

Title of the Project

by

Author 1, Author 2, Author 3, and Author 4

**Report Summarizing Design Activities - 70A**

Electrical & Computer Engineering Capstone Design Project

Toronto Metropolitan University, Year

## Acknowledgements

## Certification of Authorship

## Table of Contents

[Acknowledgements 2](#_Toc150777191)

[Certification of Authorship 3](#_Toc150777192)

[Table of Contents 4](#_Toc150777193)

[Abstract 5](#_Toc150777194)

[Introduction & Background 7](#_Toc150777195)

[Objectives 8](#_Toc150777196)

[Approach and Methods 9](#_Toc150777197)

[Design Analysis and Synthesis 10](#_Toc150777198)

[Implementation Plan (GANTT Chart) 11](#_Toc150777199)

[Conclusions 12](#_Toc150777200)

[References 13](#_Toc150777201)

[Appendices 14](#_Toc150777202)

**Remember to update the Table of Contents (TOC) by right clicking the TOC page and selecting “Update Field”.**

## Abstract

350 words limit. Your abstract should concisely present the background, design objectives, solution, results, and conclusions.

Keywords: >3 and <7

**Main body of ELE/COE-70A Report Summarizing Design Activities [Your page count for 15 pages limit STARTS from next page i.e. from “Introduction & Background” and ends before “References”]**

1. The main body of the report is limited to ***15 pages***, including text, analysis equations/ algorithms diagrams, schematics, tables etc. Additional material (e.g. source code, datasheets, etc.), not subjected to grading, can be inserted in the Appendix.
2. Properly assign headings of your report
   * + 1. Use “**Heading 1**” for chapter titles such as “Abstract”, “Introduction & Background”, ….
       2. Use “**Heading 2**” for section titles
       3. Use “**Heading 3**” for sub-section titles
       4. Proper heading is critical in generating a proper “Table of Contents”
3. Font, font size, and line spacing:
   * + 1. Font: “**Times New Roman**”
       2. Font size: **12**.
       3. Spacing between lines: **1**
4. Figures
   * + 1. All figures must be numbered. Preferred numbering strategy is: **Figure 3.1** where the first digit “3” is chapter number and the second digit “1” is the section number.
       2. All figures must have a caption. The caption of a figure must be placed immediately below the figure.
       3. The caption of a figure must end with a period mark “.”
       4. The size of the texts in figures must be comparable to that in the main body of the report.
       5. Figures must be clearly readable.
       6. Figures must be centered horizontally.
5. Tables
   * + 1. All tables must be numbered. Preferred numbering strategy is: **Table 3.1** where the first digit “3” is chapter number and the second digit “1” is the section number.
       2. All tables must have a caption. The caption of a table must be placed immediately above the table. The caption must end with a period mark “.”.
       3. The size of the texts in tables should be slightly smaller than that of the main body.
       4. Tables must be clearly readable.
       5. Tables must be centered horizontally.
6. Chapters
   * + 1. The first paragraph of each chapter should highlight what is to be covered in the chapter. Also, the organization of the chapter should be explicitly stated.
       2. The last paragraph of each chapter should summarize what were covered in the chapter. **Past tense should be used in your writing**.

## Introduction & Background

Provide detailed introduction & background of this engineering design project. This section should present the statement of the problem and clarification of need/requirements. When citing the work of others, references must be provided. The order of the appearance of the cited work must be identical to that in Section References of the report. When referring a reference, please use square bracket, for example, the reference [1].

## Objectives

Itemize the objectives of this engineering design project.

## Approach and Methods

This section must elaborate on the approaches and methods behind your design in detail with all relevant information. This section should cover relevant literature review, use of suitable engineering concepts and methods, and alternative design approaches examined and analyzed. If more space is needed for schematics, you can include it as an appendix but refer here with appropriate and detailed text description.

The following is an example of equation:

 (1)

All equations should be numbered sequentially.

An alternative equation style is shown below:

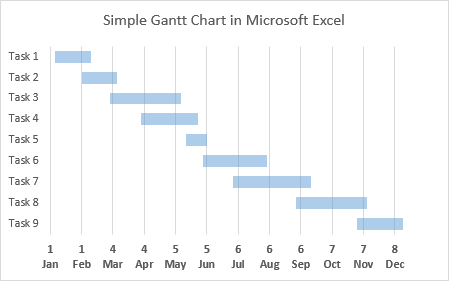
## Design Analysis and Synthesis

This section should present the detailed design analysis and synthesis in arriving at the final design for the complete project satisfying your topic specifications. This section should cover design specifications, challenges and methodology. Use of modern concepts and methods for analysis, and synthesis. All relevant design calculations, schematics, flow charts, algorithms etc. should be included.

## Implementation Plan (GANTT Chart)

Create the Gannt Chart for ELE 70B. There are many templates available for Gantt charts. Software like Excel can be used to create a Gantt Chart. A simple example is shown below.

Identify and highlight the critical tasks.



## Conclusions

Conclusions should address the follows:

1. Summarize the final design completed
2. Address any discrepancy between the initial project objectives and what has been accomplished
3. Major difficulties encountered that have not been resolved

**[Your page count for 15 pages limit ENDS here, you can add Appendices after the References Section]**

## References

1. (For a journal paper) A. Author and B. Arthur, “The title of a reference paper,” *Journal of Excitement*, vol. 1, no. 1, pp. 123-234, Jul. 1999.
2. R. Lucky, “Automatic equalization for digital communication,” *Bell Syst. Tech. J.*, vol. 44, no. 4, pp. 547–588, Apr. 1965.
3. (For a book) H. Poor, *An Introduction to Signal Detection and Estimation*. New York: Springer-Verlag, 1985, ch. 4.
4. (For a conference paper) G. Juette and L. Zeffanella, “Radio noise currents,” *IEEE Summer power Meeting*, Dallas, TX, June 22–27, 1990.
5. (Thesis style) J. Williams, “Narrow-band analyzer,” Ph.D. dissertation, Dept. Elect. Eng., Harvard Univ., Cambridge, MA, 1993.
6. (Patent style) J. Wilkinson, “Nonlinear resonant circuit devices,” U.S. Patent 3 624 12, July 16, 1990.
7. (Standard style) *Letter Symbols for Quantities*, ANSI Standard Y10.5-1968.
8. (Report style) E. Reber, R. Michell, and C. Carter, “Oxygen absorption in the Earth’s atmosphere,” Aerospace Corp., Los Angeles, CA, Tech. Rep. TR-0200, Nov. 1988.
9. (Handbook style) *Transmission Systems for Communications*, 3rd ed., Western Electric Co., Winston-Salem, NC, 1985, pp. 44–60.
10. (Basic Book/Monograph Online Sources) J. Author. (year, month, day). Title (edition) [Type of medium]. Volume(issue). Available: <http://www.(URL)> Accessed on: Date
11. J. Jones. (1991, May 10). Networks (2nd ed.) [Online]. Available: <http://www.atm.com> Accessed on : Date

**All references listed in Reference Section must be cited in the report and their order of appearance in the report must be consistent with that in Reference Section.**

## Appendices

You should include a detailed ELE/COE 70B plan for all 4 phases as an appendix to your report. For the ELE/COE 70B plan you can use the table format as per your milestones template.