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Nevada

What Drives You?

I am driven to study renewable and nuclear energy systems as a way of improving the human experience and causing less harm to the environment. Our economy and energy systems are currently oil and coal based. This presents problems on two levels. First, both of these resources are constantly depleting because when they are used, they cannot be restored. Second, emissions from these fuel sources are harmful to the ecosystem in the forms of pollution and negative chemical reactions with our air quality zones. The ongoing use of these materials as energy sources may account for extreme temperature changes across the globe, and making our air difficult or harmful to breathe.

That I might be able to contribute to changing our primary energy sources to renewable energy or efficient nuclear sources drives me to want to learn as much as possible about solar energy, nuclear energy, and energy machinery. I believe we can develop systems of energy that are cleaner and more efficient. If we find ways to make all of these renewable energy systems more effective, we can help curb or even reverse the harm our pollutants have caused in the environment. I am truly passionate about making the world cleaner and safer, and it drives me to want to major in Material Sciences and Engineering at the University of Nevada, Reno.

The potential in our renewable energy systems is fascinating, as is determining whether we can design nuclear systems that do not produce such harmful and dangerous waste. And, determining whether we can create regenerating nuclear capabilities, which may shift the nuclear system into the renewable energy category. Material Sciences and Engineering will help me to better understand the manipulation of solids, and how they can become something even greater.

Our universe contains an ultimate example of fusion energy, the sun. I am intrigued by solar panels, which look to convert that energy into human use. On average, solar panels at their current state are able to convert about 15 to 18% of the energy it receives from the sun into usable energy. If we were able to better manipulate our current panels to increase the efficiency, we could transition to a more reliable and effective energy source.

By combining the study of chemicals, solids, and machinery, I look forward to contributing to our human energy needs, while causing as little negative impact on the environment as possible. The Jiffy Lube scholarship will drive me to pursue these endeavors.