EE/CpE 423
Senior Design
Fall 2014
Class 6 – 9/23/14
Agenda

• Time line
• Group Status
• Other activities
Senior Design Tasks – Fall ‘14

- Identify project
- Form group
- Select advisor
- Develop project proposal
- Publish project proposal
- Develop final design report
- Submit parts list, final design report
- Oral/slide presentations
- Effectiveness surveys
- Weekly status reports

Timeline:
- 8/26/14
- 9/9
- 10/1
- 10/14
- 11/1
- 12/1
- 12/2
- 1/1/15

Today

EE/CpE423:
Senior Design
Fall 2008
Project Status

As of last week:

• All 14 groups have formed
• 53 of 54 students are in groups
Other activities to start thinking about

• Project proposal due 10/14
  • Format will be posted on Moodle under >> Project Proposal Requirements

• Web sites will be opened ~10/15
  • Hosted on tiger.ece.stevens-tech.edu/

• Shop access
  • Shop safety course 9/25 3:00 in K228A
  • http://stevens-shop-signups.appspot.com/
Title Page with signed pledge and advisor signature
Identification of sponsors

Executive Summary (start in Fall, Flesh out in Spring)

Table of Contents

Section – I: Project Definition and Plan (initial in Fall, refined in Spring)
  1. Mission Statement
  2. Background
  3. Stakeholder List
  4. Analysis of Stakeholder Needs
  5. Project Scope and Resources
  6. Project Plan
Section – II: Design, Evaluation & Optimization (initial in Fall, refined in Spring)

1. Requirements
2. Constraints and Assumptions
3. Applicable Codes/Standards/Regulations
4. Concept Development and Selection
5. Preliminary (Fall) and Detailed Design (Spring): Architecture, Materials, Layout, Manufacturing considerations
6. Design Evaluation Methods
   a. Methods: Analytical, Simulated, Physical Tests (Fall)
   b. Physical Prototyping: Plan and Budget (Fall)
   c. Prototype Build and Test Report (Fall/Spring)
8. Design Revisions and Optimizations (Fall/Spring)
9. Final Design Specification with BOM (spring)
Project proposal template

Section – III: Entrepreneurship & Business Development (primarily TG course requirements)
1. Business Objectives and Risks (Fall)
2. Competitive Intelligence: Market Analysis (Fall)
3. Lean Canvas Business Model (Fall)
4. Financial Analysis (Spring)
5. Intellectual Property (Spring)

Section – IV: Results
1. Conclusions
2. Recommendations

Appendices
1. Team organization chart
2. Project Gantt Chart
3. Prototyping and Testing Budget (projected – Fall, Actual – Spring)
4. Design Documents: Drawings, Layouts, Analysis reports
5. References cited