



University  
of Regina



Faculty of  
Science

Department of Computer Science

# CS Graduate Student Orientation

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DEPARTMENT OF COMPUTER SCIENCE

# Graduate Program Requirements

- ▶ M.Sc. Course
- ▶ M.Sc. Project
- ▶ M.Sc. Thesis
- ▶ Ph.D.
  
- ▶ Co-Op Designation



# M.Sc. Course

- ▶ The M.Sc. Course route is intended for students who want to complete their M.Sc. degree requirements through coursework
- ▶ This is normally achieved by taking
  - ▶ 10 CS 800-level courses
  - ▶ one instance of CS 900 (Graduate Seminar)
- ▶ Students may take up to two courses outside of Computer Science
- ▶ Students may take up to two courses at the 400 level
  
- ▶ I suggest reserving the non-CS and 400-level course options to the end of your program, in case you have already taken the courses that are being offered within our Department

# M.Sc. Project

- ▶ The M.Sc. Project route is intended for students who want to complete their M.Sc. degree requirements through a combination of coursework and professionally-oriented project research
- ▶ This is normally achieved by taking
  - ▶ 7 CS 800-level courses
  - ▶ 3 CS 902 (project research) courses
  - ▶ two instances of CS 900 (Graduate Seminar)
  - ▶ writing and formally defending a project report
- ▶ Students may take up to two courses outside of Computer Science
- ▶ Students may take up to one course at the 400 level
  
- ▶ Your supervisor will advise you on course selection and project topic

# M.Sc. Thesis

- ▶ The M.Sc. Thesis route is intended for students who want to complete their M.Sc. degree requirements through a combination of coursework and thesis research (with an option to continue on to a Ph.D.)
- ▶ This is normally achieved by taking
  - ▶ 5 CS 800-level courses
  - ▶ 5 CS 901 (thesis research) courses
  - ▶ two instances of CS 900 (Graduate Seminar)
  - ▶ writing and formally defending a thesis
- ▶ Students may take up to two courses outside of Computer Science
- ▶ Students may take up to one course at the 400 level
  
- ▶ Your supervisor will advise you on course selection and thesis topic

# Ph.D.

- ▶ Doctoral study is the highest level of education that one can obtain
- ▶ We only admit students to our Ph.D. program who have previously completed an M.Sc. Thesis (not course, project, MBA, etc.)
- ▶ This is normally achieved by taking
  - ▶ 3 CS 800-level courses
  - ▶ 17 CS 901 (thesis research) courses
  - ▶ two instances of CS 900 (Graduate Seminar)
  - ▶ writing and formally defending a doctoral dissertation
- ▶ Your supervisor will advise you on course selection and doctoral dissertation topics

# Co-Op Designation

- ▶ Any M.Sc. student may choose to add a co-op designation to their existing M.Sc. program
  - ▶ no direct admissions; students can apply after they have started their program (completed at least two CS 800-level courses)
  - ▶ M.Sc. Thesis and M.Sc. Project students need the permission of their supervisor
  - ▶ competitive admissions, based on academic performance ( $\geq 80\%$ )
  - ▶ two 4-month work terms (CS 601, CS 602)
  - ▶ preliminary report submitted before the end of the first work term
  - ▶ final report submitted before the end of the second work term
- ▶ Applications to the co-op designation must be made at the beginning of the semester before the first work-term
- ▶ Students must still have course requirements remaining to complete after their second work term

# Full Course Load

- ▶ A full course load for graduate students is **two courses per semester**
- ▶ You should interpret this to mean that professors will expect that you spend half of your time on each course
- ▶ This rule doesn't apply to two special courses: GRST 800AA and CS 900 (both 0-credit courses, and taken along with a full course load)
- ▶ Sometimes, you will need to spend more time on one than the other (e.g., as assignments are due, the days leading up to an exam)
- ▶ Plan your time accordingly, and be prepared to get ahead in one to make time for the other
- ▶ If you have TA or RA work, you need to keep this time commitment in mind as well





# Courses (Spring/Summer 2019)

- ▶ GRST 800AA (Academic Integrity)
- ▶ CS 829 (Information Theory & Applications)
- ▶ CS 837 (Information Visualization)
- ▶ CS 890AC (Data Analysis from the Internet)
- ▶ CS 890BN (Cryptography & Data Security)
- ▶ CS 890EP (IoT and Wireless Sensor Networks)
- ▶ CS 490BK (Server-Side Web Applications)
- ▶ CS 900
  
- ▶ You may take one course (3 credits) in the Spring/Summer Semester and still maintain your full-time student status



# Courses (Fall 2019)

- ▶ CS 811 (Theory of Computing)
- ▶ CS 825 (Image Processing)
- ▶ CS 828 (Human Computer Communications)
- ▶ CS 831 (Knowledge Discovery in Databases)
- ▶ CS 838 (Uncertainty Reasoning in AI)
- ▶ CS 890AQ (Mgmt Intelligent Info Systems)
- ▶ CS 890DH (Topics in Communications)
  
- ▶ CS 900



# GRST 800AA (Academic Integrity)

- ▶ All graduate students are required to complete GRST 800AA within the first month of their studies
- ▶ Online tutorial, with a focus on:
  - ▶ academic integrity
  - ▶ proper referencing/citing
  - ▶ acceptable use of others' ideas/words
  - ▶ plagiarism
  - ▶ University policy and FGSR regulations
- ▶ Work through the tutorial mindfully; learn what is expected in terms of academic integrity and the penalties for academic misconduct

# CS 900 (Seminar)

- ▶ CS Graduate students must complete two semesters of CS 900, with the exception of M.Sc. Course Route students, who must complete one semester of CS 900. When enrolled in CS 900, a student must make one presentation and attend all presentations. In the first semester of CS 900, the student will choose a Computer Science topic within their research area. In the second semester of CS 900 (if required), the student will choose a topic within their own research.
- ▶ While there is flexibility on when this can be done, there are some restrictions:
  - ▶ you cannot take both instances in the same semester
  - ▶ you cannot take CS 900 after you have finished the other credit requirements of your program
- ▶ It is your responsibility to decide when to take this course
  - ▶ Recommendation: plan to take the first instance in your 3<sup>rd</sup> semester, and the second instance in your 5<sup>th</sup> or 6<sup>th</sup> semester

# Courses in Other Programs

- ▶ We have reviewed various courses in other programs to determine whether they are appropriate for your Computer Science degree
  - ▶ Courses in Electronic Systems Engineering: ENEL 489, 492, 495, 811, 812, 813, 850, 857
  - ▶ Courses in Software Systems Engineering: ENSE 483, 880, 882, 883
  - ▶ Courses in Mathematics and Statistics: MATH 809, 827, 869, STAT 852, 871
  - ▶ Courses in Business Administration: GBUS 866
- ▶ If you wish to take a course that is not on this list and have it count towards your program, you need to seek approval
- ▶ The content must be related to CS and must be considered 400/800 level material by CS

# Course Registration Regulations

- ▶ The online system will allow you to register for up to 12 credits of courses (200% of a full course load)
  - ▶ taking this many courses is not feasible
  - ▶ if you register in 4 courses and then drop the ones you don't want after the semester starts, you are taking space away from other students
- ▶ If you are currently registered in more than 6 credits for either the spring/summer or fall semesters, you must drop courses now to allow anyone on the waitlist to get into the courses you do not want
  - ▶ the wait-list disappears on the first day of classes

# Role of Graduate Coordinator

- ▶ The Graduate Coordinator in the Department of Computer Science has a number of roles within our graduate program
  - ▶ oversee and coordinate changes to our graduate program
  - ▶ serve as the student advocate in cases where there is a conflict between a student and supervisor
    - ▶ all matters/issues should come to the Graduate Coordinator first, and may then be directed to the Department Head, Associate Dean (Faculty of Science), or Associate Dean (Faculty of Graduate Studies & Research)
  - ▶ serve as the de facto supervisor of all M.Sc. Course route students
  - ▶ verify thesis and project defense paperwork (forms, thesis review, etc.)
  - ▶ chair M.Sc. Project defenses

# Graduate Coordinator / Student Advising

- ▶ I have set aside 1.5 hours each week for graduate student advising
  - ▶ Tuesday 1:00 – 2:30 PM
  - ▶ you must book an appointment in advance:
    - ▶ [https://calendly.com/orlandhoeber/15min\\_gradcoord/](https://calendly.com/orlandhoeber/15min_gradcoord/)
- ▶ Most of the questions I get have answers in the Graduate Calendar
  - ▶ you can save yourself some time by reading that document in advance
  - ▶ FGSR website > Current Students > Graduate Calendar





# Services from Other Organizations

- ▶ UR International
- ▶ Faculty of Graduate Studies and Research
- ▶ Department of Computer Science
- ▶ Graduate Students' Association
- ▶ Computer Science Student Society
- ▶ Association of Computing Machinery
- ▶ IEEE Computer Society



# UR International

- ▶ UR International provides a range of services to help students
  - ▶ improving your English communication skills
  - ▶ wellness workshops
  - ▶ running the International Student Orientation
- ▶ If you have any questions about your study permit or other aspects of being an international student, UR International is your primary resource for resolving such issues



# Faculty of Graduate Studies & Research

- ▶ FGSR is the home faculty for all graduate students
- ▶ They provide various services for graduate students
  - ▶ admissions
  - ▶ financial aid & scholarships
  - ▶ coordination of thesis examinations
  - ▶ graduation
- ▶ In cases of academic misconduct, FGSR will get involved



# Department of Computer Science

- ▶ Although you are a student in the Faculty of Graduate Studies & Research, your graduate program is run through the Department of Computer Science
- ▶ We provide various services for graduate students
  - ▶ courses
  - ▶ supervisors for projects and theses
  - ▶ distribution of Graduate Student Baseline Funding and other awards/scholarships
  - ▶ assignment of TA work



# Graduate Students' Association

- ▶ The GSA runs various events for graduate students
- ▶ Two of their key events are:
  - ▶ Three Minute Thesis
  - ▶ Poster Competition



# Computer Science Student Society

- ▶ The CSSS is the primary student society of CS students at the University of Regina
- ▶ While the majority of the members of CSSS are undergraduate students, graduate students may also become members
- ▶ The CSSS runs a number of social events throughout the semester
- ▶ A group of CS graduate students are in the process of creating a new CS Graduate Students' Society
  - ▶ if anyone is interested in helping out with this, please contact me



# Association of Computing Machinery

- ▶ As a CS graduate student, your primary academic society is the ACM
- ▶ They provide a number of services to computing professionals (broadly defined):
  - ▶ code of ethics
  - ▶ journals
  - ▶ conferences
  - ▶ digital libraries
  - ▶ travel awards
- ▶ Membership provides discounted registration rates at conferences



Association for  
Computing Machinery

# IEEE Computer Society

- ▶ Like the ACM, the IEEE Computer Society is a society of computing professionals
- ▶ They too provide similar services
  - ▶ conferences
  - ▶ journals
  - ▶ digital libraries
- ▶ Membership provides discounted registration rates at conferences





# Professionalism & Conduct

- ▶ Dedication to Coursework
- ▶ Academic Misconduct
- ▶ Teamwork
- ▶ Research
- ▶ Respectful Workplace
- ▶ Communication Etiquette
- ▶ Deadlines



# Dedication to Coursework

- ▶ We expect that all graduate students will dedicate themselves to their coursework
  - ▶ read the syllabus
  - ▶ attend classes (all of them)
  - ▶ complete all assignments on time and to the best of your abilities
  - ▶ learn what constitutes academic misconduct, and avoid it
- ▶ If you get behind and need help, identify this problem early and seek advice from your course instructor



# Learn to Use the Library

- ▶ Physical library:
  - ▶ books
  - ▶ work space
  - ▶ software training
  - ▶ writing workshops
- ▶ Digital library
  - ▶ search for academic articles
  - ▶ access to specific articles and journals that you find elsewhere (using Google Scholar)
  - ▶ learn the difference between well-respected journals and conference, and predatory publishing
  - ▶ learn how to do forward and backward citation analysis



# Academic Misconduct

- ▶ Academic misconduct is a serious offence, and can take many forms:
  - ▶ cheating on exams
  - ▶ writing an exam on someone else's behalf
  - ▶ plagiarism (various forms)
  - ▶ submitting assignment work that is not your own (downloaded from the Internet, copied from another student)
  - ▶ allowing someone else to copy your work
- ▶ The penalty depends on the severity and frequency of the offence, ranging from a grade of zero on the exam/assignment, a grade of XF on the course, to suspension or even expulsion from the University

# Teamwork

- ▶ Some courses include team projects
- ▶ Some supervisors have their students work on group research projects
- ▶ In either case, we expect graduate students to work well in teams
  - ▶ be respectful of others in the team (their ideas, their time, their efforts)
  - ▶ do your assigned work to the best of your ability and within the timeframe established by your team
  - ▶ if there is a problem within your team, make sure you let the course instructor or research supervisor know as soon as possible



# Research

- ▶ For Ph.D., M.Sc. Thesis, and M.Sc. Project students, you will be expected to undertake independent research
- ▶ Some courses will also include elements of research
- ▶ Such research is about the creation of new knowledge
- ▶ This requires that you learn about what others have done that is relevant to the work you are undertaking
  - ▶ top conferences & journals
  - ▶ some technical material may be okay (depending on the topic/course)
- ▶ Your new research must be supported by this information (using references appropriately)
- ▶ Plagiarism in a thesis is a very serious offence



# Respectful Workplace

- ▶ We expect our graduate students to contribute to a respectful workplace
  - ▶ be respectful of the various cultures from which we originate
  - ▶ be respectful of different sexes and sexual orientations
  - ▶ be respectful of the faculty and staff
  - ▶ be kind, courteous, and helpful to your fellow students



# Communication Etiquette

- ▶ When communicating with faculty and staff, you should be mindful of the fact that we receive an enormous number of emails each day
- ▶ Change your email program to provide your full name
- ▶ Create a meaningful footer to attach to each email
- ▶ Provide an appropriate greeting, and then get to the point of the communication
- ▶ Make sure you provide sufficient information to address the issue being raised (e.g., the course, your student number, etc.)
- ▶ Proof-read your email before sending it
- ▶ <https://medium.com/@lportwoodstacer/how-to-email-your-professor-without-being-annoying-af-cf64ae0e4087>



# Graduate Calendar & Deadlines

- ▶ FGSR provides a Graduate Calendar that outlines the “rules” by which the Faculty operates
- ▶ Since you are student within FGSR, it is in your best interest to learn the rules
- ▶ We also provide some clarification of things relevant to CS on our website
  
- ▶ Ph.D., M.Sc. Thesis, and M.Sc. Project students should consult with their supervisors as they approach the end of their programs in order to get advice on how to manage their time to meet their desired deadlines.
- ▶ My experience is that writing a dissertation, thesis, or project report always takes longer than students expect.
- ▶ Note that the onus is on you to respect these deadlines (you should not rush everyone for approvals and signatures just because you are late)



# Thoughts for New Graduate Students

- ▶ Graduate studies allows you to focus on advanced study and intellectual inquiry
- ▶ Curiosity, problem solving, and self-motivation will be important
- ▶ If you treat your studies like you are still an undergraduate student, things will take longer than you expect
  
- ▶ Commit yourself to your studies, and do your best work
- ▶ If you find yourself in trouble in a course, talk to your instructor and supervisor; do not resort to cheating or plagiarism

# Thoughts for Returning Graduate Students

- ▶ Keep track of the coursework requirements of your program, especially as you approach your last few semesters
- ▶ All students who have a thesis or project requirement in their program should be mindful of the timelines for completing and defending their thesis or project report
  - ▶ theses are defended externally
  - ▶ project reports are defended entirely within the CS Department
  - ▶ in either case, time is required for the supervisor and committee members to read and provide feedback on the document
  - ▶ it is also important to consider the time required by the examiner to read and prepare questions for the defense

# What Questions Do You Have?

