



VIRGINIA  
COUNCIL  
ON  
*Women*



**8<sup>th</sup> Annual  
STEM Essay Contest**

Award Winning Essay Written by  
Lily Toombs, Senior at Randolph-Henry  
High School (Charlotte County, VA) and a  
student in the Career Tech Academy-  
Mechatronics Program

## WINNING ESSAY

Lily Toombs

*Randolph Henry High School*

Shaping the future, designing autonomous agricultural equipment, smarter cars, safer robots: mechatronics is a huge field with infinite potential, which is exactly why I feel that I belong there. As someone from a small, rural community, my closest opportunity is at the community college forty-five minutes away from where I live. Despite very few local opportunities, I am planning a future career in mechatronics engineering. To accomplish this, I am currently attending Southside Virginia Higher Education Center in South Boston Virginia working on a SIEMENS Certification Level 1 and OSHA 10 Certification.

At the beginning of high school, I didn't know what I wanted to do. My freshman and sophomore years, I regret to say that I was not the best student. I blew off my classes and only did the minimum to pass, but thankfully, that soon changed when I realized that my future relied heavily on the choices I was making at that important time. I started to focus on pulling my GPA up and keeping my grades A's and B's. I signed up for the ASVAB and the SAT, but quickly realized that my 'strong suits' don't lie in the more academic classes like English and History.

In this, I found that I am stronger in auto and shop information, mechanical and mathematics comprehension, and other vocational skills. Discovering this part of myself sparked a realization that not only could I be a leader in environmental sustainability, but I could also inspire younger women to follow in my footsteps. Mechatronics encompasses all of my core strengths, goals, and passions into one field of opportunity that will not only benefit myself but the world around me.

At the community college, I am learning the basics of mechatronics engineering. As the only female in my class, I'm motivated to work harder than the other class members to disprove the stereotypical ideas about women in engineering fields. This experience is what kick-started the idea that I could be a leader for younger women in the workforce by learning my capabilities and strengths.

Heading into mechatronics engineering, I believe that the technology we use today could be developed to be safer for the Earth and its tenants. Studying and working in mechatronics gives me the opportunity to achieve my dream of running all automobiles and vehicles on green energy. By finishing my college career, I could work for large technological companies and someday start a company to make the existing technologies we have today more ecofriendly. If we can accomplish making everyday vehicles capable of using less nonrenewable resources and safer for the environment, it could save the Earth. Not only will it save money, the atmosphere, and resources, but it will help create a brighter life for future generations. I wish to work towards building my own companies that gather all disregarded plastic and recycle it into objects that aren't thrown away as often as drink bottles, grocery bags, and other plastics. Saving the Earth from its people's destruction means a lot to me, as it should to everyone. We live here day after day, yet humans fill the oceans with plastic and the air with dangerous pollutants that will cause climate change and global warming complications to increase and escalate further.

To accomplish my hopes and dreams, however, it is financially difficult to meet these goals. This scholarship would be a major help in my journey to helping the earth and future generations. I fully intend to make changes in this world and to be someone remembered for the leaps and bounds I will make in this field. I am motivated, I have determination, and, most importantly, I have a hunger for knowledge.

Both future and modern generations are suffering for our own actions as a race. If I, an independent woman can reach these goals, more people will follow. It is my hope that I will be a huge part in the development of technology for the world and a leader in showing others that every individual's actions are necessary for the betterment of our planet. It's important that people know that reaching goals is possible if they truly want it and are willing to work for it.