

Guidelines for the Preparation of a Ph.D Research Proposal

The student will prepare a report which will:

- formulate the problem, setting out the objectives and the scope of research, and discuss the significance of the work;
- critically review the literature on the subject, identifying and interpreting the principal theoretical, computational and/or experimental contributions to the present state of knowledge in relation to the problem to be studied;
- propose and discuss plans for obtaining, processing and interpreting those data to be derived from experimental, computational or analytical investigations;
- describe the main features of the equipment and/or methodology that will be used or developed for use;
- estimate the amount of time required to complete the main stages of the investigation.

The purpose of the report is to inform the Committee of the nature and scope of the research and to provide them with a basis on which to examine the student's competence to carry out the program of research.

The length of the report should be approximately 40 double-spaced, typed pages including graphs and diagrams.

Your research proposal should normally contain the topics shown below. The page numbers shown are guidelines only -- your proposal may require a different balance.

Introduction:

Background and Motivation (2 pages)

Previous Work (6 pages)

Proposed Work (1 page)

Contribution (1 page)

Research Proposal:

Hypothesis to be Tested or Objectives of Research (2 pages)

Theory (6 pages)

Experimental/Computational Methodology (8 pages)

Proposed Experimental/Computational Matrix (2 pages)

Analysis and/or Modeling of Results/Validation Approach (6 pages)

Anticipated Problems and Solutions (3 pages)

Management:

Plan and Schedule (2 pages)

Required Support and Sources (1 page)

Total Pages 40 (double-spaced)