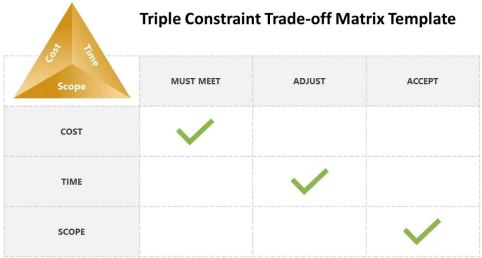
Engineering Design Models

NASA Engineering Design Model

- Teaches students that engineering is an iterative process that doesn't end which is represented by the circular picture
- Students think about how they refine their project over and over so there is never a "done" version

Dartmouth Engineering Design

- Similar to NASA engineering
- There is iteration which is very important
- What seems to be different is there is an emphasis on **analyzing trade-offs and alternatives in a trade-off matrix**
- Sometimes the best alternative scientifically isn't the best one in terms of cost, time etc.



NGSS

- Similar to both previously mentioned examples
- However, in this case they really emphasize doing research before developing a solution and exploring a lot of different options
- Using failure points as a way to improve results