

The design problem we set out to solve was to design, test, and build a SCARA topology based robotic arm that followed all of the engineering requirements seen in the collection of our artifacts. We were tasked with designing an arm that was both fast, accurate, and had the capacity to change the tool in use.

Our timeline is as shown in the artifacts section, but our approach (generalized) was as follows: design an outline for the physical arm using the additional requirements as a guide for how to design the base of the arm. We then began the process of creating the code based on example G code files we found online. After assembling the physical arm, we tested our code and made sure the motors were working properly before actually using the full code.

The largest lesson we learned from this project was not to over engineer our arm. We would run into problems and try and design something to solve this problem, this solution would then become a problem in the future.