## EXETER MATHS SCHOOL

# Brilliant Careers for STEM students in the South West: Dyson

# What is the Dyson Institute?

The Dyson Institute of Engineering and Technology is like a university, but not in the traditional sense. As well as studying for a degree apprenticeship, students work for Dyson three days a week and get paid to do so, all without having to pay tuition fees. Students at the Dyson Institute work with the company's cutting-edge technology and get exclusive access to futuristic concepts and prototypes that are still in development.

# What kind of projects do you work on at the Dyson Institute?

You are a Dyson engineer from day one. That means working alongside Dyson's experts on real projects in disciplines like fluid dynamics, motors, energy storage and robotics.

Across the first two years, you study mechanical engineering, electronics and electrical engineering, electromechanical engineering and software engineering. You then specialise in one of these areas for years three and four and this relates to your workplace team as well.

# Three key questions:

- · Can you keep a secret about Dyson's future products?
- How do you juggle working and studying at the same time?
- What would it be like to study without tuition fees?

### Student/employee profile: Emily Jones

### What did you study at A-level?

I studied maths, further maths, physics, and computer science at Exeter Maths School. The teachers were so good – I fell in love with programming and still use those skills now.

### What is it like working with Dyson's technology?

In the first year you start off with electrical, then software and mechanical, and do a lot of hands-on stuff: testing products and working with circuit boards. Then as you go through, you get deeper in, and it's very secret.

You're looking at new concepts and designing items for 10 years in the future, which is really exciting.



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Location:

Malmesbury

Industry:

Product design



#### Have you met James Dyson? What is he like?

He's getting older now, but he's still got those classic purple glasses – that's what makes him different. He's very professional and very nice. I think what makes him and Dyson different is the focus they put on education and the future, it's really big here.

#### Did you always know you wanted to do engineering?

Yeah, I think so. I did a trip to a military defence vehicle company when I was in Year 8, and ever since then I've been interested in it.

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When I was at Exeter Maths School I always preferred the practical side of engineering, and knew that was I wanted to do long term, and the ethos at the Dyson Institute of independent study and the real-life applications of engineering is similar to when I was at EMS.



#### What kind of skills do you learn?

You pick up a lot of soft skills. At the end of each rotation you have to do a presentation, or make a poster, as well as keep track of your progress for your apprenticeship, which is all really helpful for learning about the professional workplace.

#### What's it like at the Dyson Institute compared to a normal university?

It is a big learning curve, because you have to learn to do a lot quickly, but it's definitely doable. By the final year of the degree you basically work five days a week, when you finish you are fully ready: you don't need to do a grad scheme or anything, you're an engineer by the time you're 22, 23.

