

Department of Chemical Engineering
Master's Thesis Project Proposal Data Sheet

Thesis Title	
Student Name	
Student Email	
Student Phone	
Proposed Thesis Advisor	
Start Date	
Requested Budget	

Student shall prepare a research thesis proposal (1500 words maximum).

See attached sheet for instructions on preparing thesis proposal.

Attach proposal to this data sheet.

Description of project and expected results – 1500 word abstract maximum (fill in below)

Budget justification – 150 words maximum. Be specific on how funds will be spent. (fill in below)

Follow on funding opportunities (complete below through consultation with advisor)

REQUIREMENTS: THESIS PROPOSAL FOR MASTER'S FUNDING

Proposal Description:

The thesis proposal serves two primary purposes. First, it is the means by which the funding committee evaluates the merit of the research. The objective of the Master's funding program is to support research experiences for our students wanting to pursue Plan A degrees, while seeding new research directions within the laboratories of departmental faculty. Our department emphasizes original, innovative, high-impact research on important applied and scientific problems. The proposal should present your proposed approach to a problem or open question – demonstrating your technical acumen and convincing the committee of the likelihood of its success. Second, the proposal is used to judge your writing abilities. A Plan A Master's degree requires that you conduct original research and then prepare and defend a dissertation to be read and evaluated by a thesis committee. From the [Dissertation Manual](#), "At the University of Rochester, the doctoral [also master's] thesis is expected to be an original work by the student, formulated in a scholarly manner and with content of a quality consistent

with respected publications in your field.” This statement is not intended to dissuade you from pursuing a Plan A degree but rather emphasize the importance of strong writing skills required to produce a high quality, defensible thesis.

The thesis proposal should describe the research topic, impress the scientific interest or practical utility of the topic, review the current status in the field and previous results from your advisor’s laboratory, and describe your proposed approach to an important question or problem.

Proposal Instructions:

The proposal must be prepared solely by you. You are encouraged to seek assistance from friends and the UR Writing Center (writing.rochester.edu), but the text and ideas must be developed by you independently. Do not copy text from other sources, including materials that your perspective advisor might provide you.

The written reports should be no more than 1600 words in length (the cover page, figure captions, references, and budget justification are excluded from the word count). The report should contain enough information that an outside reviewer with a technical background but who is not an expert in the field can fully understand and critique it. The formatting and the technical content of the proposal is left to your discretion, but it should be a highly polished document written at a technical level. Feel free to discuss the content of the proposal with your advisor, but some examples and suggestions are provided below:

- *Introduction and Background:* Describe the research topic. Why is it important? What is its technological relevance, or what fundamental property/phenomenon do you expect to uncover?
- *Previous work:* What has been achieved? What are recent breakthroughs? What contributions has your advisor’s lab made, and how is your research distinct?
- *Proposed work:* Thoroughly describe your idea – specifically, what experiments do you intend to do. Justify your proposed approach.
- *Conclusion:* Briefly summarize the main points.
- *References: (required)*
 - Must be cited in the body of the text
 - Should come from high quality, reliable sources - often peer-reviewed publications and/or books

- A consistent formatting of the references and in-text citations should follow the general practice of your discipline, but the ACS Style Guide is a good starting point: <http://pubs.acs.org/isbn/9780841239999>
Example: Stark, T.; Potts, P. The Body Weight Distribution of Mutants at Xavier's School for Gifted Youngsters. *Journal of Obscure Data* **2014**, 20, 200-215.
- **Figures (required)**
 - Should be embedded throughout main body of the text (not listed at the end)
 - At least some should be original figures that you have prepared (not reproduced from references)
 - If you do reproduce a figure, it should be cited appropriately.
- **Appendix, Budget Justification (limited to 1 page)**
 - Maximum allowable budget is \$5000
 - With input from your PI, describe and justify the requested budget.
 - *A table categorizing the various expenses is an effective way to present the budget, but concise justification of each line is required.*
 - Examples of allowed costs: small equipment, chemicals, supplies & consumables, user facility instrument fees, conference registration fees, specialized software, etc.
 - Unallowed costs: salaries, equipment maintenance & service contracts, new computers & office equipment for your advisor's group

Document formatting (do not deviate)

- 8-1/2 x 11" paper
- 1" margins on all sides
- Font: 11 pt., Times New Roman or Arial. Other fonts are not allowed.

Department of Chemical Engineering Master's Thesis Project Proposal Policy

When a student is admitted to the program, the student who desires to complete the Plan A (thesis) MS degree will need to identify a project and advisor for their research.

The Master's Thesis Project Proposal Data Sheet must be completed by the student and submitted to the Graduate Program Administrator.

The administrator will collect all the information and provide it to the Graduate Studies Committee for their review and approval.

Master's

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Advisor Acknowledgement

_____ and I have discussed research opportunities for the Plan A Master's thesis. The proposed thesis title is _____.

I have reviewed the scope of the proposed project and concur that the requested budget is necessary and reasonable for this project. If granted the research budget, I am willing to serve as the student's Master's thesis advisor.

Professor Name (print) _____

Signature _____

Date _____