

HBS Enigma

CAREER READINESS REPORT



INFORMATION ABOUT TEAM

Team name: **HBS Enigma**

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Team Number: **10173K**

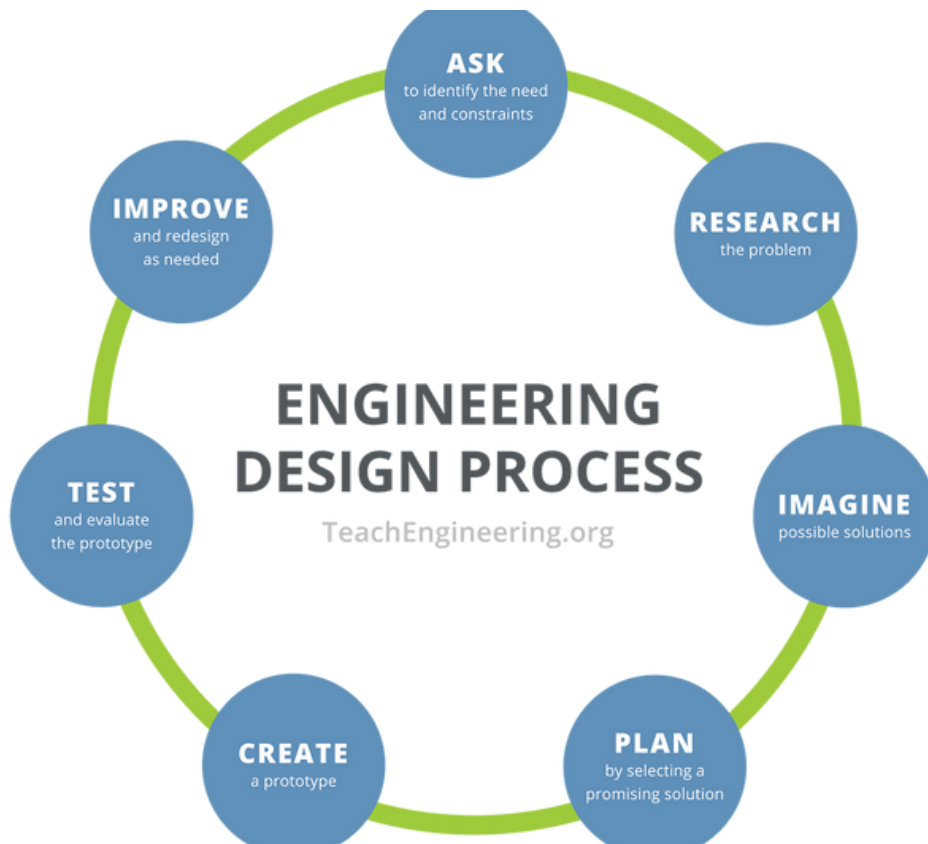
Location of team:

The Henrietta Barnett School,

London,

UK

MESSAGE FROM OUR LEADERS



Our team chose the company Oxitec which is a company that reduces the spread of various diseases such as dengue fever, Zika and other viral infections that Aedes Aegypti mosquitoes and many other pests transmit. They also reduce the amount of crops destroyed; stop pests harming livestock; and are also now working on stopping malaria. We chose this company as we are inspired by how the company has tackled such a big problem in some countries and has made such a big change in the world to many different people in many different ways. We are also very intrigued by the engineering process behind how they do all of this and it was something that we really wanted to know more about.

'We are inspired by how... has made such a big change in the world'

ABOUT THE COMPANY



Oxitec has solved a big problem in many countries and the solution for this problem has been thought out and planned and tested very efficiently by professionals in the company. On Oxitec's website, it clearly shows that they have spent time thinking about this and they have adapted their solutions and created other solutions as well to the problem they are trying to solve. The technology to keep pests away is also very precise, non-toxic and flexible, which is a huge advantage and shows that Oxitec has a very efficient engineering design process.

Everyone has a different perspective when it comes to applying the engineering design process, and professionals in Oxitec planned a lot before creating their final product as it was a very complicated and risky topic to create a solution for. They used a gene on the pests to stop this issue which is the most efficient method and they have also tested a lot and improved their current solutions which they have 2 of to make them work better.

SIMILARITIES



The engineering design approach we use as a team is slightly similar to the professionals' approaches in the developed company of Oxitec.



No. 01 – Gathering Ideas

When we are thinking of what to build, we do a lot of research to know which mechanism would be the best for us, and we plan it with a lot of thought, thoroughly.



No. 02 – Narrowing down Ideas

We think of ideas and different ways we could build it and the advantages and disadvantages of it so that we can build it and program it.



No. 03 – Quality Check

We test it and check if there is any need for improvements.

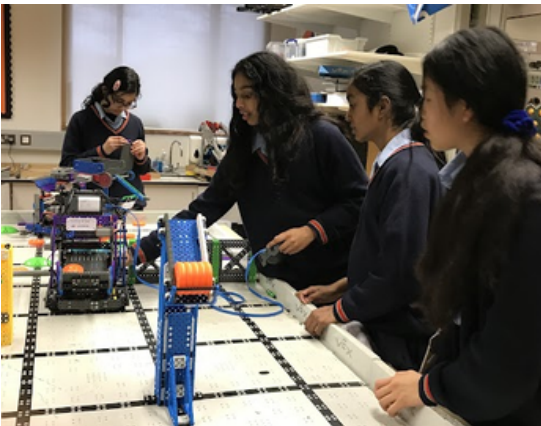
This is what Oxitec does, to make sure their products are the most suitable and of the best quality possible.

PREPARATION FOR FUTURE CAREERS

Participation in robotics has taught us many things that are very beneficial to prepare us for our future careers or jobs no matter what career path we choose.



- In VEX, you have to learn the skill of being able to incorporate everybody's ideas, working as a team, and learning to listen as well as contribute, and this is the case for every aspect in robotics. Essentially, we have learnt to be able to work in a team, as a team, which is a quality which is valued in all and any workspace.



- Things don't go smoothly at all in the first go (especially whilst building), and this has prepared us to not only recognise our mistakes, but also to grow from them, building a stronger and better robot every time. This is an extremely valuable experience, because, during our future jobs, we will not view mistakes as a burden, but, instead, stepping stones to help us up.



- We have learnt to be able to socialise confidently and build relationships with people we had previously never talked to. Before robotics, all the members on our team had never talked to each other, but within a week, we were able to work together like we had known each other for years. This is a very important skill, especially in a workspace, because you will have to work with many different people you have never met before, and potentially assist all different sorts of clients, and being able to adapt to different people quickly is a vital skill in order to succeed in any project with anyone.

ACKNOWLEDGEMENTS

- Canva, for the template.
- https://www.google.com/search?q=laptop+research+pic&tbm=isch&ved=2ahUKEwiOiKDJ8D8AhUBrycCHVMuDEoQ2-cCegQIABAA&oq=laptop+research+pic&gs_lcp=CgNpbWcQAzoFCAAQgAQ6CAgAEIAELED OgQIABBDOgcIABCxAXBDOgYIABAFEB46BggAEAgQHjoHCAAQgAQQGD0ECAAQHIDIHFi aNmC5N2gBcAB4AIABdIgb6QqSAQQxOC4ymAEAoAEBqgELZ3dzLXdpei1pbWfAAQE&scie nt=img&ei=TSK_Y86tEoHensEP09yw0AQ&bih=682&biw=1536#imgrc=P7uB3wfX8GJI0M
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- TeachEngineering.org for providing picture.