Jacob Hawley

I have been looking at two engineering principles, force distribution and centre of mass. For force distribution I have looked at both wheel base length and seat position. I have determined that the ideal wheel base length, distance from back tire to front tire, is about 1 meter. The ideal seat position has been determined to be 70 cm measure from the back tire to the seat if the wheel base is 1 m.

The second principle centre of gravity has to do with the height of the seat off of the ground. If the seat is too high off of the ground the bike will become less sturdy and could cause the bike to tip over. Reversely, if the seat is too low the driver’s visibility is impaired. Therefore, on either extreme of the seat height there are safety hazards. With this I feel that the best height for the seat would be slightly lower than the centre of the tires. This can be achieved by have a bend or curve in the frame itself. I will continue to research and find the ideal height for the seat to be off of the ground.