



Westcliff High School for Boys

UNLOCK YOUR POTENTIAL

Careers across the curriculum

in PHYSICS

Soft Skills Development (these are the skills we are committed to developing in the Careers Department)	
All Years	We develop communication and teamwork by group laboratory work, in which students must complete tasks of various different complexities to arrive at a conclusion. The individuals within the group must share the roles and apparatus, whilst all being responsible for the safety of themselves and the rest of the class. The conclusions from the practical work must be communicated effectively with the rest of the class, and when laptops are used, students have the opportunity to work collaboratively in pairs.
Years 8, 9, Middle School and Sixth Form	We develop time management skills by using Isaac Science for the completion of homework tasks in Year 9 – 13; this requires adherence to set deadlines. During practical activities, strict time limits are also imposed to ensure that the task is completed safely but with efficiency during the allocated lesson time.
Year 9, Middle School and Sixth Form	We develop creative thinking by providing opportunities for students to start their own extra- and super-curricular clubs and societies, which satisfy their own dispositions. Creative thinking is also developed by the liberal use of lateral thinking activities applied in novel scientific contexts.
In Middle School	We develop problem solving as Physics requires the application of a thorough understanding of the fundamentals of the mechanisms underpinning the increase of entropy of the universe to determine the outcome of mundane and familiar phenomena.
In Sixth Form	We develop networking by regularly drawing links between related subject disciplines that they may be studying now, or at some stage in the future. Alumni also play a valuable role in networking.

Development of Subject Specific Skills which are Relevant to Next Steps / the Workplace

Students develop numeracy skills, through copious opportunities to practise and develop numerical processing. They are taught to follow written instructions, through which they will develop fastidiousness. Students are expected to complete risk assessments, giving due consideration to health and safety in the laboratory. They develop the use of familiar and novel measuring instruments, as might be found in a commercial laboratory, whilst developing a culture of consideration of measurement uncertainties and tolerances. They also learn data processing skills, including the use of ICT to compute relationships and variables. All students must present conclusions to their investigations, which include thorough referencing of any research.

These skills are essential for research and development within any technical discipline.



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Extra-curricular Opportunities	
Engineering Society	Provides an awareness of the scope of engineering disciplines.
Astronomy Society	An opportunity to find joy in the firmament.
Rocketry Club	Students must learn to overcome engineering challenges.
CERN Trip	Exposure to the breadth of career opportunities tangential to expanding the frontiers of our understanding of all creation.
Sizewell B Trip	This visit allows students to see what happens within a real nuclear facility.