

THESIS PROJECT PHASE  
EXCERPT

FROM

DRAFT REVISED  
IS STUDENT  
HANDBOOK

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## 1.1 Thesis Project Phase

### 1.1.1 When to Apply

You apply to the Academic Board of Independent Studies for entry into Thesis Project Phase after successfully completing your pre-thesis course requirements.

For the *three-year General program*, that means you must complete a minimum of two full-time terms (five courses each term of .5 credit weight) or five part-time terms in Independent Studies and at least four full-time terms or the equivalent part-time terms of post-secondary university work.

The required number of pre-thesis courses for a *four-year Honours program* include a minimum of two full-time terms or the equivalent part-time terms in the Independent Studies program and at least six full-time terms or equivalent part-time terms of post-secondary university work.

Your written submission is known as the “Thesis Project Proposal” and must include your post-secondary academic history, your proposed program of study, a timetable for completion, a bibliography, and information about the field speciality of your proposed thesis project supervisors.

This document is prepared, first, in consultation with your academic advisor, then the proposed thesis project supervisors who must approve the proposal before it is submitted to the Academic Board. Your academic advisor will assist you in arranging for a Board member to serve as your “contact” with the Board who must be consulted about your proposal.

IS 330 *Honours Thesis Proposal Development* is a core requirement for the Honours program and it is strongly recommended that students in the three-year General program enrol in IS 220 *Thesis Proposal Development* to prepare a thesis project proposal in the term prior to when you plan to apply for thesis project phase.

### 1.1.2 The Academic Board for IS

The six members of the IS Academic Board are UW faculty and represent all faculties found at the University of Waterloo. This representation also helps maintain informal links with professors across the university who can be called upon to assist IS students, and it assures that IS students meet general university standards across the faculties.

See the IS web site (<http://is.uwaterloo.ca/faculty.htm>) for a list of current IS Academic Board members and their contact information.

### 1.1.3 Thesis Project Supervisors

You may have established a list of potential thesis project supervisors as you progressed through your pre-thesis terms. If not, you definitely need to discover candidates for thesis project supervisors

in your last pre-thesis term as you complete either IS 220 or IS 330 for the thesis proposal development. Talk with other IS students (especially those already in thesis project phase) and with academic advisors and Board members for contacts.

Consult “Forms, for THESIS phase” on the web site at [http://is.uwaterloo.ca/forms\\_the.htm](http://is.uwaterloo.ca/forms_the.htm) for the handout, “Info About IS Thesis Project Supervisors.” When you approach faculty members as potential thesis project supervisors, be sure to provide them with a copy of the “Thesis Project Supervisors Checklist” also available at this location on the web site.

The Board’s decision to accept you into Thesis Project Phase is based on an assessment of your general preparedness for BIS thesis level studies *i.e.* your ability to do at least third year or an Honours fourth year undergraduate work, the suitability of the thesis project proposal with respect to academic level and content, and the university’s capability to support such studies and evaluate the resulting work.

On accepting you into Thesis Project Phase, the Board formally appoints the thesis project supervisors who are willing to supervise the thesis project. At least one must be a UW professor. In certain circumstances, one of your supervisors may be a professor at another accredited university or a practicing professional in a career related to your interest.

Over a period of at least eight months, you meet regularly with the thesis project supervisors to carry out the approved program. At the half way point the supervisors send comments about your progress and, when the thesis project work is complete, these same supervisors submit written evaluations of your performance in the form of Letters of Evaluation to the IS Academic Board. These letters are the basis for recommending the BIS degree and they also become part of your official IS transcript package associated with your BIS degree.

It is possible to have a “reader” for your thesis who might review your thesis in the final stages of its development. That reader might be a graduate student in your field who recognizes that your work adds to the body of research for your area of study. The reader may or may not provide a Letter of Comment for your transcript, but the reader is not entitled to provide a grade.

#### 1.1.4 Thesis Project Phase Checklist

To be accepted into thesis phase you must:

- Meet your [English Language Proficiency Program](#) requirement
- Ensure your transcript is clear of any incomplete grades. There can be no grades of “INCs” (incompletes) or “IPs” (in progress).
- You are encouraged to present your work and expected thesis project topic to your fellow students and other IS involved people. For a schedule of presentation dates see The “IS News & Events” section of the IS web site and the “Events” part <http://is.uwaterloo.ca/events.htm>. Also speak with the IS office staff to reserve a presentation time.
- Inform your academic advisor and the IS office staff by no later than April 1, August 1, or December 1 (and earlier if at all possible!) of your intent to apply for the thesis project phase of your studies in either the spring, fall or winter terms respectively.

- Discuss the thesis project process with your advisor. You must meet with at least two potential thesis project supervisors to discuss your proposal and clarify any matters concerning the thesis project process and the development of your thesis project proposal ***before*** officially submitting your thesis.
- Therefore, plan to complete a **first** draft of your proposal by the middle of March, July, or November proceeding the term when you want to be in thesis project phase.
- Ensure your advisor and thesis project supervisors approve the revised and **final** draft by signing and dating the Application Form ([http://is.uwaterloo.ca/forms\\_the.htm](http://is.uwaterloo.ca/forms_the.htm)) before submitting it to the IS Academic Board member for a dated signature.\*
- The final proposal with the four dated signatures (advisor, two thesis project supervisors, Board member) must be submitted to the IS office staff at least four (4) weeks prior to the meeting of the Academic Board. Consult your IS advisor for this meeting schedule and the IS web site under "Important Dates" (<http://is.uwaterloo.ca/dates.htm>).

***\* Please Note***

The IS Academic Board member who reviews and signs your Application Form must also review the final draft of your BIS thesis project. That Board member will sign and date your Description of Studies ([http://is.uwaterloo.ca/forms\\_grad.htm](http://is.uwaterloo.ca/forms_grad.htm)) as you prepare to submit all your BIS requirements to indicate he or she has reviewed and accepts your material.

***The Thesis Project Proposal must include:***

1. Your post-secondary academic history
2. Your research topic and research method(s)
3. Proposed table of contents with summary notes under each heading
4. Time-line (schedule) for completing the thesis
5. Nomination of thesis project supervisors and arrangements made for working with them
6. Bibliography

Details for each of these six topics are provided in the section 2.2.7

***Remember:***

This proposal must also have a completed "Application for BIS Thesis Candidacy" form with the requisite signatures attached to the front of it (see "Forms, for THESIS phase" on the web site at [http://is.uwaterloo.ca/forms\\_the.htm](http://is.uwaterloo.ca/forms_the.htm)).

Once you have submitted this material, you will be invited for an interview with the Academic Board which has to approve the proposal and your thesis project supervisors.

### 1.1.5 Enrolment in Thesis Project Phase

**Thesis Phase I** or stage 1 - You may conditionally enrol in the thesis phase course for the first full-time term of your thesis phase using Quest. The course number to use for this first term in thesis phase for full-time study is “IS 310“ which has a credit weight of 2.5. (For special in enrolment because of financial requirements and part-time studies for example please contact the IS office staff for direction and assistance.) The IS office staff confirms your registration with the Registrar’s Office for the first term in thesis phase pending approval from the IS Academic Board members.

**Thesis Phase II** or stage 2 - Conditional enrolment in the second full-time thesis phase term is completed by the IS office staff using the “IS 320” and your enrolment is confirmed once approval by the thesis project supervisors has been received at the IS office.

### 1.1.6 Key Areas to consider a term or two ahead of your thesis phase application

- You might require and thus need to make arrangements for special equipment, lab space, and extra computer time.
- You might benefit from receiving research funds, particularly for any out-of-province or out-of-country work and thus it may be necessary for you to explore possible funding sources. (e.g. UW’s Office of Research at <http://www.research.uwaterloo.ca/>, contact Drew Knight or Kristin Snell; *Subsidy Directory* 2006 – a listing of more than 3000 direct and indirect financial subsidies, grants and loans offered by government departments and agencies, foundations, associations and organizations. To obtain a copy, call toll free 1-866-322-3376 or local 819-322-5756)
- You may need to contact the [Office of Research Ethics](#) to receive clearance for your research project.

### 1.1.7 Details for Your Thesis Project Proposal

There is no specifically standard format for the thesis project proposal mainly because of the rich variety of topics studied by IS students. But, as noted above, the proposal needs to include information about your studies according to six topics.

#### *1. Your Academic History*

This section should contain a detailed description of the themes and focus of your post-secondary academic studies at UW and elsewhere. Your appended transcript (which the staff at the IS office provide) will indicate what courses you have taken but you need to describe the work undertaken for each IS course. You should explain the methods of study you have used and also explain the relevance of your pre-thesis work to your thesis project. You might use these subheadings to contain this information:

- Detailed outline of Pre-Thesis work
- Study Methods
- Relevance of Pre-Thesis work to the Thesis Project

Be precise when describing your work; you could use dates listed in chronological order. In this section you should include references to general work completed.

## *2. Describing Your Thesis Project Topic*

This section will describe what you plan to accomplish in thesis project phase. The descriptions should have sufficient detail for a reader to understand your goals, how you intend to pursue these goals, the information and/or other materials you plan to use, and your proposed methods of analysis and/or synthesis. The important thing is to keep in mind how your proposed work can be made to “flow” most clearly for readers or viewers so they can easily follow what you intend to produce.

Different types of thesis project topics have their own inherent logic that can be used to structure your proposal. Potential thesis project types include:

- **Scholarly Essay** - to address a particular theme(s) or issue(s)

You start by explaining the importance of the themes or topics to furthering knowledge in a field, then review the most recent literature available that discusses this from different theoretical or practical perspectives, and conclusions are based on reflective reasoning and evidence. The thesis project can be organized as a sequence of chapters and sub-chapters to cover this; the proposal should identify the themes or topics, note why they seem significant, provide a summary of literature reviewed so far, and then sketch out what else will be done to complete it.

- **Research Project** - possibly one which is part of a larger program that one of your thesis supervisors is conducting

You follow the standard science format of stating a hypothesis, explaining why it is significant to the field of inquiry, and describing the research method(s) to be used. Results obviously aren't known at the point of the thesis proposal development but it is sufficient in the proposal to indicate what is generally expected. The thesis itself might adopt the general format of a scientific paper to be completed when the data are analyzed, discussed and conclusions drawn.

- **Design Project** - to apply current knowledge to the possible solution of a practical or otherwise challenging problem in an innovative way

Your proposal should describe what the challenge is, why it is important or interesting, what is already known about the engineering or other “hardware” and “software” components of the design, and what you will try to think through, or otherwise make happen.

- **Portfolio or Program of Creative Work** - such as actual drawings or paintings; outlines for novels or short stories; scripts for possible plays or films; or compositions for some musical instrument(s) and/or computer-enhanced “sonic environments”

As a final thesis project, your portfolio will be accompanied with your reflective statements on topics such as the genre of art you are developing, similar work in your field, your own creative experiences in the process, what else still must be done to reach the performance, publication, or gallery exhibition stage, and your subjective judgments about aesthetic and other successes so far.

- **Business Plan** - to capture some interesting opportunity, perhaps in the use of new computer technologies, software applications, or information services for some emerging area of enterprise

Components of business plans are fairly standard, but applying them to the uncertainties of new situations is the challenge. Your thesis would develop this to the point where it could be assessed by people associated with small business “start-ups” and/or venture capital.

Other kinds of thesis topics may also be proposed and discussed.

### 3. *Detail of the Table of Contents*

Provide a table of contents to the sub-heading level. There are a number of ways for constructing this table. Study the table of contents of books, the organization of major reviews or technical papers, or artistic arrangements in some form that you found helpful and of interest. Then, draft a similar format of major headings and sub-headings for the subject matter you have in mind. Prepare a paragraph or two under each heading and/or sub-heading in the table of contents that provides a clear summary description of what you will cover or otherwise present in your thesis.

#### *Remember:*

This section may take the longest to complete and can also be the most difficult. You will probably have to revise this table as you proceed.

### 4. *Calendar of Progress or Time-Line*

Give yourself the equivalent of eight months of full-time efforts to complete your thesis project work – including the final stages of revisions suggested by your thesis project supervisors and including time to complete the paper work required when applying for consideration of your BIS qualifications. It has been suggested that this last component could take as long as four to six weeks depending on the availability of your thesis project supervisors and key IS resources.

Use your experiences with the subject matter and with formal essay writing or other activities to guide you. Indicate how long each proposed chapter or component will take and list by which date you would like to have each one finished. Include a completion deadline chart. (This indicates that you have thought about how reasonable your thesis project is within the time allotted. Do not presume you can do your entire thesis project in the last month!)

### 5. *Thesis Project Supervisors*

This item need not be detailed. Simply describe the background of your proposed thesis project supervisors briefly and how you intend to contact them and how often. Consult their faculty home web sites for a description of their work. What will be their role in your work? The Board may request a *curriculum vitae* for someone who is not a regular member of UW or some other university, or who is a professional in your field of study.

### 6. *Bibliography*

Include a bibliography in this section listing all the books and/or other information sources you have used to date (*e.g.* magazine articles or reviews, web sites, films, documentaries, *etc.*). It should also list the books and other source materials you intend to draw upon for your thesis project. You can use an asterisk (\*) to note items that have been central during your preliminary research and are also applicable to the thesis, and a plus (+) for references applicable to the thesis but not examined sufficiently during your preliminary research.

### 1.1.8 Other Points to Consider

Keep in mind that at this stage your proposal is simply proposed. Your table of contents or deadlines may change and your thesis project supervisors may even change. The goal of the proposal is to give you, your supervisors, and the members of the IS Academic Board a clear understanding of what you would like to accomplish in thesis project phase.

You must obtain approval from your supervisors and the Academic Board for any major changes in the thesis project. Your supervisors should also be kept informed of any changes in time-lines. If you need to significantly change the direction of your thesis and/or to change your thesis project supervisor(s), then you **MUST** have Board approval.

This means you complete the candidacy application form again for either situation and provide a new proposal and/or include the name and dated signature for the proposed supervisor(s). Provide this material to the IS office staff who will ensure the information is forwarded to the Chair of the Academic Board for final approval. In turn, you will be notified of their decision.

#### *Academic Board Contact Person*

Provide enough time for the Board member recommended to you to comment on the draft before the final version is prepared. Keep in mind other end-of-term deadlines and seasonal activities that may impact on their availability. Their comments result from their awareness of Academic Board procedures and concerns and can help you avoid problems that may arise during the interview with the Academic Board.

#### *Roles of Thesis Project Supervisors*

Once you have confirmed two people to serve as your thesis supervisors, provide them with a copy of the Thesis Project Supervisors Checklist (found at “Forms, for THESIS phase” on the web site at [http://is.uwaterloo.ca/forms\\_the.htm](http://is.uwaterloo.ca/forms_the.htm)). Students are not always certain what they can expect from a thesis project supervisor. Relationships between student and supervisors are unique. However, two main things to keep in mind are:

1. A thesis project supervisor is more than a final arbiter of the thesis project. He/she is a resource for you to use during the process. If you need advice on organization or style of presentation, or if you are having difficulties with certain concepts or finding research material, consult your supervisors.
2. Be sure to keep your supervisors informed of your progress. You will find a regular meeting schedule helpful -- meetings after you have produced a draft of a section or chapter, or after some other component or section of your thesis project work.

#### *Essential Requirement for Original Research*

If your thesis project involves experimental research using human or non-human subjects, you must receive clearance from the Office of Research Ethics (<http://www.research.uwaterloo.ca/ethics/>). Allow from four to six weeks for processing your request - you may be asked for clarification or additional information based on what you had in your completed form.

### 1.1.9 Mandatory Aspects to Your Thesis Project Proposal:

- All components of the thesis project proposal must be done in a word processing program. Provide the most recent draft to your academic advisor, potential thesis project supervisors, and Board contact for their review.
- Use gender-neutral and appropriate academic language.
- Be sure to correct spelling and grammar. There are no excuses for any errors and thus no considerations will be given for any appearing in your proposal.
- Complete all sections of the Application for BIS Thesis Candidacy page rather than writing "see attached" for some items. Ensure you have all four signatures on the application before you hand it in to the IS Office.
- Attach the application page to a hard copy of your thesis project proposal and submit to the staff of the IS office by the time of the deadline. Earlier is always better.

You will be notified by the staff of the IS office to confirm your interview time for the next meeting of the IS Academic Board and with the IS Director and Senior Academic Advisor. You will be allotted half an hour to present your proposal and to ask for any further direction from Board members. Be sure to arrive at least a half hour in advance of your scheduled time and be prepared to make notes from the meeting for the benefit of developing your thesis project.