

Master of Design

School of Industrial Design
Carleton University

Milestone 3 - Thesis Proposal

Provide:

Thesis Title
Student's Full Name, School of Industrial Design, Carleton University
SID advisor's name, School of Industrial Design, Carleton University
Co-advisors name, affiliation

1. Introduction (150 words)

Area of Interest & Research Question

Keywords

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

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

When developing a thesis, you choose the topic in consultation with your Co-Supervisor(s), develop a research question/thesis statement based in a review of literature and other relevant sources, develop methods to study the question of interest, and you answer or address the question you have developed through a systemic approach supported by evidence (i.e., background information, the data you've collected, a synthesis of the data, comparing your findings to existing sources). This approach serves to critically support the findings and claims you arrive at in your investigation.

The thesis 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. Try to have just one single question or one aim. The question or aim should be quite obviously linked to the gap(s) or shortcoming(s) you have identified in your literature review, and if appropriate to your study, environmental scan.

Summarize the scope of your research interest including the major objective(s), the rationale to support the investigation (why is this an important area to study?), interdisciplinary aspects of the proposed area of study, the research question (and possible sub-questions), and the possible contributions of this work to the field or society. 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.

Some questions to ask yourself while you write: Why is your area of research worth pursuing? What would you like to see changed or improved and why? What contribution can you make to this initiative? Is your interest personal (is there a personal motivation, investment, or narrative for working in this area)? Does the area that you 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 (500~1000 words)

Provide a critical written account of the current state of your research topic in the literature (and environmental scan if appropriate) 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(s) you will be focusing 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 in discussing the topic or issue(s). Having explained the state of the existing scholarship, you need to then explain what the gaps or shortcomings are 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 single work in the field – this is not possible. 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. Do not include literature that is irrelevant even though you have reviewed it in earlier stages of your work.

Summarize and critically appraise the key articles or books you regard as particularly relevant 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 up to **10~15 key sources**.

3. Methods

Outline your approach and techniques for how you intend to answer your research question(s). You can start by asking yourself, 'What am I going to have to do to find an answer to my question or achieve my aim? What authors have talked about these methods (e.g., benefits, limitations)? What is the conceptual framework that underlies the choice of my methods? What have I learned that would 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 are the ethical considerations involved? What are the potential risks, limitations or challenges involved? What specific steps will I need to take to investigate my topic? And in what order?' Then – in a clear, logically structured way – describe the methods plan 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 size of the sample, demographics); where you intend 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. In forming a hypothesis (if your study is hypothesis-driven), state what you expect to find and using what statistical methods you will use to analyse the data. For exploratory, qualitative methods describe the methods and processes you will use to analyze the data (e.g., design synthesis techniques, manual or computer assisted coding and analysis, etc.).

Ethics

Provide the key ethical issues associated with your research and provide specific permissions required to conduct your research. Some questions to ask yourself: Have you consulted with participants groups or subject matter experts working with participant groups to design your ethics protocol? What ethical issues does your research raise? Who are you including and excluding and why? How will you design and obtain the consent of participants? Does the project involve physical, psychological, or social risks? How will you mitigate risks? All students participating in Milestone 3 must complete TCPS2 training and receive their certificate from TCPS 2: CORE (tcps2core.ca). 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-for-ethics/>

4. Planning & Timescales

Provide key planning issues and 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 ideally like to defend, anticipating multiple drafts of your thesis. We recommend students that need assistance with writing contact the FGPA early on in their Milestone development and manuscript writing at Carleton's Professional Development Writing Support website: <https://carleton.ca/gradpd/writing-support/> 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 centered 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 cropped the image appropriately to suit the document layout and graphic design.



Figure 1. Captions are placed under the pictures.

7. Paper Format and Submission

Set up your document in Microsoft Word, double-spaced, 12-point font (standard fonts) including any figures or tables naming the file [LastName-FirstName-StudentID.doc]. This document must be submitted to the MDes Milestones Brightspace submission link and e-mailed to your co-supervisors by end of September (September 30th, 2021). 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 minutes per student (15 min. presentation, followed by 10-15 min. of discussion). All students are required to participate in this Milestone before advancing to the thesis manuscript.