

Name of Website: AESP 428 CubeSat V2 Project Documentation

Topic Description: This semester I will be working with a group of 4 to develop a CubeSat. A CubeSat is a small, short time use satellite that is used for small missions that larger, more expensive satellites cannot complete. This webpage will hold the documentation of the project such that future classes can access the information for when they design the CubeSat V3. Documentation should consist of each stage of the project. This being the initial project planning phase, the conceptual design phase, the detailed design phase, construction phase, and the finalization phase. Each section will include documents created and used as well as descriptions of the thought processes. Additionally, some information from the V1 team may be compiled in an appendix. This page will be updated and used after the project for CSCE 242 is due. As such, each page may be populated but incomplete information-wise at the point of project submission.

Page Names:

1. Navigation Page
2. Project Planning
3. Conceptual Design
4. Detailed Design
5. Construction
6. Finalization

Data to be Stored:

- Project Planning
 - Base Requirements of the project
 - Organigram
 - Project Objective Statement
 - Mission Need Statement
 - Work Breakdown Structure
 - Work-Flow Diagram
 - Gantt Chart
 - Functional Breakdown Structure
 - Functional Flow Diagram
 - List of Requirements
 - Constraints
 - Killer Requirements
 - N2 Chart
- Conceptual Design
 - Technical Budget
 - Risk Analysis
 - Design Option Tree

- Tradeoff Analysis
 - Compliance Verification and Analysis
 - Design Selection Process
 - Conceptual Design Diagrams
- Detailed Design
 - Power Control Unit Sub-System
 - Central Processing Unit Sub-System
 - Optical and Sensor Sub-System
 - Communications Sub-System
 - Material Selection
 - Ground Station Selection
 - Evaluation and Iteration Process
 - Bill of Materials
 - Detailed Design Diagrams
- Construction
 - Construction Process
 - Code Development
 - Code
 - Ground System Integration
 - Evaluation and Iteration
- Wrap Up Project
 - Final Demonstration Videos and Images