

Final Documentation

Technical Manual:

This manual covers the motivation, research, theory of design, implementation and prototyping, and testing of your project. This should be a created starting with your documentation from EEL 4914 and making the necessary modifications and additions. The requirement is that this document consist of about 100 pages of contents with are authored by the project group members, which can include appropriated cited content and content with copyright permission from other authors. The following is not an outline, but a list of what contents the document should include:

1. Title page with the title of project, group names, date, etc.
2. Introduction
 - * Motivation for the Project and Background Information
 - * Project Objectives or Goals
 - * Project Specifications
 - * Conceptual Diagrams
3. System Design
 - * Block Diagrams and descriptions
 - * Design investigations and Resources
4. Hardware Description
 - * Theory of hardware operation
 - * Block diagram of the system and modules
 - * Explanation of functional modules
 - * Specifications
 - * Schematic Diagrams
 - * Component layout
 - * Timing diagrams, if any.
 - * References abd Resources
5. Software Description
 - * Development Environment and Commercial Software Utilization
 - * Theory of software operation
 - * Flowcharts
 - * Code Classes, Methods, Data Structures, Data Flow
 - * User Interface Design and Implementation
 - * References abd Resources
6. Troubleshooting
 - * Explain of how to troubleshoot the project
7. Budget and Milestone Chart
8. Appendices
 - * Parts List, distributors, vendors, retailers
 - * Data on IC's and application notes
 - * Diskettes and CDs

User's Manual: Your project must come with a user's manual that explains how to use your product. This must include the following

1. Title Page
2. Introduction
3. Installation
 - * Hardware set-up and requirements
 - * Equipment interconnection
 - * Software requirements and setup
4. Operation of Hardware and Software
5. Troubleshooting

Website: A web site must be created for your project on the CECS web server. You have received an FTP account for which will allow you access to transfer content to your space. Your web site contents can be anything relating to your project but must include:

- A home page with project title, group members, one paragraph project description
- The home must recognize any sponsorship including at least one sponsor contact
- Your initial project description and block diagram document from EEL 4914
- Your initial project presentation
- Your documentation from EEL 4914

And later,

- All status reports
- Your CDR from EEL 4915
- Your final presentation to your committee
- Your final documentation for EEL 4915

All content must be in one of the following formats: html, pdf, MSWord .doc, or MS Powerpoint.

Due Date: The final documentation and website are due by the final exam period (date and time) scheduled for this class.

Final Presentation

Purpose: To provide for a complete project review and evaluation. This formal group presentation of your project will provide a means for a design and implementation evaluation by the instructor and a faculty review committee. **The presentation of your design investigation, engineering decisions, hardware and software design implementation, and prototype will be the basis for determination of your course grade.** Therefore you must make every effort to convince the committee that you deserve the grade you wish to earn. A professional appearance is very important. Remember this is probably your last class before leaving to industry. At this point in your career you should be acting as professional engineers and therefore the committee expects you to act accordingly. Additionally, this presentation will provide experience making group presentations. The content should address both technical and administrative issues.

Final Review

Panel: The committee must be composed of at least 3 UCF faculties of which 2 must be from the college and one may be from outside the college. It is the responsibility of the student to find the reviewers and ask them to participate. Furthermore the students must coordinate a time to present with the committee. The team must fill out a form and have the reviewers sign the form. The form is located at the course website.

Format: Each group is allocated 20-25 minutes to make their presentation. It is required that each member be a presenter of technical information. The administrative information may be divided as desired by each group. The presentation will be followed by a 5 minute question and answer period, which is then followed by a 10-15 minute presentation of your project prototype.

Contents:

The presentation should include the following:

- Project Title, Project Team Members, and Administrative Introduction
- Statement of Project Objectives with Descriptive Illustrations
- Overall Project Block Diagram/System Design Diagram
- Discuss the design approach, implementation and difficulties in design for each project subsystem
- Present the Budget and Project Schedule Summary (Milestone Chart Review)

Notes: The above is a guideline only and the presentation should reflect the project as necessary. You should make the presentation informative in a way that best fits your project.

You must demonstrate your prototype at the presentation, however, this can be done by alternate means such as video tape if appropriate. Your presentation will most likely consist of 30-40 slides. Computer generated presentations are required.