

# Welcome to the Winter 2025 TA/IA Assignment Info Session

02/12/2025

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



# 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.


In the future, 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, scholarships 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. If your TA history is incorrect, please email us to look into it further.



## My TA Assignments

Return to [Main Menu](#)

<i>Term</i>	<i>Course</i>	<i>Job</i>	<i>Entitlement Before</i>	<i>Assigned Units</i>	<i>Entitlement After</i>	<i>Evaluation</i>
Fall 2024	CS 135	Instructional Apprentice	7.00	1.00	6.00	



# 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 (Spring 2025)

Please keep a lookout for emails from

[cs-ta@uwaterloo.ca](mailto: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 (February)

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

## Month 3: Communicate Updates/Issues (March)

- 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 (April)

- 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.

- Tell us if you want to TA
- Tell us that you don't want to TA

Your response also helps us determine how many TA units to assign each term and to identify which positions/courses are most suitable.

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 pick your first choice course preference for TA for the Winter 2025

To determine which courses may suit your technical descriptions, content, and pre-requisites on the [CS outline](#) on the University's [Outline repository](#).

If you are interested in becoming an Instructional Assistant, 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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Artificial Intelligence, Machine Learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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

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

## 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 [IA 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](#).



# 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**

✓ - Select -

- CS 445/645/SE 463: Software Requirement Specifications & Analysis
- CS 446/646/ECE 452: Software Design & Architecture
- CS 449/649: Human-Computer Interaction
- CS 452/652: Real-Time Programming
- CS 453/698: Software & Systems Security
- CS 456/656: Computer Networks
- CS 459/698: Privacy, Cryptography, & Security
- CS 466/666: Algorithm Design & Analysis
- CS 475/675: Computational Linear Algebra
- CS 480/680: Intro to Machine Learning
- CS 486/686: Intro to Artificial Intelligence
- CS 488/688: Intro the Computer Graphics
- CS 489/698: Carlo Methods: Advanced Applications**
- CS 489/698: Software Delivery
- CS 490: Information Systems Management
- CS 492: Social Implications of Computing
- CS 493/SE 490: Team Project 1

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

The Winter term begins on January 6th and ends April 26.

- Yes, I intend to TA for at least 1 TA unit if eligible.
- No, I do not think I will be TAing but in case my situation changes, I will update my course preferences for next term just in case.
- No, I will Decline any TA units assigned to me for this term.

From the list provided, select one course that you would be uncomfortable TA'ing next term.

CS 480/680

TA\_preference

Which courses have you previously TA'd/IA'd?

CS 480/680, CS 485

# 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.

### Spring 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 Spring 2025
- Other (e.g. Medical leave, 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 your availability/graduation date, or if you will likely be unable to TA but intend to submit your TA preferences as a backup option.

# 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 Abstraction

Select your first choice for a 200-level course \*

CS 240: Data Structures and

Rate your experience/familiarity with each of the following languages/software.

Select your second choice for

CS 245: Logic and Computati

Select your first choice for a

[IA] CS 348: Intro to Databas

Select your second choice for

CS 348: Intro to Databases

Select your first choice for a

CS 451/651: Data-

Select your second

CS 454/654: Distr

	Poor	Satisfactory	Good
Assembly language	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
C++	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
FileMaker Pro	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Java	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
JavaScript	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Assisting with course development (e.g. creating tutorials / assignments)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Conducting tutorials	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Consulting through electronic communication (e.g. Piazza maintenance)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Coordinating other TAs	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



# 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](https://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 em:

### 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]

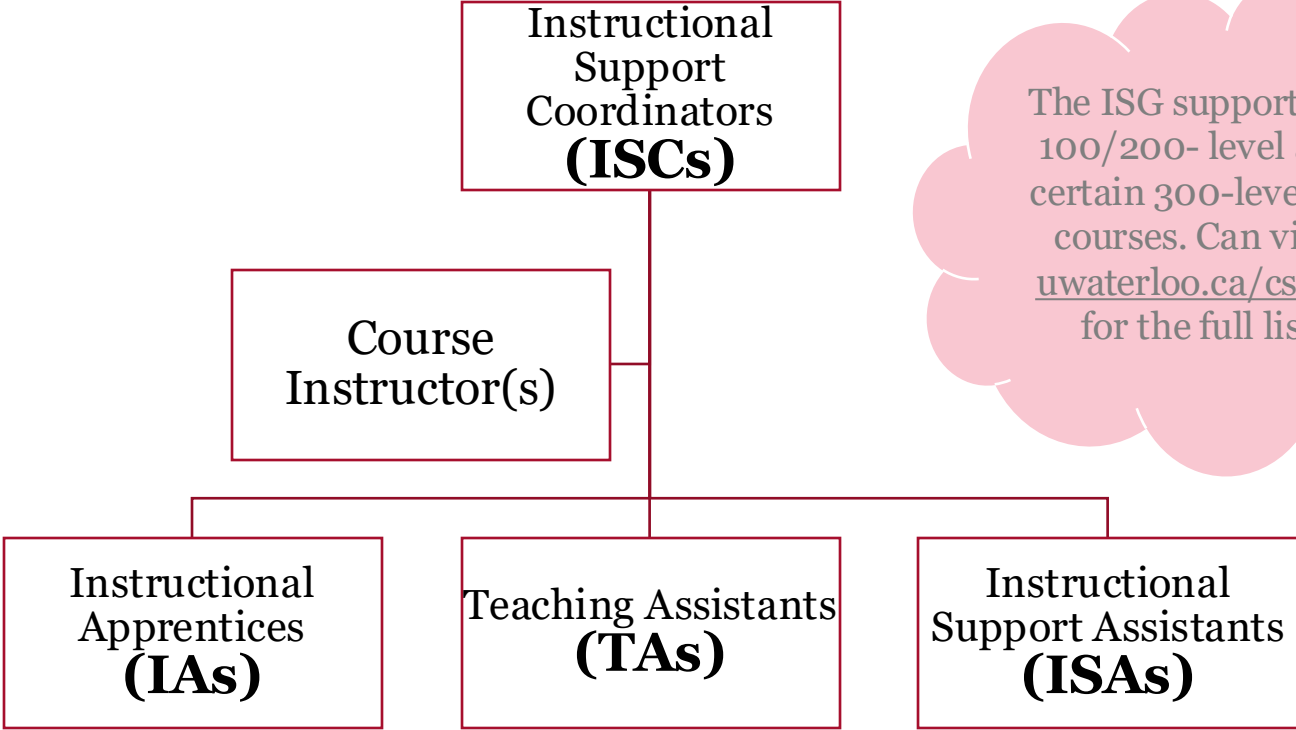
# PART THREE

## Instructional Apprentice Positions + Resources



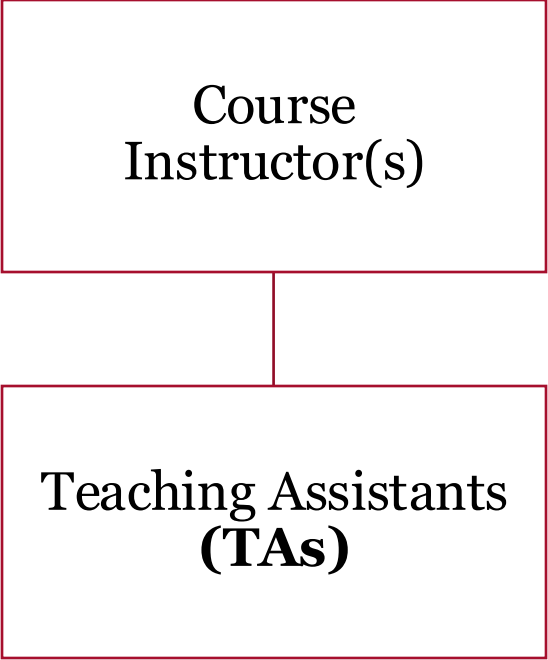
# Review: Undergraduate Support in Computer Science

## Instructional Support Group supported courses



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

## **Most** non-ISG supported courses



# 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

	<i>Least Interested</i>	<i>Less Interested</i>	<i>Interested</i>	<i>Most Interested</i>	<i>Experienced &amp; Interested</i>
<b>Creating assignment solutions</b> <small>(e.g. developing test cases for auto-marking)</small>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Creating marking schemes</b> <small>(may involve scripting)</small>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Creating scripts</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
<b>Face-to-face consulting with students</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
<b>Marking</b>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- 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
- [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

# Resources for Graduate students

Check out the ISG's website for additional resources and more details:  
[uwaterloo.ca/cs-isg/](http://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](#)

**TA/IA resources**

- [Math Faculty TA manual](#)
- [Math Faculty Graduate Advocates](#)
- [CEL TA handbook](#)
- [Guidelines for graduate employment](#)

**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](#)

**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.

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

# QUESTIONS?

Clarifications?

Most of this information is summarized online:

[uwaterloo.ca/cs-isg/ta-assignments](https://uwaterloo.ca/cs-isg/ta-assignments)

# **SUBMIT THE TA PREFERENCE FORM BY FRIDAY, FEBRUARY 21, 2025!**

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](mailto:cs-ta@uwaterloo.ca) for assistance.