THE UNIVERSITY OF THE WEST INDIES
ST. AUGUSTINE, TRINIDAD & TOBAGO, WEST INDIES
FACULTY OF ENGINEERING
**Department of Electrical & Computer Engineering**

# Instructions for Preparing MASc Project Reports
October 2011

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1. **INTRODUCTION**

Writing the final report for your Master's project is a major activity. Your project report presents all your efforts in your project [in the courses ECNG-6021, ECNG-6022 and ECNG-6023] and importantly your findings and conclusions. Naturally your progress/ final report is a major component of MASc project.

**Note: The standards (such as font size, line spacing, page layout etc) prescribed here in this document apply to both 6021-Progress and 6023-Final Reports. There is no report submission for 6022. The contents of 6021 and 6023 differ from one another, as 6021 is really the progress report, which indicates the aspects such as - the actual progress made thus far, what the student is supposed to achieve, how the student planning to execute project, what are the major milestones etc. The progress report is ideally about 60 – 75 pages and has 4 credits. Students need to submit 2 copies (6021 or 6023) in the standard prescribed format to the department. Please refer to Section 3.4 for exact details**

Please note that the contents of project reports – comments, analysis, surveys, findings and conclusions will be made available to public. Indeed, your project report is your contribution to the engineering knowledge society. Hence, students must understand the expected international standards of professional report writing. This document provides the guidelines and standards for writing your final MASc project report.

One of the classical mistakes that students commit usually – is to start writing the report just before the deadlines. The result in this case is will be a poorly written report, which makes the job of examiners very difficult in understanding what really the contribution is. Hence students are advised to follow the standard 'time-management and project management principles' and understand what are the prescribed standards for writing the report. A good writing experience will motivate you to write research articles for conferences and journals.

In the following sections, we tried to provide as much guidance as possible for making your job of writing your project report relatively easier. However, students should note that report writing usually involves several iterations, modifications to make it better. For this reason, it is recommended that students work closely with the supervisor (allowing enough time for the supervisor to make suggestions, corrections etc) for continuous improvement.

2. **STYLE, QUALITY AND WRITING CONVENTIONS**

## 2.1. Style
Style refers to correctness in the application of appropriate writing conventions. It is critical to remember that your final report is a formal, scientific document. Style and tone should be the key considerations when synthesizing your report.

## 2.2. Quality Writing
Your final written report is a technical document which aims to meet specific technical information needs – it seeks to convey your findings. You must ensure the quality of your written product. Indices of quality technical information are itemized in Table 1.

Table 1: Indices of Quality Information

| | |
|---|---|
| **Easy to use** | |
| Task Orientation | Focus on the task at hand – to **succinctly** report the findings of your study. |
| Accuracy | Freedom from error – both in terms of the validity of the data presented and the grammatical correctness of your report. |
| Completeness | Inclusion of all and only necessary information |
| **Easy to Understand** | |
| Clarity | Freedom from ambiguity – meaning must be gleaned from the first reading. Clarity and precision are largely determined by your word choices. Always aim for words which are unambiguous in meaning and prefer the familiar word over the unfamiliar. |
| Correctness | Inclusion of appropriate examples, illustrations, drawings, graphs etc. to aid understanding. |
| Visual appeal | Attractiveness and enhanced meaning through logical layout of content, easy to discern colouring, easy to read typography and clear and well-labeled non-textual items (diagrams, drawings, graphs etc.). |
| Style | Correct application of appropriate writing and referencing conventions. |
| **Easy to find** | |
| Organization | Coherent arrangement of parts that makes the logical flow of ideas possible and the connection amongst ideas clear and apparent. |
| Retrievability | Presentation of information in such a way that enables users to quickly and easily find pieces of information. Tables of content, tables of figures etc. must be well presented and accurate. |

- Adapted from Hargis et al .2004. *Developing quality technical information, a handbook for writers and editors* 2nd Ed. NJ: Prentice Hall.

3. **STANDARDS FOR THE MASC PROJECT REPORTS**

**3.1. Content Writing Standards:** Table 2 has the summary of the standards for presenting your content.

Table 2: Content Writing Standards

| | |
|---|---|
| Grammar and Spellings | Use only formal English. Never use colloquial language. All the sentences should be written in an impersonal form, i.e. in the third person, passive voice. If you must write in both active and passive voices then provide a good balance of use of the voices.<br><br>Contractions such as "isn't" and "won't" are highly inappropriate in professional reports. |
| Use of Abbreviations | Explain the abbreviations (or acronyms) at the very first occurrence. Also, you can provide a list of the symbols, abbreviations and special notations. |
| Units | Use only MKS system – Meters/ Kgs / Seconds. Do not use non MKS units like Pounds, Inches, etc. If original source (must be cited properly) has units in a different system, then convert properly and show the conversion too. |
| Equations | Equations should be numbered in the order they appear. Make sure that each equation is properly cited in the text. Keep the equations in the text (NOT at the end of the report) just before or after its citation. Avoid extensive derivations (unless it is your own contribution) by proper citation of the original source. |
| Diagrams/ figures | Each diagram should be given a title and number. Keep the diagrams in the text (NOT at the end of the report) just before or after its citation. The title of the figure should be below the figure.<br><br>Usually the numbering styles followed are: Figure 1; or Fig. 1; or Fig. 2.2; Figure 3.11 (chapter wise numbering for figures) |
| Flowcharts | Same as diagrams. Drawing a flowchart to explain the flow of your process, program logic is a good idea. You will be able to explain your work effectively through your own diagrams and flowcharts. |
| Tables | Tables should be numbered separately (tables are NOT figures or flowcharts). The title (or the caption) for the table should be just above table. Keep the tables in the text (NOT at the end of the report) just before or after its citation. |
| References and citation | Cite all the research papers, textbooks and websites that referred. Also make sure that you cite all the resources that are included in the 'References' section. Keep rest of all articles, resources (that you have not actually cited in the report) in bibliography section.<br><br>IMP: Follow Chicago Manual of Style and Standard for listing the references and their citation. More detailed information can be found at: http://mainlib.uwi.tt/divisions/eps/guides/epschicagocite.pdf |

**3.2. Standard items in the 6023 Final Report**:  The standard items that are expected in project reports are explained in Table 3.

Table 3: Standard items in the Project Reports

| | |
|---|---|
| Cover Page | Use ONLY the templates provided for the front covers on the website.  The templates for progress report and final reports are different. |
| Plagiarism Form |  This is a formal declaration that you are going to sign and keep inside your report, at the beginning.  Make sure whatever you write really belongs to you. And follow the citation/ referencing standards for the items that you have adopted from other's works.  This form is provided in Appendix 1 of this document. |
| Acknowledgements |  1 page |
| Abstract | Explain briefly the Core Contribution of your project work.  Do NOT exceed 1 page |
| Table of Contents | Make a good index with accurate page numbers. |
| List of Abbreviations and Symbols, List of Figures, List of Tables | List all these items with the actual numbers, titles and the exact page numbers for an easier reading. |
| Background | A brief background of the subject (not more than 2 or 3 pages) to provide a clear idea to the readers. |
| Objectives and Scope | Clearly indicate what are objectives and scope (Objectives – 1 page; Scope 1 page) |
| Chapters | Chapters such as Introduction, Literature review, design, design analysis/ validation, implementation etc (the chapter titles depend on your style of presenting the content) |
| Conclusion | Write your own conclusion of your work, what is achieved, how effective, how accurate etc. |
| Appendix/ Addendum | Appendix is just like a chapter, but has only support information to your report.  You can effectively use the Appendix to keep the information that is not essential to explain your findings, but that supports your analysis or validates your conclusions.  Also, you can keep - details of computations (from beginning to the end), additional  figures/tables/charts/graphs, statistics, questionnaires, interview transcripts, pictures, lengthy derivations, maps, drawings, letters, data sheets, details of computer program etc in appendices.  Please provide appropriate titles and insert page numbers for the contents of the appendices.  It is expected to have one appendix with the title 'What is on the CD' with necessary details of the contents of the CD attached. |
| CD/ DVD | You can keep a lot of information in a CD/ DVD.  The first item is that must be included here is a copy of your final report.  You can present the information using HTML pages so that browsing (or locating) the information is easy for the readers. |
| Page Limits | 60 – 75 pages for 6021 Progress Report<br><br>Minimum of 100 pages for 6023 Final Report (excluding Appendices).  Always consult your project supervisor on this particular aspect, if your document is getting too big or too small. |

**3.3.** **Standards in finalizing the reports:** Please follow the expected standards (shown in Table 4) for finalizing your reports. This ensures easier processing and further use of your report.

Table 4: Final Making of the Report

| | |
|---|---|
| Font Selection | 12 point Serif font Times Roman – Maintain this uniformly throughout the report. Never use Hand-written material. |
| Line Spacing and printing | Double spacing, single sided printing. (use one side of the page only) |
| Paper Selection | Use only 'Letter size' white paper (with 1.25''margin on the left edge and the rest 1'' margin) |
| Page Numbers | Insert page number on top right corner of each page. |
| Front Cover | Use standard template (with UWI logo) for the front cover. Please see Appendix 2 of this document which has the standard template. If you are submitting ECNG-6021, then change template of the cover in Appendix 2; 'ECNG 6023 – MASc Project' to 'ECNG 6021 – MASc Progress Report' |
| Binding | DO NOT use Hard Bound or Hard File Cabinets for the reports. Reports should be bound in Engineering Printing Room [located in Engineering Block 1, First Floor] with 'Ring Binders'. Use transparent plastic sheet on top of the front cover and colored sheet for back cover. Please contact the personnel in of Printing Room at least couple of days before to make necessary requests. |
| Accompanying CD/ DVD *(not required for ECNG-6021 Progress Report)* | Keep the accompanying CD/ DVD in an envelope and paste it to the back cover; so that it can be accessed easily and does not get separated. Make sure that all intended material is properly recorded into the CD/ DVD that is being attached to the report. |
| Plagiarism Form | This form is attached in Appendix 1. Read it carefully and sign on the document and then attach it to the report. |

**3.4. Standard items in the 6021 Progress Report**:

The 6021 progress report (2 copies) should be between 60-75 pages, clearly illustrating the following.

- Objectives
- Introduction/ Project background and Scope
- End deliverables
- Literature survey in the area
- Students own approach to solve the problem
- Design aspects / solving strategy
- Details of Tools/ software/ hardware that will be used
- A clear indication of overall progress made thus far, in terms of literature survey, experimental setup, data collection where applicable, design and development etc.
- Gantt chart (from beginning of first semester to the end of second semester) with details of minor/ major milestones

***Please note that the standards indicated in Tables 1 to 4 do apply to 6021 Progress Report.***

**APPENDIX 1 - STATEMENT OF ACADEMIC HONESTY**

**For the purpose of this declaration form the following Faculty Regulations apply:**

Rule 32 , *The Faculty of Engineering: Undergraduate Regulations 2008-2009*, states*:*

" Cheating, Plagiarism and Collusion are serious offences under University Regulations.

a) Cheating is any attempt to benefit one's self or another by deceit or fraud.

b) Plagiarism is the unauthorised and/or unacknowledged use of another person's intellectual efforts and creations howsoever recorded, including whether formally published or in manuscript or in typescript or other printed or electronically presented form and includes taking passages, ideas or structures from another work or author without proper and unequivocal attribution of such source(s), using the conventions for attributions or citing used in this University. Plagiarism is a form of cheating.

c) For the purposes of these Regulations, 'collusion' shall mean the unauthorized or unlawful collaboration or agreement between two or more students in the preparation, writing or production of a course assignment for examination and assessment, to the extent that they have produced the same or substantially the same paper, project report, as the case may be, as if it were their separate and individual efforts, in circumstances where they knew or had reason to know that the assignment or a part thereof was not intended to be a group project, but was rather to be the product of each student's individual efforts. Where two or more students have produced the same or substantially the same assignment for examination and assessment in circumstances that the assignment was to be the product of each student's individual efforts, they shall receive a failing grade in the course. "

**I……………………………………………..(insert name in BLOCK LETTERS), ………………………(student identification number) declare that the material submitted for assessment in my MASc final project report is my own work and does not involve plagiarism and collusion.**

**……………………………………… ……………………………..**

**Student's Signature with Date**

**APPENDIX 2 – TEMPLATE FOR FRONT COVER**

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<td><b>THE UNIVERSITY OF THE WEST INDIES</b></td>
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<b>MASc. (Engineering)</b>

Department of Electrical and Computer Engineering

ECNG 6023 – MASc Project




Project Title
Final (or Progress) Report




Student Name
UWI ID




Month, Date, Year




Project Supervisor:  Name of the Supervisor

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