



6 Month Material Engineer Internship

(HIEMT2604)

PLEASE READ CAREFULLY BEFORE CONTINUING.

European Student Placement Agency, Ltd (ESPA UK) is a recruitment agency whose goal is to find high quality internships for European students in the UK. We work closely with our host companies to ensure the positions provide the candidates with a great experience, both professional and personal.

REQUIREMENTS: ESPA vacancies are open to all EU passport holders able to travel to the UK for an educational work placement, without the need for visa documents. You have to be a registered student and/or have Erasmus+ status to be eligible for our internships. Any student who is unsure of their situation should check with their university before applying. Non-EU students can also apply if they are studying in the EU and can get an Erasmus+ grant/status for the entire length of the internship.

All interns coming to the UK for an internship experience must have work place accident insurance which covers them for the internship.

BENEFITS: All ESPA's services are **free** for students and alumni. The benefits are:

- 1) Paid Accommodation.
- 2) Paid Utility Bills (electricity, gas, water and council tax) + Internet Access
- 3) Commuter travel to work (accommodation will be found within an acceptable commuting distance from the workplace, if that requires more than a sensible walk then a bus/train ticket will be provided).

This will be sourced and managed on your behalf by ESPA. **These benefits have an approximate value of 700€-1000€ per month (depending on location).**

There is no salary over and above the benefits offered, unless specifically stated.

To know more, please visit: www.espauk.com

The Host Company

This is an opportunity to join one of the most innovative Additive Manufacturing (3D printing) start-up in the UK. This company is backed up by several innovation grants as its expertise is recognised in various sectors such as automotive, F1, aerospace, defence and clean energy. Their ability to design and produce 3D printed products in metals to meet specific market requirements lead them to work with major players. This company has a solid plan to become one of the international leaders of the 3D manufacturing market, using the latest available technology.

Role

This would suit someone who wants to be involved in the full project life cycle. From the start, you will have the opportunity to have an impact on the solution the company offer our clients and you will be assigned your own projects during the internship. It will be your responsibility to expand the scope and gain full understanding of each of the projects requirements through liaising with the other team members. You will then be expected to manage your own time and work load to ensure all the projects are delivered by the end of the internship period.

Location

Bristol is a fantastic city to live in. Bristol offers everything your need for a successful international experience. (Museum, artistic events, social life).

Duration

6-12 months

Languages

English should be B2/C1

Start date

September

Tasks

- Designing parts using 3D CAD software to meet the part's requirements provided by the host company.
- Converting the CAD geometry to the AM machine's definition i.e. laser scan parameters.
- Carrying out necessary measurements to validate the part against the requirements.
- Helping the company understand the quality of the material produced by the AM process in a cost effective and timely manner by monitoring the process and suggesting improvements.
- Carrying out a study to understand the capability, viability and return on investment of selected measurement methods.

You will also be working on your own project to *optimise the Additive Manufacturing process (Selective Laser Melting) and heat treatment parameters to produce turbine wheels using a nickel alloy, CM247 LC.*

- Run design of experiments to optimise AM process parameters
- Inspect samples using SEM and optical microscopy
- Measure dimensional accuracy of samples (GOM scan)
- Carry out mechanical testing
- Optimise heat treatment cycle to achieve optimum properties
- Work with the host-company's partners to develop computational process models

Personal Skills

- Material Science or Engineering (Mechanical or related) background
- Solidworks or similar 3D CAD design package and a knowledge of the HyperWorks suite by Altair
- Self-motivated, well-organised and adaptable to new situations
- Keen interest in new technologies

How to apply

STEP 1) Please, register with us at <http://www.espauk.com/students/student-registration/>

STEP 2) Please, log in to your account in <http://www.espauk.com/students/student-application/> and then click on the button **APPLY** next to the vacancy name.

If you have any problems applying for this vacancy please email us at: apply@espauk.com and in the subject please indicate the Name + the code of the vacancy you have issues to apply to.