

School of Industrial Engineering and Management

Ph.D. Dissertation Proposal

This step in the doctoral study progression includes:

- The student's development of a dissertation proposal that describes the anticipated dissertation research.
- The student's oral defense of the dissertation proposal.

Objectives

- Demonstrate the student's ability to clearly focus upon and define a research topic that meets the School of Industrial Engineering and Management dissertation standards.
- Demonstrate the student's ability to perform independent inquiry, integrate concepts and subject matter, crystallize a research topic with specifically stated objectives and define an approach.
- Demonstrate the student's ability to select a major professional endeavor to pursue for an extended period with the freedom to demonstrate creativity in the definition and approach to a research topic.
- Demonstrate the student's written and oral communication skills.
- Provide the advisory committee with a means to assess statements of the research objectives and methodology, and assure that they are sufficiently clear so that both the student and the advisory committee know what the student expects to accomplish, and the basic tasks needed to bring the research effort to a successful completion.
- Provide the advisory committee with a means to assess the student's academic background and conceptual ability, ensure their suitability for the proposed dissertation research and specify ways to correct any deficiencies.

Format

The student may submit the dissertation proposal to the advisory committee after the successful completion of the qualifying examination. This section describes the items that should be included in a dissertation proposal unless the advisory committee approves modifications to this format. The student should confer with the faculty adviser, who will provide overall guidance in the preparation of the document and may suggest specific content and format details.

The student should arrange the time and place of the oral defense of the dissertation proposal with the approval of the advisory committee. The oral defense will normally occur no sooner than one week after each advisory committee member has received a copy of the student's Ph.D. dissertation proposal and a three hour block of time should be allocated for the oral defense.

The student will give a short presentation summarizing the dissertation proposal followed by a question and answer session with the advisory committee. The advisory committee will then determine the dissertation proposal outcome. The specific outcome agreed to by the advisory committee requires the approval of the faculty adviser and no more than one negative vote from the other advisory committee members.

The dissertation proposal should contain the following major sections:

Title Page

The title should express the central focus of the proposed research as succinctly as possible. In addition to the title, this page should carry the author's name, faculty adviser's name followed by the other advisory committee member's names and the institution, School and date of submission.

Table of Contents

The table of contents should list the major headings into which the proposal is divided, with beginning page numbers. The particular headings to be used should conform to the following list, unless the nature of the research and/or desires of the advisory committee dictate a modification.

Introduction

The introduction should convey the following types of information:

- The major thrust of the proposal.
- Specific reasons for choosing the topic.
- The general significance of the topic.
- The likelihood of successful completion of the proposed research.
- The anticipated date of completion.

One or two pages should be sufficient to state the basic points to be made. This section is not the place for detailed explanations. Keep the introduction brief, general and straightforward.

Statement of the Problem

The purpose of this section is to define and delimit the research and to indicate the significance of the research effort. In this section, the student should emphasize the important distinction between the problem and the purposes of the research.

- The problem is the central theme of the questions to be answered by the research.
- The purposes of the research are the reasons why the problem is worthy of study and the rationale for the expenditure of the student's time and effort.

This part of the proposal should serve as a more formalized statement of the content of the introduction with added detail and organization.

Background of the Study

This section should be the major part of the proposal. Most of this material will be incorporated into the final dissertation, assuming, of course, that the advisory committee accepts the proposal without major changes.

- The material in this section should be carefully selected to include appropriate general references and the most pertinent specific studies from the research literature.
- This section should be organized in a way that will lead the reader from the more general background material to the more specific previous research.
- This section should convince the advisory committee members that the student has developed a clear understanding of the problem in terms of what other researchers have had to say about the problem.
- This section should contain all of the necessary supportive material concerning the formal hypotheses that will be presented.

Hypotheses or Goals and Specific Objectives and Assumptions

This part of the proposal should be very precise in phrasing the statements to explain what the hypotheses or goals and objectives are and the way in which they will be tested.

Research Plan and Procedures

- This section should describe how the research hypotheses or goals and specific objectives are to be met.
- This section should delineate the methodology of the research plan and lead the advisory committee members through the proposed research activity and validation.
- This section should include a detailed time estimate of the project using a Gantt chart

Evaluation of the Research Results or Applications

This section should describe how the research hypotheses or goals and specific objectives will be evaluated by outlining the way each hypothesis or goal and specific objective will be tested using the data collected by the research plan and procedures.

Bibliography

This section should include a complete list of the literature referred to in the dissertation proposal. There are many different standards in use for listing references and any consistent form is acceptable. However, since the references will be incorporated into the final dissertation manuscript, it is suggested that the format correspond to one of those approved in the Graduate College Thesis/Dissertation Handbook.

Appendices

This section should include copies of supportive calculations, data from preliminary studies, or other supplementary materials.

Specific Outcomes

Pass - The advisory committee accepts the dissertation proposal and agrees that the student has passed the oral defense. The student may proceed with the dissertation research.

Conditional pass - The advisory committee accepts the dissertation proposal and agrees that the student has passed the oral defense, subject to the correction of deficiencies specified by the advisory committee.

Conditional failure - The advisory committee does not accept the dissertation proposal as submitted and/or agrees that the student has not passed the oral defense. The student must revise the dissertation proposal, complete any additional requirements as specified by the advisory committee and reschedule the oral defense.

Failure - The advisory committee does not accept the dissertation proposal and/or agrees that the student has not passed the oral defense. The student will not be granted the opportunity to revise the dissertation proposal or reschedule the oral defense and will be dismissed from the program.

Successful completion of both the qualifying examination and the dissertation proposal is required before formal admission to Ph.D. candidacy can be granted. The result of the successful completion of these requirements should be reported to the Graduate College on the Application for Admission to Candidacy form (this form is available under Round-up at <https://gradcollege.okstate.edu/resources/student-resources.html>). A student must be admitted to candidacy at least six months before the commencement in which the Doctor of Philosophy degree will be received.