# Undergraduate Co-op Work Term Report Guidelines School of Computer Science: COMP 3999

### **Purpose**

Work term reports provide an opportunity for students to practice writing professional, technical documents and to develop a more comprehensive view of Computer Science by relating the work done to the concepts and skills learned during their study terms. This allows students to better articulate their skills when seeking employment upon graduation. For more on this, see Carleton University's Employability Framework.

#### **Evaluation**

The report will be evaluated both on the content and format and style in which it is presented. Work Term Reports are graded by your Co-op Faculty Advisor as either Satisfactory or Unsatisfactory, and grades are permanently recorded on your transcript for the Work Term Course in which you are enrolled. If you fail to submit a Work Term Report, you will automatically receive a grade of Unsatisfactory on your transcript. While an Unsatisfactory grade for a Work Term Report does not affect your Cumulative Grade Point Averages (CGPAs) or academic progress, it will result in your removal from the Co-op Program. In order to graduate with the Co-operative Education Designation on the transcript and diploma, Computer Science students must complete 4 work term courses, each with the grade of Satisfactory.

#### Resubmission

If a report is graded as Unsatisfactory, you may submit a revised version for reevaluation within 10 days of receiving notice from your Co-op Faculty Advisor. The opportunity to re-submit the report will only be given once.

#### **Tone**

The tone of the report must be professional. It is not meant to be a journal or a user manual. You may write using the first person ("I", "me", etc.), but avoid the "diary" style narrative (for example, "I did this, then my boss told me to do that..."). Keep in mind your targeted reader. Your report must be understandable by an undergraduate student in Computer Science who has never worked for your employer. You can assume a basic programming background, but not necessarily experience with the specific technology or techniques used in your project. Make sure to adequately describe your work so that it's understandable by your targeted reader. There are thousands of examples of technical reports and academic papers online. You are expected to look for yourself if you have questions about professional writing.

# **Report Adaptation**

There may be some instances where the employer requires a report as part of the regular duties of the job. To be acceptable as a Work Term Report, the material must be restructured to conform to the structure given below.

**Work Term Report Release Form** (Proprietary and Non-proprietary Reports) It is recommended that students choose topics and material which exclude any information of a proprietary (i.e., confidential) nature. The supervisor must review the content of the report before submission. If the employer authorizes the report to be released, students must submit their Work Term Report by the posted deadline. In cases where the report is deemed proprietary, the report must not be submitted to Carleton University and must instead be evaluated by the employer. The Co-op Office will provide the employer with grading instructions in these rare situations.

#### **Deadlines**

Please consult your Brightspace course for details on submission deadlines.

### Style

- Work Term Reports are double-spaced
- Use a 12 point standard font (e.g., Times New Roman)
- Work Term Reports are submitted as PDFs
- Page numbers should be included on the lower right corner of the page
- Figures should be original (solely authored by you), and each should have a caption

#### References

All references should use the IEEE style guide. A list of URLs is not an acceptable references section. Do not quote existing material anywhere in your report. You can describe existing concepts, but every part of your report must be original and written in your own words. Copying and pasting from any source is an instructional offence.

# **Getting Started: Full Report or Follow-up Report?**

**NEW AS OF FALL, 2022:** All students must submit a Full Report at the end of their first four-month Co-op work term. Full Reports are expected for every Co-op work term that follows UNLESS the student's position is longer than 4 months (i.e., is 8, 12, or 16 consecutive months in length) and all of the following criteria are met:

- the student has the identical job title;
- the student is with the same employer;
- the student is at the same location

In such cases, students in all degree programs may submit a "Follow-up Report." Follow-up Report instructions can be found after the Full Report instructions.

**Example 1:** Amy has a 4-month contract at Health Canada in summer, 2022. She then works at IBM for 12 months starting in January, 2023 and ending in December, 2023.

Work Term 1: Health Canada (Summer 2022) - FULL REPORT

Work Term 2: IBM (Winter 2023) - FULL REPORT

Work Term 3: IBM (Summer 2023) - FOLLOW-UP REPORT

Work Term 4: IBM (Fall 2023) - FOLLOW-UP REPORT

**Example 2:** John has a 16-month contract with Nokia starting in September, 2022 and ending in December, 2023.

Work Term 1: Nokia (Fall 2022) - FULL REPORT

Work Term 2: Nokia (Winter 2023) – FOLLOW-UP REPORT Work Term 3: Nokia (Summer 2023) – FOLLOW-UP REPORT Work Term 4: Nokia (Fall 2023) – FOLLOW-UP REPORT

## **FULL WORK TERM REPORT INSTRUCTIONS**

# **Full Report Structure**

Full Reports consist of a cover page and the report itself, which must follow the structure set out below. The "body" of your report must be between **8 and 10 pages in length**. This page count only includes section 1 (Introduction) to section 4 (Summary) as described below, and it does not include unnecessarily large figures.

The report must be structured as follows and contain all the sections\*:

- ➤ Cover page
- Executive summary
- Acknowledgements (optional)
- > Table of contents
- 1. Introduction
- 1.1 Organizational context
- 2. Work experience
- 2.1 Nature of work
- 2.2 Experience
- 2.3 Challenges and solutions
- 3. Reflections on work experience
- 3.1 Contributions
- 3.2 Relation to academic studies
- 3.3 Career development
- 4. Summary
- 5. References
- 6. List of abbreviations (optional)
- 7. Glossary (optional)
- 8. Appendix (optional)

\*Note: As of Fall, 2022, a Cover Letter is no longer required.

# **Description of sections**

**Cover page:** The first page of your report will be a Cover page. It should list the following information:

- > Employer
- > Name of manager or supervisor and department
- > Co-op course code (i.e., COMP 3999)
- > The submission date
- ➤ Work Term number (i.e., is this your first, second, third, or fourth work term since you started the Co-op Program?)\*
- ➤ Title of report
- > Name and student number of author
- > Carleton email address of author

**Executive summary:** A brief section at the beginning that summarizes the document. It is not background and not an introduction. People who read only the executive summary should get the essence of the document without fine details. A general rule of thumb is that executive summaries should be about 5% as long as the primary document. At very most, they can run up to 10% in some cases. But because the goal is to convince without losing attention, the shorter your executive summary can be, the better.

**Acknowledgements:** This section recognizes the assistance that the author received during his or her project. It would be appropriate to thank your supervisor and any colleagues who helped or mentored you during your work term.

**Introduction:** An introduction always introduces the document and provides a short description of every section.

**Organizational context:** This section helps to situate your specific project within the employer's overall mandate or mission statement. You can mention the employer's geographical location, but this section must focus on what they do and how your project's contributions fit into the overall goals of the company or agency.

# Work Experience Nature of work

This is an overall description of the kind of work that you have done (or are doing) and perhaps a little bit about what is involved in that kind of work...but not specific details about what work you did. Perhaps explain how you fit into the "team" and whether it involved weekly/daily meetings with a supervisor, team discussions, coding, testing, client interaction, etc.

<sup>\*</sup>A Work Term is approximately 4 months in length.

### **Experience**

This section describes the overall project that you worked on, the specific work that you did as part of that project, the types of technology and/or techniques you had to learn in order to do the work, your regular duties, and the results that you achieved.

## **Challenges and Solutions**

This sub-section is particularly important, because the most memorable learning happens in overcoming adversity. Describing the problems and challenges that you faced and how you dealt with them will provide important information about what you learned.

# **Reflections on work experience**

This section summarizes the work you did and puts it in the context of how you contributed to the employer's overall goals and mission. You must also describe how your work relates to what you learned in your university courses, not just in terms of the course material but also in terms of preparation for working in a professional setting. You should also discuss how your work experience ties in with your long-range career goals.

#### **Contributions**

Summarize your contributions. To what extent did your work contribute to the organization's mandate?

#### **Relation to academic studies**

Relate the co-op work experience to your previous academic studies. Describe the learning you gained from the work term which could not be obtained in the classroom. What additional course work would have better prepared you for the work experience?

## **Career development**

Indicate the main lessons that you learned during your co-op experience. Discuss how the co-op experience has influenced your future study and career objectives. Describe your experience, what you learned and/or accomplished. Which of the ten Career Competencies did you build on during your work term?

## Summary

Talk about possible future use of your work and recommend possible future directions in which your work might be taken by your successor. Finally, include personal reflections.

**References:** This section is mandatory. Your report must use references throughout, and this section is your bibliography. In a technical report, you are reporting on existing facts. Most of these facts will not have been researched and

first reported by you, so you must provide sources for where you obtained each fact. For example, the employer's organizational context information will come from a source inside the organization, and you will need to reference that source. The description of the work you did will usually include descriptions of technologies and/or techniques that already exist, so you need to reference where these are described.

### **FOLLOW-UP WORK TERM REPORT INSTRUCTIONS**

## **Follow-up Report Structure**

Follow-up Reports consist of a cover page and the report itself, which must follow the structure set out below. The "body" of your report must be between **2 and 3 double-spaced pages in length**. You MUST include your original Full Report as well as any previous Follow-up Reports at the end.

The report must be structured as follows and contain all the sections\*:

- Cover page (same information as Full Report see above).
- 1. Reflection on work experience
- 1.1 Contributions
- 1.2 Relation to academic studies
- 1.3 Career development
  - \*Note: As of Fall, 2022, a Cover Letter is no longer required.

# **Description of sections**

Since you have already submitted your Full Report and have reflected on your early Co-op experiences, you are now asked to provide an update and expand your answers to the questions posed below. A key part of the Co-op experience is that you think about the bigger picture; how has this work experience enhanced your skills and what do you think your main contributions were to the organization? How does the work relate to your academic studies? How has it influenced your overall career options?

#### **Contributions**

Summarize your contributions since your last Work Term Report. To what extent did your work further contribute to the organization's mandate?

#### **Relation to academic studies**

Since writing your last Work Term Report, relate your co-op work experience to your previous academic studies, and/or to any courses you took in the last 4 months. Describe the learning you gained from your most recent work term which could not be obtained in the classroom. What additional course work would have better prepared you for the work experience?

#### **Career development**

Elaborate on the main lessons that you learned during your co-op experience. Discuss how the co-op experience has influenced your future study and career

objectives. Describe your experience, what you learned and/or accomplished. Which of the ten <u>Career Competencies</u> did you build on during your work term?

**Last Updated: July 2022 Co-op Office**