

## PHYSICS

I wish to study Physics to have a greater understanding of the universe and in turn develop theories and understanding. I have always enjoyed making things and also taking things apart, just to try see how and why they work, for example old computers and a ride-on lawn mower. A lot of the contents I found within computers and the lawnmower I could only guess at their workings, but through my A level Physics I have learnt many things that have helped me understand many of these mysteries. The feeling of gaining this knowledge in turn helped my understanding and was enriching. A persistent curiosity to find out what makes things tick, ultimately made me choose Physics as a subject of study. My initial work experience was based on Engineering and it was through this that I realised that Engineers applied Physics principles derived from Physics. I am more interested in researching and discovering these fundamental principles. I am so glad that I changed my mind, as researching Physics and Physics degrees, and careers, visiting Open days and listening to lecturers talking about Physics showed me what Physics has to offer. It was utterly fascinating. I am hooked; I also enjoy logic puzzle problems, even more so if they involve the application of maths. Therefore studying physics further at university would be of great enjoyment as well as further fuelling my passion.

Throughout my schooling I have always enjoyed all the sciences but the principles in Physics and their implications on everything made Physics my favourite of the sciences. As part as my Physics A level I had to investigate a material and based on its physical properties present, why it's suited to its role. Doing this task really made me realise how Physics affects our day to day lives. My interest of Physics is not purely through school, I have watched various documentaries as well as reading books. One noteworthy read "Hawking & Black holes" by Paul Strathern explored black holes and the scientific advances that Stephen Hawking made. I have taken part in two lots of work experience. In 2010 I visited Pembroke Chevron oil refinery for a week and shadowed Engineers who specialised in Mechanical, Electrical and Chemical Engineering. In 2011 I spent a week at Jacobs Engineering UK in Cheadle. As part of a team we were given a project for which we had to research and design equipment, ask questions of discipline engineers and present our findings. Throughout the week we came across many problems within the task for which we came up with different solutions, which we discussed and selected the most suitable answer. In my school I am a senior prefect, responsible for organising events such as fundraiser and social events which require organisation and management skills.

I have a wide range of hobbies and interests; I play rugby for Tenby youth and I sail weekly as part of Tenby sailing club; through this I've achieved RYA level 3. I play the Euphonium at a grade 6 standard, and I play in the school orchestra and wind band, as well as playing for the County Wind Band and Brass Band. I would like to carry on with this in University. I have been a member of the scouting movement for over eleven years, achieving the Gold Chief Scout award. I have worked through my Bronze, Silver and Gold Duke of Edinburgh award. I have undertaken many volunteering responsibilities, in the Scouts I became a Young Leader, organising and running evening meetings, camps and activities for 20 children. For my residential for the Gold award I worked voluntarily at a summer camp, called Wickedly Wonderful, where I had to work as part of a team, and look after and cater for 60 children. These activities require perseverance, determination, organisation, commitment as well as enhancing my ability to work as a team, and subsequently I have gained many skills and had many great experiences. With my degree I wish to carry on my education with post-graduate studies and enter research.