

Honors College Senior Project Group/Senior Project Proposal Engineering Majors

This proposal format is for engineering students who choose the Senior Design Group/Honors Senior Project option <u>ONLY</u>. Engineering students who choose any other option should refer to the Senior Project proposal outline for non-engineering students.

The Senior Project proposal should be specific, clear and succinct: what the focus of the research will be, what research has already been conducted on the subject, why it is worthy of investigation, and what methodology will be used.

The proposal should be two to three pages (single-spaced), plus a preliminary bibliography.

Your proposal should be written in full sentences (not bullet-points) and broken into sections—*do not write this in an essay format*. These section titles generally include, but are *not limited to*:

Statement of Problem or Research Question (a few sentences)

Research begins with the identification of a disciplinary problem needing a solution, an unanswered question, or a claim needing proof. Because the Engineering Senior Design project is a group effort, a brief description of the overall project is necessary. For your Honors Senior Project, you must *clarify precisely what your individual contribution to the group project will be*; demonstrating how you will engage with the project on a deeper level than your non-Honors classmates. Just as you have done for many of your Honors contract courses, ask yourself, "What makes my contribution to the project worthy of Honors credit?" Consider the following examples:

- a more comprehensive search and analysis of the specialist literature;
- a consideration of the historical context of the problem your team seeks to solve;
- an essay on the engineering/technical ramifications of your group project;
- an excursus on other, broader applications that your project might inspire in the real world;

Summary of Peer-Reviewed Scholarship Relevant to your Research (a few paragraphs)

Briefly summarize what is already known about the problem you will be addressing. You may use past examples, plans, engineering diagrams or other appropriate scholarship. Many group projects are a prototype of a future model. If this is the case, remember that the prototype is still based on existing theories. Google Scholar is a good resource for finding relevant peer-reviewed research.

Significance

Clarify how your *individual contribution* to the group project will add value to the overall topic and the body of knowledge in your specific field or profession.

Methodology (a few paragraphs)

Your senior design instructor will help you determine the best methodology for your project. This section should describe the manner in which the disciplinary problem, question, or claim to be investigated will be evaluated and why the method is appropriate for your research.

Preliminary Bibliography

Attach a preliminary list of relevant scholarly sources as noted above in the *Summary of Peer-Reviewed Scholarship* section. Note: Your mentor will determine which citation style is most appropriate for your discipline; you are responsible for ensuring that all in-text and references section citations are correct. Owl Purdue is one resource that contains information on the most common reference styles (<u>https://owl.english.purdue.edu/owl/section/2/</u>).

***List the other students in your group and include what their individual responsibilities within the larger group project are.