



GRAVESEND GRAMMAR SCHOOL

ENGINEERING

Engineering falls under the Science faculty where we aim to provide an enjoyable, practical and challenging environment where all our students are encouraged to be confident, enquiring, independent and interested learners ready to take the opportunities provided in an increasingly technological world. The curriculum followed is designed to challenge the very able students we are privileged to teach. As such it does not shy away from academic challenge but tries to access it through practical application.

Currently all Y7 and Y8 students follow a bespoke Engineering curriculum designed around practical problem solving and project work. At KS4, in Y9, for the last 2 years we have offered the new AQA GCSE Engineering course as an option. Currently there are one Y10 class and two Y9 classes following the course.

AQA GCSE Engineering 8852 course information:

- Consists of two assessment elements
 - Exam worth 60% 120 marks
 - NEA worth 40% 80 marks
 - Total marks 200 therefore equal weighting factor for individual marks
- NEA can not be started until the end of year ten as this is when the exam board releases the context and design brief for the NEA task. This is the case for every year that passes, there is a new brief in the same format for each exam year.
- There is an emphasis on applying knowledge and understanding with the use of different skills, equipment and materials. Evidence of practical work is high.
- Students need to be able to use machines, know and understand about where they can be used and how to manufacture
- Students need to be able to complete many different engineering equations that are relevant to materials, electronics, mechanisms and costings
- Students must use electronics and mechanisms in the NEA which is key and clearly defined by the NEA briefs
- They also need to incorporate CAD CAM in their learning and NEA especially

The successful applicant will work primarily in a well equipped workshop and excellent additional access to ICT as well as full time technical support. The Head of Science leads the faculty supported by subject leaders, the STEM lead and the Key Stage three co-ordinator.

As a school and within the faculty we have a well-developed and integrated approach to assessment, feedback and intervention which helps us to achieve excellent GCSE results. The faculty is well resourced and we encourage the use of purposeful, hands on, practical work wherever appropriate. This is supported by full time technicians.

The candidate should be prepared to work closely with colleagues to utilise and develop their subject knowledge and teaching skills in delivering the curriculum, where possible bringing greater creativity and innovation to the team. Candidates should also have the enthusiasm and leadership skills to ensure that there is sufficient vigour and rigour in their teaching.

Gravesend Grammar School provides a positive atmosphere where learning can flourish and teaching can develop. This is also a great opportunity to lead a significant contribution to an improved results profile for the School as a whole.

March 2020