

Week 13 - Homework Design Optimization

Week 13 Homework

- **Reducing Material Use**
 - The goal of reducing material is to lightweight a design so that less material is used. This results in a more optimal design that offers benefits throughout the product lifecycle.
- **Green Materials Selection**
 - Selecting the correct material to manufacture a component is critical to design optimization and provides many benefits.

Reducing Material Use

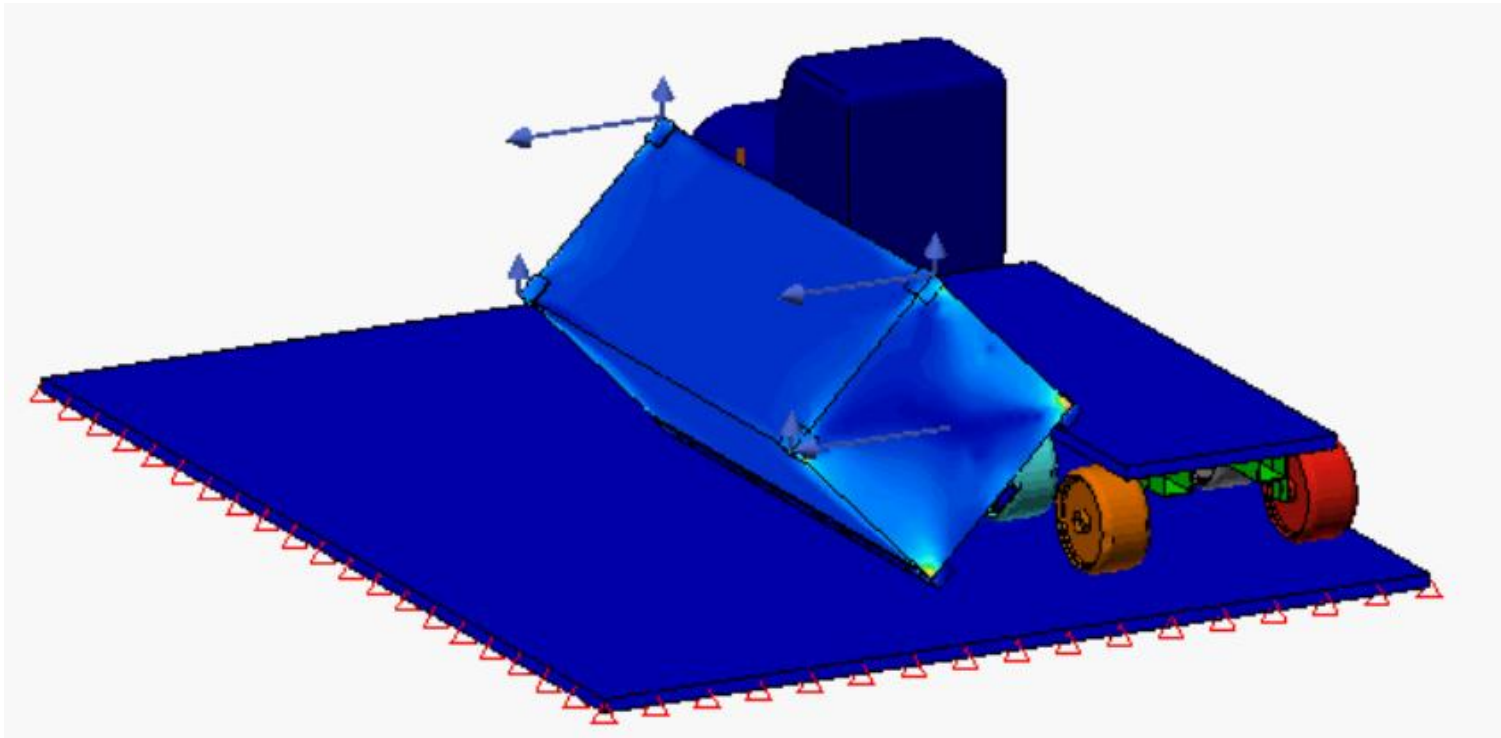
- Introduction to Lightweighting
 - <http://sustainabilityworkshop.autodesk.com/design-strategies/reducing-material-use-lightweighting>
- Reinforcing Strategies for Lightweighting
 - <http://sustainabilityworkshop.autodesk.com/strategy/reinforcing-strategies-lightweighting>
- Material Inputs: Hidden Waste
 - <http://sustainabilityworkshop.autodesk.com/material-inputs-hidden-waste-reduced-lightweighting>
- Tensegrity
 - <http://sustainabilityworkshop.autodesk.com/strategy/tensegrity>

Green Materials Selection

- Introduction to Green Material Selection
 - <http://sustainabilityworkshop.autodesk.com/design-strategies/green-materials-selection>
- Environmental Properties of Materials
 - <http://sustainabilityworkshop.autodesk.com/strategy/environmental-properties-materials>
- Physical Properties of Materials
 - <http://sustainabilityworkshop.autodesk.com/strategy/physical-properties-materials>

Guided Lab Project 1

- Guides instructions for completing an MES Drop Test Simulation.



Guided Lab Project 2

- Guided instructions for completing Design Modifications and Iterations.

