EEE 491 Engineering Design I

Conceptual Design Report (max. 15 pages)

See EEE392 Course Materials before developing your report

EEE 392 Video records can be reached via
https://www.youtube.com/channel/UClpWqUL0Ux4DJE53ovgyDtw

The report must contain

- front page
- content page
- summary

Summary

An overview of the report, including the scope and general content of the project, detailing the progresses made in the project, and the conclusions of the report

1. Introduction
2. Problem statement/Needs Identification
3. Research/Technology Survey and/or Background information
4. Requirements Specifications
   - Engineering requirements
   - Marketing Requirements
   - Constraints (economical, environmental, sustainability, manufacturability, Social)
   - Certifications and/or Standards
5. Concept Generation and Evaluation
   - Level 0 Design: the highest level design of the system, overall description of the system, i.e., description of inputs-outputs and functionality, decomposition of the requirements to sub-system/module requirements (for Level 1 Design)
   - Level 1 Design: functional decomposition of the system (Level 0 Design) to sub-systems, demonstration of how concept generation methods are implemented (existing products, benchmarking, brainstorming, nominal group technique, concept table/fun etc.)
   - Demonstration of how behavioral models (class diagram, use cases, state machine, activity diagram, UML etc.) are implemented within the project running period (if implemented)
6. Conclusions
7. References
8. Appendix (team working proofs shall be provided)