

## **Essay:**

Having seen in the media that engineers have produced a device that has the ability to test human tissue for cancerous cells during surgery within ten seconds without the need of a histologist, I was immediately fascinated. This sparked a great interest and led me to find a degree course that allows you to pursue a career in the field of medical engineering. Having first-hand experience of the technology used within a hospital laboratory, I gain an insight into the reality of working in a laboratory and the skills that are required.

After studying healthcare in ICT at AS level, I was able to fully understand the use of scanning devices and expert systems within healthcare. This has given me a perspective as to what medical equipment has already been engineered. I also have a keen interest in studying the mechanics module in mathematics which will help me gain skills that will aid me with the mechanical engineering based modules.

Having recently competed in the Welsh Microsoft Specialist competition, after completing the PowerPoint and Word challenges; this has enabled me to develop my computer skills greatly which is fundamental for an engineering degree. In addition to this. I am currently working towards my grade eight piano exam, this has enabled me to become a more dedicated and committed person. As well as piano; I have also been a member of the school orchestra, playing the violin to a grade five standard. This has not only helped me to develop my interpersonal skills but also my leadership skills, which is vital for an engineer.

Throughout school, I have taken part in multiple volunteering activities which have allowed me to develop my interpersonal skills. I firstly ran a Welsh Club for pupils in a local primary school in preparation for their arrival in secondary school. This tested both my patience and organisation, as I was required to present and organise a lesson each week. Moreover, for the Welsh Baccalaureate Qualification I was required to complete a total of 30 hours community volunteering. This experience helped me significantly for the future, as I was able to develop my independence, an essential skill for university.

For work experience, I was given the opportunity to spend a week in the Welsh Police Headquarters. I was privileged enough to gain experience in a number of different areas such as road traffic policing and scientific support. This experience helped me to develop a wide variety of different skills including communication, teamwork and time management. I was also given an insight about how technology is used within the police, and I was able to develop my ICT skills further and work with large quantities of confidential data.