

Gemma has always been fascinated by science; below, Sir James Dyson, who says we need more engineers, male and female.

ENGINEERING A CHANGE

BRITAIN NEEDS GIRL POWER TO HELP ADDRESS A SERIOUS SKILLS SHORTAGE. ALEXANDRA HANKINSON-KING REPORTS

One of Britain's most successful inventors and designers believes the country is in the grip of an engineering skills crisis.

Sir James Dyson – whose vacuum cleaners and hand drying machines have revolutionised their sectors – declared: “Ultimately we need more engineers: male or female.

“Getting women into engineering is vital. It will not just alleviate the shortage, but could actually improve the engineering solutions that are developed.”

His concerns are gradually being heard by engineering firms, universities, colleges, schools, parents and even the government. But with the UK still having just nine per cent of its engineering workforce made up of women – the lowest in Europe – there is still a long way to go.

Gemma Elliott is part of the new wave of women in engineering. Having completed A Levels in English, Classics and Biology, plus an AS Level in Chemistry she was on track to accept a place at university.

“I had always been fascinated by science and as a child was really inspired by my father, who was a project engineer in the nuclear industry. He was always doing different and engaging projects at work which looked very technical and complicated.

“When I was younger I found it very enthralling and decided I wanted to work

on similar projects when I grew up.”

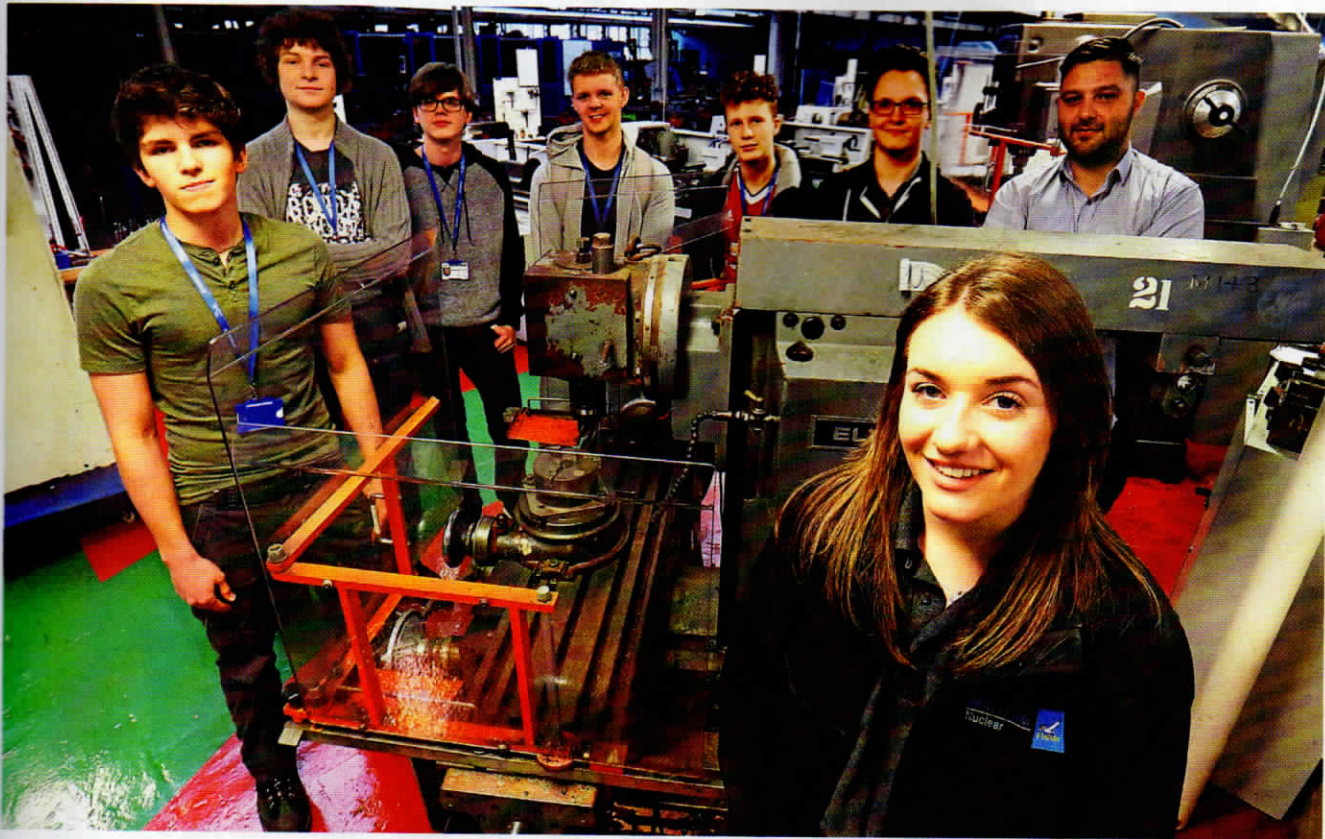
Gemma was on track to go to university to study Science, so to get some work experience she took up a summer post with James Fisher Nuclear on Trawsfynydd Decommissioning Nuclear plant on Deeside in the Magnox Health Physics department.

“I was exploring engineering as a career and found I thoroughly enjoyed it. Working with radiometric instrumentation, using radioactive sources, the electronics and the mechanics were all new yet intriguing to me. I had suddenly found a passion for an innovative and ever-growing area of engineering.”

Gemma joined James Fisher Nuclear in August 2015 as a Trainee Technician. The company supplies and services radiometric and X-ray equipment to nuclear power stations and other related businesses across the UK. She also started a Foundation Degree in Electrical and Electronic Technology at Shrewsbury College at the same time.

“The opportunity to take a Trainee





FROM TOP:
Starring in a man's world – Gemma Elliot with fellow Shrewsbury College students, from left, Dominic Hamer, Hugo Guerra, Tom Davenport, Cameron Reedy, Michael Leah, Matt Lloyd and Khalil Mahmood; Gemma in the work environment where she is most at home.

Technician role with such a prestigious employer and to be sponsored by them to study a fascinating university level course at Shrewsbury College is incredible,” says Gemma. “I have learnt so much, it’s been an amazing experience.”

Gemma has already worked on many, varied projects including the on-site installation of exit monitors which identify contamination on monitoring people. She has also designed and created a photomultiplier tube used inside instrumentation to detect alpha and beta radiation.

“It’s proved a fascinating area of engineering to get to grips with,” she adds enthusiastically.

So what of being a woman in such an environment?

“I am the only woman amongst the 14 engineers I work with, which may sound daunting but it’s irrelevant in our day to day work. We are all just engineers.

“When I first joined James Fisher, I used to get odd looks walking around sites in my work overalls. At first it was discouraging and I did find it slightly



patronising, but you learn very quickly to deal with it and laugh it off. Maybe there will be areas where it might be a challenge being the first female in a role, but with the amazing support of my colleagues I know I will have the encouragement and help required.

“The team have accepted me from day one.

“I think it comes down to how much effort you are prepared to put in, and no matter whether you are male or female, if you can prove you are dedicated, committed, enthusiastic and professional, you will be taken seriously.

“I know that the country needs more engineers generally, and that the

proportion of female engineers is very low, so I hope that more girls will start to see what a great career it can offer and not let the stereotypical ‘male dominated’ reputation of the industry put them off,” Gemma adds.

A sentiment which James Dyson supports, saying: “Rather than bemoaning the lack of engineers, let’s celebrate our female role models and excite our children about the possibilities of a career in engineering.

“Britain’s high technology companies need their brain power.”

■ To find out more about engineering courses at Shrewsbury College, call Course Advice on 01743 342333.