

CS GRAD STUDENT ORIENTATION

Winter 2025



UNIVERSITY OF
WATERLOO

DAVID R. CHERITON SCHOOL
OF COMPUTER SCIENCE



Today:

1. **Welcome from Cheriton School of CS**
School Director Raouf Boutaba
Graduate Director Khuzaima Daudjee
2. **Computer Science Computing Facility**
Lori Paniak
3. **Library Services**
Rebecca Hutchinson
4. **Graduate Advocates**
Professor Richard Trefler
5. **CS Graduate Student Association**
Gengyi Sun, Evelien Riddell, Harrum Noor, Ruizhe Wang, & James Riddell
6. **Grad Office Orientation**
CS Grad Office



WELCOME TO GRAD SCHOOL

SHANE MCINTOSH
ASSOCIATE GRADUATE DIRECTOR

School of Computer Science leadership



Raouf Boutaba
Director of the School



Khuzaima Daudjee
Director of Grad Studies



Shane McIntosh
Assoc. Director of Grad Studies

COMPUTER SCIENCE COMPUTING FACILITY (CSCF)

LORI PANIAK

TECHNICAL MANAGER, RESEARCH AND SPECIAL PROJECTS

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>

Very Short Version: Campus IT

- This doc:
<https://vault.cs.uwaterloo.ca/s/KdS22EDFrG2s37D>
- Also: One-page flyer of IT services available
<https://vault.cs.uwaterloo.ca/s/5WLD7HsXxcnznJr>

CSCF Structure: Three Groups

- Infrastructure (**INF**) – Manager: Gwendoline Nubila, plus 5 staff
 - provides servers, network infrastructure, Active Directory, purchases all computing equipment for the School
- Teaching and Administration (**TOP**): Manager: Nick Lee, plus 5 staff
 - supports all undergraduate teaching labs, plus administrative staff, the Instructional Support Group and School meeting rooms and audiovisual services
 - CSCF Help Desk
- Research and Special Projects (**RSG**): Manager: Lori Paniak (me), plus 8 staff
 - provides IT support for Faculty, Grads, PostDocs and Research Visitors
 - Develop (web) Applications for the School and wider campus

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>



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 that can handle certain tasks
 - 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
 - x31100, DC 2608 or 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://andromeda.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>

Personal Web Pages

- <https://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

- youruserid@uwaterloo.ca
 - Grad students automatically given a Office 365 account
 - Can redirect wherever you prefer with a mailbox rule:
 - i.e. Your own account (Gmail, Hotmail, etc)
- You can also configure a “friendly” email address, e.g.:
 - Lawrence.Folland@uwaterloo.ca
 - Do that in <https://idm.uwaterloo.ca/watiam/login.jsf?prompt=true>
 - Manage Email Settings

Printing

- Can print to any of our printers listed on our CUPS server:
 - <https://print.cs.uwaterloo.ca:631/printers/>
 - Or [\\printers.cs.uwaterloo.ca](https://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/twiki/view/CF/LinuxPrinting>



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
 - MI60 – Ming Li (Bioinformatics)
 - Daytona – Poupart/Hoey/Lizotte (Health Informatics)
 - Husky – Ihab Ilyas (DB)
 - Chippie – Cybersecurity and Privacy Institute
 - Himrod – General use
 - watgpu.cs – AI cluster
 - datasci.cs – Hadoop cluster
 - 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/GPUs
- 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



LIBRARY SERVICES

**REBECCA HUTCHINSON,
COMPUTER SCIENCE LIBRARIAN**

COMPUTER SCIENCE GRADS AND THE LIBRARY

Rebecca Hutchinson,
Computer Science Librarian
r3hutchi@uwaterloo.ca



UNIVERSITY OF
WATERLOO

FACULTY OF
MATHEMATICS



Davis Centre Library



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](#)

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](#)

Personalized Research Support



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!

Consultations

- Copyright questions
- Publishing questions
- Searching the literature
- Managing research data
- Tracking scientific impact
- Citing and citation software
- And more!

Get Started!

[Library website](#)

[Computer Science Research Guide](#)

[Book a meeting](#)

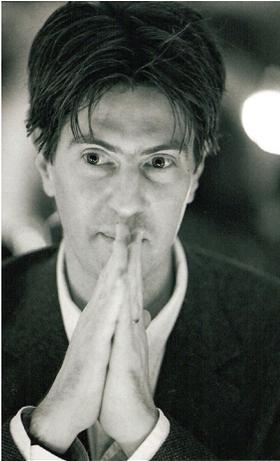


GRADUATE ADVOCATES

PROFESSOR RICHARD TREFLER

Graduate Advocate

Your CS Advocates:



Richard Trefler (trefler@uwaterloo.ca)

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.

CS GRADUATE STUDENT ASSOCIATION

**GENGYI SUN, EVELIEN RIDDELL, HARRUM NOOR,
RUIZHE WANG, & JAMES RIDDELL**

CSGSA Board Members



Evelien Riddell
evelien.riddell@uwaterloo.ca



Gengyi Sun
gengyi.sun@uwaterloo.ca



Harrum Noor
harrum.noor@uwaterloo.ca



Ruizhe Wang
ruizhe.wang@uwaterloo.ca



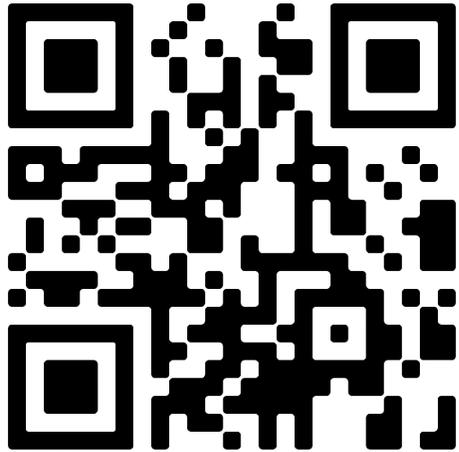
James Riddell
james.riddell@uwaterloo.ca



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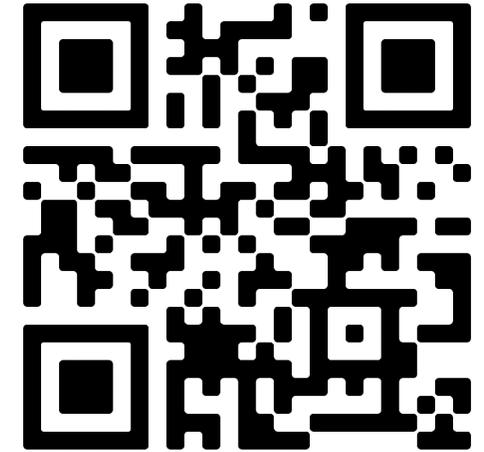
Contact us



CS Grad Student Discord

csgsa@uwaterloo.ca

Instagram: [@uwcsgsa](https://www.instagram.com/uwcsgsa)



CSGSA Website

GRADUATE OFFICE ORIENTATION

CS GRAD OFFICE

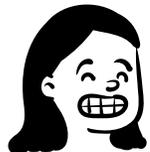
Staff



Denise Shantz
Graduate Studies Manager



Nadine WitmerZinger
Graduate Coordinator, PhD Programs



Amy Todd
Graduate Coordinator, Admissions & Scheduling



Makenna Ryder
Graduate Coordinator, TA & Scholarships



Cecilia Martin
Graduate Coordinator, MMath Programs

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

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*

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

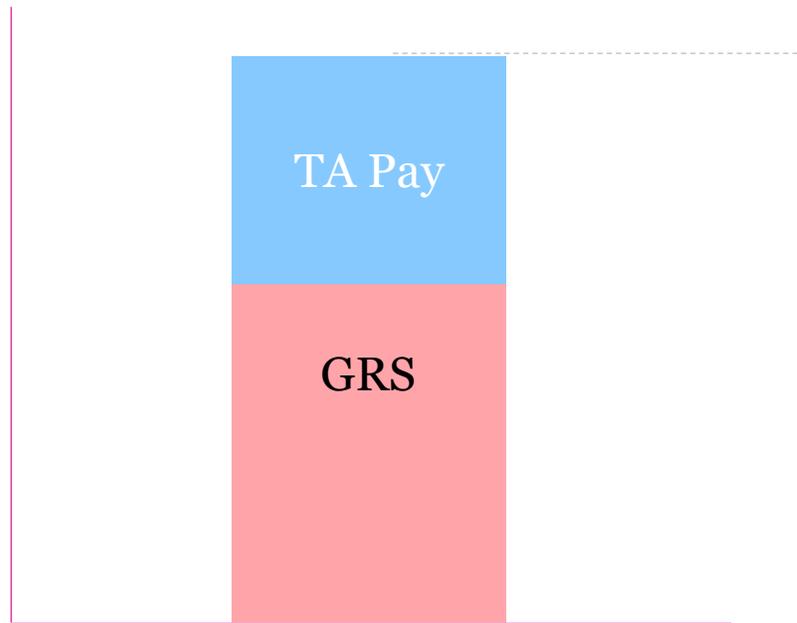
PhD students have four TA units in each year:

	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.

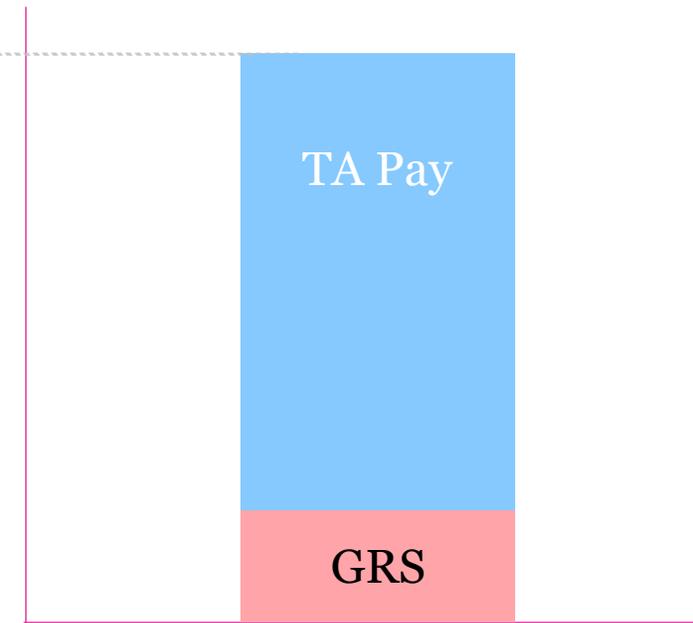
GRS funding will fluctuate with your TA units to help ensure your termly pay is regular and balanced

In terms with one TA unit, you will receive a base GRS



~ The
same total
each term

In terms with two TA units, your GRS is reduced as your TA income doubles



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

Domestic

MMath

	1 TA unit term	2 TA unit term
TA	\$4,380	\$8,760
GRS	\$4,000	\$1,000

PhD

	1 TA unit term	2 TA unit term
TA	\$4,380	\$8,760
GRS	\$3,439	\$1,000

International

	1 TA unit term	2 TA unit term
TA	\$4,380	\$8,760
GRS	\$6,818	\$2,628

	1 TA unit term	2 TA unit term
TA	\$4,380	\$8,760
GRS	\$6,059	\$1,679

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**

* Incorporated in your "GRS" line item in your offer letter

** May be split between two sources in some terms



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



1. First, the tuition/fee balance will be deducted from your **GRS and scholarships posted in Quest**.
2. If a tuition/fee balance remains, it will be divided into four and deducted monthly from your **TA pay**.
3. If funding remains after paying your tuition/fee balance, it will be deposited into your Canadian bank account on file.

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!

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.

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. A Canadian bank account is required.
- ❑ **Complete your mandatory 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
- ❑ **Complete your TA training (if you couldn't attend the in-person session)**
- ❑ **International students: provide your SIN to Human Resources as soon as you receive one (via Workday)**

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.

3. COURSE ENROLLMENT

COURSE ENROLMENT TIMELINE

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

1 month before term
Course enrolment begins

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.

After 3 weeks into term
Course enrolment ends

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

After 2.5 months into term
End of WD period

Beyond...

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

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.

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.

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
- 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)

RECOMMENDED SEQUENCE FOR CO-OP

Term	Term count	Type of term	Action/notes
W25	1	Academic	<ul style="list-style-type: none"> Take 2 out of 4 of the required courses
S25	2	Academic	<ul style="list-style-type: none"> Take 2 out of 4 of the required courses Apply to co-op program
F25	3	Academic (<i>Master's Thesis Co-op program begins</i>)	<ul style="list-style-type: none"> Thesis research Actively searching for a co-op position
W26	3.5	Co-op work term	<ul style="list-style-type: none"> Master thesis co-op
S26	4	Co-op work term	<ul style="list-style-type: none"> Master Thesis co-op
F26	5	Academic term	<ul style="list-style-type: none"> Co-op work report due 30 days after your work term Thesis research
W27	6	Academic term (if needed)	<ul style="list-style-type: none"> Thesis research

WIL 601

Students interested in co-op will need to take the mandatory course:
WIL601: Career Foundations for Work-Integrated Learning.



You will learn the tools, strategies and resources to effectively prepare for your upcoming WIL experiences

- Critically reflect on your career values and goals.
- Identify, evaluate and articulate your current skillsets and the competencies you are developing in graduate school.
- Learn strategies for networking and the job search process, and how to cultivate meaningful career development during and after your WIL experience.
- Connect with **Centre for Career Development (CCD)** advisors through synchronous sessions.

5. EXTERNAL SCHOLARSHIPS

EXTERNAL SCHOLARSHIP DEADLINES

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

February 1	OGS Domestic and International applications are due <i>Note: transcript requests may become due in January</i>
September	N SERC Doctoral transcript requests are due
October	N SERC 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!

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**

Pick up your fobs from CS Admin Office, and keys from Key Control GSC 1101

- ❑ **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!

Further reminders for International Students

- 1. Remember to get your SIN as soon as possible!**
In order to get paid for TA, you need to provide your SIN Number to Human Resources. 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

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 at any time.

Key contacts

Reason	Email	Contact	Drop-In office hours (Winter '25)
General Inquiries	cs-gradoffice@uwaterloo.ca	Co-op Student	Tu, W, Th 10 – 11:30am
GRS Funding	cfinance@uwaterloo.ca	Nadine Zinger/ Cecilia Martin	W, Th 10 – 11:30am
TA Inquiries	Cs-ta@uwaterloo.ca	Makenna Ryder	Tu, W 10 – 11:30am
Scholarships/Manager	cmanager@uwaterloo.ca	Denise Shantz	W, Th 10 – 11:30am
PhD Program	csphd@uwaterloo.ca	Nadine Zinger	W, Th 10 – 11:30am
MMath Program	csmaster@uwaterloo.ca	Cecilia Martin	W, Th 10 – 11:30am
Course scheduling	cgschedule@uwaterloo.ca	Amy Todd	Tu, W 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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OF COMPUTER SCIENCE**