed.ac.uk

For further information on entry requirements and language requirements, please visit:

<https://www.ed.ac.uk/studying/international/postgraduate-entry>

<https://www.ed.ac.uk/studying/postgraduate/degrees/index.php?r=site/view&edition=2019&id=947>