



## ***Graduate Student Expectations***

This document is a summary and clarification of what we currently expect from our Graduate students in the School of Computing Science at SFU. It is intended to complement:

- the Dean of Graduate Studies regulations at SFU [<http://www.sfu.ca/dean-gradstudies/current/index.html>]
- our Graduate Brochure [<http://www.cs.sfu.ca/gradpgm/Recruiting/gradbrochure.html>]
- the Teaching Assistant Guidelines [<http://www.cs.sfu.ca/gradpgm/useful/TA-guidelines.pdf>]
- our online resources [<http://www.cs.sfu.ca/gradpgm>]

Each student must be and remain in good standing with the School of Computing Science and what follows summarizes our definition of "Good Standing," which is the basis of receiving any funding allocations (Teaching Assistantships, Research Assistantships, Graduate Fellowships or Scholarships) from the School.

### **Graduate students in good standing are expected to:**

- Maintain a grade point average of 3.0 or higher
- Follow the academic plan as outlined on the next page
- Maintain an active relationship with their supervisors
- Perform well in their duties as Teaching and Research Assistants (see details below)
- Submit a yearly complete progress report [<https://intraweb.cs.sfu.ca/progprep/index.cgi>] by the deadline (January 15th)
- Apply for all scholarships, Teaching Assistant appointments, and Research Assistant appointments for which they are eligible annually and/or each semester
- Check their email daily as a way for the School and supervisor to reach them and to also respond to emails in a timely fashion
- For our first year students, attend and participate in CMPT 891

Students "not" in good standing should see the Graduate Program chair immediately to rectify any problems and to seek assistance and support. If this is not addressed in a timely fashion, this can lead to funding problems and possible expulsion from the program.

### **Seeking Help**

Graduate Studies are hard. We know this, and want to support you as much as possible. It is very important that you discuss and relate problems you encounter.

Often your fellow graduate students share the same problems. The buddy program created by the Computing Science Graduate Student Association (CSGSA) [<http://www.cs.sfu.ca/~csgsa/>] is unique and a really good way to help you find your way around. Just ask your buddy! You can also approach the president and other officers of the CSGSA.

Other people that are happy to help you by listening, providing resources or assisting in finding the “right people” with whom you can discuss any issue with, include:

- the Graduate Director – Dr. Art Liestman
- the Manager, Administrative and Academic Services - Tracy Bruneau
- the Graduate Secretaries - Val Galat and Gerdi Snyder
- the Health and Counselling Centre at SFU [<http://www.sfu.ca/hccc/>]

## **Academic Plan**

### **For MSc Project students:**

Semester 1: Complete 2 graduate courses (GPA of 3.0 or higher) in addition to CMPT 891

Semester 1: Choose a permanent Senior Supervisor using this form  
[<http://www.sfu.ca/dean-gradstudies/forms.html>]

Semester 2: Choose and complete 3 courses (GPA of 3.0 or higher)

To satisfy the breadth requirements you must complete 1 theory course (CMPT 705/710 or equivalent) and 6 courses in 3 of 5 areas of instruction (including CMPT 705/710) as well as, 1 graduate course not included in the above courses. You must also have taken 1 seminar course (CMPT 891 or 506). Only 2 Special Topics courses can be used to satisfy breadth, except with permission of the Graduate Program Breadth Committee.

Semester 2: Have a COMPLETE supervisory committee in place by the end of semester 2, using this form [<http://www.sfu.ca/dean-gradstudies/forms.html>]

Semester 3: Have a clear idea of your project topic and begin the research

Semester 4: Complete course requirements in order to fulfill your breadth requirement and submit for approval using the appropriate form [<http://www.cs.sfu.ca/Forms/Grads/>]

Semester 4: Project report should be 50% complete

Semester 5: Complete and defend project report

### **For MSc thesis students:**

Semester 1: Complete 2 graduate courses (GPA of 3.0 or higher) in addition to CMPT 891

Semester 1: Choose a permanent Senior Supervisor using this form  
[<http://www.sfu.ca/dean-gradstudies/forms.html>]

Semester 2: Choose and complete 2 graduate courses (GPA of 3.0 or higher)

Semester 2: Engage in research projects with your Senior Supervisor

Semester 2: Have a COMPLETE supervisory committee in place by the end of semester 2, using this form [<http://www.sfu.ca/dean-gradstudies/forms.html>]

Semester 3: Complete course requirements in order to fulfill your breadth requirement and submit for approval using the appropriate form [<http://www.cs.sfu.ca/Forms/Grads/>]

To satisfy the breadth requirements you must complete 1 theory course (CMPT 705/710 or equivalent) and 4 courses in 3 of 5 areas of instruction (including CMPT 705/710) as well as, 1 graduate course not included in the above courses. You must also have taken 1 seminar course (CMPT 891 or 506). Only 2 Special Topics courses can be used to satisfy breadth, except with permission of the Graduate Program Breadth Committee.

Semester 3: Have a clear idea of your thesis topic and begin the research

- Semester 4: Focus on research project full time
- Semester 5: Complete research and most of the writing
- Semester 5: Submit theses to supervisory committee
- Semester 6: Defend, at the latest, during the middle of the semester to allow time for including the suggestions of your committee into your final draft for library submission

**For PhD students:**

- Semester 1: Complete 2 graduate courses (GPA of 3.0 or higher) in addition to CMPT 891
- Semester 1: Choose a permanent Senior Supervisor using this form  
[<http://www.sfu.ca/dean-gradstudies/forms.html>]
- Semester 2: Choose and complete 2 graduate courses (GPA of 3.0 or higher)

To satisfy the breadth requirements there are 2 options.

If you are a student **already** having an MSc in Computing Science you must complete 1 theory course (CMPT 705/710 or equivalent) and 3 courses (including CMPT 705/710) in 3 of 5 areas of instruction.

If you are a student **NOT already** having an MSc in Computing Science you must complete 1 theory course (CMPT 705/710 or equivalent) and 6 courses (including CMPT 705/710) in 3 of 5 areas of instruction.

For both options you must also take 1 graduate course not included in the above courses. As well, you must have taken 1 seminar course (CMPT 891 or 506). Only 2 Special Topics courses can be used to satisfy breadth, except with permission of the Graduate Program Breadth Committee.

- Semester 2: Engage in research projects with your senior supervisor
- Semester 2: Have a COMPLETE supervisory committee in place by the end of Semester 2, using this form [<http://www.sfu.ca/dean-gradstudies/forms.html>]
- Semester 2: Choose and complete 2 graduate courses (GPA of 3.0 or higher)
- Semester 2: Engage in research projects with your Senior Supervisor
- Semester 3: Fulfill your breadth requirement using the appropriate form and submit for approval [<http://www.cs.sfu.ca/Forms/Grads/>]
- Semester 3: Have a clear idea of your thesis topic and start the research
- Year 2: Complete all course requirements
- Year 2: Depth Exam Completed
- Year 3: Thesis Proposal Completed
- Year 4: Thesis Defended

For your reference, we have included the five areas of instruction. For purposes of defining the MSc and PhD breadth requirements, courses are grouped into the five major areas in Table 1. Courses not related to the breadth requirements are shown in Table 2. Any courses taken outside the School of Computing Science must be approved by the student's senior supervisor and the director of the graduate program.

## TABLE I

### *Area I – Algorithms and Complexity Theory*

CMPT 701-3 Computability and Logic  
CMPT 705-3 Design and Analysis of Algorithms  
CMPT 710-3 Computational Complexity  
CMPT 711-3 Bioinformatics Algorithms  
CMPT 813-3 Computational Geometry  
CMPT 814-3 Algorithmic Graph Theory  
CMPT 815-3 Algorithms of Optimization  
CMPT 881-3 Special Topics in Theoretical Computing Science

### *Area II – Networks, Software and Systems*

CMPT 730-3 Programming Languages  
CMPT 731-3 Functional Programming  
CMPT 745-3 Software Engineering  
CMPT 755-3 Compiler Theory  
CMPT 760-3 Operating Systems  
CMPT 765-3 Computer Communication Networks  
CMPT 771-3 Internet Architecture and Protocols  
CMPT 777-3 Formal Verification  
CMPT 816-3 Theory of Communication Networks  
CMPT 885-3 Special Topics in Computer Architecture  
CMPT 886-3 Special Topics in Networks, Software and Systems

### *Area III – Artificial Intelligence*

CMPT 721-3 Knowledge Representation and Reasoning  
CMPT 725-3 Logical Methods in Computational Intelligence  
CMPT 726-3 Machine Learning  
CMPT 823-3 Formal Topics in Knowledge Representation  
CMPT 825-3 Natural Language Processing  
CMPT 826-3 Automated Learning and Reasoning  
CMPT 827-3 Intelligent Systems  
CMPT 882-3 Special Topics in Artificial Intelligence

### *Area IV – Databases, Data Mining and Computational Biology*

CMPT 505-3 Problem Based Learning in Bioinformatics  
CMPT 740-3 Database Systems  
CMPT 741-3 Data Mining  
CMPT 829-3 Special Topics in Bioinformatics  
CMPT 842-3 Concurrency Control in Database Systems  
CMPT 843-3 Database and Knowledge-Base Systems  
CMPT 884-3 Special Topics in Database Systems

### *Area V - Graphics, HCI, Vision and Visualization*

CMPT 761-3 Image Synthesis  
CMPT 764-3 Geometric Modeling in Computer Graphics  
CMPT 773-3 User Interface Design  
CMPT 767-3 Visualization

**CMPT 820-3 Multimedia Systems**  
**CMPT 821-3 Robot Vision**  
**CMPT 822-3 Computational Vision**  
**CMPT 888-3 Special Topics in Computer Graphics, HCI , Vision and Visualization**

## **Table II**

**CMPT 880-3 Special Topics in Computing Science**  
**CMPT 894-3 Directed Reading**  
**CMPT 889-3 Special Topics in Interdisciplinary Computing**

## **Supervisor**

It is extremely important to choose a Senior Supervisor as early as possible in your graduate career. University regulations require that you formally declare your Senior Supervisor on this form [<http://www.sfu.ca/dean-gradstudies/forms.html>]

The choice of a Senior Supervisor is an important one, and you should choose one who best fits your research interests, talents, and working style. Based on the information provided in your application, we have worked very hard to pair you, initially, with a faculty member who has similar interests and talents. This faculty member has made a serious financial commitment to your first year in graduate school. Thus, it is important that you work diligently to honour that commitment, by making every attempt to build a research relationship with them, in the hope that you will be comfortable in choosing them as your Senior Supervisor. While you are not required to choose this faculty member as your Senior Supervisor, the School expects that you will give them very strong consideration.

## **Research**

The way research is conducted differs from area to area and supervisor to supervisor. Hence, you are encouraged to talk to your supervisor to discuss and confirm his or her expectations of you. We also suggest that you work with your Senior Supervisor to document these expectations and any changes that occur throughout your program.

## **Funding**

The funding structure for graduate students has changed and some students received funding promises in their admission letter and some did not. For those that did receive funding promises, the funding will come from different sources.

On average you will receive one semester of funding per year from the department and two semesters of funding from your Senior Supervisor. The funding from the department will come either as a Teaching Assistantship or as a fellowship (SFU-GF or FAS-GF). As already stipulated within your offer letter, your funding guarantee depends on your "good standing" in our program (as defined above).

Those students that did not receive funding promises will only receive funding from the department or the Senior Supervisor if sufficient funds are available. Again, we encourage you to apply for TA appointments and scholarships whenever possible.

## **Teaching Assistant (TA) Appointments**

Since TA work impacts directly on the educational experience of students, it is important that you take your TA assignment(s) seriously and keep in mind that you are acting as a representative of the School of Computing Science. It will also provide you with invaluable experience in your graduate education. Furthermore, if you plan for a career in industry, it will give you experience in communicating ideas clearly and succinctly, and in dealing with those less experienced than you. If you plan for a career in academia, it will provide you with teaching experience.  
[<http://www.cs.sfu.ca/gradpgm/useful/TA-guidelines.pdf>]

### a. TA Application Process

All graduate students are eligible and encouraged to apply for a TA position regardless of your funding promises and/or current funding position. Please keep in mind that in order to apply you MUST be a fully registered student. We encourage everyone to apply so that they may be considered unless you have confirmed funding in place for the semester being applied for. Please consult the TA Guidelines for detailed information.  
[<http://www.cs.sfu.ca/gradpgm/useful/TA-guidelines.pdf>]

You will have to apply for a TA position by the deadline using the Computing Science web site [<http://www.cs.sfu.ca/Forms/Grads/TAapp/>] and this information is communicated to all graduate students each semester. You should apply to TA only for those courses where you feel confident in your understanding of the subject matter. Assignments are generally completed one month prior to semester start and offers are sent to each individual via email. Once you have accepted the offer made and have signed your appointment contract, it is your responsibility to contact the course instructor and set-up a meeting to discuss your responsibilities during the semester, possibly in conjunction with other TAs assigned to the course.

Your TA contract specifies that you will work a specific number of "base units". A "base unit" is a standard amount of work performed over the semester. What constitutes a base unit varies depending on the exact nature of the work that you are performing. In most cases, one base unit is equivalent to 42 hours of work over the semester. If your duties require classroom contact with students, then this number may vary. It is important that you complete the Time Use Guideline form provided by the TSSU and as well, you are expected to provide a completed copy to the School. If you have any questions about whether your workload exceeds the amount required in your contract, the work assigned etc., you should first contact the Manager, Administrative and Academic Services to review this and if all else fails you should contact the TSSU and review your workload with them.

### b. Tasks:

Different courses and different instructors will likely have different expectations for the work performed by their appointed TAs, some of these may be:

- Hold, prepare for and run tutorials and/or labs
- Hold office hours on a regular basis
- Mark assignments and exam and record grades
- Answer emails from students

You must discuss and reach an agreement with the instructor and the other TAs in the teaching team about how the work is distributed and how you will communicate among the

teaching team. You must keep the instructor informed about how your activities develop as well as about any problems that arise, which could, in any way, affect the normal development of the course, whether they are problems involving the students and/or general problems or concerns about your TAing duties.

c. Communication:

It is important that you communicate well with the instructor of the course throughout the entire semester and always in a timely fashion. Some things that you may wish to discuss and clarify are; any misunderstanding regarding your duties, problems that arise related to any of the student(s) in the class, any situations that arise that prevent you from doing the work you have committed to do, or any other details or situations that come up during the semester – again, please ensure that you are in constant communications with the instructor.

You will evaluate students and as well, you will be asked to evaluate the instructor you have worked with. Similarly, the students and the instructor evaluate you. These evaluations are considered when reviewing the TA appointments and you should ensure that you are in “good standing” with the School based on your performance. If you have any inquiries on this please contact the Manager, Administrative and Academic Services ([tbruneau@cs.sfu.ca](mailto:tbruneau@cs.sfu.ca)).

You must also keep in mind that you are expected to be available for work as a TA from the beginning until the end of the semester - this includes the exam period and the weeks following that period. If you are considering or know that you will be absent during any of these times, it is your responsibility to communicate this to the instructor immediately and gain his or her permission for the absence and/or work out coverage for the time that you must be away.

d. Training:

Aside from the required teaching//training courses and /or workshops organized by the department it is highly recommended that you look into additional training about your role as a TA. You should attend every possible TA/TM day organized once per semester by the Learning and Instructional Development Centre (LIDC) [<http://www.lidc.sfu.ca/>] or other relevant training workshops that you are made aware of. If you have any communication difficulties in particular because of language problems you should consider attending the ITA Seminar [<http://www.sfu.ca/cstudies/lang/ita/what.htm>].

New training resources will be offered by Computing Science. All of these workshops are available to any graduate student and are offered before the beginning of each semester. For further information please contact the Manager, Administrative and Academic Services.

e. In summary:

There are three important points that you should keep in mind: **communicate well, be respectful and require that you are respected.**

As a TA you have to work closely with the course instructor and/or the teaching team. You are encouraged to seek pedagogical support as needed. Respect the other members in the teaching team: if you have committed to a certain share of work, keep your word.

Respect the students too. They may not know about or understand some topics covered in the course, but they deserve your respect, patience and prompt replies, in a polite manner. Inform the instructor if any unusual problems appear. Require that you are respected. Do not let the students or teaching team members (including other TAs or the instructors) assign you more than what you have committed to and are able to do.

Also keep in mind that there are people in the School that can provide assistance, give support and answer questions - we encourage you to seek them out if the need arises.

Some of these people include: the Manager, Administrative and Academic Services, members of the CSGSA, Graduate Program Assistants and the Graduate Director.

### **Miscellaneous General Guidelines**

- The student should make and maintain a strong commitment in order to devote the required time and energy needed to engage successfully in graduate work and research, write a thesis, and contribute fully to the scholarly and intellectual life of the University.
- The student should show continuous dedicated efforts to gain the background knowledge and skills needed to pursue graduate work successfully, and adhere to the highest standards of ethical behaviour to assure academic integrity and professionalism at all times.
- The student should maintain registration throughout the program and ensure, that where required, visas and employment authorization documents are kept up-to-date.
- The student should be aware of and conform to program, Faculty of Graduate Studies, and University requirements relating to deadlines, thesis style, award applications, and other graduate requirements, etc.
- The student should pay due attention to the need, to maintain a workplace which is safe, tidy and healthy. The student should respect the work and equipment of others, and show tolerance and respect for others sharing the same facilities. This would include, for example, cleaning up a work space when finished, and complying with all safety and work regulations of the lab/program/University.
- The student should be thoughtful and reasonably frugal in using lab resources, and assist in obtaining resources for the research of other group members, when applicable.
- The student should be reasonably available to meet with the Senior Supervisor and Supervisory Committee when requested, and be able to report fully and regularly on thesis progress and results.
- The student should give serious consideration and response to comments and advice from the Senior Supervisor and Committee members.
- The student should, very early on, discuss and formulate with their Senior Supervisor a plan of study for completion of degree requirements and thesis work, with clear milestones denoting progress. This would include, for example, setting a viable time schedule and adhering to it for all graduate work, including thesis progress and completion. Any variations to this schedule, including prolonged absences by the student, should be discussed. More generally, the student should maintain open communication and feedback with the Senior Supervisor on all issues, including supervisory practices.



- The student should inform the program (i.e., Graduate Director), in a timely fashion, of any serious difficulties which may arise in supervision. These might include, but are not limited to, major professional or academic disagreements, interpersonal conflicts, or potential conflict of interest situations.