# Computer Science
## Work Term Report Guidelines

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1. About your work term report

Your objective is to write a work term report that successfully communicates technical ideas about your co-op work term. Summarize your work term project(s) and explain how technical information was applied to solve problems that you encountered during your work term.

Report Marker
Your marker will be a co-op coordinator, a faculty member or a teaching assistant (TA). Write your report at a technical level that is understandable to a reader who has a technical background but who is not familiar with your work. Avoid acronyms and local jargon used at your work place, or include a glossary to help the reader understand the subject matter.

After you hand in your report, your marker may ask you to do some revisions—you must contact your marker to find out if revisions are required.

Report length
Your entire report should normally be about 3,000 words in length, or approximately 12 to 15 pages of double-spaced text in 12 point font, on standard letter size paper with margins not less than one inch.

Report style
Write your report in a formal style and avoid using casual or colloquial phrases.

Spelling, grammar, punctuation and the report format are important. Proofread your document. Some frequently noted errors are:

- incorrect use of it's/its, their/there/they're and we're/were,
- using a singular subject and plural pronoun,
- incorrect use of commas,
- sentences that are missing a noun or a verb,
- incorrect spelling, and
- inconsistent or incorrect use of capital letters.

2. Choosing a topic

The easiest way to write a coherent report is to have a topic, then develop a central issue about the topic. It’s a good idea to discuss this with your work supervisor and co-op coordinator. Any material presented in the report should be relevant to the central issue. Ideally, the report should discuss a problem you encountered during the work term: provide suitable background; identify the problem; discuss possible solution(s); if applicable, discuss how the solution(s) was (were) implemented and the result(s). Did the solution work as desired? What changes are recommended, if any.

By having a central issue, the report will follow a logical flow and assist the reader to understand the issue. Where possible include numbers and reference material to support your statements. For example, stating that "adding a colour printer is not feasible due to costs", is not as convincing as including a table of price quotes from potential suppliers.
3. What to include

Include the following items in your report:
Title Page
Abstract
Report Specification
Table of Contents
List of Tables and/or Figures (optional)
Glossary (optional)
Introduction
Main Text or Body
Personal Reflections (optional)
Conclusions
Acknowledgements
References
Appendices

1. TITLE PAGE
The title page announces your report to the reader. As an announcement, it should be descriptive of the report content and understandable to the general reader. Terminology specific to your company and uncommon acronyms should be avoided in the title. Your title page must include:

- A report title no longer than 120 characters (a longer title will be truncated on your student transcripts)
- The company name and location
- Your name, student number, e-mail address, and academic discipline
- The date you submitted the report.
- IMPORTANT: a signature from your employer, approving release of the report to UVic for marking.

Figure 1 illustrates a sample title page.
Figure 1. Sample Title Page
2. ABSTRACT

The abstract should concisely summarize the major points of the main text and the conclusions. The abstract should appear by itself on a separate page and is typically no longer than one page.

3. REPORT SPECIFICATION

This section contains three subsections:

- **Audience** - Describe the intended reader of the report. Normally, your reader should not be envisioned as your co-op coordinator or a university marker, but rather someone who may be moving into your job and would find it useful to read your document, or someone who wants to know what it is like to work in that position, or your supervisor or co-workers.
- **Prerequisites** - Clearly state the knowledge assumed by the reader. For example, are you assuming that the reader can understand any particular programming language or has an understanding of elementary statistics?
- **Purpose** - Describe why you are writing this document. Very briefly state what the report is about, and if, for example, it is an information source for future co-op students, or documentation of the work you accomplished for either your employer or yourself.

4. TABLE OF CONTENTS

A table of contents allows the reader to find the location of a specific section or illustration. It is constructed from the major headings used in the report. Note that the appendices are listed at the bottom of the Table of Contents and that a List of Tables and Figures follows on the subsequent page. Do not list the heading of "Table of Contents" as an item in the table itself. This error is often created by word processing software that creates the table of contents from the header contents of each section. Figure 2 is a sample table of contents.
# Table of Contents

- List of Figures ........................................................................................................... ij
- List of Tables ............................................................................................................... iii
- Summary ....................................................................................................................... iv
- Glossary ....................................................................................................................... v
- Introduction .................................................................................................................. 1
- Problem ......................................................................................................................... 3
- Solution ......................................................................................................................... 4
  - Usability ...................................................................................................................... 7
  - Scalability .................................................................................................................. 10
- Conclusions .................................................................................................................. 11
- Recommendations ....................................................................................................... 12
- References .................................................................................................................... 13

Figure 2. Sample table of contents.
5. LIST OF TABLES AND/OR FIGURES  (optional)

It is useful to provide a list of tables and/or figures (see Figure 3) to help your reader understand your work term report.

**LIST OF TABLES AND FIGURES**

<table>
<thead>
<tr>
<th>FIGURES</th>
<th>TABLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Table 1</td>
</tr>
<tr>
<td>Sample Title Page</td>
<td>Performance Statistics</td>
</tr>
<tr>
<td>Figure 2</td>
<td></td>
</tr>
<tr>
<td>Sample Glossary</td>
<td></td>
</tr>
<tr>
<td>Figure 3</td>
<td></td>
</tr>
<tr>
<td>Sample List of Constants</td>
<td></td>
</tr>
</tbody>
</table>

Figure 3. Sample list of tables and figures.

6. GLOSSARY  (optional)

If your report contains acronyms or terms that may not be familiar to your audience include a glossary explaining these terms.

The glossary defines specialized technical terminology including acronyms, listing them in alphabetical order. The list of symbols defines the mathematical symbols used in the report. Any mathematical symbols or constants included in the report should be defined since most mathematical usage is not standardized. A sample glossary is presented in Figure 4.

<table>
<thead>
<tr>
<th>Glossary Entry</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google Closure</td>
<td>A set of tools that helps developers build web applications using JavaScript.</td>
</tr>
<tr>
<td>GUI</td>
<td>Graphical User Interface. This interface enables users to interact with electronic devices.</td>
</tr>
<tr>
<td>HTML5</td>
<td>Hyper-Text Markup Language. The fifth version of the standard markup language used for creating web pages.</td>
</tr>
<tr>
<td>HTTP</td>
<td>Hypertext Transfer Protocol. The protocol used by the web that defines how messages are formatted and transmitted.</td>
</tr>
</tbody>
</table>

Figure 4. Sample Glossary
7. INTRODUCTION

The introduction identifies the subject of the report and states its purpose, significance or objectives. For example, the subject could be the solution to a particular problem, the development, maintenance or testing of some software, the testing of some hypothesis or the analysis of some procedure.

The relevance of this report to previous or similar work should be discussed. Limitations of the report, such as aspects that will not be described, should be included. The introduction should briefly describe the company or organization where the work was done, and should include a summary of the organizational structure of the remainder of the report.

8. MAIN TEXT OR BODY

The main body of the report should contain a clear and informative description of what you accomplished on your work term. Include the approach, methodology, techniques or software used. Discuss any possible alternatives. Present any results and any data or information collected, possibly using tables, or figures. Any relevant background theory can be given.

- The main body or text should be divided into numbered sections with headings. Emphasize the scientific aspects. What problems did you encounter? What decisions did you make? What were the consequences of these decisions?
- Do not include any non-technical personal experiences (such as social events, issues concerning transportation to and from the work place, or congeniality of co-workers).

9. PERSONAL REFLECTIONS (optional)

If you wish, you can include a personal reflections section that discusses some of the personal (nontechnical) aspects of your work term. For example, you could discuss whether or not the work term met your expectations or your learning objectives, details regarding the work environment, or how the job related to your academic program or career objectives.

10. CONCLUSIONS

Conclusions are the results derived from the evidence provided in the discussion. No new material is presented in the conclusion.

When presenting more than one conclusion, state the main conclusion first followed by the others in the order of decreasing importance, to ensure the maximum impact on the reader.

11. ACKNOWLEDGEMENTS

The student's supervisor should be acknowledged, as well as any others who were of help during the work term or who had input to the work term report.
12. REFERENCES

Any information quoted, paraphrased, or summarized is cited as a reference. Citing references assists the reader by indicating where further information can be found and lends credibility to the analysis within your report. Please note: Wikipedia may be neither an accurate nor authoritative reference source, and should not be cited. "Definition by popular consensus" does not constitute a suitable reference. Instead, use original published source material from reputable established sources.

Any material introduced in the report that is not your original work should be followed by a number, which corresponds, to an item in the List of References. The material cited may be tables or figures from other sources, equations which you did not derive, technical specifications or facts used to support your claims.

Note that each listing includes:
· the name(s) of the author(s).
· the title of the document.
  o For book and journal titles, the title is underlined or italicized.
  o For articles in journals, the title of the article is included in quotations.
· other information.
  o For books, the publisher's name and location, and the year the book was printed.
  o For articles, the name of the journal, the volume number and the date of issue.
  o For reports, the report number, the name and location of the issuer and the date of issue.
· the page number, when applicable.

When citing a reference within the report, the corresponding reference number should be included in square brackets as outlined in the following examples:
· at the end of a sentence just before the period, eg. [2].
· after figure and title labels, eg. Figure 1: Network Design [3].
· after the appendix title if the entire appendix is copied from another source, eg. Appendix A [4].
· at the right hand margin beside a mathematical equation.

In the list of references, list the cited references in the same order as they are referred to in your report. The reference numbers appear in square brackets at the left-hand margin. Figure 5 illustrates the recommended IEEE reference format.

Cited references:

Figure 5. Sample of references cited
13. APPENDICES

Appendices may include sample calculations, computer programs and/or output, and supplementary figures or tables that provide additional supportive information. Any information appearing in an Appendix must be referred to in the main text of the report.

4. Overall format

Page numbering
Except for the title page, all pages are numbered. Sections preceding the introduction (Table of Contents, List of Tables and Figures, Summary, and the Glossary) are numbered using lower case roman numerals, i.e. i, ii, iii, iv, etc. Page numbers may be placed at the top middle, top right hand corner, bottom middle or bottom right hand corner of the page. The location of the page numbers should be the same throughout the report to avoid confusion.

Appendices are numbered separately from the rest of the report usually by appendix designation followed by the page number. e.g. A-1, A-2, B-1, etc. or I-1, I-2, II-1, etc.

Section numbering
Number sections in the report using a numerals-only system. Headings can either left-justified or indented for each layer.

Headings
Every section in the report has a heading. A heading briefly describes the section that follows and are most often followed by a paragraph rather than another heading. Section and sub-section headings are used in the Table of Contents to assist the reader in locating specific material in the report.

Capitalization
When writing work term reports, covering letters and resumes, try to follow the accepted rules of capitalization. The two most relevant rules are:

- Capitalization of government agencies, companies, departments, divisions, and organizations.

  Capitalize official names and titles. e.g.:
  - Air Pollution Control Division
  - Crown Publications
  - Keen Engineering Ltd.
  - Province of British Columbia
Do not capitalize words such as government, federal agency, department, division, administration, group, company, research and development, engineering, and manufacturing when they stand alone. They are only capitalized when they are part of an official name as shown in Table 1.

<table>
<thead>
<tr>
<th>Wrong</th>
<th>Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is a problem for Research and Development, not Engineering.</td>
<td>This is a problem for research and development, not engineering.</td>
</tr>
<tr>
<td>Jane Doe is the head of her Division in the Company.</td>
<td>Jane Doe is the head of her division in the company.</td>
</tr>
<tr>
<td>Jane Doe is the head of the Research and Development Department, not the Engineering Department.</td>
<td>Jane Doe is the head of the Standards Division in ABC Engineering.</td>
</tr>
</tbody>
</table>

*Table 1 Examples of capitalizing words.*

Do not capitalize words to emphasize them.

Avoid capitalizing words to make them stand out - use *italics* or **bolding** instead. Random capitalization at best detracts from the appearance of your work, and at worst creates the impression that you don't understand basic writing rules. Examples are provided in Tables 2 and 3.

<table>
<thead>
<tr>
<th>Wrong</th>
<th>Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising and publicity can enhance the Value Package of your product.</td>
<td>Advertising and publicity can enhance the value package of your product.</td>
</tr>
<tr>
<td>Advertising and publicity can enhance the value of your product.</td>
<td>Advertising and publicity can enhance the <em>value package</em> of your product.</td>
</tr>
</tbody>
</table>

*Table 2 Using *italics* for emphasis.*

<table>
<thead>
<tr>
<th>Wrong</th>
<th>Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burning is a Chemical Reaction in which Oxygen atoms combine with the atoms of the Substance being burned.</td>
<td>Burning is a chemical reaction in which oxygen atoms combine with the atoms of the substance being burned.</td>
</tr>
<tr>
<td>Burning is a chemical reaction in which oxygen atoms combine with the atoms of the substance being burned.</td>
<td>Burning is a <em>chemical reaction</em> in which oxygen atoms combine with the atoms of the substance being burned.</td>
</tr>
</tbody>
</table>

*Table 3 Using **bold font** for emphasis.*
5. Additional resources

If you would like additional help you can consult the following resources:


