Department of Mechanical and Aerospace Engineering

[Thesis Proposal](#Text1): Agreement & Approval

Astronautical Engineering Degrees

[Academic Honor Code](http://intranet.nps.edu/Code00/Instructions/pdf_files/NAVPGSCOLINST%205370.1D.pdf)

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Section1**:**   
  
[Thesis Proposal Agreement](#_top" \o "Thesis Proposal Agreement): This agreement is between the primary thesis advisor and AE student. The Advisor has the primary responsibility for guiding the research content and style. The Advisor will guide and review the research for validity and quality of analysis, methods, procedures, conclusions, logical flow, development of material and rationale, and for the appropriateness of recommendations.

**Advisor Duties**: The primary advisor will 1) Assist in determining what is feasible for the student to thoroughly research in the available time; 2) Help to decide on a reasonable choice of a co-advisor. This choice is frequently dictated by the nature of the thesis topic; 3) Jointly discuss and document a schedule of milestones to assess progress; 4) Suggest initial references to read and people to contact; 5) Meet with the student regularly to monitor progress and provide consultation and direction. Joint meetings should occur at least weekly during the final quarter; 6) Review and critique the thesis outline; 7) Review and critique the work, offer suggestions for necessary revisions, and check for accuracy and completeness. The Advisor will not normally undertake responsibility for major editing or rewriting--this is the responsibility of the student; 8) The advisor is responsible for ensuring that the student meets course requirements within the discipline of Astronautical Engineering to support the thesis topic.

**Student Responsibilities**: Student is responsible for the completeness, accuracy, and originality of the thesis. Student is responsible for a thorough literature search to establish the state of existing knowledge of the thesis topic. Student is responsible for timely progress and completion of the thesis. Student is responsible for careful editing and formatting of the thesis document.

**Specialization Track within Astronautical Engineering:** The student must also demonstrate competence at the advanced level in one of the disciplines of Astronautical Engineering. This may be accomplished by completing at least eight quarter-hours of the 4000 level credits by courses in the MAE Department in a particular area and a thesis in the same discipline area. The typical specialization track is in Structures, Dynamics, and Control, and requires two (2) non-design AE48XX courses. [**http://intranet.nps.edu/Academics/AcademicCatalog.htm**](http://intranet.nps.edu/Academics/AcademicCatalog.htm)

# [Section 2: Thesis Proposal Instructions](#_top" \o "Proposal Instructions) Institutional Review Board (IRB)

Research with human subjects may not take place without prior approval by the NPS IRB and President as required by federal, DoD, and Navy rules and regulations. Attach IRB Checklist with the thesis proposal if questions 1, 2, and 3, and at least one part of question 4 are answered yes. For forms and information, go to  
 <http://www.nps.edu/research/IRB.htm>

# Filling out the Thesis Proposal

1. Answer items A through K on cover page of the thesis proposal approval form. Ensure all fields are populated. Item(s) that do not apply type in N/A.
2. On a separate sheet of paper answer items “L through Q” items listed below

L. Research Questions/Objectives

Identify the primary research question and subsidiary research questions. The primary research question should be broad enough that it covers the entire spectrum of the research activity. Subsidiary research questions subdivide the primary research question into manageable research segments. This should be a very explicit statement of the questions the research will seek to answer. While the questions may be redefined later as the research progresses, initial objective should be made specific.

M. Discussion of Topic

Describe the main thrust of the study, what areas will be specifically investigated and what areas will be excluded; put boundaries around the study; identify what the study will be (e.g., a computer simulation, an experiment, an electronic design and implementation, a system study); discuss any limitations of the study.

N. Tentative Chapter Outline

Identify tentative chapter headings and provide brief discussion of chapter content (Note: This can change).

O. Benefit of Study

State the contribution expected from your research efforts, what individuals/organizations will use the results of your thesis and what problems/issues you expect to be addressed/resolved.

P. Literature Review and Preliminary Bibliography

Provide a listing of representative materials consulted during preliminary literature search. This should include references to the problem or issue to be studied, prior thesis work, literature references, or other sources of information. The final bibliography will probably be much more extensive. Use a standard and complete citation format.

Q. Milestones

This is a tentative list of target dates for completion of the successive stages of the project. You will not be held strictly to this schedule; it is a means of conveying to others when you expect to complete major milestones of the study. Give the dates during which the following activities will be accomplished.

* 1. Literature Review
  2. Construct Research Approach
  3. Conduct Research/Travel
  4. Analyze Data
  5. Draft Thesis
  6. Final Thesis Submission Signature

1. Student sign and date.
2. Route proposal for signatures in the order they appear on the form. (Do not include instructions)
3. Enter thesis information in Python upon approval.
4. Original Thesis Proposal is to be filed with the program office.

**[Section 3: Thesis Processing](#_top" \o "Thesis Processing):** The Thesis Processing Office collects and reviews theses, dissertations, MBA Professional Reports, capstone projects, and/or Joint Applied Projects. For processing instructions visit <http://www.nps.edu/Research/research1.html>   
 **Thesis Brief:** Learn how to get your certificate of completion (the Green Card!). They will cover the submission process, template, and forms. The thesis brief lasts approximately 50 minutes. The brief is **mandatory** for students graduating in the current quarter and all students are welcome to attend.

All briefs are held in the ME Auditorium.

**Thesis Extensions:**

* A Student who detaches from NPS before completing his/her thesis for the master's degree will be granted an extension of one year upon filling out the thesis extension request form.
* A student may apply for up to two additional one-year thesis extensions. Requests for these extensions should include a progress report, an endorsement from the thesis advisor and any other relevant information. Students are reminded that requests for a third thesis extension will be granted only if the student has made SIGNIFICANT progress towards completion of their thesis, as certified by their thesis advisor.
* **The student bears full responsibility for maintaining the viability of his/her candidacy.** If a student's extension expires, his candidacy has lapsed and the degree cannot be awarded at any time in the future.
* Students must complete their thesis requirements within 3 years of the date of detachment from the School. The Extension form can be obtained from the MAE Program Office.

It is the student’s primary responsibility for the success or failure of his/her thesis project. In broad terms, the nature of that responsibility is to plan your work and work your plan!

[Final Thesis Submission to the Department](#_top" \o "Final Thesis submission):

1. Complete thesis processing instructions 1-6.
2. Complete the Thesis Release page for program officer signature. The student must provide a final hard copy of the special abstract.
3. Submit final hardcopy thesis with required forms (to include color copy request, if applicable) to Wa-336. Allow one week for Department Chair review and signature.

***ALL STUDENTS:*** *Upon completion of Thesis/Dissertation/Project Report\*, MUST check out with the Ed Tech in Watkins Hall Rm. 115 with the following paperwork before graduation or one week after.*

* *Copy of Certificate of Completion (Green Card)*
* *Copy of the Special Abstract*
* *And/or a signed Thesis Extension Request form.*

*\*A signed report page is the same as a Green Card.*

***Department of Mechanical and Aerospace Engineering***

***THESIS PROPOSAL APPROVAL FORM***

***Astronautical Engineering Degrees***

A. Name:       Curriculum:

B. Month/Year of Graduation:

C. Primary Degree:

Secondary Degree:

D. Tentative Thesis Title:       Thesis Classification Level:

E. Primary Thesis Advisor:

F. Co-Advisor:

Second Reader:

G. Anticipated Funding Requirements (If any):       Funding provided by:

H. Advanced Level Competence: Per the Academic Catalog, in order to complete the requirements for the MS-AE, MS-ES (AE) or Astronautical Engineer degrees, advanced level competence must be demonstrated in a specific discipline area of Astronautical Engineering. This is normally accomplished by completing at least eight quarter-hours of 4000 level credits by courses in the MAE Department in the same discipline area as the thesis. Please identify the 4000 level courses which support your thesis:

4XXX courses:

I. Human Subjects Research Involved: Read Section “P” in instructions to identify whether your thesis project requires IRB approval. If so, approval must be secured BEFORE starting research.

Project requires IRB approval:  Y  N

*Student signature*: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



*Approved by*:

*Thesis Advisor*: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Co-Advisor*: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Second Reader*: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Academic Associate*: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Chairman*: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Noted /Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ *Program Officer*: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Modified July 2012