

Graduate students must also consult the SGS calendar and the SGS web site under *General Regulations*, *Degree Regulations* and the section on *Aerospace Science and Engineering*. Some of the regulations presented here may also be included in the SGS Calendar, but are provided here for completeness.

Make sure that you also obtain a copy of the *UTIAS Information and Regulations for all Graduate Students*, which covers information on Courses and Completion of Studies.

1. COURSES

PhD students **MUST** complete their course work, consisting of four technical courses and JDE 1000, in the first two years of the doctoral studies. Students are strongly encouraged to complete their course work in the first year of their studies. For students entering the PhD program through the Direct Transfer option from the MASc program, the two additional technical courses must be taken in the first year following the direct transfer. For students entering the PhD program through the Direct Entry option, all seven courses and JDE 1000 must be completed by the end of the second year in the program.

2. PROGRAM DURATION AND FINANCIAL SUPPORT

Doctoral students with satisfactory academic performance receive the departmental standard level of financial support for four years in the program. Under extenuating circumstances, the student may apply for funding for a fifth year; such an application will require the full (financial) support of the supervising professor and must be approved by the Institute. Students in the Direct Transfer option will receive financial support for four years following the transfer. Students in the Direct Entry option will receive five years of financial support.

3. DOCTORAL EXAMINATION COMMITTEE (DEC) AND DEC MEETINGS

3.1 Functions of the DEC

The DEC is intended to perform several functions:

- To ascertain the suitability of the student for advanced research;
- To assess the thesis topic;
- To conduct formal reviews of the student's progress at least once a year (unsatisfactory progress may result in the termination of the student's candidacy);
- To provide advice and guidance to the student; and
- To provide a first assessment of the completed thesis, accompanied by suggested modifications or corrections.

3.2 Composition of the DEC

- The student's supervisor, in consultation with the Associate Director, Graduate Studies selects the committee.
- The DEC will consist of three members of the UTIAS Graduate Faculty (supervisor plus two experts, one of whom will act as Chair).
- Other experts from outside of UTIAS may be added if deemed necessary.

3.3 Schedule of DEC Meetings

- DEC meetings will be scheduled as follows:
 - February 1 – February 28 for September start students; the DEC written report is due the first business day after January 14;
 - May 15 – June 15 for January start students; the DEC written report is due the first business day after April 30.
 - September 15 – October 15 for May start students; the DEC written report is due the first business day after August 31.
- Students who take one or more terms of leave for any reason may be shifted to a different DEC schedule.
- The first meeting must be held within 6 months of PhD start.
- The second DEC meeting (approximately 1.5 years after PhD start) is designated as the "Qualifying Exam" which will determine whether the student should continue in the program.
- Subsequent meetings are held at least once per year.

3.4 Expectations at the DEC Meetings

- At the first DEC meeting (held within 6 months of PhD start, or date of transfer for students transferring directly from the MSc program) the aim is to identify the topic and scope of the thesis.
- At the second DEC meeting (the Qualifying Examination), the student's progress is assessed, their fundamental background knowledge of their field is examined, and a decision is made whether the student should continue in the PhD program or have their candidacy be terminated. Please see the [additional regulations for the Qualifying Examination](#).
- At subsequent meetings, progress is assessed, and goals are set for future work and thesis completion.
- If an unsatisfactory assessment is given, the DEC prepares a list outlining the reasons for the assessment, and the student is given three months to achieve specific milestones with his/her candidacy to be terminated if these milestones are not achieved. After the three-month period, a 'Special DEC Meeting' will be held to either change the unsatisfactory evaluation, or recommend termination of the PhD candidacy.)
- **PhD students are expected to complete all requirements for the PhD within four years of their date of initial admission, or five years for students transferring directly from**

the MASc program or in the Direct Entry option. If this is not achieved, students are required to present a draft of the PhD thesis to the annual DEC meeting immediately prior to the completion of 4.5 years in the PhD program. For Direct Transfer students, the period is 5.5 years after first registration in the MASc program. For Direct Entry students, the period is 5.5 years after first registration. The draft must represent a *substantially complete form* of the final thesis and is due two weeks prior to the scheduled meeting. Students who fail to present the draft by the required time will automatically receive a grade of “unsatisfactory” at the subsequent DEC meeting and will have three months to address the situation.

3.5 Preparation for DEC Meetings

3.5.1 Written Report

In preparation for DEC meetings (including the first DEC), students will prepare a written report. Both a paper copy and an electronic copy of the report must be submitted to the Graduate Office prior to the due date. Electronic copies should also be provided to the DEC members. The report must be a comprehensive and coherent independent document, not simply a hard-copy of the material used for the presentation. The report length is limited to 10 letter-sized pages (1.5 spacing, 12 point font, 25 mm margins). Material in excess of 10 pages will not be read by the DEC. The 10 pages must include the following:

- the thesis title;
- a discussion of the literature relevant to the report;
- a description of the original contributions made since the previous DEC meeting, and where further contributions are expected to be made;
- the research objectives, methodology and plan for the long term;
- references for the report; and
- specific milestones for the coming year.

3.5.2 Oral Presentation

- Excluding questions, the presentation should last approximately 30 minutes.
- Refer to the **DEC Meeting Report** (sent by email to all PhD students annually by the Graduate Office) for guidelines for the preparation of the DEC oral presentation.

4. PhD PROGRAM EXTENSION REQUEST

The normal length of the PhD program is four years, during which the student is guaranteed funding to cover tuition and living expenses. After 6 years of registration in the PhD program, students who have not completed their theses, but are very close to completion, may request a program extension for a period not to exceed one year. The request will only be approved if a credible case is made by the student and the supervisor that the thesis will be completed in the requested extra time. Otherwise, the

student's program registration will be terminated. A maximum of four program extensions may be requested. This means that PhD students have at most ten years to complete their thesis and the Final Oral Examination. This time period cannot be exceeded under any circumstances.

5. THESIS PREPARATION

Students preparing for graduation must submit a final draft of the thesis to the DEC. This final draft should be agreed by the student and supervisor. The DEC members will read and comment on the thesis. The DEC members may elect to hold a formal final DEC to examine the progress of the student or waive this in favour of the final oral examination. All DEC members must agree that the thesis is ready for progress to the examination phase. The chair of the DEC will notify the Director in writing that the student is prepared to progress to the DDS and final oral exam. At this point the Departmental Doctoral Seminar (DDS) will be scheduled.

5.1 Thesis Format

- PhD theses **must** be kept **under 160 pages**, using a 10 point font and 1.5 line spacing. Paper size should be 8.5"x11" (21.5cm x 28cm) with 1.0" (2.5 cm) margins all around. This page limit is to include all text, figures, tables, appendices, etc. (all pages from cover to cover). Every page in the text must be numbered.
- For the copies to be printed and bound, use the SGS requirement for 1.25" margins on the binding side and 0.75" margins on the other side.
- The student will submit an electronic copy of the thesis document to the Graduate Office **at least 8 weeks** prior to the planned FOE date. The size of the electronic file **must** be less than 10 MB.
- Should any of the members of the FOE committee require a paper copy of the thesis, the Graduate Office will notify the student, and the student will provide the required number of paper copies to the Graduate Office.

6. DEPARTMENTAL DOCTORAL SEMINAR (DDS)

The DDS will be scheduled after acceptance of the thesis by the student's DEC. The DDS should be attended by all DEC members plus either the Director or one of the Associate Directors. In preparation for the DDS the student must submit the following documents to the Graduate Office:

- A brief bio, including the following information:
 - Undergraduate studies: dates, universities, programs
 - Master's studies: dates, universities, programs
 - PhD studies: start date; date of transfer for transfer students
 - Publications in refereed journals, refereed conference proceedings, and other technical reports/publications (use these headings)
 - Scholarships, other awards and distinctions; and
- An abstract of the thesis to be used for the seminar notice.

Oral Presentation at the DDS

- Excluding questions, the presentation should last approximately 40 minutes.
- It is recommended that the DDS be presented in a manner that is accessible to a broad range of UTIAS students and faculty.
- The presentation will be followed by questions from faculty and students.

7. FINAL ORAL EXAMINATION (FOE)

In planning the Final Oral Examination, a minimum period of nine weeks should be allowed between the acceptance of the thesis by the DEC and the FOE.

7.1 Composition of the Final Oral Examination Committee

- **THREE** examiners who are members of the UTIAS Graduate Faculty (normally three members of the DEC).
- **TWO** examiners from outside of UTIAS: one, the External Appraiser, must be from outside of the University of Toronto and will write an appraisal of the thesis; the other must be from another department at the University of Toronto and may not be a DEC member.
- **Optionally**, **ONE** additional examiner who is a member of the University of Toronto Graduate Faculty but is not a member of the DEC.
- **Quorum at the FOE**: four examiners, including **both of the examiners from outside of UTIAS**.

7.2 Final Thesis Document

- Subsequent to a successful FOE, the student will prepare the final thesis document, with corrections or modifications incorporated.
- Students are responsible for the preparation of the thesis. The final thesis must be prepared [according to the SGS Guidelines](#).
- Submit **TWO unbound** copies (double sided) to the UTIAS Graduate Office. Binding fees will be paid by UTIAS. The submission of the thesis in electronic form is also required.
- Submit the thesis to the SGS according to the SGS thesis submission policy and procedure.
- Prior to convocation, PhD candidates must prepare **at least one formal manuscript**, based on the thesis, for publication in a **refereed journal or a refereed conference proceeding**.