

MECH 3200 – 12S – Homework Chap.4b  
Due Friday, 3 Feb 12

For the Problem Scenario of HWChap.4a:

1. Synthesize three overall concepts from the subfunction working principle alternatives of your functional decomposition.
  - a. Explain your choices in the three combinations of WP's - why these combinations are promising, why others might not be - identify the logic of your selection.
  - b. Make a clear arrangement sketch of each of the three concepts.
  - c. Explain how each concept meets each point in the Engineering Design Specification.
  
2. Select a concept (or two) for further design development.
  - a. Create a decision matrix to compare the three concepts against the Customer Requirements, using importances for each CR and a belief map to generate scores.
  - b. Explain why the lowest satisfaction concept is not favored.
  - c. Explain why the highest satisfaction concept is favored.
  - d. Explain whether the middle satisfaction concept should be rejected or developed further.

Recall that, per syllabus, all HW in 3200 will be presented in the style of a technical memorandum.