For Reference Only

University of Arkansas
MEEG 4131 - Creative Project I:
Additional Course Materials on Blackboard

Instructor– TBD

Description - Within the context of the industry defined project, students learn and apply the design process of Conceive, Design, Implement, and Operate.
CP-I students will focus on Conceive and Design, while CPII students will focus on Implement and Operate.

Conceive: define the problem, its scope, customer needs, and possible solutions. Design: select the best solution, apply engineering analysis to predict its performance, create drawings / BOM, and specify components. Implement: build your design. Operate: test your design and report on results.

Co-requisite – MEEG4104 (MED) or MEEG4483 (TSAD)

Objectives -
Develop the ability to apply engineering analysis to real-world designs.
Develop a set of engineering documentation suitable for construction in CP-II.
Work in a group to solve a problem and implement a solution.
Develop professional oral and written communication skills.
Develop a project budget and Gantt chart.

Grading -

Participation / Initiative / Weekly Memo*	30%
Preliminary design review	20%
Final Design Review	20%
Design Package (drawings, BOM, analysis, etc.)	30%

Each group is to submit a weekly status report (noon Monday) to industry contact and instructor providing a summary of progress including: (1) tasks completed the previous week (2) tasks to be done the next week (3) who will perform the tasks and (4) project status relative to Gantt chart (5) Questions for the sponsor

A Preliminary design review will take place no later than XXX and consist of: Problem statement, benchmark data, list of all solutions considered, selection of best solution based on down select matrix, Gantt chart for the remainder of the semester, and estimated cost.

A Final design review will take place no later than XXX and consist of: brief review of topics from preliminary design review with any necessary revisions, a detailed description of concept including: assembly drawings (exploded view 3D model), detail drawings, bill of material, cost estimate, Gantt chart (for CPII), engineering analysis, predicted performance, an outline and draft for some sections of the final report report, lessons learned and next steps.

* Weekly class attendance is mandatory. Email instructor in advance if you must miss a class. Each group will be assigned a faculty advisor who will meet every-other-week with just your team.