ETEE 3255 Project Final Report Guidelines

This document consists of the Senior Design final report guidelines, quoted verbatim from the Senior Design syllabus.

A comprehensive **Project** **Report** is one of the requirements for completion of ETEE3641. The requirements for this report are rather stringent. These requirements are outlined and discussed in the following paragraphs.

In many companies all of your work as an engineering technologist will be presented in written form. Your work and worth to the company will be judged by what you present on the printed page.

The required format for reports for this course (in addition to the title page and table of contents) is:

 **1) Abstract**

 **2) Background of the Topic**

 **3) Review of Current Literature**

 **4) Experimental Method**

 **5) Experimental Results**

 **6) Conclusions**

 **7) List of References**

 **8) Bibliography**

 **9) Appendices – Including your project proposal.**

1) The **Abstract** is a very concise synopsis of what your project is and what is contained in the report. It will typically consist of one paragraph. It is usually written last once the entire report is completed.

The next two topics are included for several reasons. It is vital that you learn to use standard engineering library reference techniques. You will need them after graduation. Diligent use of the library will also aid you greatly in your design project for this course. Each hour spent in the library will save several, usually many, hours of design and experimental work.

2) The **Background of the Topic** is required to ensure that you are aware of techniques that have been applied to your project in the past. Include information on similar products, projects or designs that have been attempted or completed by other people working in the field. This section should essentially be a justification of why you are attempting this project.

3) The **Review of Current Literature** should be of great help in your design project. We are asking "How are other designers doing the job now?" In fast-moving fields, references cited would typically be less than two years old. This also involves published data about systems not yet available on the market. This information can also include websites.

4) The **Experimental Method** section describes your work. It usually begins with a block diagram then discusses the blocks. Circuits and software you designed and used will also be discussed. It includes the design specifications.

5) **Experimental Results** include a verbal discussion supported by curves, tables, etc.

6) The **Conclusion** sums up the whole project. If you had to do it over, what would you do differently? Discuss the cost of the project in terms of the material or parts and the labor costs.

7) **List of References** includes all references cited in the paper including websites.

8) **Bibliography** includes references not cited that were useful to you.

9) **Appendices** include materials that contribute to the paper but are too bulky or not suited to the main body of the text. Example: computer printouts, lengthy calculations, special data sheets, etc. Also include a copy of your original Project Proposal.

The report should be typed doubled spaced. The left margin should be one and one-half inches wide. The right, top, and bottom margins of each page should be one inch wide.

In the body of the report, a note to a reference in the list of references should be placed in the line with a number enclosed in parentheses. Numbered entries in the list of references and/or bibliography should use the IEEE reference/bibliographic format for technical reports.

Each figure should have a figure number and a caption with the word figure abbreviated and capitalized e.g.

|  |
| --- |
| Fig. 4 Block Diagram of Lunar Lander. |

**Landscape figures** should be placed in the bound **report so the figure number and caption are to the right when you face the page, e.g. binding is to the left**. Ideally, a reader should be able to obtain all the information necessary to interpret a graph or a figure by studying the page without having to refer to the text. The axes of a graph must be labeled, including the proper units. Measured points on a curve should be so indicated with suitable symbols such as small circles, small triangles, etc. Theoretical curves on graphs have no such symbols. Of course, the curves are usually smooth and continuous. If more than one curve appears on a graph, use different line types such as a solid line, a broken line, or a dash-dot line. You are encouraged to use Excel or other relevant software for presenting graphs and curves.

Tables should be numbered with Roman numerals and should have a title, e.g.,

|  |
| --- |
| Table II Transistor Performance Data. |

Equations should be numbered consecutively. Place the equation number on the right side of the page and number the equations by sections. For example, the third equation in section IV of the report would be (4-3). This procedure reduces the amount of work necessary in renumbering equations as revisions are made in the report. Microsoft Word or other word processors can be used for typing equations and for easily numbering them as well.

The written report should be stapled without a cover. **DO NOT waste your money** on commercial covers as they are usually discarded before filing. Pages should be numbered except for the first page or title page. This page should contain (just above center of the page):

|  |
| --- |
| *the title of the project* |
| *your name,* |
| *your partner’s name* |

And the following words (just below center of the page):

|  |
| --- |
| Technical Report Submitted In Partial Fulfillment of the Engineering Technology Project Course |
| ETEE3641 |
| *Spring* Semester, 2010 |
|  |
| Submitted *date* |

The second page should be the table of contents. It will list the topics and the page numbers.

Following the table of contents, an index of symbols used in the technical report should be included. This index contains the symbol and the meaning of the symbol. Acronyms can also be included here. An index to figures should follow the index of symbols. This page will contain the figure number, the figure caption, and the page number of the figure.

Lower case Roman numerals should be used for numbering the title page, the table of contents, the index of symbols, and the index of figures. Although the title is page "i", do not place a number on it. Starting with the abstract, use Arabic numbers for numbering this page and following pages.

The form for reference/bibliographic entries varies somewhat from one technical journal or publisher to another. The form to be used for reference/bibliographic entries for the technical report is that used by the IEEE. See any of the IEEE journals or groups for the proper format or consult the IEEE Author Kit.