



- ## Phase 2 – Big Picture
- ◆ Point of View – Design Report
    - Accomplishments, Lessons Learned
    - Key Assumptions, Risk Issues
    - Recommendations
  - ◆ Intro – Summarize Project
  - ◆ Detail Design
    - Design Freeze by Ph2 Draft Submittal
    - Engr Drawings + Bill of Materials
      - At least completion plan in Draft
    - Analyses
    - Risk Reduction Items

- ## Phase 2 - Intro
- ◆ Background
  - ◆ Customers/wants – updated/**VALIDATED**
  - ◆ Benchmarking
    - Lessons, metrics, range of wild ideas
  - ◆ Metrics & Target Values – How?, Why?
  - ◆ Summary of Concept Selection
  - ◆ Design Freeze by Ph2 Draft Submittal

- ## Phase 2 – Detailed Design
- ◆ Flow Chart of Decisions?
  - ◆ Subsystems & Interactions
  - ◆ Critical Metrics, Target Values
    - Include deflection, strength, fatigue, vibration...
  - ◆ Assumptions!
    - Cantilever conservative for stress
    - Simple supports conservative for deflection
  - ◆ Easy/Tough Choices & Compromises
  - ◆ Safety Factor/Margin Summary

- ## Phase 2 – Audience Issues
- ◆ Coherence is #1 task
  - ◆ Use Design Report Format
  - ◆ Graphics (shrink sizes)
    - Re-do sketches
    - Intersperse figures in report body
    - Reverse White on Black images
  - ◆ Schedule – Roll up earlier sub-tasks
  - ◆ Drawings – Need Bill of Materials
  - ◆ Backup Slides – Key to Good Q/A

MEEG 394 Performance Guidelines		
Phase 2 - Concept Design		
	Senior Design (for reference)	MEEG 394
Technicality/Concept to Design	A design with comprehensive presentation of their solution and the rationale for the design is submitted in the context of the sponsor's business and 2) critical customer requirements, customer wants and metrics with target values, framed in the context of current technology/benchmarks. 3) Critical performance metrics for the sponsor's business are included in the design.	75% of grade Continues development of the best concept design among various alternatives, and validates based on: 1) design methods of assessing and integrating customer, wants, & constraints; 2) adding value to sponsor's business; and 3) technical feasibility validated in the context of applicable best technology/benchmarks.
		90% Perform detailed design of all subsystems in compliance with their specific design specifications. Validate the detailed design.
Process and Efficiency	The plan was created and evolved, and the effort of members is made efficient and clear, a logical and organized structure, and 2) evidence of well-organized and well-communicated team. A path forward plan was created to deliver project results to the sponsoring business, and as appropriate, define and develop the developments needed for commercial application.	10 Describe the plan that was followed.  Recommend a path forward.
Engagement, Interaction and Communication	The effectiveness of the project was enhanced by the team's 1) ability to engage and integrate contributors of the sponsor/buyer into the design through continuous communication processes, 2) awareness, 3) professional behavior and appearance, and 4) clear and consistent articulation of project status, validated results, and beneficial consequences for the sponsor's business.	10 Function as a productive team; Deliver timely Updates; Working Agenda; Minutes, & Peer Grade.  10 Delivered late, timely communication in Online Logbook.  Deliver per course Design Report with engineering drawings, purchased parts list, & engineering analysis.

To provide design practice using the same procedures as Gender Design, the student is to develop a new business-oriented paper mill.

Startup: [Phase 1](#) [Team](#) [Also see Resources Page](#) [Schedule Weekly Meetings](#)

**Phase 0 - Design Requirements (Draft Proposal Paper/70% of Course Grade) [Final Exam Form](#)**  
 First part of Draft Proposal covering Customer Needs, Project Scope (2-Weeks), Selected Technology Needs, and Key Metrics/Target Values due as integrated Wordfile named 0-p0.doc (P/Team 0) attached to message in Exec level of WebCT Team Discussion on Friday, 4/14. Post Revised Team Home to WebCT. Follow Peer Evaluation Link in WebCT. All DUE by Sun, Wednesday, 4/18. Post Team Home to WebCT. Follow Peer Evaluation Link in WebCT. All DUE by Sun, [Final Feedback](#)

**Phase 1 - Concept Selection (Process Report/10%) [Final Exam Form](#)**  
 Process covering Concept, Customer & Technology Basis, & Project Plan due as integrated Wordfile named 1-p1.doc attached to message in Exec level of WebCT Team Discussion on Friday, 4/14. Post Revised Team Home to WebCT. Follow Peer Evaluation Link in WebCT. All DUE by Sun, [Final Feedback](#)

**Phase 2 - Concept Design (Draft/60, Final Report/10%, Presentation/10%) [Final Exam Form](#)**  
 Incomplete documentations, but technically complete, user-friendly draft due as integrated Wordfile named 2-p2.doc attached to message in Exec level of WebCT Team Discussion on Wednesday, 4/22, for Design Process Calc. Follow Peer Evaluation Link in WebCT. (MAY BE DONE in Peer Eval'n - 5 pts. for individual). All DUE by Sun.  
 Final Report due as integrated Wordfile named 2-p2.doc attached to message in Exec level of WebCT Team Discussion on Wednesday, 4/22. Follow Peer Evaluation Link in WebCT. All DUE by Sun.  
 Final Presentations due as integrated Powerpoint file named 2-p2.ppt attached to message in Exec level of WebCT Team Discussion on Monday, 4/20. Follow Peer Evaluation Link in WebCT. All DUE by Sun. Presentations to be scheduled.  
 Final Presentations from 10:30-12:30 on Monday, 4/20. Each team gives an 1-minute talk followed by 1 minute Q/A. Each class member evaluates each talk using [Presentation Evaluation Form](#)

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## Resources

- **ADesign**
  - [Design Glossary](#) [Webster's User's Guide](#)
  - [User Design Terminology](#) [User's Presentation on Design Methodology](#)
  - [General Design Criteria Categories](#) [Customer Perspectives Table](#)
  - [User Design Requirements Table](#) [User Design's Instructions](#)
  - [Product Learning Guidelines](#)
- **Evaluation Materials**
  - Peer Evaluation (Use online version in WebCT.)
  - [Phase 0 Evaluation Form](#)
  - [Phase 1 Evaluation Form](#)
  - [Phase 2 Evaluation Form](#)
- **Reporting**
  - [Course Logbook Expectations](#) [Logbook Levels](#)
  - [Report Guidelines](#) [Elements of a Student Design Final Report](#)
  - [Using References](#) [Graphics Checklist](#)
  - [MILC-101 Final Doc](#) [Complex LCA's Part 1](#)
  - [Structure Final Presentation Guidelines](#)
- **Teamwork**
  - [Source](#) [Guidelines for Productive Meetings](#) [Minutes & Minutes](#)
  - [Introduction to Teamwork](#) [Team Learning](#)
  - [Team Norms & Communication](#) [Team Working Check](#)
- **Other Links**
  - [MILC 201 Course Resources List](#)
  - [Student Work Guidelines](#)
  - [Lectures 1-100](#)