BME Minor Thesis Option

BME has made a thesis option available to BME Minor students who are interested in more of a research-oriented experience. This thesis will provide students the opportunity of conducting an independent research project with an academic faculty at BME. Note that the BME Minor thesis option is being counted towards the BME Minor in lieu of BME499Y.

The BME Minor Thesis is comprised of completing a thesis proposal, conducting research, writing a report (which is the thesis), and writing and submitting a one-page summary of their report to the Cross Disciplinary (CDP) Office. Students should consult with their supervisor before writing the thesis proposal.

Process

1. Find a supervisor
2. Fill out Thesis Design Project Approval Form include your one-page project proposal
3. Program Director approves thesis topic; CDP Office emails student with approval confirmation
4. Conduct Research
5. Submit Research Summary to CDP Office via email
6. CDP Office approves summary and credits student

Additional notes

1. Please see Core-faculty (https://bme.utoronto.ca/faculty-research/core-faculty/) & Cross-Appointed Members (https://bme.utoronto.ca/faculty-research/cross-appointed/) pages. You will be able to search through the profiles of your potential supervisor and find their contact information.

2. 2021-2022 Form will be available in August here: https://undergrad.engineering.utoronto.ca/academics-registration/minors-certificates/
   - Please submit to the Cross-Disciplinary Programs Office (44 St. George Street; 1st floor of Bahen House) by the deadline.
   - Students will need to include a one-page description of your research. This must also justify how the research being undertaken relates to the BME Minor.
   - Follow the deadlines will be noted on this form

5. Please email the research summary to engineering.minors@utoronto.ca by the deadline noted in the Minor thesis approval form (available in the link above).
BME Thesis Format

Thesis Proposal

Your thesis proposal should include the following:

- **Abstract**: Summary of your research proposal (approx. 250 word)
- **Introduction**: Provide background on your research topic, what research question you are attempting to answer, and significance of the research outcome. This section should have a set of literature that supports the claims made.
- **Method and materials**: Provide a description on how experiments will be carried out, what kind of experiments and reagents will be used
- **Significance**: Define why the findings will be important and how it can drive the field forward.

Your thesis proposal length can be discussed between you and your supervisor. The UG Office suggests the proposal to be 2-3 pages minimum.

*Literature Review*

A literature review involves collecting, evaluating and analyzing publications which relate to your research question. A literature review doesn’t just summarize sources. A good literature review will summarize, analyze, and synthesize the current literature to evaluate and highlight the current understanding of the topic at hand and identify gaps in the knowledge.

Students should include a minimum of 5 peer reviewed articles in their literature review.


*Report*

A large part of your report is similar to the information provided in the proposal. However it is expected that you go into more detail in each of the sections.

- Abstract
- Introduction
- Methods & Materials
- Results
- Discussion
- Conclusions/future work
- Citations

Your report length can be discussed between you and your supervisor. The UG Office suggests the report be 8-10 pages.

*Summary*

Your summary should outline the sections of your report and condense it down to 1 page.