Master of Design

School of Industrial Design Carleton University

Milestone 3 - Thesis Proposal

Use this document as a template, following the provided style. Before uploading your final version delete the instructions provided in blue. (delete this sentence too)

Thesis Title:

Student's Full Name, School of Industrial Design, Carleton University SID supervisor's name, School of Industrial Design, Carleton University Co-supervisor's name, affiliation

1. Introduction (300-400 words)

Keywords:

List at least five (5) keywords of your research.

For example: Human Factors; Design Thinking; Interdisciplinary Collaboration; Sustainability;

Area of Interest & Research Question

When developing your thesis research, you: 1) choose the topic in consultation with your Supervisor and Co-supervisor, 2) develop a research question/thesis statement based on a review of literature and other relevant sources, 3) identify the research aim and objectives, 4) define a research methodology and select the methods to study the question of interest, and 5) answer or address the question you have developed through a systemic approach supported by evidence (e.g., background information, the data you've collected, a synthesis of the data, comparing your findings to existing sources). This approach will allow you to critically support the findings and claims you arrive at in your investigation.

The outcome of the research process is the thesis. In the thesis manuscript, you should demonstrate to a reader that you understand the area of research in depth, that you have mastered methods for studying the topic and that you are advancing the domain of knowledge based on your original research.

This document will help you outline in detail the focus of your thesis, its relevance and how you will achieve your objectives.

In this first section, summarize the scope of your research interest, including the main issue/gap that you are addressing, the rationale to support the investigation (why is

this an important area to study?), your research question, the aim and specific objectives, interdisciplinary aspects of the proposed area of study, and the possible contributions of this work to the field or society.

About your research question, you should clearly and precisely state the research question that you intend to address through your study. This should be a simple sentence, or a few sentences at most, outlining the key focus of your research. Have just one single question and related aim. The question and aim should emerge from the gap(s) or shortcoming(s) identified in your literature review and, if appropriate to your study, environmental scan.

Some questions to ask yourself while you write: Why is my area of research worth pursuing? What would I like to see changed or improved, and why? What contribution can I make to this initiative? Is my interest personal (is there a personal motivation, investment, or narrative for working in this area)? Does the area that I would like to investigate have some urgent practical (e.g., applied need within the field) or academic or theoretical importance (e.g., new methods)?

2. Literature Review (3000-4000 words)

In this section, you need to provide a critical written account of the current state of your research topic in the literature and describe the relationship of each source to the others that you have selected through logical transitions between the topics. Outline the current scholarly work in the area, ideally through a keyword search. Explain how the existing literature discusses the issue you will focus on in your research. You should refer to specific seminal sources in the area and critically reflect on them. It may help identify and distinguish how different writers (or schools of thought) take different approaches to discuss the topic or issue(s).

Having explained the state of the existing scholarship, you need to explain the gaps or shortcomings in that existing scholarship. What has not yet been done, or what has not been done adequately? Or is it that something has not been approached in a particular way yet? These questions should be supported by referring to the existing literature.

How much literature do you need to review? Your literature review does not need to cover every work in the field – this is impossible. It needs to refer to enough literature

to make it clear that you are familiar with the major works in the topic area, specifically the works across disciplines that are relevant and scoped to the topic and issue(s) you are investigating. Summarize and critically appraise the key articles or books you regard as particularly pertinent to your proposed study. Explain how they relate to your research. Do they contain an argument or position you intend to question or defend or an idea that could help you to answer your question? Please fully reference at least 10~15 key sources.

Do not include irrelevant literature even though you have reviewed it in earlier stages of your work.

3. Methodology (1000 words)

Outline your approach for how you intend to answer your research question. You can start by asking yourself, 'What am I going to have to do to find an answer to my question and achieve my aim? What will I have to do to achieve each of my objectives? What authors have discussed these methods (e.g., benefits, limitations)? What is the conceptual framework that underlies the choice of my methods? What have I learned to help me understand the pros and cons of using one method over another (reference authors that discuss methods)? What methods would be appropriate for the population and/or context I would like to study? What specific steps will I need to take to investigate my topic? And in what order?' Then – in a clear, logically structured way – describe your methodological approach with a diagram outlining the steps you will take.

Data Gathering

Describe/explain who you intend to collect data from (any details on participants such as the size of the sample, demographics); where you plan to collect data (place, archives); when you intend to collect data (how many times, over what period of time, time of day, etc.); data gathering methods; and disclose assumptions you may have about the participants or the context. State what you expect to find and the methods you will use to analyze the data.

Ethics

Provide the key ethical issues associated with your research and provide information on specific permissions required to conduct your research. Some questions to ask yourself: Have I consulted with participant groups or subject matter experts working with participant groups to design my ethics protocol? What ethical issues does my

research raise? Who am I including and excluding, and why? How will I design and obtain the consent of participants? Does the project involve physical, psychological, or social risks? How will I mitigate risks?

All students participating in Milestone 3 must complete TCPS2 training and receive their certificate from TCPS 2: CORE (tcps2core.ca) before the submission of their Milestone 3. Students must also review the information (including forms and templates) on Carleton University's CUREB-B website before writing this Milestone, and we suggest you try filling this form out before you present your Milestone to help structure your study: https://carleton.ca/researchethics/who-needs-to-apply-forethics/

4. Planning & Timescales

Present a tentative timeline for your research activity and thesis completion. You can use bullet points or include a separate Gantt-type chart. We suggest you refer to the Excel template designed by our graduate administrator, which can help you calculate the time you need to develop the manuscript before your defence. Ideally, work backwards from the time you would like to defend, anticipating multiple drafts of your thesis. We recommend that students who need assistance with writing contact the Centre for Student Academic Support (https://carleton.ca/csas/support/) early on in their Milestone development and manuscript writing. We also recommend hiring an editor to assist with manuscript writing if required.

5. References

Referencing should follow the most recent APA Manual of Style located on Carleton's website at https://library.carleton.ca/help/apa-citation-style Citation managers (e.g., Mendeley, Zotero) are strongly recommended to develop your references in your Milestone and thesis manuscript.

6. Guidelines for Additional Information Included in Milestone 3 *Tables*

Tables should be formatted as Table #: left justified text for the first column and left or centred columns thereafter as appropriate.

Table 1. Table layout. Captions for Tables are placed above.

Table Rows	Cell one	Cell two	Cell three
Second Row	1	2	3

Third Row	2	3	6

Figures

Images require a numbered caption (e.g., Figure 1). If the image is not yours, you must cite its source following the caption according to APA style. Please make sure the images are large enough to see clearly with a good resolution (200dpi) and crop the image appropriately to suit the document layout and graphic design.



Figure 1. Captions are placed under the pictures.

7. Paper Format and Submission

Use this document as template and upload *.doc version of your document, any figures or tables. Name the file [LastName-FirstName-StudentID.doc]. This document must be submitted to the MDes Milestones Brightspace submission link by the 30th of September. After the submission, an oral presentation is given to the public, including the co-supervisors, faculty members, and other students. This event will take place in the first week of October in the 2nd year and be 30-40 minutes per student (10 min. presentation, followed by 20-30 min. of discussion). All students are required to participate in this Milestone before advancing to the thesis manuscript.