

This was a Capstone project done by me and a friend in our senior year of Highschool to showcase our knowledge on design and CAD softwares. We used our knowledge and skill using Inventor to design a supercar that met Canada Motor Vehicle Safety Standards (CMVSS). We designed and modeled all major components to fit along with each other and meet the Safety Standards as well.

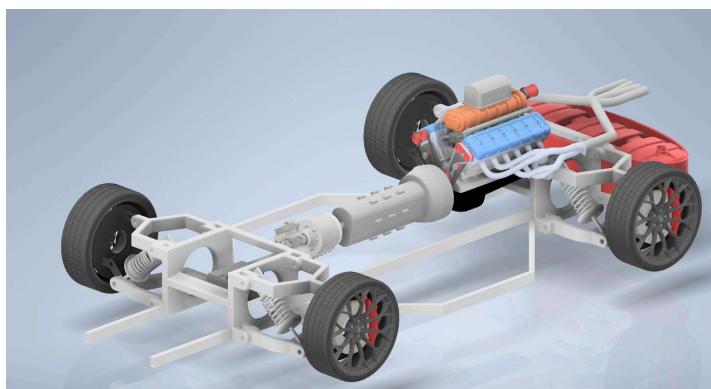


Some Major Components Designed were:

Engine: We designed a V10 engine for the purpose that we thought it would make the car feel like a sports car and would be easier to change the design to a hybrid V8. If we had gone with a bigger engine we did not think it would be as simple to change the car design to a hybrid.

Transmission: To fit with the engine a 6 speed manual transmission was designed. Being a car we wanted to design for car enthusiasts we thought that a manual was the way to go giving the driver of the car some excitement while driving. Making it a manual was almost due to the fact that there aren't many V10 manuals.

Suspension: I designed a suspension that could handle high speeds along with changing terrain. The suspension design was based on the Porsche GT3RS; the spring coils are larger and designed to absorb more shock to handle harder terrains giving the car the ability to go off-roading. Along with this the suspension is designed to lift the ride height of the car to be able to drive it in many different areas



Chassis: A sturdy light weight chassis was needed in the car for safety and to keep all the pieces together. I designed a shape that best suits what I wanted the body of the car to look like. Along with this making the parts of the chassis out of Carbon Fiber to make it light weight but still support the engine and transmissions weight.

Body: The Body of the Car had to look appealing but also be aero dynamic. Using a windtunnel add on and Autodesk Alias I was able to design a body shape that would be aerodynamic while still looking appealing to a customer.