Scott Aflague II

Mechanical Engineering

Mechanical engineering is the branch of engineering that uses the law of engineering physics and mathematical principles to design and manufacture machines. The purpose of mechanical engineering is to make power producing machines.

STEM RESEARCH AREA

One of the main subjects that I found remarkably interesting was mechanical engineering. I was watching this video about what Mechanical engineer works on and does for the Navy. Mechanical engineering is not only important in the Navy or Marine Corps, its important in our everyday life. Without mechanical engineering we will not have engines, generator, or even cars. Mechanical engineering plays a key role in the military's past success and future success. In fact, almost everything in the military revolves around mechanical engineering. It teaches us how things work and how we can make it more efficient. More specifically to the military side, mechanical engineering helps us to develop tanks, ships, and submarines. All these vehicles lead us to victory on protecting the United States of America. One of the engineers who truly inspired me in the video was Lily Stewart. The reason she inspires me was how she entered the mechanical engineering field. All she did was look at a flier on a board and said might as well apply because it will not hurt to try. Not only that but what she does at her job is truly cool and is immensely helpful in case of emergencies. Lily Stewart works on rescue vehicles for the Navy. One example of the rescue vehicles she works on is mini submarines. The purpose of these mini submarines is to rescue men and women who are stuck in sunken submarines. To me this is very similar to my career goals in the future. I would love to see what I work on be put in to action. I want one of my machines to make people in the military have an easier time or protect them in case of emergencies. I believe the future for mechanical engineering will grow rapidly. Everyday we are evolving from unmanned drones to self-driving cars. Just like I mentioned about the mini submarines, I believe that the mini submarines will not only become more efficient on saving people but I believe it will be autopiloted causing there to be more room in the submarine so they can rescue more people. Also, I believe new technology such as electric cars will make our lives different in the future because maybe there will be no more gas stations and only charging ports for our cars. Another new technology that might be in the future is biomechatronic which will allow us to merge body and machine. I believe this will affect the Navy and Marine Corps because I heard there were research in the military industry for mechanical sensors, controllers, and actuators for biomedical devices used in prosthetics and even miniature medical implants. Finally, I believe there will be nanoengineering in the future. This will cause much stronger composite material, renewable energy storage systems, and biomedical devices such as the one I mentioned earlier. This will affect the Navy and Marine Corps because we would not rely so much on fossil fuel but more towards easier renewable energy sources.