# **ENEL 417 – Winter 2012 Final Report Documents:**

# Due: April 9<sup>th</sup> 2012 by 10 AM – To D.Wagner

Three Reports are required to fulfill the documentation requirements of ENEL 417. One of each report is required per group. The reports can be summarized as:

- 1. Project Build and Evaluation Report
- 2. Project Proceedings Submission.
- 3. Outcomes Assessment Questionnaire (To by provided on line April 5<sup>th</sup> 2012)

# 1. Project Build and Evaluation Report:

A minimum of Three, and Maximum of Five sections: Consisting of:

- a. Project Report
- b. Schematic/Physical Construction Diagrams
- c. Software Diagrams/design structure & Listings (if applicable)
- d. References:
- e. Appendices (if applicable)

## .A Project Report:

This is the written area of your report where you explain what was the problem or issue you set out to solve, what your target specification or goals were, and what you achieved. This report should be approximately 4 single spaced pages, and should be structured as:

#### Introduction

- -Overview of purpose and goals
- -Summary of requirements

#### Methods and Material

- -How was it designed?
- -How was it built?

#### Results

- -How did it work?
- -What were the outputs or measures?

#### Discussions

- -What to the results mean
- -What worked well?
- -What did not work well?

#### Conclusions

- -What have you learned?
- -What would you do differently?

-What would you do if you continue with the project?

B Schematics, Physical Diagrams:

This section should include a CAD based drawing of your schematic for any circuit construction you have developed for your project. You should include as a first diagram a CAD based drawing of your project block diagram. If you have constructed any assemblies that are represented in physical drawings (i.e Solid-Edge) include a print out of those drawings. If you are using a commercial assembly (Sonar sensors, flame detectors, system level boards) Do Not include those schematics in this section.

#### .C Software Documentation:

If your project employs programmable devices you should include:

- Software overview design (flow chart, block diagram or Pseudo-code overview)
- Commented, software listing all software listings should include a header block with author information & revision tracking if so implemented...

#### .D References:

All reliance on external resources must be acknowledged to avoid plagiarism. This should include:

- Any manufacturer's suggested circuits implemented in your design.
- Any 3<sup>rd</sup> party designs or applications on which part of your design is based, or loosely based.
- Any significant contributions made by members outside of your team.
- Any software libraries used in your project, open source or proprietary.
- Bulletin board/FAQ references, manufacturer's support assistance, etc.
- When in doubt reference.

Reference format should follow one of standard formats for endnote/footnote references, however you may expand the reference to help explain its application to your project.

### .E. Appendices:

If you have additional information that you feel is pertinent (significant test data, PCB layouts, schedule or budget information) you may include them in one or more appendix sections to your document.

#### 4. Project Proceedings Submission:

Under separate posting, you will find the format for project proceedings. This columnar format is common for engineering publications. Each group is expected to reformat, and annotate section "A" of their project document according to this format. If particular

documentation, such as schematics, photos etc. are pertinent, please include them in your Proceeding submission. It is the program area's intention to collect the submissions annually, and bind them as a record of ENEL 417 projects.

# General:

Remember your reports are one of many that have to be graded – ensure the information you compile is pertinent to the project you have completed. Do not include unessential material.