Graduate Orientation

George Labahn

Cheriton School of Computer Science
University of Waterloo

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Faculty

• Mark Giesbrecht, Director of the School

• George Labahn, Director of Graduate Studies

• Bernard Wong, Associate Director of Graduate Studies

• Naomi Nishimura, MMath Coursework Advisor

• Edward Lank, Nancy Day, Graduate Advocates
Staff

• Marie Kahkejian
• Loc Do
• Denise Shantz
PhD students and thesis/paper MMath students

- Your supervisor...
  - admitted you to the program
  - provides your research assistantship
  - guides you in your research
  - helps you with course selection

- Contact your supervisor as soon as possible
Coursework MMath

- Naomi Nishimura is your advisor. She can
  - help you with course selection
  - answer questions about your program
Course Numbering

- CS 100–400
- CS 600
- CS 700
- CS 800
• Undergraduate courses

• Not open to graduate students except as a remedial or extra
• Essentially a 400-level undergrad course

• Extra work required for grad students
• Typically fixed curriculum
• Lecture based
• Research oriented topics courses

• Reading/analysis of 20–40 research papers

• Projects

• May vary offering to offering
  May be able to count two offerings of same course
Master’s Course Requirements

<table>
<thead>
<tr>
<th>Program</th>
<th>Total</th>
<th>600-level</th>
<th>800-level</th>
<th>per area</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMath thesis</td>
<td>4</td>
<td>≤ 1</td>
<td>≥ 1</td>
<td>≤ 2</td>
</tr>
<tr>
<td>MMath paper</td>
<td>7</td>
<td>≤ 3</td>
<td>≥ 2</td>
<td>≤ 3</td>
</tr>
<tr>
<td>MMath coursework</td>
<td>8</td>
<td>≤ 3</td>
<td>≥ 2</td>
<td>≤ 4</td>
</tr>
</tbody>
</table>

Plan to complete at least 2 courses per term (3 for MMath coursework) until course requirements are complete

Details on the [CS Grad web pages](#).
## PhD Course Requirements

<table>
<thead>
<tr>
<th>Program</th>
<th>Total</th>
<th>600-level</th>
<th>800-level</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD (from masters)</td>
<td>4</td>
<td>≤ 1</td>
<td>≥ 1</td>
</tr>
<tr>
<td>PhD (from bachelors)</td>
<td>8</td>
<td>≤ 3</td>
<td>≥ 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computing Technology</td>
<td>Software Engineering&lt;br&gt;Programming Languages&lt;br&gt;Hardware and Software Systems</td>
</tr>
<tr>
<td>Applications</td>
<td>Artificial Intelligence&lt;br&gt;Databases&lt;br&gt;Graphics and User Interfaces&lt;br&gt;Bioinformatics&lt;br&gt;Health Informatics</td>
</tr>
</tbody>
</table>

Comp I requires coverage of 6 areas, including at least one from each category.
Comp-I Courses

• Comp-I requirements can be satisfied using
  • graduate courses
  • advanced undergraduate courses (similar to 400-level courses at Waterloo)

• Comp-I requirements can be satisfied by
  • Waterloo courses (e.g., courses taken to satisfy the PhD course requirements)
  • courses from other Universities
    • non-UW courses will be evaluated by the Graduate Director and Graduate Committee to determine area and whether the topics covered and course depth are appropriate for the Comp-I requirement

• courses used to satisfy the Comp-I requirement must have marks of at least B+ (78% or equivalent)
Grad course offerings can be found online

- Consult your supervisor/advisor to decide which courses to take.
- Enrol in most CS grad courses online using Quest
- Drop deadline is 4 weeks into the term.
Non-CS Courses

• Need permission of instructor and host department, and recommendation of supervisor

• To count towards your CS degree:
  • List of approved non-CS courses online
  • Otherwise, prior approval from the Graduate Director

    Email course outline showing topics covered, reference materials, the grading basis, and supervisor recommendation

    Course should have “CS content”

• Most courses must be CS courses
  • MMath Thesis: 3 of 4
  • MMath Research Paper: 5 of 7
  • MMath Coursework: 6 of 8
  • PhD from Masters: 3 of 4
  • PhD from Bachelors: 6 of 8
Thesis Course Requirement

- 4 graduate level courses
- No more than one 600-level
- At least one 800-level
- Masters: No more than two in one area
Research Paper Course Requirement

• 7 graduate level courses

• No more than three 600-level

• At least two 800-level

• No more than three in one area
Coursework Course Requirement

- 8 graduate level courses
- No more than three 600-level
- At least two 800-level
- No more than four in one area
After Your Courses...

- Courses provide structure
- Research can lack structure, but...
  - Study a topic, previous work
  - Identify a problem/open question
  - Solve it
  - Write it up
- Don’t drift!
  Supervisor provides guidance
Teaching Assistantships

• Only guaranteed for PhD and MMath thesis students
  • Normal load is 4 units per year
  • Max 2 per term
  • Your current assignment is on Odyssey

• Duties
  • Set by instructor
  • Contact immediately

• All TAs must have attended today’s TA Orientation Session!
Do A Good Job

- Attend TA meetings

- Being a TA is both a privilege and a responsibility. Badly performing TAs will not get future TAships

- **TA award ($500)**
  Awarded at 4:00 pm today for last year’s TAs
Major Scholarships

• NSERC (Natural Science and Engineering Research Council) Scholarships
  • Available to Canadian citizens and PR only
  • Applications due in October

• OGS (Ontario Graduate Scholarship)
  • Open to all
  • Only small number for international students
  • Applications due in October (international) and February (Canadian/PR)

• You are required to apply for OGS and NSERC if you hold an RA and are eligible (average over 85%)
Cheriton Scholarships

- Open to all Ph.D. students within program limits
  80% average
- 3–5 awarded each term
- $10,000 per year for two years
- Call for nominations near end of each term
Running low on funds?

- Talk to your supervisor
- Some funds to help those in genuine distress
Questions?

- First, check or post to Piazza
  - https://piazza.com/uwaterloo.ca/other/scsgrad

- If Piazza doesn’t help, send email to
  - Denise Shantz denise.shantz if you are a Coursework Master’s student
  - Marie Kahkejian mkahkeji if you are a Thesis/Research Paper Master’s student
  - Loc Do ltdo if you are a PhD student
Still need help?

• Send email to
  • George Labahn (CS Grad Director) cs-graddir if you are a non-coursework student
  • Naomi Nishimura nishi if you are a coursework student

• Desperate? Go to the grad office
  • DC 2599

• Your last option...come to my office
  • DC 3629