

# Brilliant Careers for STEM students in the South West: Nova Systems



**Employees:**

50 - 100

**Location:**

Bristol

**Industry:**

Aviation engineering

## What does Nova Systems do?

Nova Systems provide expertise in the defence and security sector, especially on aerospace. This means when companies need to know the answer to some tricky defence questions – for example, if they need a fighter jet simulator, or they need to analyse data from a test run of a new plane – they get in touch with Nova Systems.

### Three key questions:

- How do you simulate different planes in a flight simulator?
- How do you programme a model to simulate airflow over a plane?
- How do you make sense of flight data for a brand-new plane?

### Employee profile: Alex Rowan-Smith, Graduate Engineer

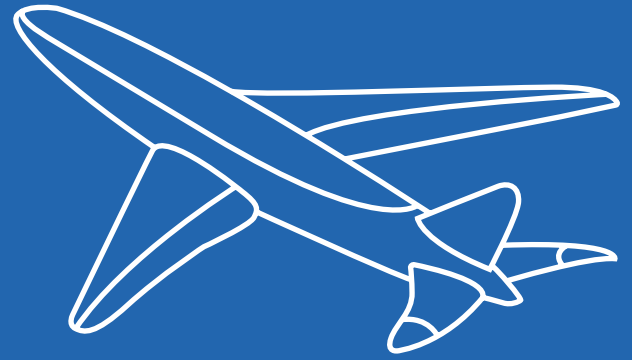
#### Do you have any advice for students interested in engineering?

Don't worry too much about your background. I got hired as an engineer because of my specialised skills in maths, even though an engineering degree may have been more useful, so just do what you enjoy the most! It can be hard to make decision: lots of people still don't know what they want to do even after three or four years at uni, but believe me, there are others in your position.

#### What was surprising about moving from studying to working?

The social life aspect changes so much after uni, but being on a grad scheme allows you to make friends. Graduate schemes and apprenticeships are a great way of being exposed to a job and that style of life without being overwhelmed.





### **How did you come to work at Nova Systems?**

I applied to countless grad schemes at uni. For me, it was important to find a company that was interested in my own development and that also cared about me as a person. Compared to other grad jobs, I knew I would be given more responsibility at Nova, which, while scary at first, now means I'm making jet simulators, rather than just making coffee.

### **What does your job involve?**

As an engineering grad, I support other senior engineers, which means I have the chance to stand back and learn, but also get involved at the same time. Since joining the company, I've been focused on two projects: an F-35 fighter jet training simulator and an aerospace machine learning project. As you can imagine, there's been a lot of training to begin with, but even then, it's all good experience that goes on the CV for later.



### **What did you study at university, and how did it help with your job?**

I was better at maths in college so for me it made sense, and I wanted to study in-depth the parts of maths that I really liked. After taking a module in my second year on mathematical modelling, I knew I wanted to be an engineer. If you look up 'maths jobs' on google, it says you can either be an accountant or teacher, and even though my job title is 'engineer' now, I consistently use maths and programming on a daily basis.

### **How do you decide on which job?**

Knowing what you want to do is almost impossible straight away. Even after three or four years at uni lots of people still don't know. The whole point of working after graduating is to find something you want to do; it might be something that you've always wanted to do, or something you never thought of before. It's all good experience – plus you get paid!

