

T E A M 3 7 1 0 1 X

Career Readiness Challenge

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What STEM-related job did we choose and why?

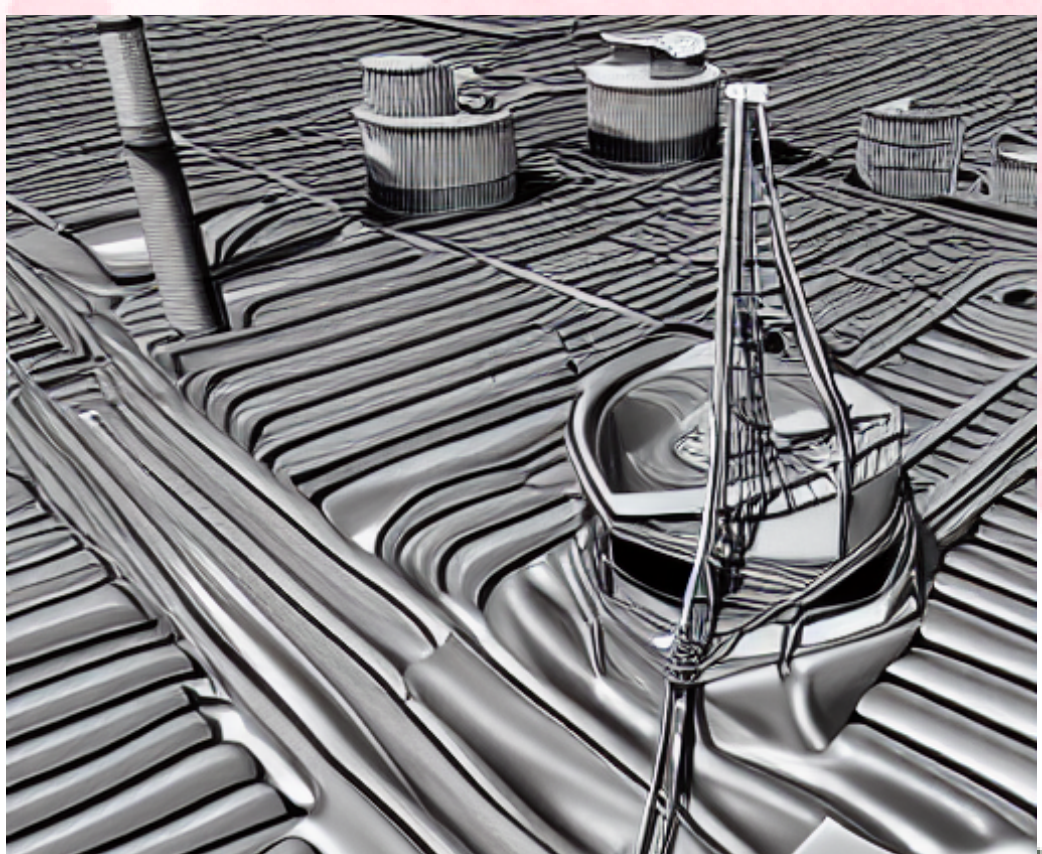
We chose the job of a petroleum engineer because it is often overlooked and unheard of and we think that this job is highly important and can change our quality of life by a significant amount. Currently the United Kingdom is facing the challenge of the cost of living crisis. Simple necessities such as prices of oil and gas have inflated. From our deep research we believe that the cause of this is predominantly by high inflation outstripping wage and benefit increases and has been further exacerbated by recent tax increases. We would use our knowledge that we have collectively gathered in Vex Robotics and apply it to help more people and work towards a greater and larger cause.

What sources did we find to learn about professionals in this field?

Some of our grandfathers were petroleum engineers abroad and many women in our families wanted to continue this legacy however were unjustly denied due to their mere gender. Finally our generation of woman were allowed to pursue this legacy and were passed on our knowledge from our ancestors from building designing and engineering to many more. We are determined to make this as just and as fair as we possibly can as this could impact many other young girls lives the way it impacted ours.

How does our participation in VEX robotics prepare us for us for a future career?

With VEX robotics we learn and acquire many things, such as building, designing, programming and most importantly, teamwork. All of these are highly useful things and open the doorway to countless job opportunities and without the quality of teamwork, we would be unable to get many things done in life. These certain skills that our confidence has elevated in would be applied on a larger scale in the following workplace. Engineering, programming, building and much more will further our understanding and knowledge outside the textbooks that our handed to us.



We created a detailed CAD of how the workspace would look





How do professionals in this career apply steps of the engineering design process?

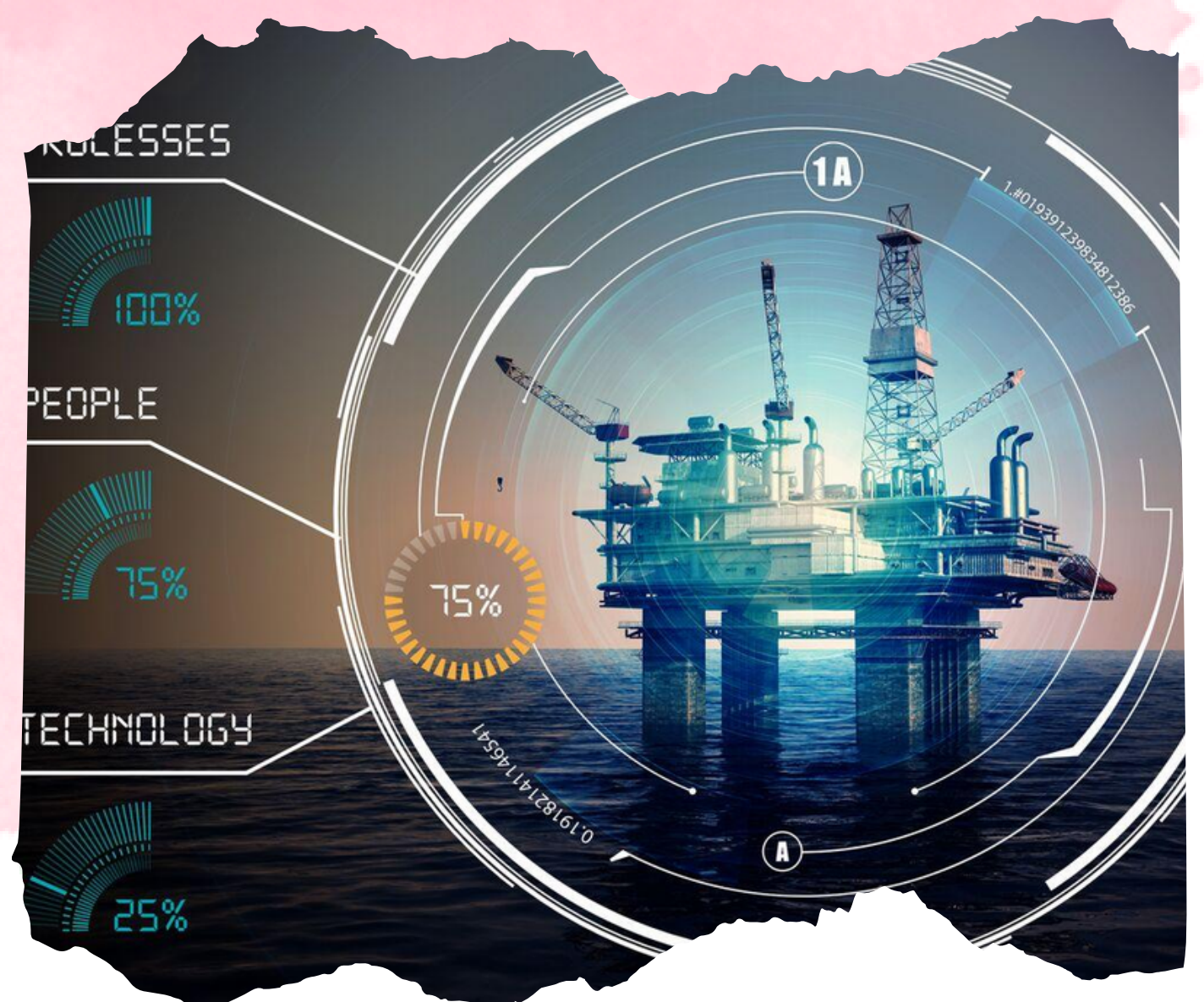
The area of petroleum engineering known as petroleum production engineering aims to maximise oil and gas output while being cost-effective. Production engineers must have a solid understanding of the petroleum production systems they deal with in order to accomplish this goal. Like Vex Robotics the petroleum engineers must have an accurate idea of the engineering design process or else it could be a recipe for disaster which can be very unethical especially in this immense industry.

How does the professional approach to engineering design match and differ from the approach our team?

Our team enjoys being organised, finding a systematic overview of projects, methodically planning them out, and then finally carrying them out. The same applies to petroleum engineering, where any modifications or alterations must be properly planned and tested thoroughly because the results could be disastrous otherwise.

Petroleum engineering focuses primarily on field-related tasks like drilling and infrastructure. More subsurface-related activities, such as reservoir engineering, are discussed.

Our Career Readiness Challenge entry addresses how vex robotics can prepare us in many different aspects of careers in the future ; some aspects rather obvious and some vital yet hidden beneath the surface. We have explained how we have been prepared for these careers and many more opportunities to come. Thank you!



Credits

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ARISHA , TANMANA

WRITING: DHRITI , SAINA , TANMANA

IMAGES FOUND BY: AALIA AND ARISHA

Thank You!

Research Links

https://en.wikipedia.org/wiki/Petroleum_engineering

<https://www.worldoil.com/news/2022/7/8/esg-focus-leads-to-dwindling-numbers-of-new-petroleum-engineers/>

<https://www.gov.uk/cost-of-living>

<https://www.mirror.co.uk/all-about/petrol-prices>

<https://www.instituteforgovernment.org.uk/explainer/cost-living-crisis>

<https://www.investopedia.com/articles/professionals/122915/4-degrees-most-oil-companies-are-looking.asp>