

**Apply here****Start date**

January 2022

Duration

6 months

Languages

Good spoken and written English levels are required (B2 onwards)

Location

Belfast, Northern Ireland

[You will be working in Lisburn with a short commute from your accommodation in Belfast.](#)

Belfast is the capital city of Northern Ireland and over recent years has seen a period of significant regeneration and growth. The birthplace of the [Titanic](#), this vibrant city has a buzzing nightlife and social scene with many cultural events taking place throughout the year. Close to beautiful countryside including [10 Game of Thrones filming locations](#) and the famous [Giant's Causeway](#), Belfast has something to suit all tastes.

Are you eligible?

Are you a registered student?

Or

Are you eligible to participate in the Erasmus+ programme?

Benefits

See website for details of all ESPA benefits. For all internships over 6 months, additional benefits will be paid. Details available at interview.

Role

This is a fantastic opportunity for a research minded student to gain practical experience within this innovative leader in door and access solutions. Mentored throughout, you will support the research and development of a new metal fire door platform through research into using new materials and/or construction methods to give a competitive advantage and to disrupt the current market. This is a great chance to take early responsibility and use your skills and knowledge to own and manage this key project. For the selected candidate, this research led project that will be a great asset to the company and addition to your CV.

Tasks

- Research, analyse and design mechanical fire door solutions, using a product specification from cradle to grave and mechanical design solutions, working closely with prototype and test resources to ensure that design verification is achieved.
- Implement the new product gateway process as defined in the Company Quality System, participating in the analysis and evaluations of designs both formally and informally, ensuring that designs meet specification and that all products are safe to manufacture, install and operate.
- Produce conceptual designs using sketches and 3D CAD and Carry out Design FMEA's
- Validate conceptual designs and solutions with peer review
- Produce/support creation of 3D CAD models and drawings that can be used for prototyping, tooling, drawings for final production of product using AutoCAD Inventor system
- Produce prototype solutions using appropriate Rapid Prototyping techniques.
- Project manage the design phase of the project, initiate, and participate in brainstorming sessions
- Work in compliance with company rules and procedures

Desired Skills

- MSc Mechanical Engineering (pre/postgraduate)/MSc Materials Engineering (pre/post graduate)
- Experienced in materials, adhesives, FMEA and rapid prototyping.
- Good understanding of mechanical design principals & adhesives principals.
- Good eye for detail; able to work in a timely, accurate manner and team player
- Knowledgeable in 3D CAD, IT, desirable knowledge in fire engineering.

The Host Company

Part of an international group totalling 47,500 employees and annual sales close to 7 billion euros, this host is the UK's leading supplier of safety and security door solutions across a range of markets including residential, business, the health, public and high security sectors. Offering the most comprehensive total door opening solutions of any manufacturer, this innovative company is seeking motivated individuals to continue their success and maintain their position as the market leader.