

Assignment 1.8i: Solution Selection

1. List the important design requirements that you will use for criteria to select a solution for your group design project (choose 3-5 from the requirements you already listed).
2. Using Excel create a Pair-wise comparison matrix to rank the criteria
 - List each requirement as both a row and a column heading.
 - Blank out the diagonals where Row and Columns match.
 - Put a **1** on the **row** for each criterion where the row criterion is **more** important than the column criterion.
 - Put a **0** on the **row** for each criterion where the row criterion is **less** important than the column criterion.
 - Total each row to determine the importance ranking for your criteria.
3. In the same spreadsheet, create a Decision Matrix.
 - Give an importance weight to each criterion (total for all criteria must be 1).
 - Score the 5 most promising designs from your brainstorming.
 - Calculate weighted score for each design and requirement.
 - Calculate total weighted score for each design.

Developed through a partnership between the University of Utah College of Engineering and Granite School District