CS GRAD STUDENT ORIENTATION

Spring 2024

UNIVERSITY OF WATERLOO | DAVID R. CHERITON SCHOOL OF COMPUTER SCIENCE

Today:

1. Welcome from Cheriton School of CS

2. Graduate Advocates
   Prof Kate Larson

3. Computer Science Computing Facility
   Lori Paniak

4. Library Services
   Rebecca Hutchinson

5. Grad Office Orientation
   CS Grad Office

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School of Computer Science Graduate Directors

Khuzaima Daudjee
CS Grad Director

Shane McIntosh
CS Associate Grad Director

GRADUATE ADVOCATES

KATE LARSON

Graduate Advocate

Your CS Advocate:

Kate Larson (kate.larson@uwaterloo.ca)

You can also talk to other advocates in the Faculty of Math

- Responsible for interacting with graduate students on matters that are not directly related to their graduate program

  - Items you want brought to the grad director's attention but are not comfortable discussing with them directly

  - Second opinion on advice, requests, comments made to you by your supervisor

  - Changing supervisors

  - …

- Everything is "off-the-record" unless you desire otherwise.

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COMPUTER SCIENCE COMPUTING FACILITY (CSCF)

LORI PANIAK

Please note that CSCF is updating its website. Some links may become broken in the migration.

CSCF Services
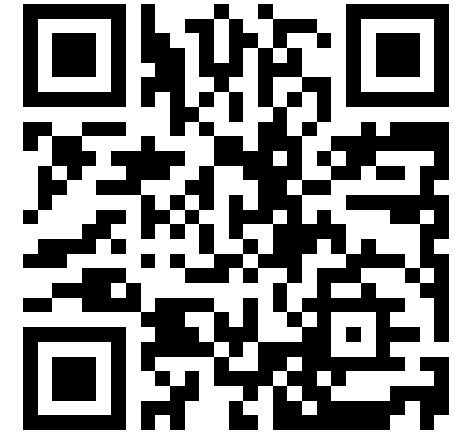
Lori Paniak

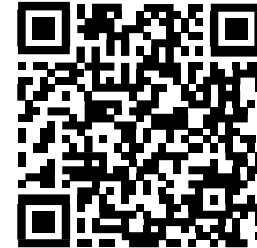Manager, Research and Special Projects (RSG)

ldpaniak@uwaterloo.ca

DC 2625

https://teams.microsoft.com/l/chat/0/0?users=ldpaniak%40uwaterloo.ca

Slides available on:

https://cs.uwaterloo.ca/cscf/information-graduate-students

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Very Short Version: Campus IT

- This doc:
  https://vault.cs.uwaterloo.ca/s/S3TW4KdtoyLZZbf

- Also: One-page flyer of IT services available
  https://vault.cs.uwaterloo.ca/s/Q2dM8CH8yoFboFF

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CSCF Structure: Three Groups

Infrastructure (INF) – Manager: Dave Gawley, plus 4 staff
- Provides servers, network infrastructure, Active Directory, purchases all computing equipment for the School

Teaching and Administration (TOP): Manager: O Nafees, plus 6 staff
- Supports all undergraduate teaching labs, plus administrative staff, the Instructional Support Group and School meeting rooms and audiovisual services

Research and Special Projects (RSG): Manager: Lori Paniak (me), plus 7 staff
- Provides computing support for Faculty, Grads, PostDocs and Research Visitors
- Develop (web) Applications for the School and wider campus

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Workstations when you arrive

Research grads

- Supervisor/you have choice of (including monitor):
  - PC Laptop – Windows / Ubuntu
  - Mac Book Air (M1/M2)
  - Supervisor purchased system
- Expect an email from "RT" on this!

- https://cs.uwaterloo.ca/cscf/about/policies/graduate-student-workstation-options

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Research Support

- Each group/faculty assigned a "Point of Contact" within the Research Support Group – that is your "go to" person
  - https://uwaterloo.ca/computer-science-computing-facility/getting-help/research-points-contact

- Other RSG staff will also help as needed

- Your point of contact has answers to all your IT questions (on campus and beyond)

- Can help out with workstations, clusters, grants, GPUs…

CSCF Help Desk

We have a Help Desk who can handle certain tasks:

- Setting passwords
- Loan of equipment – cables, display adapters, external drive bays, keyboards, mice
- Assist with wireless issues
- Take a problem report and get it assigned to appropriate staff

To contact:

- x31100, DC 2608
- cscfhelp@uwaterloo.ca
- https://cs.uwaterloo.ca/cscf/getting-help/help-desk

Compute Resources

- **School Linux servers**: linux.cs.uwaterloo.ca

- **Student Linux servers**: linux.student.cs.uwaterloo.ca

- **School Windows servers**: windows.cs.uwaterloo.ca

- **GPU cluster**: watgpu.cs https://watgpu.cs.uwaterloo.ca/

- **VM server**: https://andromeda01.cs.uwaterloo.ca

- **On demand servers**: https://paper.cs.uwaterloo.ca

File Storage

- **Ceph distributed cluster – 500GB+ per student**
  - Home directory under linux.cs
  - P: drive under Windows.cs and Windows workstations
  - smb://smb-files.cs.uwaterloo.ca
  - S3 buckets

- **Backup**
  - Files are backed up regularly
  - Snapshots: cd .snapshot   in any directory, files stored by hour, day, week

NextCloud (DropBox-like service)

- Locally stored on ceph cluster
- Up to 500GB per grad student (ask if you need more)
- Access at: https://vault.cs.uwaterloo.ca
- Download NextCloud clients or web access
- Documentation: https://cs.uwaterloo.ca/twiki/view/CF/Vault

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Web pages

- www.cs.uwaterloo.ca/~youruserid

- Files in linux.cs home directory under "~/public_html"
- Create / update index.html
- Make sure to assign "world read" to your web files
- %chmod o+r index.html

Email

- <u>youruserid@uwaterloo.ca</u>

  - Grad students automatically given a Office 365 account
    - can redirect wherever you prefer
    - Your own account (Gmail, Hotmail, etc)

  - You can also configure a "friendly" email address, eg:
    - <u>Lawrence.Folland@uwaterloo.ca</u>
    - Do that in <u>https://idm.uwaterloo.ca/watiam/login.jsf?prompt=true</u>
      - Manage Email Settings

Printing

- Can print to any of our printers listed on our CUPS server:
    - http://print.cs.uwaterloo.ca:631/printers/
    - Or \\printers.cs.uwaterloo.ca   (in Windows)
        - (login with your CS-GENERAL\userid credentials)

- Setup notes:
    - https://cs.uwaterloo.ca/twiki/view/CF/WindowsPrinting
    - https://cs.uwaterloo.ca/twiki/view/CF/LinuxPrinting
    - https://cs.uwaterloo.ca/twiki/view/CF/MacPrinting
- Note: printing is tracked but not quota limited

- https://cs.uwaterloo.ca/cscf/services/printing

High Performance Computing (SCS)

- Faculty-provided servers/clusters: thousands of CPU cores/dozens of GPUs!
    - Syn cluster – Salem/Wong/Brecht (Data Systems Group)
    - RIPPLE – Ian Goldberg (CrySP)
    - Tembo – Khuzaima Daudjee
    - CloudNetwork – Raouf Boutaba
    - M160 – Ming Li (Bioinformatics)
    - Daytona – Poupart/Hoey/Lizotte (Health Informatics)
    - Husky - Ihab Ilyas (DB)
    - Chippie - Cybersecurity and Privacy Institute
    - Novo – Bin Ma (Bioinformatics)
    - datasci.cs
    - Various other servers

- https://cs.uwaterloo.ca/twiki/view/CF/HighPerformanceComputingResources

HPC – SHARCNET/Compute Canada

- Compute Canada provides batch computing for large numbers of cores / memory

- 1 TB storage

- Requires a Compute Canada account based on faculty sponsorship (your supervisor needs to have an account to sponsor yours)

- There is no cost to use these resources

- Systems and accounts:

  - https://alliancecan.ca/en/services/advanced-research-computing/federation/national-host-sites

  - https://alliancecan.ca/en/services/advanced-research-computing/account-management/apply-account

Software

- **Windows** – can be put on any Research / Teaching machine
- **MS Office** – campus license
- **Visual Studio** – free Academic license
- **VMWare** – Math license – covers vSphere Enterprise Plus, vCenter, vCloud Director, vCloud Suite, Workstation, Fusion, etc. – for research / teaching machines
- **Maple** – free for UW users
- **MatLab** – free for UW users
- **Others** – talk to your Point of Contact

Questions? Feedback?

Lori Paniak

ldpaniak@uwaterloo.ca DC2625

Slides available on:

https://
cs.uwaterloo.ca/cscf/information-graduate-students

LIBRARY SERVICES

REBECCA HUTCHINSON

COMPUTER SCIENCE GRADS AND THE LIBRARY

Rebecca Hutchinson,
Computer Science Librarian
r3hutchi@uwaterloo.ca

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Davis Centre Library

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Library Space

- Davis Centre Library
  - 8am–12am Monday–Friday
  - 11am–12am Saturday & Sunday
  - [Computer science collection](#)
  - [Computers, printing, photocopying, and scanning](#)
  - [Individual study space](#)
  - [Group study space](#)
  - IST Help Desk
  - Library Help Desk
- [Dana Porter and other libraries on campus](#)

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Library Services

- Access to online journals, articles, conference papers, and books

  - Start at the [Library's website](#) for access to full text

- Print books

  - Request a print book through the [library's catalogue](#)

  - Pick it up from the Help Desk or have it mailed to you (within Canada)

- Research support

  - [Computer science guide](#) has discipline specific resources to help you find e-books, online papers, and more

  - Email your Librarian [r3hutchi@uwaterloo.ca](#), [book a meeting](#), or [chat through Teams](#)

- More help

  - [Library Chat and FAQs](#)

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Personalized Research Support

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Computer Science Librarian

- My job is to connect you with the information, resources, and knowledge you need to be successful with you course work and thesis

  - Virtual and in-person consultations available

  - Designed for your specific research needs

  - Not sure if I can help? Just ask!

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Consultations

- Copyright questions

- Publishing questions

- Searching the literature

- Managing research data

- Tracking scientific impact

- Citing and citation software

- And more!

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Get Started!

Library website

Computer Science Research Guide

Book a meeting

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GRADUATE OFFICE ORIENTATION

CS GRAD OFFICE

Agenda

1. Understanding your funding: GRS & TA pay

2. What to expect when TA'ing

3. Course enrolment

4. MMath co-op program

5. External scholarships

6. Key reminders

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1. UNDERSTANDING YOUR FUNDING

Each offer contains three sources of funding:

Graduate Research Studentship (GRS)

What is it?
Pay for the work you perform as a researcher in your supervisor's lab.

Who pays it?
Your supervisor

When is it paid?
Lump sum at the beginning of term in Quest.

Teaching Assistantships (TA)

What is it?
Pay for the work you perform as a TA for undergrad courses.

Who pays it?
The School

When is it paid?
Monthly, last Friday of the month

Termly Scholarships

What is it?
IMAE, IDSA, and DGSA*

Who pays it?
The University or the School

When is it paid?
Lump sum at the beginning of term in Quest.

*DGSA is an award for domestic students – it's not a separate line item in your offer but is included in the GRS line item

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Funding is generally based on four TA units per year

MMath students usually have four TA units in their 1st year, and three TA units in their 2nd year:

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
E.g. # of TA's	1 TA unit	1 TA unit	2 TA units	1 TA unit	1 TA unit	1 TA unit

PhD students have four TA units in each year:

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6	…
E.g. # of TA's	1 TA unit	1 TA unit	2 TA units	1 TA unit	1 TA unit	2 TA units	…

TA allocations vary term to term. Your TA pattern may not match this example exactly.

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Your TA pay and GRS funding will always be balanced each term:

In terms with one TA, your GRS will be higher, and your TA pay will be lower
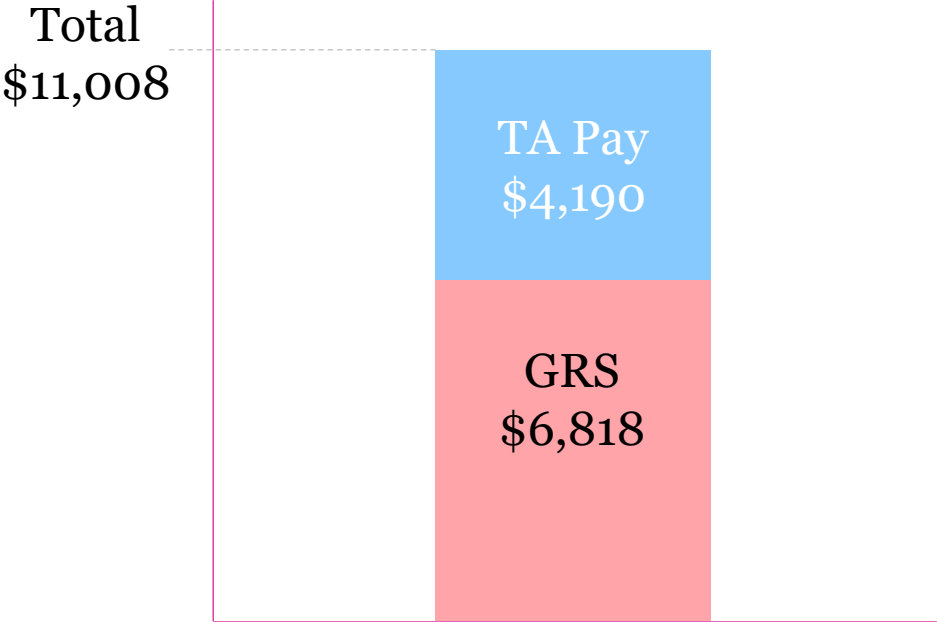
In terms with two TAs, your GRS will be lower, and your TA pay will be higher

Total
$11,008

TA Pay
$4,190

GRS
$6,818

Total
$11,008

TA Pay
$8,380

GRS
$2,628

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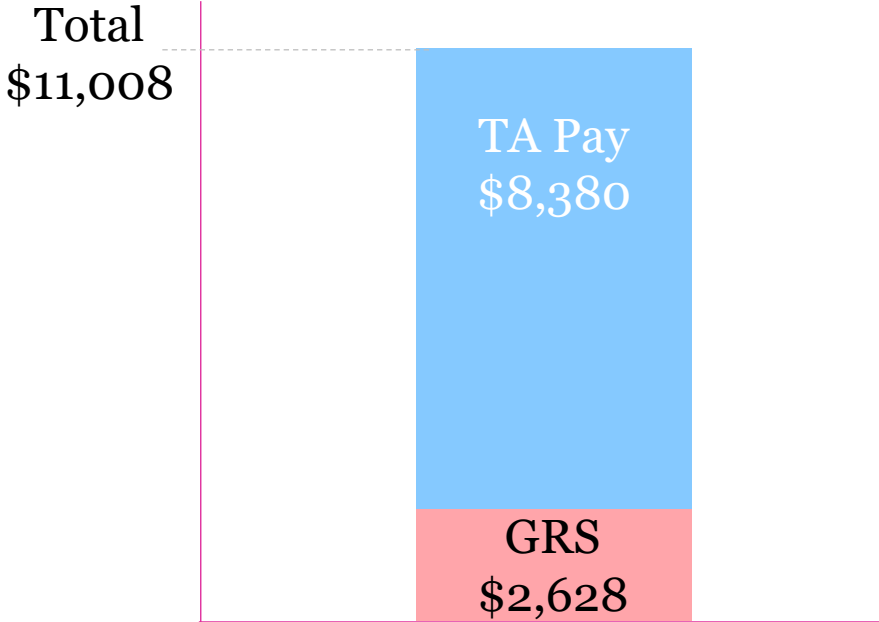
You can review expected GRS vs. TA earnings based on these charts:

MMath

Domestic

	1 TA unit term	2 TA unit term
TA	$4,190	$8,380
GRS	$4,000	$1,000

International

	1 TA unit term	2 TA unit term
TA	$4,190	$8,380
GRS	$6,818	$2,628

PhD

Domestic

	1 TA unit term	2 TA unit term
TA	$4,190	$8,380
GRS	$3,439	$1,000

International

	1 TA unit term	2 TA unit term
TA	$4,190	$8,380
GRS	$5,996	$1,806

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Beyond GRS & TA, your letters would also have included a termly scholarship:

MMath

PhD

Domestic

Name	Termly Amount
Domestic Graduate Student Award	$1,000

Name	Termly Amount
Domestic Graduate Student Award	$2,000

International

Name	Termly Amount
International Master's Award of Excellence	$2,500

Name	Termly Amount
International Doctoral Student Award	$5,140*

May be split between two sources in some terms

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If you used a promissory note to cover your tuition/fees, your funding will be deducted in the following order:

First, the tuition/fee balance will be deducted from your **GRS and scholarships posted in Quest**.

If a tuition/fee balance remains, it will be divided into four and deducted monthly from your **TA pay**.

If funding remains after paying your tuition/fee balance, it will be deposited into your Canadian bank account on file.

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It is important to remember that just like your academic career, your funding is also your responsibility to track and manage:

1. Have I added my [bank account details](#) into Quest?

2. Do I have, at minimum, the three core sources of funding (GRS, TA, termly scholarship) accounted for in my Quest account?

    - Please note that at times your termly scholarship may appear as a "GRS" line item in Quest – ensure you're checking the total funding, not just the names of the line items!

    - Please also ensure you're aware of both the eligibility and time length of your scholarships

3. Does my GRS rate match the amount of TA units I'm working this term?

> Confused about your funding? Think you've received too much or too little?
> **Please reach out to Cfinance@uwaterloo.ca for support!**

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2. WHAT TO EXPECT WHEN TA'ING

General information for TA's

Per Policy 30, your TA contract will include more detailed expectations for your TA role. However, at minimum you can expect the following:

- One TA unit = 80 hours of total work in one term (approx. 5 hours per week)

- Two TA units = 160 hours of total work in one term (approx. 10 hours per week)

- Once you receive your TA assignment and contract, please reach out to the instructor or Instructional Support Coordinator for your course

- Always ensure you fill out the TA preference form that becomes available in the second month of term. This ensures you'll receive an appropriate TA next term.

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Getting set-up to TA: a checklist

❑ **Get set-up in Workday**
You will receive an email from Workday within the first month of term regarding on-boarding. Please ensure you complete all on-boarding steps, including submitting your Canadian banking information. <u>A Canadian bank account is required.</u>

❑ **Complete your <u>mandatory</u> LEARN trainings (via self-registration) in your first 8 weeks**

    ❑ **Academic Integrity 101**

    ❑ **CMAHRO TA Training – Mathematics**

    ❑ **Workplace Violence Awareness**

    ❑ **Employee Safety Orientation**

    ❑ **WHMIS 2015**

    ❑ **AODA_Training: Accessibility Training**

❑ **Look for your TA training session (in-person or online) in your first 3 weeks**

❑ **International students: provide your SIN to Human Resources as soon as you receive one**

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The in-person TA training will cover:

- An overview of the Instructional Support Group

- IA vs. TA work duties

- Resources available to TA staff

- How to mark/grade assignments

- Guidelines regarding conflict management*

*If you become aware of or are approached regarding any situation involving harassment or discrimination it is important that you understand your responsibilities as a TA. The link below will provide you with information on how to respond in such situations. It also contains a memo from Jeff Casello, Associate Vice President - Graduate Studies and Postdoctoral Affairs and links to Policy #33, Policy #42 and other relevant documents.

Guidelines for Teaching Assistants (TAs) | Conflict Management & Human Rights Office (uwaterloo.ca)

Please ensure that you have read through and understand this information so that you are prepared to respond if a situation involving harassment or discrimination arises.

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3. COURSE ENROLLMENT

COURSE ENROLMENT TIMELINE

View more on the [GSPA Important Dates calendar](#)

1 month before term
Course enrolment begins

After 3 weeks into term
Course enrolment ends

After 2.5 months into term
End of WD period

Class enrolment period
- During this period, use Quest to enrol in and drop classes.
- If you are not "fees arranged" by end of class enrolment period, your classes will be dropped.

Class drop with grade of Withdrawn, no credit granted (WD)
- During this period, you can continue to drop classes in Quest – however a grade of "Withdrawn, no credit granted" will be applied and remain on your transcript. WD is not an academic penalty
- Classes can be added with a drop/add form

Beyond...
- Only students with special circumstances can petition to drop a class with a course drop/add form

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Remedials and non-required courses

Remedials

- Remedial courses add with a DROP/ADD form (unless at the graduate level). You should receive an email from the Undergrad office with a permission # for any remedial courses.

- Remedials must be completed in your **first 2 terms**.

- EMLS (remedial courses) do NOT count towards a student's grad course count for a term. EMLS 601R (speaking) & 602R (writing) can be taken in the same term.

Non-required courses

- Additional courses taken for credit but not included in your program requirement must be assigned XTRA and submitted on a DROP/ADD form ASAP.

- AUDIT/READING courses add with a DROP/ADD form.

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Housekeeping note

- **Discuss all of your course enrolments with your supervisor.** They should always know how many and which courses you are taking.

- **Please only enroll in the number of courses you are allowed to take that term for your program**.

- **Please do not over-enroll in courses.** This ties up spots from other students who might need that particular course to complete their degree! Course enrollment is monitored and we do not want to email you to drop courses.

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4. MMATH CO-OP OPTION

CO-OP PREPARATION TIMELINE

View more on the [CS Website under Math Coop Option](#)

Now

Determine if Co-op is a good option for you
- Discuss the co-op option with your supervisor
- Complete the mandatory *MMath Computer Science Co-op Series* mandatory information sessions on LEARN. *These sessions do not commit you to the program, but provide valuable information for you to make your decision.*
- International students: meet with the [Student Success Office](#) to understand the process for applying for a work permit (required for co-op program)

Term prior to your first co-op work term,
2 weeks before the 100% refund deadline

Form submissions
- Submit a *program/plan change form* and a *sequence change form* to add the co-op option to your program and set your study/work term cycle, respectively.

Meet course requirements
- Ensure you've completed four courses toward your coursework requirements
- Ensure you've completed your remedials (if applicable)

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RECOMMENDED SEQUENCE FOR CO-OP

Term	Term count	Type of term	Action/notes
S24	1	Academic	• Take 2 out of 4 of the required courses
F24	2	Academic	• Take 2 out of 4 of the required courses • <mark>Apply to co-op program</mark>
W25	3	Academic *(Master's Thesis Co-op program begins)*	• Thesis research • <mark>Actively searching for a co-op position</mark>
S25	3.5	Co-op work term	• Master thesis co-op
F25	4	Co-op work term	• Master Thesis co-op
W26	5	Academic term	• <mark>Co-op work report due 30 days after your work term</mark> • Thesis research
S26	6	Academic term (if needed)	• Thesis research

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5. EXTERNAL SCHOLARSHIPS

EXTERNAL SCHOLARSHIP DEADLINES

View more on the [*CS Website under External awards*](CS Website under External awards)

| February 1 | OGS Domestic and International applications are due
Note: transcript requests may become due in January |

| September | NSERC Doctoral transcript requests are due |

| October | NSERC Doctoral applications are due |

| November | Tri-Agency CGSM transcript requests are due |

| December | Tri-Agency CGSM transcript applications are due |

We send updates on scholarships via our biweekly CS Grad Office Newsletter!

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6. KEY REMINDERS

Getting set-up at UW: A checklist

❑ **Regularly check your UWaterloo email**
Your email was set-up when you matriculated. Ensure you use your @uwaterloo.ca email (not @edu.uwaterloo.ca) for all updates!

❑ **Update your local mailing address in Quest as soon as possible**
The university uses this as your primary mailing address. Inter-university mail can be picked up in the mailboxes in DC 2583.

❑ **Pick up your keys/fobs for your office**
If you haven't picked up your keys/fobs yet, please contact Greg McTavish by emailing him at gmctavish@uwaterloo.ca

❑ **Complete the "Confidentiality Agreement" on LEARN**

❑ **Read the Orientation summary email**
In particular, review the 'Important Links for Graduate Students' that will be included in your summary email. They are a great resource!

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Further reminders for International Students

1. **Remember to get your SIN as soon as possible!**
   In order to get paid for TA, you provide your SIN Number to Human Resources as soon as you get one. This is completed as part of your onboarding through Workday.

2. **The Student Success Office is your go-to for student permit/immigration questions**
   You can contact an immigration consultant, visit them in-person at South Campus Hall (2nd floor), or email them at success@uwaterloo.ca

3. **You are automatically enrolled in the UHIP health plan**
   International Graduate students are charged the UHIP fee during every term, including Inactive terms, to ensure continuous coverage for the duration of your program. If you have a family member here they MUST register for UHIP within 30 days!

4. **Review our International Student resources**
   In particular, the International Student Guide can be helpful to prepare for your studies

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Tips for a successful program at UW

1. **Read the bi-weekly CS Grad Office email**
   Deadlines and updates are communicated in this email. Don't miss it!

2. **Always complete forms electronically**

3. **When in doubt, ask us!**
   Please come to our drop-in hours, or send us an email – we're happy to help!

> Your graduate program is your responsibility.
> Please stay informed on processes and requirements. Feel free to ask your supervisor/coordinator for clarification any time.

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Key contacts

Reason	Email	Contact	Drop-In office hours (Spring)
General Inquiries	cs-gradoffice@uwaterloo.ca	Ernest Lam	Tu, W, Th 10 – 11:30am
GRS Funding	cfinance@uwaterloo.ca	Nadine Zinger/Carly McLeod	M, Tu, W 10 – 11:30am
TA Inquiries	tarannom.haghighi@uwaterloo.ca	Tara Haghighi	W, Th, F 10 – 11:30am
Scholarships/Manager	cmanager@uwaterloo.ca	Denise Shantz	
PhD Program	csphd@uwaterloo.ca	Nadine Zinger	M, Tu, W 10 – 11:30am
MMath Program	csmaster@uwaterloo.ca	Carly McLeod	M, Tu, W 10 – 11:30am
Course scheduling	cgschedule@uwaterloo.ca	Amy Todd	W, Th, F 10 – 11:30am

Please email any of us anytime. We will reply via email and book an MS Teams or in person meeting. We are here to help you!

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