



16.810 Engineering Design and Rapid Prototyping

- Acrobatic Bike Design – Team 8
 - Chris Graff, Georgene Hilb
- Market Priorities:
 - Structural Performance and mass
 - Accept cost



Requirements

- Loading: $F1 = F2 = F3 = 100$ lbs
- Performance (Constrain):
 - 0.063mm Fork Deflection, 0.01mm Saddle Deflection
 - 632.2 Hz Natural Frequency
- Mass (Optimize):
 - 0.40 lbs (Original: 0.16 lbs)
- Cost (Accept):
 - Unlimited (Original: \$10.40)

Analysis, Testing, Final Design

■ Table of Results

