

## **Quantitative Methods in Systems Engineering**

## **WEEK 1: MAKING EARLY TRADEOFF DECISIONS**

Week 1: Making Early Tradeoff Decisions > Concept Selection Methods

## **UNWEIGHTED DECISION MATRIX**

|             | Option 1 | Option 2 | Option 3 | Option 4 | Option 5 | Option 6 |
|-------------|----------|----------|----------|----------|----------|----------|
|             |          |          |          |          |          |          |
| Criteria 1  | 0        | -1       | 0        | 0        | +1       | -1       |
| Criteria 2  | 0        | +1       | -1       | -1       | +1       | +1       |
| Criteria 3  | 0        | -1       | -1       | 0        | -1       | +1       |
| Criteria 4  | 0        | +1       | -1       | 0        | -1       | -1       |
| Criteria 5  | 0        | -1       | +1       | +1       | +1       | +1       |
| Criteria 6  | 0        | +1       | 0        | 0        | 0        | 0        |
| Criteria 7  | 0        | -1       | -1       | -1       | 0        | -1       |
| Criteria 8  | 0        | +1       | +1       | +1       | 0        | -1       |
| Better (+1) |          | 4        | 2        | 2        | 3        | 3        |
| Same (0)    |          | 0        | 2        | 4        | 3        | 1        |
| Worse (-1)  |          | 4        | 4        | 2        | 2        | 4        |