

*Xavier Jimenez*

EDSGN 100  
Personal CAD Project  
Fire Engine

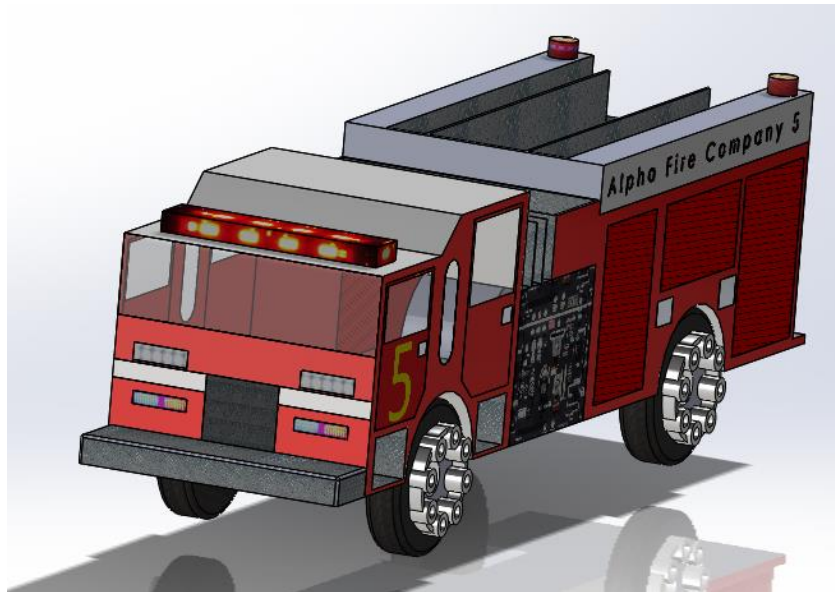
This design is a reproduction of the Engine 510 from the Alpha Fire Company in State College, PA. This engine is a 2007 Pierce that is in the downtown Alpha Station. Below is one of the pictures that I used as a model, more pictures can be found in the official site of the Company ([alphafire.com](http://alphafire.com)).



[www.alphafire.com](http://www.alphafire.com)

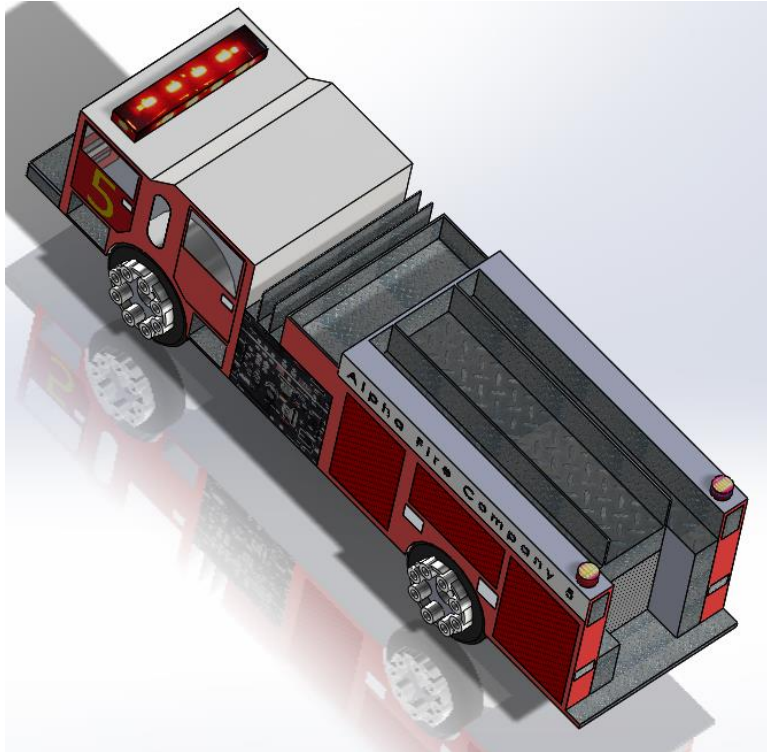
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I picked this object to create in SolidWorks because it is a design that is not common and that students before have not done. I have access to this engine so I was able to measure and get the exact dimensions. The most difficult part was thinking about the tools I will need to make the different parts of the engine. Also, I had to use inch and feet in my design because I could not find a tool for measuring in meters. It was very confusing at the beginning but after a while I felt more comfortable with the unit system.



This project is related to my major because I am going to be a Mechanical Engineer, and designing different types of parts or models is something we do in a daily basis. This is also related to my personal experience because I am a firefighter and since I was young I always wanted to make a model of a fire truck. My father who also is a firefighter was always buying toys for me, so my room was full of firefighting stuff.

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I learned to see different parts of the model and start thinking about the tools I will need to make that shape. Also I learned that choosing the right materials and colors is very important to give the model a real aspect. The Personal CAD project was very fun, and was also my first experience design something. I think I will enjoy using SolidWorks in other classes and also in my job after graduation.