Welcome to the Fall 2024 TA/IA Assignment Info Session

10/03/2024

Prepared for the Instructional Support Group,
David R. Cheriton School of Computer Science

We will start the presentation momentarily.

Please note this presentation will be recorded

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Learning Objectives

By the end of this session, you should be able to:

- recognize the scale and timeline of TA Assignments in Computer Science,
- understand how the **TA Preference Form** can impact your TA eligibility, funding, and course assignments,
- identity the differences between a Teaching Assistant (TA) and an **Instructional Apprentice (IA).**

INTRODUCTION

TA Assignment Team and Timeline

CS TA Assignment Team (CS-TA@uwaterloo.ca)

In any given term, the Cheriton School of Computer Science has

- **300-450 TA units** that need to be allocated to over 300 graduate students
- **40-50 undergraduate courses** offered spanning a wide variety of topics and research areas

The **CS TA Assignment Team** is a shared effort between the School of Computer Science Instructional Support Group (ISG) + Graduate Office. The priority of the TA assignment team is to ensure that:

- all **eligible** graduate students are getting TA/IA opportunities + funding
- undergraduate courses are **appropriately** staffed + supported

We thank you for your continuous patience and cooperation by communicating your TA status, preferences and any issues in a timely manner.

Review of TA Eligibility, Units

TA Unit Eligibility:

- MMath students are entitled to **7.00 TA units** in **6 terms**
- PhD students are entitled to **16.00 TA units** in **12 terms**

You must also be:

- enrolled with a full-time course load
- on-campus for the 4-month term
- legally allowed to work in Canada (i.e. valid SIN/work permit, Canadian bank account)

CS graduate students are **guaranteed** a TA position + funding if they are:

- eligible for a TA unit
- complete the **TA Preference Form**

Single/Double TA units:

Recall: 1.00 TA unit = 80 hours of part-time work / term. Typically 5 hrs/week, but not evenly distributed.

You may be given a double TA unit (2.00 units) that entails approximately double the TA workload (~160 hours / term, ~10 hours / week).

Your TA pay doubles but your GRS funding is reduced by the same amount (i.e. your total term funding is *same as a single TA unit*).

Each term the Grad Office will determine the number of TA units offered to you based on your TA history and needs of the School.

Odyssey

- CS uses **Odyssey** to track your complete TA history and will be where your TA assignments are posted. It should tell you the course and positions assigned, or record buyouts/declines.
- Currently under construction, but your TA history should still be available.

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Jump to

ODYSSEY INSTRUCTIONAL SUPPORT

MENU

My TA Assignments

Return to Main Menu

Term	*Course*	*Job*	*Entitlement Before*	*Assigned Units*	*Entitlement After*	*Evaluation*
Fall 2024	CS 135	Instructional Apprentice	7.00	1.00	6.00	

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Graduate Students who are not assigned TA units

The following are cases where eligible grad students will **not be assigned** TA positions:

- **Declines**; students who decline TA units / funding
- **Buyouts**; students who are **bought out** by their supervisors (TA relief)
- students on an Internship/Co-op term or taking on a Sessional Instructor position
- students completing their degrees before the term will end
- students with part-time course loads or inactive/off-terms
- students who do not complete the **TA preference form**

The following students are not guaranteed a TA unit but are welcome to submit a TA preference form to be considered for additional positions in the case of a TA shortage

- Math Thesis/PhD students over their time limit/eligibility; considered *overeligible* (OE)
- MDSAI students
- non-CS students

Timeline for TA Assignments in CS (Winter 2025)

Please keep a lookout for emails from

cs-ta@uwaterloo.ca

We email you when:

- there is a form for you to complete
- you should review your tentative/final TA assignment
- individual scenarios occur e.g.
  - your position will/could change based on course/instructor needs
  - there are difficulties with your funding/units/contract/hire

Month 2: Complete Preference Forms (October)

- Graduate students submit the TA preference form.
- Instructors submit the request forms.

Month 3: Communicate Updates/Issues (November)

- TA assignments are drafted and posted *tentatively* for review.
- Best time to let us know if your status has changed or will change.

Month 4: Sign Contracts/Agreements (December)

- TA assignments are finalized and posted for Grad Students + Instructors/ISCs to begin planning for next term.
- TA contracts/TA agreements are made available to sign online.

PART TWO

TA Preference Form

How to Communicate your TA Preferences + Status

The TA Preference Form helps our team to confirm your **status, eligibility, and desire to TA**.

Thus, the **TA Preference Form** should be completed by **all graduate students each term**, *regardless* of their intentions to TA.

e.g. if you do not want to TA next term or won't be on-campus at all, tell us on the form so that we won't assign you a TA position + adjust your funding accordingly!

Your response helps us determine assigned number of TA units, to identify which courses may be suitable for your background.

There is a preference form for *Faculty/Instructors* to submit their special requests on TA assignments.

Instructor TA request form: for the instructor of a course which may require specific TAs/skillsets for their course

Preview of the TA Preference Form

Student Profile > Course preferences > Other skills/preferences > Confidentiality Agreement

Name(s) of supervisor(s)

At which university and in what major was your undergraduate study?

e.g. University of Waterloo, CS

Winter 2025 Status *

What is your program of study next term? *

- PhD
- MMath: Thesis
- MMath: DataSci
- MDSAI†
- Other...

► †Note for MDSAI students

What is your status for next term? *

- Full-time
- Part-time
- Inactive/off-term
- Internship/Co-op
- Plan to complete degree and not register in Winter 2025
- Other/unsure

Please indicate any potential changes to your status for next term.

Please indicate if you are expecting a buyout, if you are unsure about you
likely be unable to TA but intend to submit your TA preferences as a backu

Course preferences

For the lists of 100, 200, 300 and 400 level courses pr
choice course preference for TA for the Winter 2025

To determine which courses may suit your technica
descriptions, content, and pre-requisites on the CS
outline on the University's Outline repository.

If you are interested in becoming an Instructional A
select the option(s) with the [IA] tag.

If a course is not listed here, it is most likely not off
TA/IA support from Computer Science.

► Am I guaranteed my choices here?

Select your first choice for a 100-level course *

- Select -

Select your first choice for a 100-level course

- None -

Select your first choice for a 200-level course *

- Select -

Select your second choice for a 200-level course

- None -

Select your first choice for a 300-level course *

- Select -

Select your second choice for a 300-level course

- None -

Rate your experience/familiarity with each of the following Computer Science, Computing Technology, Mathematics, or Applications Areas

	No experience	*Some exposure (e.g. course taken)*	*Average experience (e.g. few courses taken)*	*Very experienced (e.g. current research area, industry-level)*
Algorithms & Complexity	○	○	○	○
Artificial Intelligence, Machine Learning	○	○	○	○
Bioinformatics				
Computer Algebra				
Computer Architecture				
Computer Graphics				
Computer Engineering, Digital Hardwar				
Cryptography, Security, Privacy				
Database Systems				
Distributed Systems, Networking				
Formal Methods				

Rate your experience/willingness with each of the following TA/IA duties.

	Least Interested	*Less Interested*	*Interested*	*Most Interested*	*Experi & Intere*
Assisting students in the labs	○	○	○	○	○
Assisting with course development (e.g. creating tutorials / assignments)	○	○	○	○	○
Conducting tutorials	○	○	○	○	○
Consulting through electronic communication (e.g. Piazza maintenance)	○	○	○	○	○
Coordinating other TAs	○	○	○	○	○
Creating assignment solutions (e.g. developing test cases for auto-marking)	○	○	○	○	○
Creating marking schemes (may involve scripting)	○	○	○	○	○
Creating scripts	○	○	○	○	○
Face-to-face consulting with students	○	○	○	○	○
Marking	○	○	○	○	○

Additional Qualifications / Comments

You may include previously taken courses, work experience, skills, interests, or anything else you'd like us to be aware of when assigning your TA, assuming it isn't covered in other parts of the preference form.

Confidentiality Agreement

In order to TA, you must agree to the Confidentiality Agreement below:

"Student information" refers to the University records relating to a student's admission to the University, their academic progress and achievements at the University and the University Colleges, and any other personal information of the student's – including student identification photographs – which is collected and used by the University for administrative purposes.

In accordance with the Personal Information Protection and Electronic Documents Act (PIPEDA) and University of Waterloo Policy 46, a TA/IA agrees to the following:

1) Protect all student information to which they have access during the term of my appointment with the University.

2) Hold confidential any student information unless necessary for the performance of the job duties or without the prior authorization of the appropriate head as outlined in Policy 46.

3) Use student information only for purposes consistent with the job duties and the purposes for which the information was collected.

4) Understand that the TA/IA obligation continues in perpetuity even after the end of position with the University of Waterloo, and that failure to protect student information may be subject to disciplinary sanction or other appropriate action.

Confidentiality Agreement *

☐

As an employee of the University of Waterloo, I understand the above and that I have an obligation to the University to protect student information. By checking this box, I acknowledge that I understand the University's policies and this confidentiality agreement.

By submitting this form, you acknowledge that you have read/acknowledged TA Expectations for all TA/IAs.

If your situation has changed (e.g., your status for next term) after your TA preference form has been submitted, then please email the TA Assignment Team CS. For MMath Thesis students, please also CC the CS Graduate Office.

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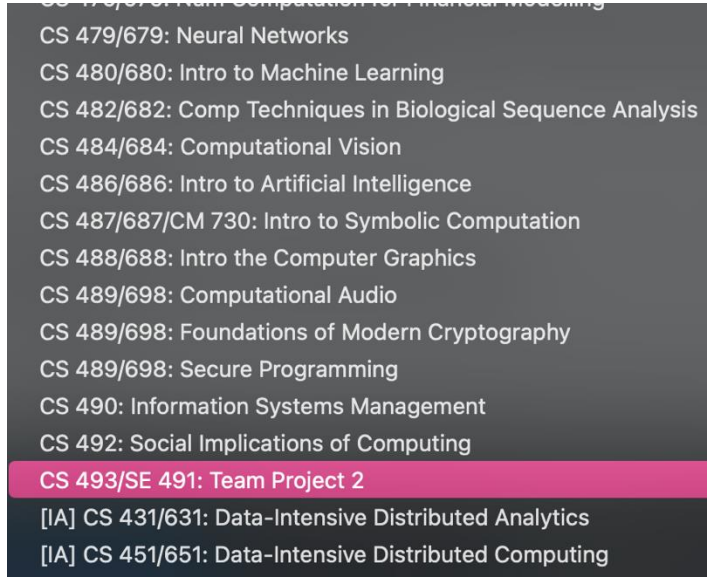
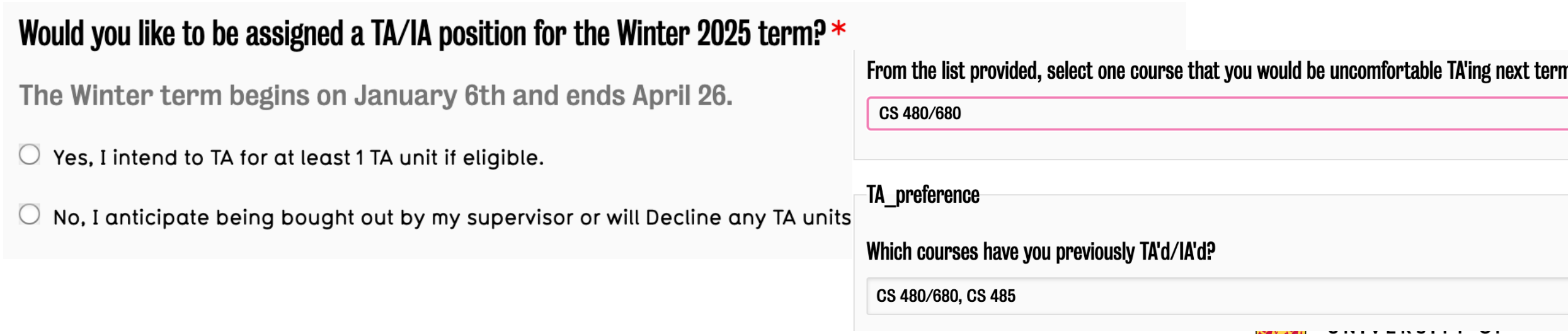
Importance of the TA Preference Form

Why do I need to complete the TA preference form every term?

- Your TA eligibility / preferences may change between terms
- Some courses are not offered every term (e.g. new/special topics courses)
- Graduate students who do not complete the form **will be assumed to decline their TA units/funding**





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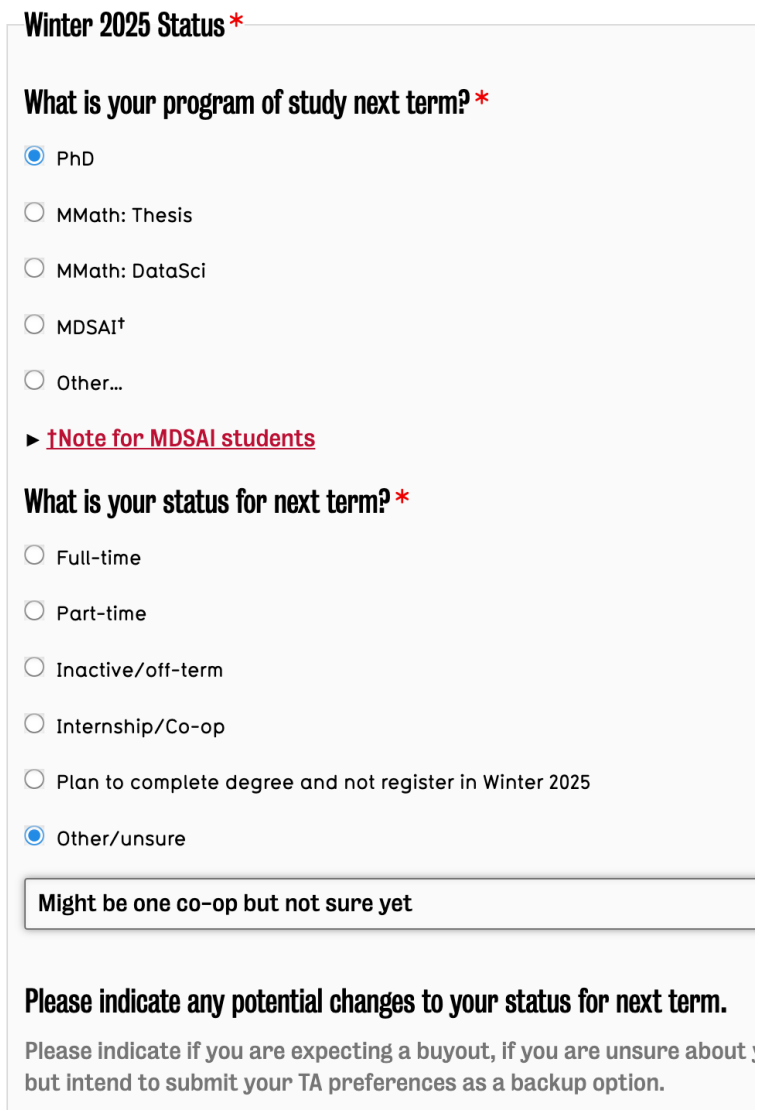
Importance of the TA Preference Form

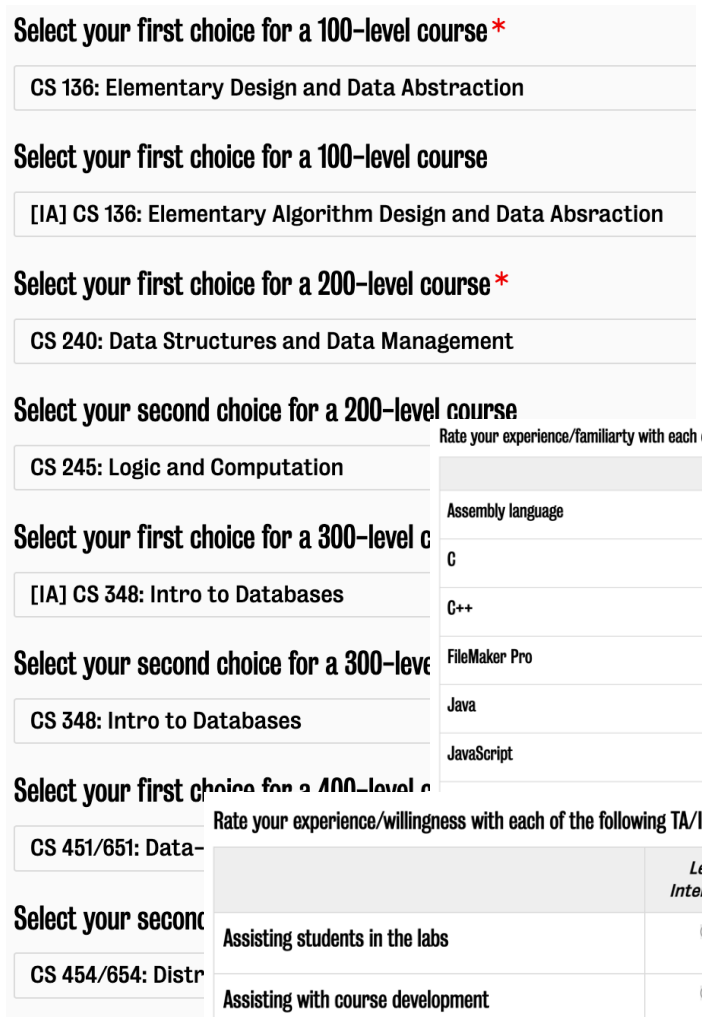
What if I do not know about my eligibility/availability next term?

- Indicate your uncertainty somewhere on the form so that we are at least aware of potential changes.
- We will follow up with you / your supervisor to confirm.
- Can always check with us if you are unsure if your situation is a special case.



Submitting TA Preferences

- Many factors influence course needs like the number of positions, instructor/ISC input, TAs who have taken the course recently
- Providing your TA history, work experience, research background, and task preferences will help us narrow down the "best" fit for each position.
- **We do consider every response**, and we will try our best to accommodate your preferences where possible.



Select your first choice for a 100-level course *

CS 136: Elementary Design and Data Abstraction

Select your first choice for a 100-level course

[IA] CS 136: Elementary Algorithm Design and Data Absraction

Select your first choice for a 200-level course *

CS 240: Data Structures and Data Management

Select your second choice for a 200-level course

CS 245: Logic and Computation

Select your first choice for a 300-level c

[IA] CS 348: Intro to Databases

Select your second choice for a 300-leve

CS 348: Intro to Databases

Select your first choice for a 400-level c

CS 451/651: Data-

Select your second

CS 454/654: Distr

Rate your experience/familiarty with each of the following languages/softwares.

	Poor	Satisfactory	Good	Great
Assembly language	○	○	○	◉
C	○	○	◉	○
C++	◉	○	○	○
FileMaker Pro	◉	○	○	○
Java	○	○	◉	○
JavaScript	○	○	◉	○

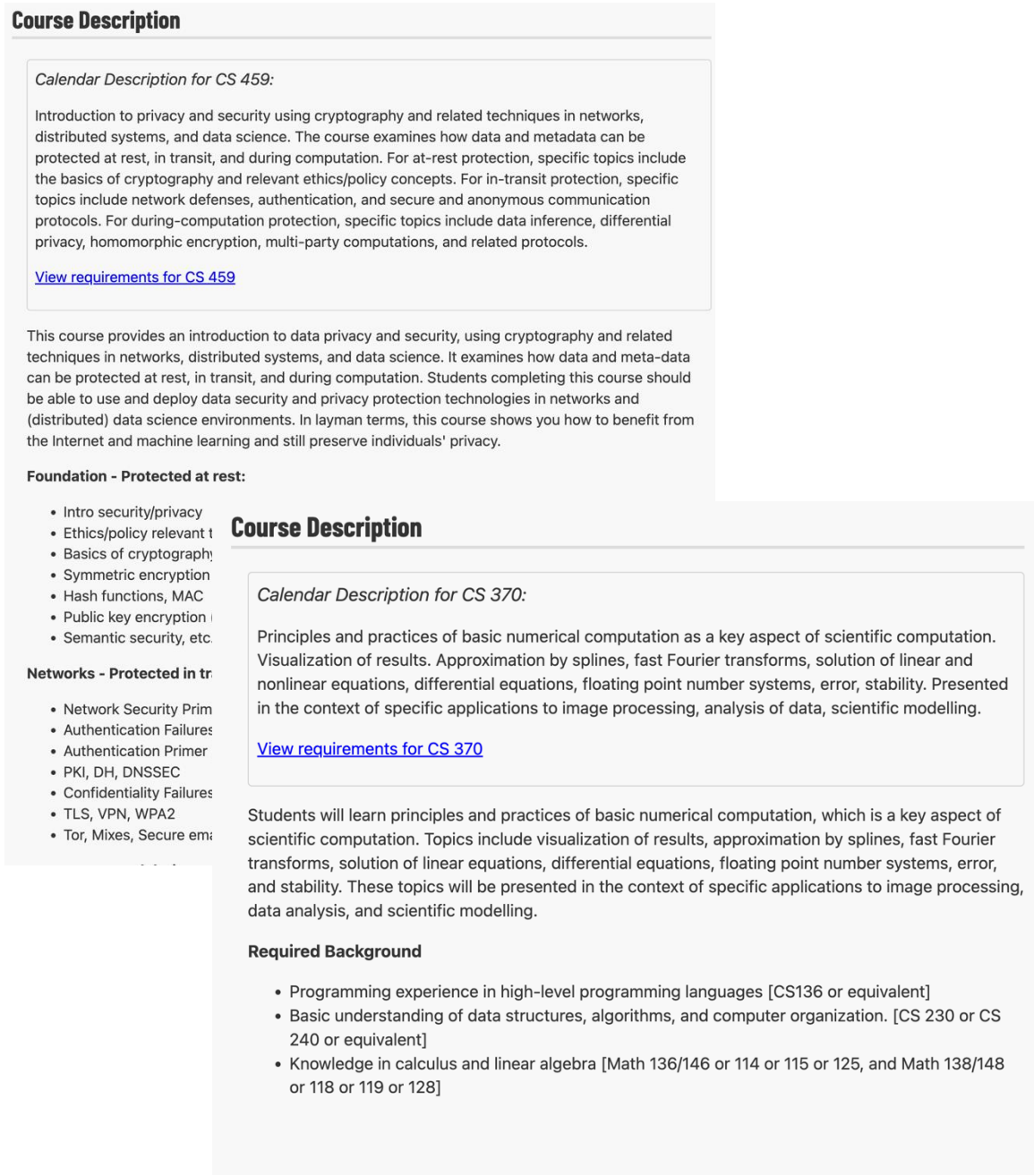
Rate your experience/willingness with each of the following TA/IA duties.

	Least Interested	Less Interested	Interested	Most Interested	Experienced & Interested
Assisting students in the labs	○	○	○	○	◉
Assisting with course development (e.g. creating tutorials / assignments)	○	○	○	◉	○
Conducting tutorials	○	○	◉	○	○
Consulting through electronic communication (e.g. Piazza maintenance)	◉	○	○	○	○
Coordinating other TAs	◉	○	○	○	○

Submitting TA Preferences

How can I learn more about the courses/TA positions that are available?

- For a better idea of course content, you can visit via outline.uwaterloo.ca for course descriptions from previous term offerings
- Can ask your supervisor or inquire through the professors/peers in your lab for courses relevant to your research area
- If you wish to have student interaction or contribute to course delivery (e.g. assignment development / scripting) then you may be interested in becoming an **Instructional Apprentice (IA)**
  - More information in the next section!



Course Description

Calendar Description for CS 459:

Introduction to privacy and security using cryptography and related techniques in networks, distributed systems, and data science. The course examines how data and metadata can be protected at rest, in transit, and during computation. For at-rest protection, specific topics include the basics of cryptography and relevant ethics/policy concepts. For in-transit protection, specific topics include network defenses, authentication, and secure and anonymous communication protocols. For during-computation protection, specific topics include data inference, differential privacy, homomorphic encryption, multi-party computations, and related protocols.

View requirements for CS 459

This course provides an introduction to data privacy and security, using cryptography and related techniques in networks, distributed systems, and data science. It examines how data and meta-data can be protected at rest, in transit, and during computation. Students completing this course should be able to use and deploy data security and privacy protection technologies in networks and (distributed) data science environments. In layman terms, this course shows you how to benefit from the Internet and machine learning and still preserve individuals' privacy.

Foundation - Protected at rest:

- Intro security/privacy
- Ethics/policy relevant t
- Basics of cryptography
- Symmetric encryption
- Hash functions, MAC
- Public key encryption
- Semantic security, etc.

Networks - Protected in tr

- Network Security Prim
- Authentication Failures
- Authentication Primer
- PKI, DH, DNSSEC
- Confidentiality Failures
- TLS, VPN, WPA2
- Tor, Mixes, Secure ema

Course Description

Calendar Description for CS 370:

Principles and practices of basic numerical computation as a key aspect of scientific computation. Visualization of results. Approximation by splines, fast Fourier transforms, solution of linear and nonlinear equations, differential equations, floating point number systems, error, stability. Presented in the context of specific applications to image processing, analysis of data, scientific modelling.

View requirements for CS 370

Students will learn principles and practices of basic numerical computation, which is a key aspect of scientific computation. Topics include visualization of results, approximation by splines, fast Fourier transforms, solution of linear equations, differential equations, floating point number systems, error, and stability. These topics will be presented in the context of specific applications to image processing, data analysis, and scientific modelling.

Required Background

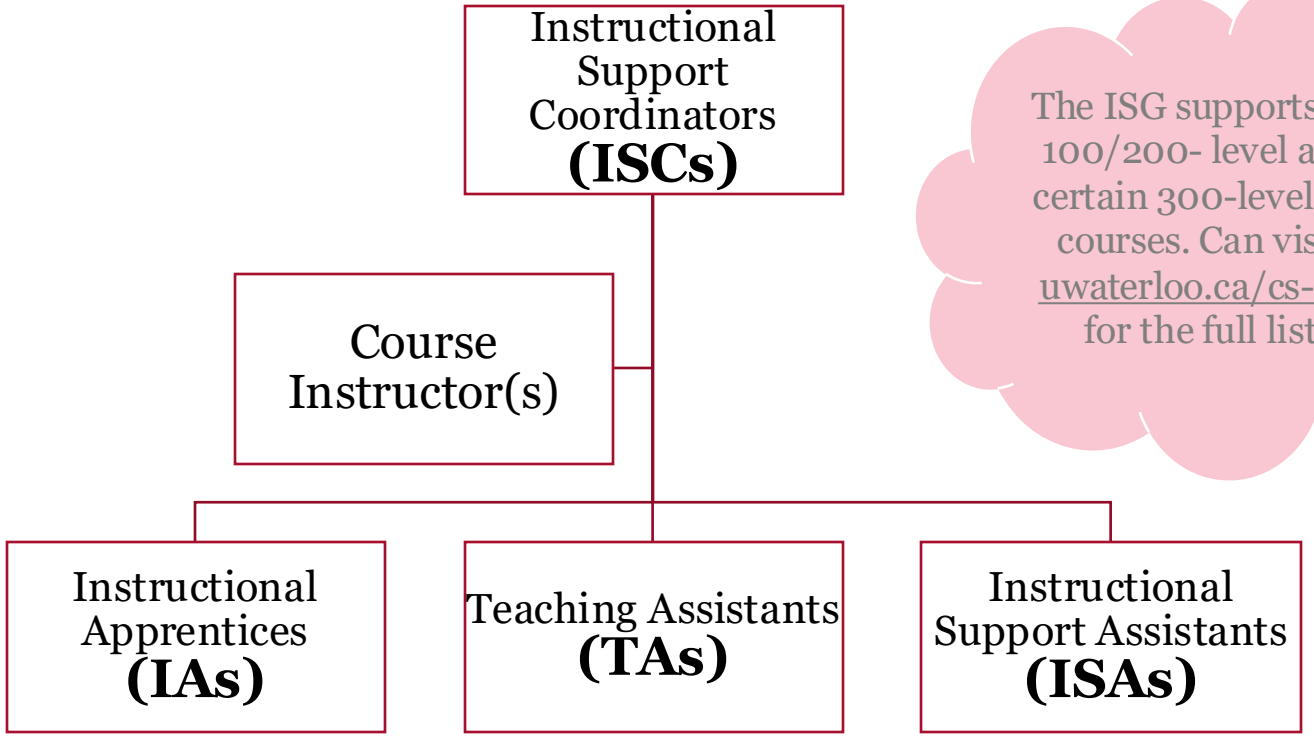
- Programming experience in high-level programming languages [CS136 or equivalent]
- Basic understanding of data structures, algorithms, and computer organization. [CS 230 or CS 240 or equivalent]
- Knowledge in calculus and linear algebra [Math 136/146 or 114 or 115 or 125, and Math 138/148 or 118 or 119 or 128]

PART THREE

Instructional Apprentice Positions + Resources

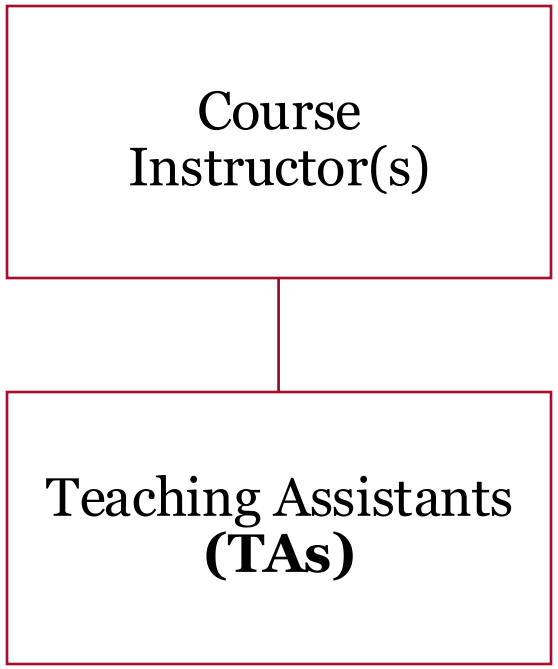
Review: Undergraduate Support in Computer Science

Instructional Support Group supported courses



The ISG supports all 100/200- level and certain 300-level CS courses. Can visit uwaterloo.ca/cs-isg for the full list

Most non-ISG supported courses



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Review: General Expectations of all TAs/IAs

Instructional Apprenticeships (IAships) have the same policies + expectations as TAs, including:

- Weekly commitment
- Course knowledge
- Willingness to learn
- Ability to work well with others
- Reliability
- Communication

TAs and IAs are **evaluated** each term with the following categories from 1 (Insufficient Opportunity to Observe) to 5 (Excellent)

Quality of Work	/5
Timeliness	/5
Communication	/5
Preparedness	/5
Initiative	/5
Overall Rating	/5

TAs/IAs with exceptional performance may be considered for TA awards ($$$)

What is the Difference Between TA/IAs?

Main Duties of a TA:

- Marking assignments, midterms and finals
- Proctor midterms and finals

Additional tasks for upper year course (400-level) TAs:

- Attends regular course meetings
- May monitor discussion forums (e.g. Piazza) or hold office hours
- May update content on course materials

Main Duties of an IA:

- May prepare and lead tutorials
- May supervise and assist students in labs
- May have consulting hours (one-on-one or group student interaction)
- May contribute to assignments (creating questions/solutions, scripting auto-tests)
- May proof-read assignments and/or exams
- Mark midterms and finals
- Proctor final exams

Why would you want to be a TA or an IA?

TA positions may be suitable if you:

- enjoy the behind-the-scenes tasks involved in course delivery such as marking weekly assignments
- have the flexibility to schedule your own time for marking assignments, etc.
- enjoy working both independently/in a group of other TAs

IA positions may be suitable if you:

- enjoy face-to-face interaction with students
- are able to provide insight and potential input into course content or delivery
- wish to develop teaching skills required to be a professor/**Sessional Instructor**
- plan on applying to either academic or industry roles (great on CV)

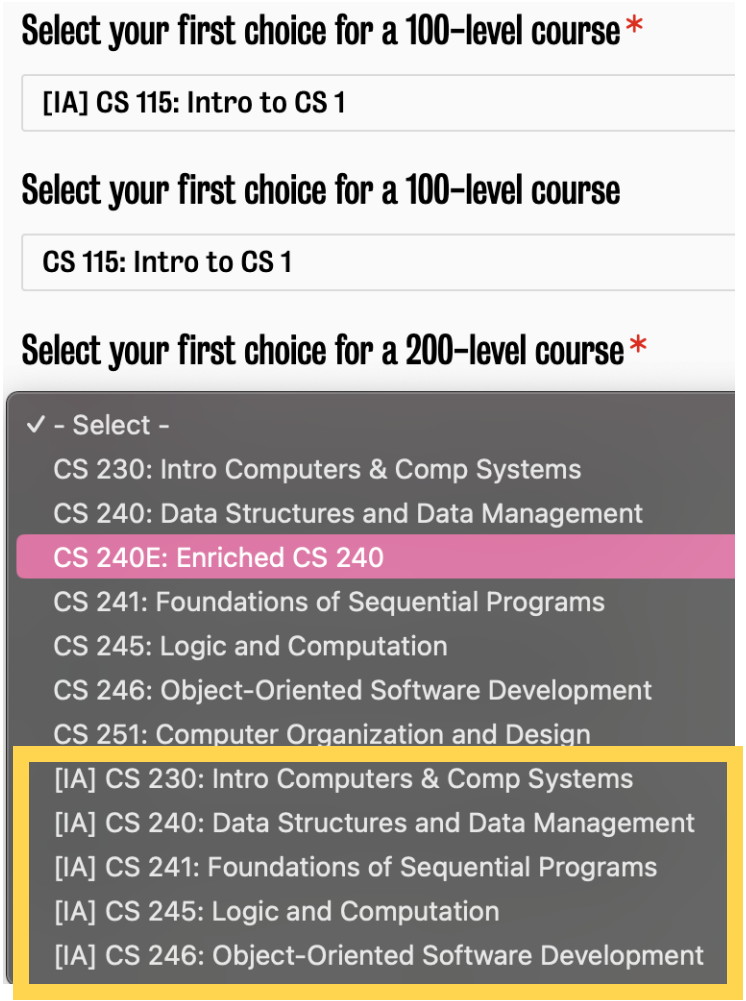
How can I be considered for an IA position?

Can indicate when submitting on the TA Preference Form by selecting courses with the [IA] indicator / additional qualifications.

- You may also be considered for IA positions (or more involved TA positions) if the work aligns with your task preferences

	Least Interested	*Less Interested*	*Interested*	*Most Interested*	*Experienced & Interested*
Creating assignment solutions (e.g. developing test cases for auto-marking)	○	○	◉	○	○
Creating marking schemes (may involve scripting)	○	○	◉	○	○
Creating scripts	○	○	○	◉	○
Face-to-face consulting with students	○	○	○	○	◉
Marking	○	◉	○	○	○

- If you have a double unit, you could be assigned either 2.00 IA units or 1.00 IA unit + 1.00 TA unit (depending on the course)



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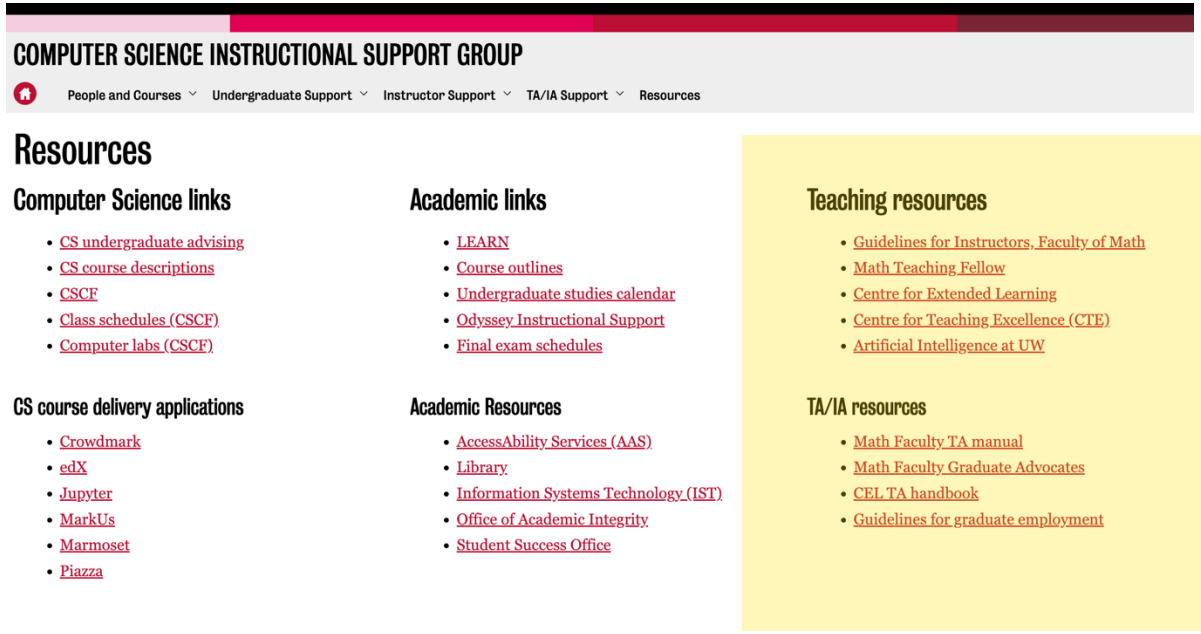
Resources for Graduate students

Check out the ISG's website for additional resources and more details:
uwaterloo.ca/cs-isg/


COMPUTER SCIENCE INSTRUCTIONAL SUPPORT GROUP

People and Courses | Undergraduate Support | Instructor Support | TA/IA Support | Resources

Resources

Computer Science links

- CS undergraduate advising
- CS course descriptions
- CSCF
- Class schedules (CSCF)
- Computer labs (CSCF)

Academic links

- LEARN
- Course outlines
- Undergraduate studies calendar
- Odyssey Instructional Support
- Final exam schedules

Teaching resources

- Guidelines for Instructors, Faculty of Math
- Math Teaching Fellow
- Centre for Extended Learning
- Centre for Teaching Excellence (CTE)
- Artificial Intelligence at UW

CS course delivery applications

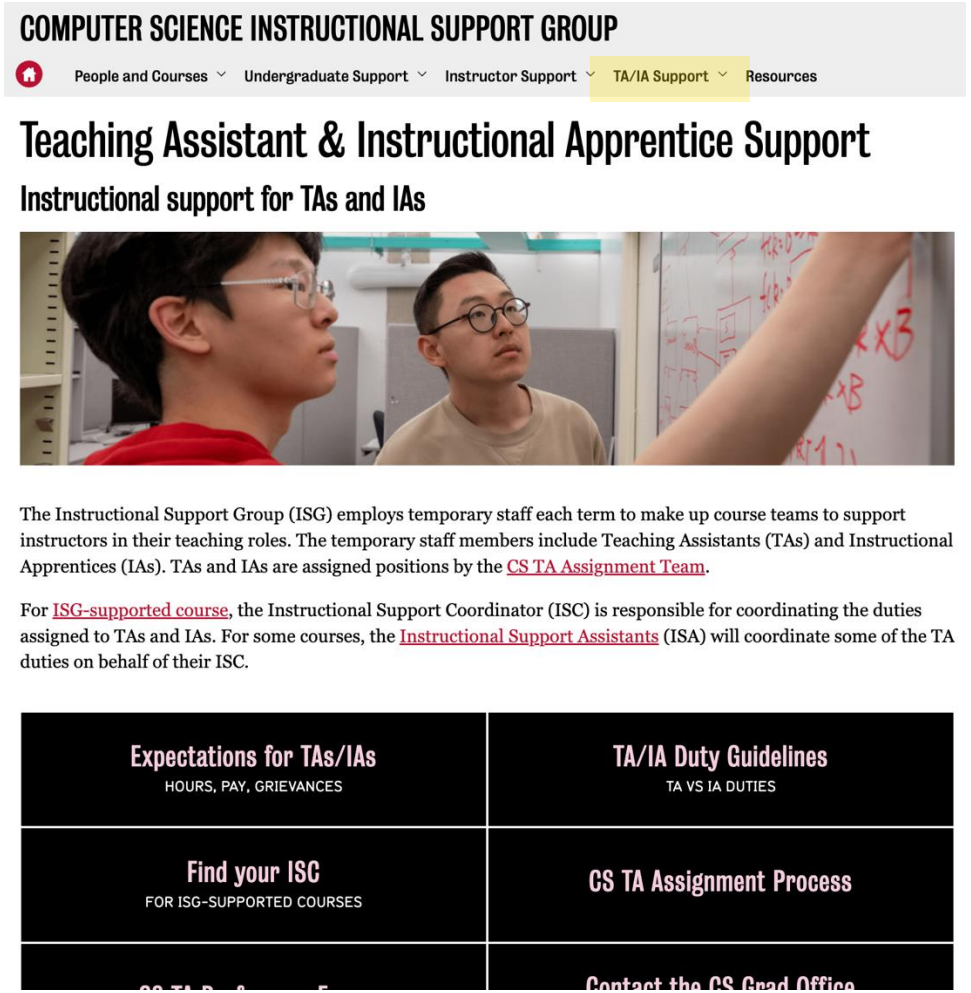
- Crowdmark
- edX
- Jupyter
- MarkUs
- Marmoset
- Piazza

Academic Resources

- AccessAbility Services (AAS)
- Library
- Information Systems Technology (IST)
- Office of Academic Integrity
- Student Success Office

TA/IA resources

- Math Faculty TA manual
- Math Faculty Graduate Advocates
- CEL TA handbook
- Guidelines for graduate employment


COMPUTER SCIENCE INSTRUCTIONAL SUPPORT GROUP

People and Courses | Undergraduate Support | Instructor Support | TA/IA Support | Resources

Teaching Assistant & Instructional Apprentice Support

Instructional support for TAs and IAs

The Instructional Support Group (ISG) employs temporary staff each term to make up course teams to support instructors in their teaching roles. The temporary staff members include Teaching Assistants (TAs) and Instructional Apprentices (IAs). TAs and IAs are assigned positions by the CS TA Assignment Team.

For ISG-supported course, the Instructional Support Coordinator (ISC) is responsible for coordinating the duties assigned to TAs and IAs. For some courses, the Instructional Support Assistants (ISA) will coordinate some of the TA duties on behalf of their ISC.

Expectations for TAs/IAs HOURS, PAY, GRIEVANCES	TA/IA Duty Guidelines TA VS IA DUTIES
Find your ISC FOR ISG-SUPPORTED COURSES	CS TA Assignment Process
	Contact the CS Grad Office

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QUESTIONS?

Anything that needs clarification or confusing?

Most of this information is summarized online:

uwaterloo.ca/cs-isg/ta-assignments

SUBMIT THE TA PREFERENCE FORM BY FRIDAY OCTOBER 11, 2024!

An email with the recording, slides, and relevant links will be sent to you shortly.

If you have any technical issues or have additional questions that aren't in our FAQ, please contact cs-ta@uwaterloo.ca for assistance.