TA/IA Assignment Information (as of Spring 2025)



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

Please contact <u>CS-TA@uwaterloo.ca</u> for questions about your TAships at any point.



Learning Objectives

These slides should highlight

- The general timeline of TA assignments in Computer Science
- The **TA Preference Form** and its impact on TA eligibility, funding, and course assignments
- The differences between a Teaching Assistant (TA) and an Instructional Apprentice (IA)



Timeline for TA Assignments in CS (Fall 2025)

The TA assignment process begins **3** months before the term you TA.

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 -3: Complete Preference Forms (June)

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

Month -2: Communicate Updates/Issues (July)

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

Month -1: Sign Contracts/Agreements (August)

- 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.



REVIEW

The following slides will reference information that you should already know from a TA Training Session or another Grad Orientation session.

TA Eligibility, Units

TA Unit Eligibility:

- MMath students are entitled to 7.00 TA units in 6 terms
- PhD from Masters students are entitled to 16.00 TA units in 12 terms
- PhD from Bachelors students are entitled to 24.00 TA units in 18 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)

Single/Double TA units:

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

Recall: 1.00 TA unit = 80 hours of part-time work / term.

In the Fall, 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*).



Graduate Students who are not assigned TA units

The following are cases where eligible grad students will **NOT BE ASSIGNED** TA positions:

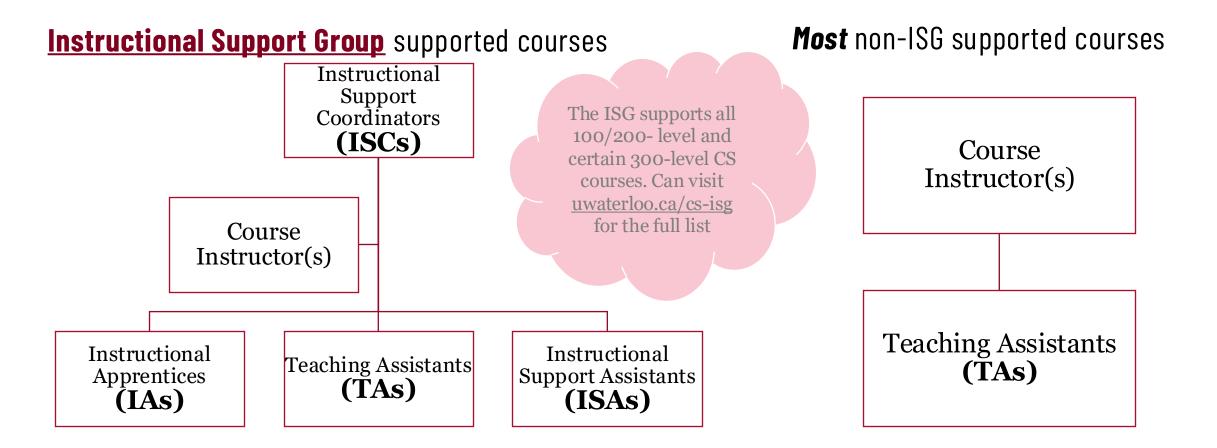
- **Declines**; students who decline TA units / funding
- Buyouts; students who are bought out by their supervisors (also known as TA relief)
- students on an Internship/Co-op term or taking on a Sessional Instructor position
- students completing their degrees before the term will end
- students with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

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



Undergrad Support in Computer Science (Acronyms)





TA PREFERENCE FORM

In general, please read the form questions carefully; your response directly influences how TA assignments are determined.

If you do not fill out the form accurate to your experience, it may cause confusion/delay for yourself, course instructors, or the Grad Office.

Purpose of TA Preference Form

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

The TA Preference Form should be completed by all CS graduate students **every term**, *regardless* of their intentions to TA or not.

Students who do not submit the form **are defaulted to a TA Decline** → will not receive TA funding for the following term.

Would you like to be assigned a TA/IA position for the Fall 2025 term?*

The Fall 2025 term begins on September 6th and ends December 23.

- Yes, I intend to TA for at least 1 TA unit if eligible / not bought-out.
- O No, I do not intend TA but I would like to update my course preferences just in case my situation changes.
- O No, I will Decline any TA units assigned to me for this term.

I confirm that I am eligible to TA for the Fall 2025 term.*

Eligibility requirements include that you...

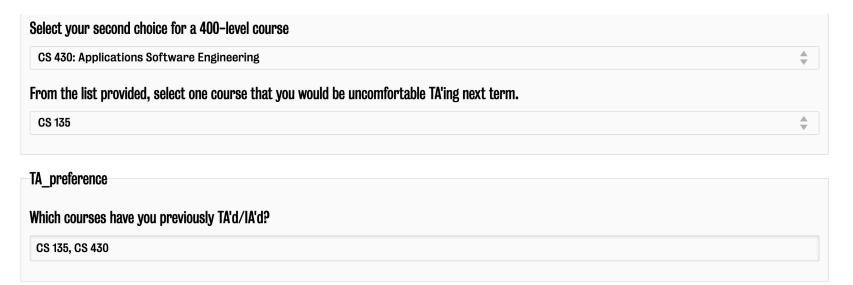
- 1. are physically in Ontario, on-campus, from September December 2025,
- 2. have a Social Insurance Number (SIN) valid until December 2025, and
- 3. have a Canadian bank account.



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)
- Failure to complete the form will have negative effects on your ability to TA or receive TA funding



CS 430: Applications Software Engineering CS 431: Data-Intensive Distributed Analytics CS 445/645/SE 463: Software Requirement Specifical CS 449/649: Human-Computer Interaction CS 451/651: Data-Intensive Distributed Computing CS 453/698: Software & Systems Security CS 454/654: Distributed Systems CS 456/656: Computer Networks CS 459/698: Privacy, Cryptography, & Security CS 466/666: Algorithm Design & Analysis CS 480/680: Intro to Machine Learning CS 484/684: Computational Vision CS 485/685: Statistical & Computational Foundations CS 486/686: Intro to Artificial Intelligence CS 488/688: Intro to Computer Graphics CS 489/698: Foundations of Modern Cryptography CS 493/SE 490: Team Project 1



How are assignments made?

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

CS 136: Elementary Design and Data Abstraction Select your first choice for a 100-level course [IA] CS 136: Elementary Algorithm Design and Dat			form for courses which may require specific TAs/skillsets for their course				
Select your first ch		200-level course * Rate your experience/famili	arty with each of the follow				924
Select your second	choice for	Assembly language		Poor		factory	Good
CS 245: Logic and Computati C Select your first choice for a [IA] CS 348: Intro to Databas FileMaker Pro Select your second choice for Java		C		0 0		0	
		G++	• 0		0		
		FileMaker Pro		0 0		0	0
		Java				0	•
CS 348: Intro to Databases		JavaScript		O		0	•
		rience/willingness with each	of the following TA/IA duties.				
CS 451/651: Data-			Least Interested	Less Interested	Interested	Most Interested	Experienced & Interested
Select your second	Assisting stud	lents in the labs	0	0	0	0	•
65 454/654: DISTI		course development tutorials / assignments)	0	0	0	•	0
Conducting tutorials Consulting through electronic communication (e.g. Piazza maintenance)		rtorials	0	O	•	O	0
		•	on	0	O	O	0

There is an Instructor TA request

Select your first choice for a 100-level course *

Coordinating other TAs

Submitting TA Preferences

How can I learn more about the courses

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
- Most TA positions in CS require marking + proctoring duties. IA positions may require more hands-on experience.

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]

Eligibility/Availability

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.

Fal	Il 2025 Status *
Wh	nat is your program of study next term? *
0	PhD
0	MMath: Thesis
0	MMath: DataSci
0	MDSAI†
0	Other
▶ 1	Note for MDSAI students
Wh	nat is your status for next term?*
0	Full-time
0	Part-time
0	Inactive/off-term
0	Internship/Co-op
0	Plan to complete degree and not register in Fall 2025
0	Other (e.g. Medical leave, unsure)
Ple	ease indicate any potential changes to your status for next term.
ava	ease indicate if you are expecting a buyout, if you are unsure about your allability/graduation date, or if you will likely be unable to TA but intend to submit your TA eferences as a backup option.

INSTRUCTIONAL APPRENTICES [IA]

Instructional Apprentice is a title given to teaching assistants with more front-line duties. In other departments, this might be referred to as a "Head TA" or "Senior TA".

The hours + salary are the same as a TA position; the duties differentiate the two positions.

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



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.

 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)	O	0	•	0	0
Creating marking schemes (may involve scripting)	0	0	•	0	0
Greating scripts	0	O	0	•	O
Face-to-face consulting with students	0	O	0	O	•
Marking	0	•	0	0	0

- Can highlight previous TA/IA work experience/skills at UW or previous institutions
- 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)

Select your first choice for a 200-level course*

CS 240E: Enriched CS 240

Select your second choice for a 200-level course

√ - None -

CS 230: Intro Computers & Comp Systems

CS 231: CS 231: Algorithmic Problem Solving

CS 234: Data Types & Structures

CS 240: Data Structures and Data Management

CS 240E: Enriched CS 240

CS 241: Foundations of Sequential Programs

CS 245: Logic and Computation

CS 246: Object-Oriented Software Development

CS 247: Software Eng Principles

[IA] CS 230: Intro Computers & Comp Systems

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[IA] CS 231: Algorithmic Problem Solving

[IA] CS 234: Data Types & Structures

[IA] CS 240: Data Structures and Data Management

[IA] CS 241: Foundations of Sequential Programs

[IA] CS 245: Logic and Computation

[IA] CS 246: Object-Oriented Software Development

[IA] CS 251: Computer Organization and Design

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
- can 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)



RESOURCES

Most of this information is summarized online:

uwaterloo.ca/cs-isg/ta-assignments

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.
- If your TA history appears to be incorrect, please email us to investigate.

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Entitlements

#	Units	Start Term	Term Count	Comment
0	7.00	Fall 2024	6	Registration in CSM
Total Entitlement:	7.00			
#	Units	Start Term	Term Count	Comment

Assignment History

Term	Course	Job	Overall Rating	Evaluation	Job Units	Term Units
Fall 2024	CS 135	Instructional Apprentice	5	View	1.00	1.00
Winter 2025	CS 240	Instructional Apprentice	5	View	1.00	1.00
Spring 2025	CS 240	Instructional Apprentice			1.00	1.00
				Total Units Assigned:	3.00	



Resources for Graduate students

Check out the ISG's website for additional resources and more details:

uwaterloo.ca/cs-isg/





Computer Science links

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

CS course delivery applications

- Crowdmark
- edX
- Jupyter
- MarkUs
- Marmose
- Piazza

Academic links

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

Academic Resources

- · AccessAbility Services (AAS)
- <u>Library</u>
- Information Systems Technology (IST)
- · Office of Academic Integrity
- · Student Success Office

Teaching resources

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

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 V Undergraduate Support V Instructor Support V TA/IA Support V 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
00 TA D. 0	Contact the CS Grad Office

