

Newstead Wood School for Girls

Newstead Wood is an all-girls 11-18 Specialist Engineering selective school in South London/North Kent with a roll of 1,000 pupils. The school is characterised by rich ethnicity, high mobility and socio-economic diversity. It is a Gifted and Talented Lead School and a National Support School as well as HPSS Languages since 2008.

Headteacher Liz Allen is committed to developing and sustaining a rich mix of employer partnerships to enrich the curriculum and inspire and stimulate the girls' achievements, particularly in STEM subjects. She is able to speak on behalf of the Specialist Engineering Schools, acknowledging their commitment to Employer Engagement

Two exemplary relationships have been with **NORTEL** (a large multinational) and a micro-business surgical instrument maker. Both relationships were based on a shared commitment to make a difference and a very strong relationship between MD and the Headteacher.

The Nortel relationship generated a number of sustainable programmes, offering progression through a range of opportunities and activities for young people from Year 9 to the Sixth Form. The school offered Nortel a chance to enhance and influence the development of potential future employees, and to access a range of professional support and development opportunities for their own staff. The micro-business relationship offered mentoring passion and inspiration to the students. Both employers offered role models of women succeeding in engineering fields.

These are just two of many relationships the schools have invested in. The businesses they work with offer a range of activities and experiences, including:

- Arkwright Scholarships
- Engineering Enterprise Scheme
- Year in Industry
- RAeS Build a Plane Challenge
- Engineering Diploma Work Placement
- Work Experience for Year 10 students
- Governor/Trustee of the school

Reciprocity in the relationships is the key to success and the engineering businesses report the following benefits:

- The chance to show high achieving girls that careers in engineering can be exciting, challenging and available to girls and boys equally
- Real input into the skills development of young people, particularly in STEM subjects
- Development opportunities for their own staff, designing, leading and enabling the students to get the most out of the partnership opportunities.

Case Study: Justin Brooks, SEM Controlled Motor Technology

- 2007 Supported one student with the Audio Engineering in her Design & Technology project.
- 2008 Provided an extended work placement for this student. Facilitated industrial visits for VGCSE manufacturing students. Offered 'a year in industry' placements.
- 2009 Attended the Engineering our Future careers day at the school as a featured employer.

Justin continues to assist with delivery of Advanced Engineering Diploma through a series of industrial visits and linked assessment activities.



Quotes from students:

"The RIBA architecture competition was stimulating and challenging; something that I enjoyed. It showed me how I could change the world through architecture"

Sophie Williams Year 7

This was a brilliant opportunity for us to learn about the inspiring career path, Civil Engineering"

"It gave me an idea about what engineering is and it was the reason I chose to study the engineering diploma"

Year 9 students on the Rapid Response Challenge ran by Engineers from the ICE.

"I do like the idea of doing engineering for a career, maybe civil or aerospace. One of the good things about the diploma is that I know it is designed by employers and covers what they think is important"

Sorcha Stokvis. Higher Level Diploma student

"I found it exciting because I got to work on real projects and experience the challenges engineers face everyday"

Jess Salisbury Year 11 about her Diploma work experience at Cundall

"Spending time with Southern Rail has inspired me to pursue my interest in engineering because it will offer me challenges that test my abilities"

Lily Webb Year 12 Engineering Society Chair

"Visiting BAE systems has given me an insight into Avionics, an area which I did not know much about and now have an interest in"

Lucy Millgate Year 12

"My decision to read engineering at university was confirmed when I spent a week with a team looking into alternative fuels at BP. The involvement of engineers in such issues so fundamental to society, greatly appealed to me"

Laura Gardiner Year 13