

A Career With NASA
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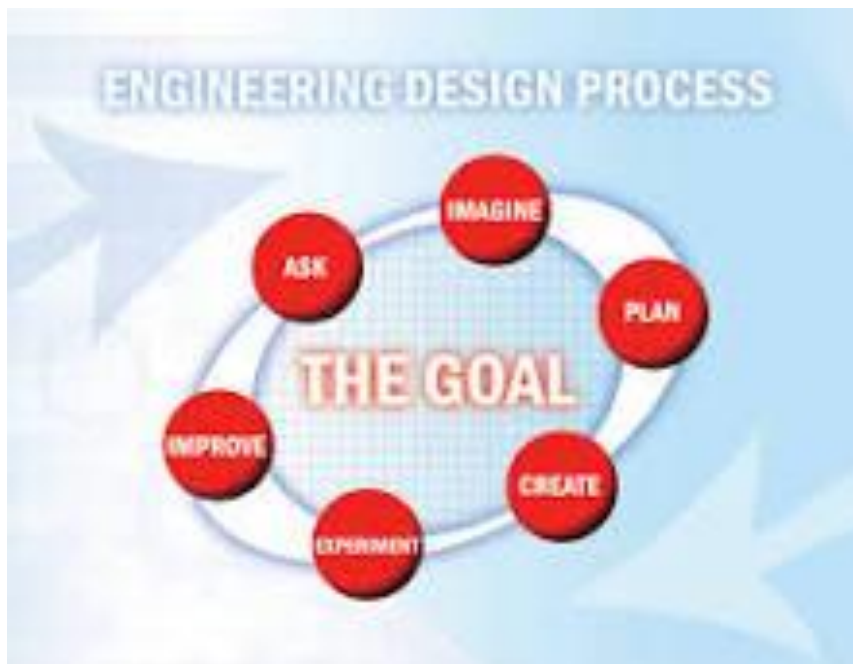
This is the Langford robotics team. In Langford's robotics team there are three students. These students are Hillary, Christian, and Guadalupe. Guadalupe and Christian are designing and building. Hillary is managing software engineering and helping with the build. The three of us already have a dream. Christian's dream is to work at NASA as a designer and builder. All this started when he was five years old at home and played with a bucket of Legos for the very first time. Ever sense that day he thinks it is incredibly fun to build with imagination and create new things. His hobbies are building, drawing, painting, playing with Legos and cooking. Guadalupe's dream is to build new moon rovers at NASA. It all started' when he was talking with his friends about moon rovers at school. His hobbies are playing with technology, drawing, and playing with Legos. Then there's Hillary whose dream is to be a software engineer and help with creating and building at NASA. It all started when she was a 7-year-old when she got interested in math and science, she realized that NASA had all the things she likes combined. Hillary's hobbies are drawing, sketching, building, creating, painting, using her imagination, playing with Legos, writing, reading, designing, and watching tv. So, for our STEM career, the three of us decided on engineering with NASA.



(Hillary, Christian, Guadalupe)

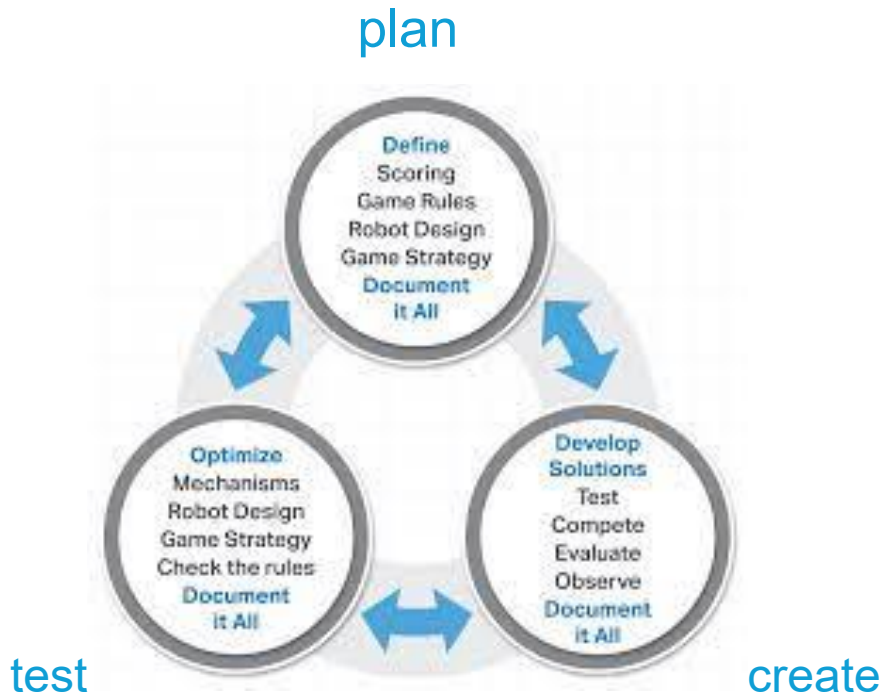
While I was working on my research about NASA's and our engineering design process, I found out a lot of things. First of all, I decided to find out more details about the engineering design process to understand it better and the way it really works and what is the right way to use it so I went to google and found a link YouTube video I clicked it and it send me to a YouTube video (<https://www.youtube.com/watch?v=Vcma79mVAYw>) about the Design Squad kids using the engineering design process step by step and somebody explaining it and that's where a got a lot of information.

Then for my second step I decided to do research about how NASA uses the engineering design process to I went to google and searched up 'NASA engineering design process' and then I found a link to an image that showed NASA's engineering design process and learned some things about it.



(this was found at https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.nasa.gov%2Fcontent%2Fuploads%2F2012%2F09%2F630754main_nasasbestactivityguide6-8.pdf&psig=AOvVaw1thCJTpZyn8c-lkvxb2NIC&ust=1706740405431000&source=images&cd=vfe&opi=89978449&ved=0CBMQjRxqFwoTCKCXxs-VhoQDFQAAAAAdAAAAABAE)

Our design process uses a mix of the Design Squad and VEXIQ Engineering design process. So here is the picture of the VEXIQ Engineering Design process. We plan, create, test, and repeat.



(This image was found at <https://vrc-kb.refc.org/hc/en-us/articles/9628278280215-VRC-Engineering-Design-Process>)

Then after my research we decided to compare the two engineering design processes to figure out the differences and similarities of the two. NASA uses a lot of different things than we do because they are professionals. One of them is the engineering design process. An engineering design process is what helps us and leads us. It is the steps engineers use to create something like instructions that we need to follow for good success. Students and professionals follow a series of steps to find a problem and solution. We who are beginners use define and develop solutions and optimize as our design process. NASA engineering design process is ask, imagine, plan, create, experiment, and improve. NASA uses way more steps than we do because they are professionals.

Some differences between NASA engineering design process and ours is that they use more advanced materials and steps since we are students, and they are professionals. Something that is also

different is that they design their own projects while we mainly follow build instructions and steps. They must do more advanced things like using more steps and using more advanced computers. Some things they do like us is that NASA work all as a team and we also do because working as a team is easier and faster, and everyone has ideas and opinions. Second, they also state the problem as a team like us and help each other. Another thing is that they follow step by step their engineering design process and that is important for good success. Finally, is that they work hard and try their best like we do and always need to do so because engineering needs a lot of work to do but they need to keep finding ideas and never give up. At the end we realized the engineering design process is one of the most important that we always need to follow no matter what.

While we were working on this project, we realized that VEX robotics is not just a simple program but in reality, it is a program that teaches us how important working in team is and that working in teams make things easier. We realized that VEX robotics has helped us understand that working hard can lead us to success and that understanding steps is especially important not only that, but we learned that being able to be in this program is an honor to us because we got to experience how engineering feels like. This has helped us realize that being an engineer takes a lot of work but it's all worth it. It opened our eyes, and we realized that being part of VEX robotics is giving us a lot of opportunities for our future and helping us reach our dreams, like Chirstian who wants to be an engineer when growing up and so does Guadalupe. or like Hillary who wants to be a software engineer and now understands how coding works. So, in conclusion, VEX robotics has helped us a lot. We are thankful for that and honored to be part of the VEX robotics.