

Graduate Studies: A Practical Guide

November 2012

Note: This Guide was published by CAGS in 1992. The booklet is no longer in print. Although there have been changes in some aspects of graduate studies since 1992, much of this Guide is still relevant. CAGS is still making this document available in web format as a service to students, faculty and others involved in graduate programs.

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Forward

This booklet is addressed to students considering Masters and Doctoral programs at Canadian universities. It discusses some of the motives for pursuing graduate studies and provides prospective students with information on things to consider when examining the option of graduate school. There is a tremendous diversity to graduate programs and thus some sections may pertain more to some areas of study than others.

From the perspective of students, graduate studies are not an end in themselves, but rather a means to an end. In most cases, that end is gainful employment. Graduate studies therefore constitute an investment of time and money for the purpose of career development. In some cases the investment is essential, in others it is a matter of choice. From the perspective of supervisors, graduate studies are an almost indispensable part of academic life and sometimes central to successful research. Graduate students are needed for assistance, collaboration, and as a source of inspiration, energy and fulfillment. They are also important partners for obtaining external research funding from provincial and federal granting councils. From the perspective of departments, research centers, and other units or combination of units offering graduate programs, graduate studies are an essential component of research. What distinguishes universities from other academic institutions is their mandate to carry out research and train researchers.

Graduate programs maintain and enhance the academic standing of a university and have a significant bearing on the public perception of the quality of the graduates of that university. As is the case in most partnerships, the probability of success in graduate studies is enhanced by a set of explicit checks and balances which articulate the respective rights and responsibilities of the partners.

Graduate school can be, and often is, one of the highlights in a student's life. Students are provided with the opportunity to work in exciting environments and share experiences with like minded colleagues that can result in lifelong friendships. Many former graduate students look back on this time in their life with fondness and the realization that it represented an important period of personal development that laid the foundation for a rewarding career.

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Why Pursue Graduate Studies?

Many students pursue graduate studies for the love of learning and discovery. For others, cultural motivation and family traditions have an unquestionably positive influence on the decision to enter graduate studies. Some students pursue graduate studies because their chosen profession requires a graduate degree while others are looking to change career paths or better position themselves for advancement opportunities.

In research programs, graduate students are involved in both the development and the responsible conduct of original, important research and scholarship. As such, graduate students should be excited by carrying out in-depth and detailed studies in the spirit of creative and imaginative inquiry. Graduate students and their work are an important part of an ongoing research process that helps us to better comprehend the human and natural world in which we exist. This research provides the human community with ways of understanding natural, cultural, imaginative, social and technological phenomena and investigating problems through the pursuit of knowledge. Graduate students are thus engaged not only in a social process that provides society with new ways of looking at the world's complexity, problems and beauty, but in a personal quest for bettering their lives or expanding their learning and insight.

Recently, people with graduate degrees have been referred to as “highly qualified personnel”. In today's knowledge economy this level of qualification is a valuable asset for an increasing number of jobs. According to the 2007 National Graduates Survey (Class of 2005), 93% of graduates of master programs were employed at the time of survey. As one might expect, earnings increase with education levels, with the largest earning premiums between the bachelor and master levels (Bayard & Greenlee, 2009).

Skills Required Before Entering Graduate Programs

- High academic standing
- Strong commitment to pursuing rigorous research training in a selected subject area
- Enthusiasm and a high degree of interest in learning
- Curiosity, and an open and enquiring mind
- Sound work ethic, integrity and moral standards
- Collegiality
- Perseverance and patience
- Maturity and reliability

Representative Skills Acquired in Graduate Programs

- Excellent critical thinking skills
- Ability to integrate data and information from multiple sources, and to develop and test hypotheses rigorously
- Excellent oral and written communication skills

- Skills in a range of analytical techniques using sophisticated instrumentation
- Ability to work with equipment and instruments at tasks requiring precision
- Ability to coordinate or co-supervise the work of others
- Ability to identify problems and to develop and implement innovative solutions
- Ability to work independently and in teams

(Used with permission from the Schulich School of Medicine & Dentistry, The University of Western Ontario [UWO], 2010, p. 3)

What is Graduate Education?

Graduate school includes Masters Programs (typically 1-2 years of full time study following an undergraduate degree) and Doctoral/Ph.D. programs (approximately 4-6 additional years of study which may follow a Masters Degree).

The graduate learning environment is distinctly different from that at the undergraduate level. It has been characterized as advanced, focused and scholarly in nature:

- It is advanced because it builds upon an undergraduate education.
- It is focused because the emphasis in graduate studies is on depth.
- It is scholarly because it is concerned not simply with the acquisition of knowledge and skills, but with the critical analysis of existing knowledge and the creation of new knowledge. Graduate students are expected to acquire and apply advanced analytical and interpretive skills, as well understanding and/or producing research.

Although the expectations of students enrolled in graduate programs may vary, it should be recognized that graduate school represents a very different educational experience than that of undergraduate studies. Scientific discovery is seldom a linear process, and it is generally not possible to drive research directly towards a desired outcome. Discovery is a mixture of insight, effort, curiosity, and good fortune (UWO, 2010, p. 5).

Graduate programs may be separated into three broad categories:

- **Professional programs** – provide specialized skills and qualifications for a specific profession (i.e., Speech-Language Pathology, MBA programs).
- **Terminal programs** – Masters and Doctoral degrees are achieved separately. Students apply to Doctoral programs after first completing their Masters degree.
- **Non-terminal programs** – Masters program feeds directly into Doctoral program without option of stopping after Masters. May be entered into directly from undergraduate studies.

Additionally, your degree may be:

- **Course-based** – a combination of required courses, practicum placement, qualifying exam, independent research, or capstone course or project.

- **Thesis-based** – a combination of required courses and a thesis project under the supervision of a thesis advisor. (UTM Career Centre [UTM], 2012, p. 1)

Thesis-based master's programs provide an opportunity for students to explore the possibility of pursuing research as a career. The normal time to completion of this degree is 2 years, although completion of a high quality thesis may require a longer period of time. Students are expected to display enthusiasm and dedication towards completing the objectives that define their research projects, which can mean working on their projects beyond a standard work week. In research, the end result is nearly always determined by the effort and commitment of the student to the project. The reward for this is the opportunity to pursue research questions and lead discovery in diverse and important areas that are directed at reducing human suffering and improving our understanding of the world.

Preparation for Graduate School

The process of deciding to enrol in a graduate program and the development of a plan of action often begins well before the completion of a bachelor's degree. In disciplines where the opportunity exists, students sometimes secure summer jobs in research environments to get a sense of what research is like. They also learn through reading and conversation about the research community and the career opportunities in their field of interest.

Some students visit the appropriate departments in several universities and gain an insight into the existing curriculum, programs, infra-structure and support system for graduate studies. Sometimes they also assess through discussions with potential supervisors the type of research project for which supervision and financial support are available and identify research topics in which they are interested and for which they are qualified.

Although standards and criteria vary across programs, one common factor is that the competition is intense. Factors that contribute to admission decisions include:

- **GPA** – most schools look for a minimum average of B+ during the last two years of undergraduate study
- **Suitability for the program** – determined by the quality of your application, your research interests and your compatibility with the program/faculty research interests
- **Skills and experience** – your research experience, volunteer/work experiences and extracurricular activities
- **Reference letters** – the type of referee and relevance of their comments are weighed more heavily than the number of reference letters you submit
- **Admission test scores** – if required (GRE www.gre.org , GMAT www.mba.com/mba)

Prepare for graduate school during your undergraduate studies by:

- **Strengthening your GPA** – Although many programs look primarily at your final two years, a GPA that is consistently high will impress admission committees

- **Exploring your options** – Take a variety of courses to help determine your research interests, talk to Teaching Assistant about their experiences, take part in networking activities, and talk to your professors about graduate programs and their areas of research
- **Identifying references** – Graduate applications require between 2-3 references. Get to know your professors by taking more than one class with those whose work interests you, participate in class discussions, attend office hours, and join clubs that allow professors to get to know you outside of the classroom
- **Building experience** – Gain research experience through part-time or summer jobs, senior level thesis courses, faculty research projects, undergraduate research awards, internships, or volunteering with a professor. Experience as a teaching assistant would be an asset. (UTM, 2012, p. 2)

Making the Decision

As prospective graduate students, you are important potential members of a university's research and learning community. The orientation and guidelines that this document provides are designed to help you approach your future studies as a confident and informed person. Even though you may feel that the process of admission to graduate studies is one in which you are being evaluated by a university, you also have just as significant a role in evaluating your prospective program of study. It is important that you make sure that you have the information you need to make a good decision.

Making Contacts

Making contact with your prospective institutions is important. This may mean:

- using websites
- communicating by e-mail
- talking on the telephone
- making a visit

Do your best to talk to prospective supervisors or heads of graduate admissions committees as well as a range of students including those presently enrolled in the program and those who have already graduated. It is important to gauge your potential satisfaction with a program or a supervisor from a student's perspective. This type of conversation can help you know what to expect from a supervisor or a course, or may just prove helpful in getting tips on potential living arrangements.

Choosing an Institution

Students choose to pursue their studies at a particular institution for a variety of reasons. For instance, some people choose to attend universities near to where they live. Others base their decision on the reputation of a university. Keep in mind, though, that the research reputation of a university does not always equate with student experiences in a program of study. Sometimes graduate students' experiences of the programs at a world-renowned research university may not

mesh with the university's high reputation. Students may rank their experiences at a lesser-known university as being far more supportive and encouraging than the university's research reputation might suggest.

In the case of a professional graduate degree, it is important to verify that the university program is accredited by professional bodies. If this applies to your field of study, look into the accreditation status of the institution and/or program you are planning to attend.

Whether you are interested in a professional or a research-oriented degree, you should research the nature of the university you are considering. Because it is ultimately a question of your fit and prospective experience at a university, it is crucial to be as informed as possible.

Choosing a Supervisor

The choice of the right supervisor depends on many factors such as the track record of a supervisor in seeing students through to a successful conclusion in a reasonable period of time. Personality considerations also play a role. Some students require the caring attention of a professor who may be a superb teacher but less active as a scholar, others flourish in the competitive environment where the star of the research team is an internationally recognized researcher. The relationship between student and supervisor should be based on complementary objectives and qualities. Thus students should not become totally dependent on their supervisor. They should try to maintain a collegial working relationship with all members of the department. In turn, departments should remember that students require continuing departmental support for their successful and timely graduation. Thinking about appropriate supervisors and then approaching them will be one of the most important things you need to do when applying to a graduate research program.

The role of the supervisor will differ depending on your area of study. In certain disciplines, the choice of the type of research project for which supervision and financial support are available will depend quite directly on the research work the supervisor is doing. However, in the social sciences and humanities, research topics often originate from the students themselves. In either case, you will want to identify research topics in which potential supervisors are interested and knowledgeable.

Determining whether a supervisor is an active and productive scholar or researcher is an important factor. Many professors maintain a website which contains their pedagogical and publication history. This may be more detailed and useful than a database search because it will reflect conference participation, courses taught and present research projects as well. Exploring the professor's website or the department site of the university with which your potential supervisor is affiliated will often give you access to valuable information about the professor's research and interests. If you are approaching a potential supervisor, knowledge of their own research is invaluable. Become familiar with this professor's publications and be able to knowledgeably discuss your mutual interests. Potential graduate students should ask the following questions about the supervisors they are considering:

- Do they regularly publish journal articles? In which journals? On what subject?
- What books have they written?
- Do they encourage publications by their students, either jointly or as single authored publications?

Potential supervisors have track records not only as scholars, but also as supervisors. This is also very important in determining whether they are someone you want to work with. Assessing the combination of a potential supervisor's scholarship and supervisory skills will give you a good idea of what your working relationship with them might be like. However, it is just as important to try to get a sense of the person's character and attitude towards supervision in a more personal way. Try to talk to them over e-mail or telephone, or ideally, in person. You will be working closely with this person for a number of years, so something as basic as how well you get along will be surprisingly important. Since the issue in supervision is good “fit,” an honest self-assessment of what you are looking for and what works best for you is also in order.

At the beginning of the study term, supervisors and students should discuss such things as:

- timelines for completion
- forming a Supervisory Committee
- expected work hours, vacation times, research agendas, etc.
- scheduling regular meetings between supervisor and student
- attending departmental seminars, guest lecturers, etc.
- attending academic conferences
- policies on plagiarism
- policies about authorship on papers and intellectual property

The CAGS has developed a Letter of Understanding template that may assist you in these discussions.

Financing a Graduate Education

Most graduate students require financial assistance during their studies. Student financial assistance is available in various forms, including government financial aid (student loans and/or bursaries), and privately funded bursary and scholarship programs, as well as student assistance programs (tuition payments deferrals, emergency funding, food vouchers, etc.) and on-campus work opportunities through work-study programs. Students may also wish to take on teaching or research assistance positions.

Federal agencies such as the Canadian Institutes for Health Research, the Natural Sciences and Engineering Research Council and the Social Sciences and Humanities Research Council as well as provincial agencies are among the primary sources of scholarships and fellowships for these students. Scholarships and fellowships are always tenable for limited periods of time. NSERC, for example, provides a maximum of four years of combined support at the master's and doctoral levels. The maximum funding for a master's program is two years.

Business and industry often offer scholarships for study in designated areas. In addition, most graduate programs provide teaching assistantships from university operating funds and research fellowships or stipends from faculty research grants and contracts. Most Canadian universities maintain a database or records of funding sources and publish selective listings in their graduate calendar.

Many (if not all) Canadian universities have a financial aid office to assist students and prospective students in seeking and securing financial assistance to enable them to pursue their education. The Government of Canada also has a comprehensive [website](#) explaining the eligibility and application process for government student loans, which students and prospective students may find useful.

At the time of admission into a graduate program, it is essential that students, supervisors, and program administrators have a clear understanding of the financial support obtained, for what purposes, over what period of time, and in return for what services. The need for financial stability in graduate school cannot be overemphasized. Many academically able students have failed because they underestimated the financial drain on their resources and because they had depleted all available sources of support before their studies were complete. It is important that students measure their personal financial needs realistically against these available funds.

Funding Sources

In addition to those listed here, many institutions offer internal awards. Although this list is not exhaustive, here are some of the most common external granting agencies:

Association of Universities and Colleges of Canada – Higher Education Scholarships	https://juno.aucc.ca/wes/?pg=834
Canadian Bureau for International Education	www.cbie-bcei.ca/education-management-services/alphabetical-list-of-programs
Canadian Cancer Society	www.cancer.ca/research/Grants%20and%20Awards/Ongoing%20funding.aspx?sc_lang=en
Canadian Institutes of Health Research (CIHR)	www.cihr-irsc.gc.ca
Fondation Baxter & Alma Ricard	www.fondationricard.com
Fonds de la recherche en santé du Québec	www.frsq.gouv.qc.ca
Fonds québécois de la recherche sur la nature et les technologies	www.fqrnt.gouv.qc.ca
Fonds québécois de la recherche sur la société et culture	www.frqsc.gouv.qc.ca
Heart and Stroke Foundation of Canada	www.hsf.ca/research/en/home
IODE Canada War Memorial Doctoral Scholarship	www.iode.ca/War-Memorial-Doctoral-Scholarship.aspx
John and Lois Lamont Graduate Scholarship	http://www.cfsh.ca/What-We-Do/Scholarships_and_Awards/John-and-Lois-Lamont-Graduate-Scholarship.aspx

Mitacs	www.mitacs.ca/funding-opportunities
Natural Sciences and Engineering Research Council of Canada	www.nserc-crsng.gc.ca
Ontario Graduate Scholarships (OGS) / Ontario Graduate Scholarships in Science and Technology (OGSST)	https://osap.gov.on.ca/OSAPPortal/en/A-ZListofAid/PRD1346626.html
Social Sciences and Humanities Research Council (SSHRC)	www.sshrc-crsh.gc.ca/Default.aspx
The International Development Research Centre	www.crdi.ca/EN/Funding/Pages/default.aspx
Trudeau Scholarships	http://www.trudeaufoundation.ca/en/programs/scholarships/applications
Vanier Canada Graduate Scholarships (CIHR, NSERC, SSHRC)	www.vanier.gc.ca/eng/home-accueil.aspx

Moving Along

Acquiring Formal Training and Certifications

Much of the formal training in research-oriented graduate programs is received during the first year in the program. This training varies with the nature of the discipline and the department. In many programs it is customary to provide graduate courses and to examine the students in these courses, usually by written tests or papers. In other programs, the course work is augmented by directed reading or individual study accompanied by periodic evaluation. However, it is generally agreed that the first year should include an introduction to research and should not be entirely spent on formal teaching. Students should begin to participate in research seminars and attend conferences in their discipline as soon as possible.

For research involving human participants, animals or radioactive, biological or hazardous materials and lasers, certification normally must be obtained prior to starting the research. Often, grant funds cannot be released until the relevant certification has been obtained.

Choosing a Research Topic

Once a student is integrated into a program and a faculty member has agreed to be a supervisor, the next matter is the choice of the student's research topic. At the master's level, the topic should be feasible in a predictable period of time and its scope should be reasonable. In departments without doctoral programs the temptation sometimes exists to expand master's theses into mini-doctoral theses, usually at a cost to the students which outweighs the associated benefit. At the doctoral level, the choice of research topic often determines the career path of a student and therefore requires thoughtful planning and expert advice.

In some programs, a student may become involved in one of the ongoing lines of research within the department. There is a growing tendency in Canadian universities, encouraged by the federal and provincial research councils, to pursue collaborative research. Graduate students can be the beneficiaries of this trend. The available research topics in such cases are partially predetermined by the existing departmental research programs. The success rate of students in such programs is reasonably high because the research is directly linked to the milestones of the programs.

In other programs, the choice of a research topic may depend more on the advice of a specific supervisor who may have a general idea of several research possibilities. In deciding on a particular research topic, the supervisor should be confident that given hard work and reasonable ability, it is fairly certain that the student will bring the project to a satisfactory conclusion in a predictable period of time. On the other hand, an exciting line of research occasionally presents itself in which the outcome is more uncertain. In these situations the student and the supervisor should have a fallback position in case unexpected difficulties arise.

Setting Milestones

After having chosen a research topic, students should, with the help of their supervisor, make a realistic plan for their research and thesis work which takes into account the departmental and university rules, as well as their own constraints and outside responsibilities. This plan should be endorsed by the supervisor and the departmental graduate studies committee. The CAGS has developed a Letter of Understanding template that may assist you in these discussions.

The plan should establish in writing appropriate milestones which the student should reach at various times. It should be filed with the director of the program and form the basis for regular assessments of progress involving the student, the supervisor, and the department. Students should keep systematic records which enable them to take note of the pace of their progress and of their research activities and related events in an objective, quantifiable way.

Everything tends to take much longer than inexperienced students expect. With the help of their supervisors, students need to plan their time carefully if they are to complete their graduate programs within an agreed period of time. The start of a research project is nearly always slower than students expect. Another common cause of delay is the fact that sometimes the students, or the supervisors, are never satisfied with the accomplished research. They can always think of ways of improving the obtained results. In short, they cannot bring a project to a conclusion. Perfectionism can be a virtue, but students should write up what they have already achieved. With a draft, they would almost certainly see more clearly whether any improvement was actually necessary.

Not infrequently it happens that the collected information or obtained results are inadequate to support a thesis. This inadequacy is often not recognized until the thesis is actually written. Students then have to gather additional information, perform further experiments or calculations, or do more research, usually resulting in a delay of at least six to twelve months. If the accumulation of information depends on seasonal or other unpredictable factors, the delay may be even longer. Essentially this outcome is due to a lack of planning. The role of a department in

monitoring research progress is particularly pertinent to minimizing the risks involved in this kind of research.

For doctoral students, there exists a pivotal milestone which determines whether they should continue in a program in the form of their admission to candidacy. This process usually consists of written and oral comprehensive examinations evaluated jointly by several faculty members in addition to the supervisor. The precise nature of the examinations differs considerably from university to university and from discipline to discipline. In some cases the examinations are of a diagnostic nature and serve indeed as the mechanism used to decide whether a student continues in a program. In other cases the examinations are summative and serve to flag gaps in a student's knowledge which need to be filled. In both cases, however, the examinations can be a traumatic experience and students often over-prepare for them. Firm departmental and faculty rules and regulations should be in place to clarify the process.

In a number of disciplines, several universities have introduced the fast track option that allows a student to proceed to a doctoral program from a master's program without completing the master's degree requirements. In addition, some universities also permit talented students in certain disciplines to enter doctoral programs directly from bachelor's programs. In such cases, master's programs sometimes represent a fallback option for students who cannot complete their doctoral programs. It is then up to the graduate faculty of a university to specify the exact conditions under which a doctoral candidate can enter a master's program in the same field, and what requirements must be met in order to obtain a master's degree in place of a doctorate.

Finishing Up

Analysis, Synthesis, and Writing

Often students define the thesis process in terms of researching, then writing. They are proud of the fact that they have achieved their research objectives and that all that remains is to write up the thesis. Several years later they have still not finished. The problem is that research is generally fun and relatively easy once the project has been defined. In contrast, writing is always demanding, and it is especially demanding when it has not been done for the entire period of research. For this reason, students should be encouraged to combine researching and writing at all times. It is particularly difficult to combine the writing up of a thesis with full-time employment and students should be encouraged and given the means to complete their thesis before leaving the university.

Two particular points must be mentioned here. First, the thesis should be no longer than necessary. It should demonstrate that the student understands the background to the research, explain clearly the methods used, present the results, and discuss the findings within an appropriate framework. Verbosity and padding should be avoided at all stages; they detract from the issues at hand and provide easy targets for criticism by examiners.

Secondly, unless the student is a particularly gifted or experienced writer, the use of one of the many books that are available on good writing will likely improve the thesis. There is more in

this than making the thesis a pleasure for the examiners to read. Unclear writing is frequently a reflection of unclear thinking, whereas students who write clearly soon discover that a problem of expression often arises from a lack of understanding.

Graduate faculties and departments usually have specific guidelines and regulations governing the preparation of theses. Before starting to write a thesis, students should therefore familiarize themselves with the formal requirements which a thesis must meet. Most universities will accept a thesis that is a series of articles written in the publication format for that discipline.

One of the basic requirements of a doctoral thesis is that it be original. At the doctoral level, a student's contribution must always be in the form of a substantial advancement of knowledge. The student should have been trained as a scholar and thinker who is able to place this new knowledge convincingly and eloquently in a broader conceptual context. The student should also feel confident to guide the research of other students in the same field.

Presenting and Publishing

All research students, both master's and doctoral, should be encouraged by their supervisors to make presentations, participate in conferences and submit manuscripts to journals, often starting with research notes. The many good results of such activities include greater self-confidence, a better perspective on the quality and meaning of their research, and more visibility in the job market. They also help students to acquire a variety of skills which are necessary for a career in research or in research management. Students sometimes do not realize that colleagues may be more interested in the wider aspects of the project and its impact on the whole body of knowledge than in their raw results. For these reasons, students should be given the opportunity, particularly toward the end of the period of research training and while writing up their results, to present the results of their research in a public forum, both for criticism and enrichment.

A Note about Intellectual Property Rights

Students must receive proper recognition by their supervisors for contributions made in publications before and after the defence of a thesis. This is particularly crucial where a student's research is part of a larger team project, and where related results emanating from the larger project have already been published, either jointly by the students and their supervisors or by other members of the team. There should be a very clear departmental policy which regulates the respective rights of students, supervisor, and research collaborators to publish results of joint research.

Another issue which sometimes arises is whether a student actually has the intellectual property right to previously published material. It may happen that the copyright to research articles belongs to a scientific journal or publishing house and students must obtain written permission if they wish to include reprints in a thesis and subsequently copyright the thesis. In situations where a thesis consists entirely of previously published material or is a work of art, the regulations and

procedures for the examination of such theses should be established in writing at the time of admission of the student to the program.

In the case of research of immediate or even prospective commercial value, or where the dissemination of knowledge is being delayed because of the proprietary nature of the results, the confidential nature of the thesis defence raises additional ethical questions which the university should anticipate. In these and similar situations, the university regulations should also spell out unequivocally the extent of a student's right to restrict publication of research results, while still meeting the degree requirements.

Questions about authorship and credit for research to be carried out should be anticipated and settled early in the program within the context of departmental guidelines and policies with your supervisor. In the case of collaborative and team research, it is often difficult to isolate the original contributions of individuals from the project as a whole. In such cases it is particularly important to be able to refer to the specifically agreed and recorded objectives which each team member was required to attain, and to have a record of seminar and conference presentations which document the contribution of individual researchers.

Additional Living Considerations

Living Expenses

From food to accommodation, clothing and transportation, living costs will vary by location. For instance, in Toronto, accommodation can cost between \$7,300 and \$14,000 per year (<http://cie.utoronto.ca/Coming/Living-Here/Cost-of-Living.htm#cost>).

Is a vehicle required? Is public transportation sufficient? These factors will also impact the student's budget. For a graduate student with a family, there are other expenses considerations. The Graduate Student Association at the University of Waterloo has prepared a sample [budget](#) for a typical graduate student with a family.

Housing

Finding a place to live can be both exciting and challenging for new students. Many universities have housing geared to upper-year and graduate level students and this may be the first consideration for students new to a city. In addition to being on-campus, residence offers other social and academic supports to residents. University-owned apartments are also often close to campus and can offer additional benefits to students.

Some students choose to live off-campus. A visit to the off-campus housing office can assist students in finding suitable housing and understanding lease agreements. Students will need to do some legwork to determine which area to live in and whether proximity to campus is a factor in their decision making.

Parental leave

A graduate student who is bearing a child or who has primary responsibility for the care of an infant or young child immediately following a birth or adoption is eligible for parental leave. Students who are pregnant or considering having a child or taking parental leave should review the specific guidelines related to requests for maternity/parental leaves at his or her particular institution.

Childcare

There are many childcare options and they depend on what type of care your child needs. It is important to ask yourself questions such as:

- When will you need child care?
- Do you want your child in a home-based program or child care centre?
- Should you choose a program near your home or school?

Child care is available at many institutions and each will have different care options ranging from full-time to drop-in options. The Province of Ontario provides a good guide to choosing the right child care for your child(ren): <http://www.edu.gov.on.ca/childcare/finding.html>

Most regions have childcare subsidy programs available, and it may be worthwhile to investigate whether your income and child care needs meet the criteria for the program. It is important to keep in mind that there may be wait lists for funding and childcare spaces may not be immediately available.

Some institutions offer a child daycare subsidy for graduate students in order to help offset the cost of childcare for graduate students. For instance, the [University of Alberta](#) offers one such subsidy, to a maximum of \$500 per child per fiscal year (to a total maximum of \$2,000 in each fiscal year).

Questionnaires

The purpose of this booklet was to identify key aspects of the dynamic relationship between graduate students, supervisors and departments. The focus was on the presentation of a suitable framework in which students and professors could interact with a good measure of predictable success. The following questions are intended to highlight the main points of the discussion.

For Students

- Have you assessed your financial needs during your studies and do you have a financial contingency plan?
- Do you have a written commitment from your department which specifies what financial support you will receive during your studies, for what purposes, over what period of time, and in return for what services?

- Have you made a plan for your research which includes achievable milestones and a timetable for achieving these milestones?
- Have you made a plan for your research which includes achievable milestones and a timetable for achieving these milestones?
- Have you discussed your research plan with your supervisor and agreed on the milestones and a timetable?
- Are you keeping systematic records of your work and results, and are you able to answer questions on the milestones achieved?
- What progress have you made towards your degree in the last few months?
- Have you written a draft of any portion of your thesis for which you have completed the research, and are there tables, figures or other matters which you could prepare at this time?
- Have you discussed your research results and draft with others, and do they find your written work clear and articulate?
- What is your timetable for completing the remaining phases of your research and for writing up your thesis?
- What are the remaining requirements for your degree and when do you expect to graduate?

For Supervisors

- Are your students' research topics well-defined, realistic and manageable within the agreed timeframes?
- Have you discussed different management strategies and methodological approaches with your students after having decided on their research topic?
- Have you set up a schedule of regular meetings with your students in order to monitor their progress in relation to their research plan?
- Do you have a mechanism for refining your students' research topics in the early stages of their program?
- Have you provided your students with guidelines on the appropriate length of a thesis in your field?
- Have you provided your students with guidelines on writing up and presenting their research?
- Do your students keep detailed records of their work and do you check these records periodically to see whether they are systematic and adequate?
- Are you familiar with your students' milestones for the next few months?
- Have you provided your students with the opportunity to give seminar and conference presentations on their research?
- Have you discussed with your students the question of intellectual property rights and credit for collaborative research?

For Departments

- Do you provide your students with written statements specifying what scholarships, fellowships, teaching assistantships or research assistantships they will receive during their studies?
- Do you have a document describing the responsibilities of a thesis supervisor?
- How do you ensure a good match between supervisors and prospective students?
- Do your students have a research plan, deposited with the department, listing the objectives of their research program and identifying a critical path for achieving them?
- Do your students have to present reports at regular intervals which are assessed by members of the department other than the supervisor?
- Do your students, supervisors, and the graduate studies committee meet on a regular basis to assess the students' difficulties and progress?
- How do you ensure that a student's timetable for writing a thesis and completing the degree requirements is realistic?
- Do your students have to give seminar and conference presentations on their work?
- Do you have guidelines on the respective roles of co-supervisors of a thesis?
- Do you have guidelines on collaborative research?

References

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