A Master’s thesis proposal should

- Explain the basic idea of the thesis topic (e.g., the problem to be solved and the approach to solving it)
- Argue why that topic is interesting (e.g., what contributions to the field would be made in carrying out the proposed work)
- State what kind of results are expected
- Argue that these results are obtainable within a reasonable amount of time
- Demonstrate the student's personal qualifications for doing the proposed work

The main purpose of the thesis proposal is to convey your ideas to the thesis advisor that the chosen thesis topic is significant and that your approach has a reasonable chance of success. A thesis proposal provides the thesis advisor and the student to further refine the ideas (as necessary) at the start of the work rather than try to correct or compensate for at the end. The objective is to minimize the chance that a thesis submission will be turned down when almost completed. I expect students to present their thesis proposals as early as possible, but certainly not after beginning to write the thesis. A thesis proposal should be short, about three to four pages.

There are several types of theses. Some extend an existing line of research; add to an existing framework that is used to evaluate a theory or data set; lend credence to a particular perspective involving a long-standing question; open up a new area of research; add to the experimental validation of a theory; provides empirical data in support of a theory or applies a theory in a new way; postulates a superior algorithm; develops a new tool, uses an existing tool in a new way, or uses an existing tool in conjunction with data to investigate a new issue, or produce a negative result to change how others think about a particular method or approach.

Describe how you will measure your progress. Determine what the measures of success will be. Discuss how your thesis work will change how people think.

The focus of the thesis is to identify a problem, show the relevance of solving the problem, pose a credible solution to the problem within a context that you describe and discuss, and summarize what the solution means within that context.

The following table summarizes the type of information you are providing and the form of the verb (with examples) to help clarify the stylistic formula used in writing a thesis.
<table>
<thead>
<tr>
<th>type of information</th>
<th>verb form (tense or commonly occurring verbs)</th>
<th>examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>giving background details</td>
<td>present tense</td>
<td>The industry <em>is</em> already well known for its efforts to improve the eco-efficiency of its processes</td>
</tr>
<tr>
<td>describing the research activity</td>
<td>simple past tense, present perfect tense</td>
<td>The study <em>focused</em> on 2 main areas</td>
</tr>
<tr>
<td>describing the methods</td>
<td>simple past tense (active or passive)</td>
<td>The framework for life cycle analysis <em>has been developed</em></td>
</tr>
<tr>
<td>reporting results</td>
<td>simple past tense</td>
<td><em>We carried out</em> a series of field tests</td>
</tr>
</tbody>
</table>
| stating conclusions | present tense verbs indicating tentativeness:  
  - is possible  
  - is likely  
  - appears  
  - seems  
  - might | Results *indicated* that the problem is even more serious than previously predicted |
| stating conclusions | modal auxiliary verbs:  
  - can  
  - may  
  - could  
  - might | This indicates *that there are, in fact*, several factors contributing to the decrease |
| stating conclusions | modal auxiliary verbs:  
  - can  
  - may  
  - could  
  - might | *It appears* that the incidence of human error cannot be eliminated at any stage |
| stating conclusions | modal auxiliary verbs:  
  - can  
  - may  
  - could  
  - might | *There might be a need for revising* the list of criteria within the next 5-10 years |