

UNIVERSITY OF MIAMI
DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING
EEN 415/418 – SENIOR PROJECT PLANNING/SENIOR PROJECT I

Fall 2014

Homework 4

- 1) Consider the design of a common hardware or software product, such as a portable audio player, digital camera, alarm clock, electric toothbrush, wearable activity tracker or vital signs monitor, laptop computer, tablet, cell phone, a video game.
 - (a) For the product you selected list five existing examples of this product that you could purchase in the market today.
 - (b) For the selected product identify at least six marketing requirements and at least six engineering requirements.
 - (c) Identify which marketing requirement(s) relate to each engineering requirement and justify that relationship.
 - (d) Identify which of the marketing and engineering requirements increase (+) or decrease the desirability of the product.
 - (e) Form the engineering-marketing tradeoff matrix, which shows the correlation to each other (strong positive, positive, negative, or strong negative.)
 - (f) Form the engineering tradeoff matrix, which shows how the engineering requirements correlate to each other (positive or negative.)

- 2) In Homework 2, which was due September 12, 2014, you were asked to generate four ideas for senior design projects you might be interested in pursuing and to provide their descriptive titles.

Now, state the one project idea that is most appealing to you, either from those you included in Homework 2, or a new one. Enter this idea in the Forum titled “Project Ideas from Students” found on Bb under Discussion Board.

Due Date: Friday, September 26, 2014

Note: The class textbook is “**Design for Electrical and Computer Engineers**”, Ford, R., Coulston, C., 1st Edition, McGraw-Hill 2008