Computer Science PhD Student Handbook

Revised: May 2025

I. Introduction

The PhD in Computer Science is a joint program between the School of Computer Science, the School of Interactive Computing, the School of Cybersecurity and Privacy, and the School of Computational Science and Engineering within the College of Computing. All students in the program receive the same degree regardless of their interest area, specialization, research focus, or school affiliation. New students are affiliated with the school in which their advisor resides, but none of the schools impose any special requirements compared to another.

As a research-oriented degree, the PhD in Computer Science prepares exceptional students for careers at the cutting edge of academia, industry, and government. Students are expected to demonstrate excellence in both defining and executing a substantial research project that forms a novel contribution to the state of the art of computing. With a highly individualized program of study, the degree provides students with depth in their chosen research area coupled with a rigorous breadth of knowledge across the discipline.

This handbook is meant to detail the inner workings of the CS PhD program for students, faculty, and administrators. The sections below describe the processes in the most important parts of the program, including admissions, coursework requirements, the qualifying exam, the PhD proposal, the dissertation, and final defense, as well as the mechanisms for administration. A list of Current Personnel, Course Listings, Doctoral Minor information, and Health and Wellness Resources are included at the end of this guide.

II. Admissions

External applications are only accepted for the Fall semester each year. Students apply to the CS PhD program through one of the four participating home schools. The application deadline is December 15.

Admissions decisions are made by the home school. The home school will communicate the acceptance to the prospective student. The home school will also communicate all rejections.

Support for incoming students (including guarantees of teaching and research assistantships and/or fellowships) is determined by the home schools.

Recruiting visits

Recruiting visits are organized in the Spring by the home schools along with their other degree programs.

New Student Orientation

There will be a new student orientation for all new CS PhD students the week before classes start in August. It will consist of a short presentation by the director on the degree requirements, an open discussion, and various other activities that vary by home unit.

III. Program Requirements

The coursework for the CS PhD consists of the following, per the current 2025-26 GT Catalog year:

1. CS 7001- Intro to Grad Studies, 5 hours.
2. Breadth Requirement, 12 hours.
3. Programming Proficiency Requirement.
4. Doctoral minor, 6 hours.
5. GTA Apprenticeship, 1 course, such as CETL 8000
6. Responsible Conduct of Research, 1 course, 1 hour (pass/fail).
7. PhD Qualifying exam, 1 course, 3 hours (pass/fail).
8. Thesis Proposal.
9. Dissertation Defense.

For details about these requirements, please see Appendices A, B, and C.

The coursework requirements are subject to change. Students can satisfy any version of the coursework requirements that are in effect from the date of matriculation into the program to the date of the PhD Proposal.

More information about the Institute-level requirements for the PhD degree can be found here: http://www.catalog.gatech.edu/academics/graduate/doctoral-degree-info/

Course Transfer Credit/Course Waivers

If a student has completed graduate work at another institution, they can petition to receive credit or course waivers. Students should request the class evaluation during their second term or later. The classes must be at the graduate level and no classes that were used to satisfy an undergraduate degree can be used toward the CS PhD degree. Up to 30 hours of credits earned toward a graduate degree with a grade of B and above at a different institution can be used towards the PhD degree. The approved classes will count toward the PhD degree course requirements but will not be shown as transferred on the Georgia Tech transcript or appear in Degreeworks.

The course waiver process is coordinated by your School's Graduate Coordinator.   The student should submit a short letter of petition describing which courses they believe they should receive credit for along with justification. Along with this letter, an unofficial transcript from the institute where the classes were taken and syllabi for each of the courses in question should be included. The student would be responsible for contacting the faculty for the course equivalent here at GT. Once approved by the teaching faculty, you will contact your Graduate Coordinator for final approval.

Teaching Apprenticeship and Extra-curricular Requirements

Teaching Apprenticeship
CS Ph.D. students must complete a one-semester teaching apprenticeship requirement. Through this requirement, students will develop general skills in pedagogy, communication, curriculum development, and organization. This type of practical experience will help students become effective communicators and will serve as valuable preparation for any career. Students are required to take a relevant one-

semester training course, such as CETL 8000 Graduate Teaching Assistant Preparation, during the same semester they serve as a teaching apprenticeship.

Extra-curricular Requirements
CS Ph.D. students are subject to their home unit's extra-curricular requirements. Students are responsible for ensuring that they understand and satisfy any home school requirements in addition to the CS program and Institute requirements.

Academic Advising

For advice on which courses, including doctoral thesis hours, to take and when to take them, students should refer to their thesis advisor.

Advising on non-academic issues, including Institute policies and procedures regarding program requirements such as qualifying exam, proposal, defense, course waivers, etc, will be provided by the student's home school graduate coordinator or Associate Chair for Graduate Programs.

Qualifying Exam

The Qualifier is a student's first step toward achieving candidacy in the doctoral program. This Qualifier functions as Georgia Tech's Comprehensive Examination. It is designed to test whether PhD students are sufficiently prepared to do research in their chosen area(s) and whether they are engaged in research in their chosen area(s). Students are expected to take qualifier in their second year unless there are truly exceptional circumstances. The Qualifier's format can vary by study area. In the semester in which they take the qualifying exam, the student registers for three to six hours of CS 7999 (Prep-Doctoral Qual Exam, section PHD). This is a permit only course; please email your home school's graduate coordinator for approval.

Generally speaking, the qualifier consists of three parts:

1. Testing the students' depth of knowledge in their chosen research area.
2. The submission of a high-quality research deliverable, as evidenced by a portfolio consisting of an exam-committee-reviewed and publishable article, and possibly other work products as approved by the exam committee. This component evaluates the student's creative and research abilities, along with the potential to do dissertation research.
3. An oral presentation and examination which also allows for follow-up on the first two parts.

The student must identify a research advisor and an exam committee of at least three other faculty from the area to oversee the Qualifier.

The exam committee is responsible for determining if a student has passed the Qualifier. The results of the Qualifier will be communicated to the PhD. coordinator by the respective area advisor. The student should fill out the Qualifier Form after passing the Exam.

Each student is allowed two opportunities to pass both the area knowledge and creativity components of the examination. The two components are treated independently, so a student need not pass both at the same time. Students who are not able to pass the Qualifier after two attempts will be encouraged to seek a Master's degree, and they will not be able to continue in the doctoral program.

After successfully completing the Qualifier, student focuses on research leading toward a dissertation. Students should register for doctoral dissertation hours (CS 9000) after passing the Qualifier rather than registering for Special Problems (CS 8903).

The topic of the student's research is formalized through both a written dissertation proposal and an oral presentation.

Admission to PhD Candidacy and PhD Proposal

The PhD. proposal consists of:
1. A proposal document written by the student in which he/she will propose the research work to be undertaken as part of his/her doctoral work and a schedule for completion
2. An oral defense of the proposal document

Committee

PhD. proposal will be administered by the student's thesis advisory committee (the advisor plus at least two other faculty members), chosen jointly by the student and the advisor. A majority of the members of the advisory committee must hold their primary appointments on the College of Computing faculty. It is a good practice to have all members (including the external committee member) of your dissertation defense committee in your proposal committee.

Proposal Announcement

The proposal must be announced publicly to the College at least one week prior to the date of the oral defense by sending the proposal announcement to phd-coc-official@cc.gatech.edu. Please provide a copy of the announcement to the PhD Program Coordinator in your school.

Format

There is no fixed format for the oral defense. The advisor, as the chair of the committee, conducts the examination. Here is a typical way in which it may be run:
1. The student will make a presentation to the committee and others present.
2. After the presentation there is a question-and-answer period. The chair then asks everyone other than the committee members and Georgia Tech faculty to leave. The committee members then have an opportunity to ask more questions. Then the student is asked to leave.
3. The committee deliberates and then decides whether the student has passed the proposal defense. They give feedback to the student on the proposal either individually or through the advisor.

A student must have passed the qualifying examination to do a PhD. proposal. A student who has passed the proposal defense and has also completed all course requirements (except the minor), maintaining a satisfactory scholastic record, has achieved PhD. candidacy and should submit the Admission to Candidacy Form located on the Graduate Studies website.

PhD Dissertation and Final Defense

The primary requirement of the PhD student is to create original and substantial research. This research is reported for review in the PhD dissertation and presented at the final defense.

Before the announcement of the public PhD. dissertation defense, your advisor must approve that the dissertation is ready to be given to the dissertation committee, and the dissertation committee must approve that the dissertation is ready for the public dissertation defense. Before giving this approval, the

entire committee is expected to have read the dissertation and to have given comments to the student. The committee must approve that a substantial and defensible portion of the dissertation has been completed. Three (3) weeks is a reasonable amount of time for reading the dissertation.

After the approval, the candidate must announce the public dissertation defense at least fifteen (15) days in advance and must forward this announcement together with the names of the dissertation committee to the Office of Graduate Studies and Research.

The public dissertation defense starts with a presentation by the candidate and is followed by a question-answer period. The advisor, who is the chair of the committee, determines who may ask questions and in which order and brings the discussion to a close at the appropriate time. The question-answer period is followed by a closed-door session attended by only the members of the PhD. dissertation committee and interested Georgia Tech faculty.

The dissertation committee must take one of the following actions:
- To approve the dissertation without corrections.
- To approve the dissertation with minor corrections, to be approved by the advisor only.
- To require a resubmission with major changes and re-approval by the entire committee.
- Not to approve the dissertation.

The dissertation committee may recommend one additional defense if the dissertation is resubmitted with major changes or if the dissertation is not approved.

The candidate must make any corrections deemed necessary by the dissertation committee and the committee must sign the dissertation approval form after the dissertation has been approved. The format of the dissertation must meet the published institute guidelines found at: *Georgia Institute Technology Graduate Studies Thesis and Dissertation Manual.*

The candidate must submit the dissertation and the signed dissertation approval form to the Georgia Institute of Technology Office Graduate Studies and Research by the deadline published by the Institute. The deadline is typically 12-14 days before last day of classes. Check here the deadlines.

Committee

As mentioned above, your advisor is the chair of your dissertation defense committee. Your committee should be formed of at least five people. At least one faculty member must be from outside CoC (from another unit at Tech or an outsider, and should have a Ph.D.), but the majority must have some CoC faculty appointment.

Note: You only need to have three people on your committee at the time of your proposal, but it is recommended that you have all five members at that time. All members of your committee should be present for the defense; however, in hardship cases, measures such as conference calls can be used as well.

Advertising the defense

The Graduate Studies office asks that you post an announcement of the defense to announcements@grad.gatech.edu. This should be done at least fifteen (15) working days prior to the defense. The announcement should consist of the day/time/place of the defense, title, abstract, and a list of the committee members. You are also expected to send that announcement to the CoC community at phd-coc-official@cc.gatech.edu.

Timing

There must be a gap semester between the proposal and the defense. Summer semester does count.

Online Application for Graduation (OAG)

Students should refer to the Registrar's Online Application for Graduation (OAG) and submit a petition to graduate the semester before they plan to graduate. (eg. if planning to graduate in Spring 2026, then the OAG is due in Fall 2025). This allows time to correct any unfulfilled requirements identified by the Office of Graduate Studies. See the GT academic calendar for OAG deadlines: https://registrar.gatech.edu/calendar. If a student has previously applied but did not graduate, they must repeat the same process to graduate.

To view graduation status, login to DegreeWorks. Near the top of the audit, under a section titled *Student View*, there will be a field for *Graduation Information*. The text that appears in that field is the current graduation application status. To review missing requirements, see the section *Degree Requirements*.

NOTE: The status "lacks thesis" may appear on OSCAR for several weeks after the thesis or dissertation has been accepted by the Graduate Thesis Office as both the Graduate Thesis Office and the Registrar must do some processing of records. Acceptance by the Graduate Thesis Office, documented either by an approval e-mail for the ETD or a copy of the signed Certificate of Thesis Approval, is assurance that everything is all right.

Last semester Registration Options

Students who are completing their Ph.D. may find that the timing of their defense, graduation, and start of their subsequent employment leads to uncertainty in how to register for their final semester at Georgia Tech. There are three options (see the above Thesis Manual for more details and rules).

1).   Register as full-time as in a typical semester (i.e., 9000 doctoral thesis hours). This works best if the final version of the thesis is submitted in time for graduation in the last semester (see the deadlines), and there are no funding limitations.

2).   1-credit hour option. Students in their graduating semester may register for only 1 hour of doctoral thesis hours. Such students are not full-time and will therefore not receive a tuition waiver or be paid as a GTA or GRA. These students must pay the 1-hr of tuition and fees. Students may be hired as a Graduate Assistant (GA) by their advisor and paid hourly, pending advisors and their department's approval.

Note: Students who are US citizens are ineligible for student health insurance if they are registered for less than 4 credit hours. Such students should contact STAMPS Health Services and consider their options before registering for 1-credit hour. Students can use the 1-credit hour option only once while at Georgia Tech.

3). Enrollment Waiver. This is for students who missed the final submission deadline for their target graduating semester, but have successfully defended, submitted their thesis, and are ready to start their job. They must stay 'on the books' at Georgia Tech in order to graduate the following semester, even though they may not be on campus during the semester. The Enrollment Waiver allows a student to stay 'on the books' and not register for any hours or pay any fees. To use the Enrollment Waiver, complete the form via Grad Studies DocuSign. Note that all thesis-related forms must be completed and submitted for the Enrollment Waiver to be approved. Students can use the enrollment waiver only once while at Georgia Tech.

Note: International students should contact OIE via iStart if registering for less than full-time to request an academic reduced course load.

If none of these seem to fit, students should discuss their case with the Registrar's Office.

IV. Administration and Governance

The College of Computing's Graduate Curriculum Committee has ultimate responsibility for the CS PhD program. The GCC oversees the overall administration and policy directions for the program. This includes decisions on Institute Policy waivers, curriculum revisions, etc.

The Associate Chairs for Graduate Programs within the schools are the School representatives for the CS PhD program. The Associate Chairs are responsible for the following:

- Admissions. The Associate Chairs coordinate the review of applications within the school with the relevant faculty.
- Committee approval. The Associate Chairs will have ultimate approval over CS PhD student thesis proposal and thesis defense committees.
- Course waivers. The Associate Chairs will have ultimate approval over course waivers from other universities.

CS PhD Program Faculty

Any CoC tenure-track faculty member may serve as a thesis advisor, regardless of their CoC home school.

Current Personnel

Associate Chair for Graduate Programs, School of Computer Science- Santosh Pande
Associate Chair for Graduate Programs, School of Interactive Computing- Thomas Ploetz
Associate Chair for Graduate Programs, School of Cybersecurity and Privacy- Alexandra Boldyreva
Associate Chair for Academic Affairs, School of Computational Science and Engineering- B. Aditya Prakash

Graduate Coordinator, School of Computer Science - Tiffany Ntuli
Graduate Coordinator, School of Interactive Computing - Theresa Nash
Graduate Coordinator, School of Cybersecurity and Privacy -Nancy Baker
Graduate Coordinator, School of Computational Science and Engineering - Iris Hamilton

PhD Review

Each PhD student in the College of Computing will be subject to review by the School faculty twice a year to ensure proper progress is made into the program: once in the Fall and once in the Spring. The goal of the PhD review process is to give students feedback on their progress in the program, in relationship to clearly articulated expectations and milestones. When a student is accepted into the Ph.D. program, they are granted certain rights based on the expectation that the student maintains a good standing within the Ph.D. program. The Ph.D. review process is the mechanism by which the faculty periodically communicate to the students whether or not they are in good standing. In the worst case, when a student is no longer deemed to be in good standing, the school will no longer have a commitment to financially support that Ph.D. student.

Appendix A: Program of Study Details

The coursework for the CS PhD consists of the following, per the current 2025-26 GT Catalog year:

- CS 7001- Intro to Grad Studies, 5 hours.
- Breadth Requirement, 12 hours.
  - The Breadth component of the program is intended to give students a view into a variety of areas within computing. Each student must take classes in 4 of our 18 areas of study. One of these courses MUST be a Theory area course. Students must earn an A or B in all of these courses with more As than Bs total. Students who have taken graduate level courses elsewhere before entering the program can petition to have those classes count toward filling the breadth requirement. See Appendix B for full list.
- Programming Proficiency Requirement.
  - Each student must complete one course from the Programming Proficiency list. A single class may satisfy both the Programming Proficiency requirement and a Breadth area requirement. This requirement must be fulfilled at Georgia Tech and may not be satisfied by transfer credit or advanced standing. See Appendix B for full list.
- Doctoral minor, 6 hours.
  - The minor is a sequence of non-College of Computing courses with a coherent theme, totaling 6 credit hours. These courses should have a subject designator OTHER than "CS/CSE" as reported on your transcript. Their theme should somehow relate to the subject of the student's thesis and research. The classes must be taken for a letter grade, with at least a "B" average. Courses should be at the graduate level, but one approved 4000-level course may be used. No more than three of the hours may be directed research. Please see Appendix C for details.
- GTA Apprenticeship, 1 course.
  - CS Ph.D. students must complete a one-semester teaching apprenticeship requirement. Through this requirement, students will develop general skills in pedagogy, communication, curriculum development, and organization. This type of practical experience will help students become effective communicators and will serve as valuable preparation for any career. Students are required to take a relevant one-semester training course, such as CETL 8000 Graduate Teaching Assistant Preparation, during the same semester they serve as a teaching apprenticeship.
- Responsible Conduct of Research, 1 course, 1 hour (pass/fail).
  - Georgia Tech requires that all PhD students complete an RCR requirement that consists of an online component and in-person training. The online component is completed during the student's first semester enrolled at Georgia Tech. The in-person training is satisfied by taking PHIL 6000 or their associated academic program's in-house RCR course (which, for CoC is CS 7001).
- PhD Qualifying exam, 1 course, 3 hours (pass/fail).
  - As a student's research progresses, he or she must select a primary, and possibly secondary, area of focus from the areas of research in the College and then pass a Qualifier in that area or areas. The Qualifier is a student's first step toward achieving candidacy in the doctoral program. This Qualifier functions as Georgia Tech's Comprehensive Examination.
- Thesis Proposal.
  - The PhD. proposal consists of: A proposal document written by the student in which he/she will propose the research work to be undertaken as part of his/her doctoral work and a schedule for completion and an oral defense of the proposal document.
- Dissertation Defense

The coursework requirements are subject to change. Students can satisfy any version of them that are in effect from the date of matriculation into the program to the date of the PhD Proposal.

Appendix B: Breadth and Programming Proficiency Courses

Breadth Areas:

Artificial Intelligence
CS 6601 Artificial Intelligence
CS 6795 Introduction to Cognitive Science
CS 7630 Autonomous Robotics
CS 7631 Multi-Robot Systems
CS 7632 Game AI
CS 7633 Human-Robot Interaction
CS 7634 AI Storytelling in Virtual Worlds
CS 7636 Computational Perception
CS 7637 Knowledge-Based AI
CS 7641 Machine Learning
CS 7643 Deep Learning
CS 7647 Machine Learning with Limited Supervision
CS 7648 Interactive Robot Learning
CS 7649 Robot Intelligence: Planning
CS 7650 Natural Language
CS 7651 Human and Machine Learning
CSE 6740 Computational Data Analysis

Computational Science and Engineering
CSE 6140 Computational Science and Engineering Algorithms
CSE 6220 High Performance Computing
CSE 6730 Modeling and Simulation: Foundations and Implementation
CSE/MATH 6643 Numerical Linear Algebra
CSE/ISYE 6740 Computational Data Analysis

Computer Architecture
CS 6290 High-Performance Computer Architecture
CS 7290 Advanced Microarchitecture
CS 7292 Reliability and Security in Computer Architecture
NOTE: students who have not already taken CS 6290 or the equivalent should take CS 6290 to satisfy this requirement. Those who have already taken CS 6290 or CS 4290, or the equivalent, can satisfy this requirement by taking CS 7290 or CS 7292.

Cryptography
CS 6260 Applied Cryptography
CS 7560 Theoretical Foundations of Cryptography
CS 8803 BC Blockchain & Cryptocurrencies
CS 8803 SMC Secure Multiparty Computation
CS 8803 SCP Secure Communication Protocols

Database Systems
CS 4420 Database System Implementation
CS 6400 Database System Concepts and Design
CS 6411 Object-Oriented Database Models and Systems
CS 6421 Temporal, Spatial, and Active Databases
CS 6422 Database Systems Implementation
CS 6430 Parallel and Distributed Database Systems and Applications

Graphics and Visualization
CS 6421 Temporal, Spatial, and Active Databases
CS 6476 Computer Vision
CS 6480 Computer Visualization Techniques
CS 6491 Computer Graphics
CS 6780 Medical Image Processing
CS 7476 Advanced Computer Vision
CS 7490 Advanced Image Synthesis
CS 7491 3D Complexity
CS 7496 Computer Animation
CS 7497 Virtual Environments
CS 7636 Computational Perception

Human Computer Interaction
CS 6451 Introduction to Human-Centered Computing
CS 6455 User Interface Design and Evaluation
CS 6456 Principles of User Interface Software
CS 6470 Design of Online Communities
CS 6750 Human-Computer Interaction
CS 7450 Information Visualization
CS 7451 Human-Centered Data Analysis
CS 7460 Collaborative Computing
CS 7470 Mobile and Ubiquitous Computing
CS 7633 Human-Robot Interaction

Learning Sciences and Technology
CS 6460 Educational Technology: Foundations
CS 6461 Computing Education Research
CS 7465 Educational Technology: Design and Evaluation
CS 7467 Computer Supported Collaborative Learning
CS 8803 Special Topics: Cognition and Education

Machine Learning
CS 6476 Computer Vision
CS 7545 Theoretical Foundations of ML
CS 7616 Pattern Recognition
CS 7641 Machine Learning
CS 7643 Deep Learning
CS 7646 Machine Learning for Trading
CSE 6240 Web Search and Text Mining
CSE 6242 Data and Visual Analytics
CSE 6740 Computational Data Analysis

Networking and Communications
CS 6250 Computer Networks
CS 7260 Internetworking Architectures and Protocols
CS 7270 Networked Applications and Services
CS 7280 Network Science

Network Security
CS 6262 Computer Network Security
CS 6264 System and Network Defenses Lab
CS 8803 ECS Empirical Computer Security
CS 8803 EMS Advanced Network Security and Measurement
CS 8803 SII Securing Internet Infrastructure

Programming Languages and Compilers
CS 6241 Design and Implementation of Compilers
CS 6245 Compiling for Parallelism
CS 6390 Programming Language Design
CS 8803 Special Topics: Topics in Program Analysis

Privacy, Security, and Policy
CS 6268 Psychology of Cybersecurity
CS 6725 Information Security Strategies and Policies
CS 6726 Privacy, Technology, Policy, and Law
CS 8803 SPD Security, Privacy, and Democracy

Social Computing
CS 6465 Computational Journalism
CS 6470 Design of Online Communities
CS 6474 Social Computing
CS 6675 Advanced Internet Computing Systems and Applications
CS 7270 Networked Applications and Services
CS 7460 Collaborative Computing
CS 7467 Computer-Supported Collaborative Learning
CS 8893 Special Topics in Cognitive Science: Cognition and Culture

Software Methodology and Engineering
CS 6300 Software Development Process
CS 6301 Advanced Topics in Software Engineering
CS 6310 Software Architecture and Design
CS 6320 Software Requirements Analysis and Specification
CS 6330 Software Generation, Testing, and Maintenance
CS 6340 Software Analysis and Testing
CS 8803 Special Topics: Formal Modeling and Analysis of Computing Systems

Systems
CS 6210 Advanced Operating Systems
CS 6235 Real-time Systems
CS 6365 Introduction to Enterprise Computing
CS 6675 Advanced Internet Computing Systems and Applications
CS 7210 Distributed Computing

Systems Security
CS 6238 Secure Computer Systems
CS 6263 Intro to Cyber Physical Systems
CS 6265 Information Security Lab: Binary Exploitation
CS 6402 Databases and Information Security
CS 6747 Advanced Malware Analysis
CS 8803 COD Cybersecurity of Drones
CS 8803 ESC Exploiting Smart Contract/DeFi

Theory
CS 6505 Computability, Algorithms, and Complexity
CS 6515 Intro to Graduate Algorithms
CS 6520 Computational Complexity Theory
CS 6550 Design and Analysis of Algorithms
CS 7510 Graph Algorithms
CS 7520 Approximation Algorithms
CS 7530 Randomized Algorithms

CSE 6140 Computational Science and Engineering Algorithms

Programming Proficiency List:
CS 6210 Advanced Operating Systems
CS 6238 Secure Computer Systems
CS 6241 Design and Implementation of Compilers
CS 6262 Network Security
CS 6264 System and Network Defenses Lab
CS 6290 High-Performance Computer Architecture
CS 6476 Computer Vision
CS 6601 Artificial Intelligence
CS 7490 Advanced Image Synthesis
CS 7492 Simulation of Biology
CS 7632 Game AI
CS 7637 Knowledge-Based AI
CS 7643 Deep Learning
CS 7646 Machine Learning for Trading
CS 7650 Natural Language

Appendix C: Doctoral minor, 2 courses, 6 hours

Per the Institute's requirements, in addition to an adequate knowledge of the major field of intended research, all PhD students must demonstrate mastery of another smaller body of knowledge—the minor field—preferably outside the student's school. The purpose of the minor is to encourage a wider interest on the part of the student and to provide a broader basis for the evaluation of the student's capabilities.

The minor coursework should form a coherent theme, totaling at least six semester credit hours and should be somehow related to the subject of the student's thesis and research. These courses should have a subject designator OTHER than "CS/CSE" as reported on the student transcript. The courses must be taken for a letter grade with at least a "B" average. Courses should be at the graduate level, but one approved 4000 level course may be used. No more than three hours may be directed research. Courses taken at other institutions may be included in the minor and do not need to be transferred into Georgia Tech.

The minor course of study is approved first by the student's thesis advisor and the home unit's graduate coordinator, then the Institute's Graduate Studies office.

The Office of Grad Studies "Doctoral Minor Form" available via Docusign is signed by both the thesis advisor and the home unit's graduate coordinator. Students should plan to officially declare their minor to the Institute when submitting their thesis proposal. Students may submit it after their quals have been passed and they have formulated their minor with their thesis advisor.

Health and Wellness Resources

Questions about Student Health Insurance should be directed to Jennifer White at STAMPS at:
jennifer.white@health.gatech.edu.

Graduate school can be a stressful time for students. The Georgia Tech Counseling Center and STAMPS health services offer a wide range of programs and services that can help students who may need assistance. The Georgia Tech Health Initiatives site includes information on many stress-management services available on campus (e.g., yoga, mindfulness), as well as diet and lifestyle resources.

If you just need to talk to another graduate student who knows what you are going through, the Peer Coaching Program provides students with another way to receive support with their academic, social, and other concerns. Students are matched with a fellow Tech student who has been extensively trained to navigate mental health conversations and who is knowledgeable about campus resources.

Additional resources on campus that are there to assist graduate students include the Women's Resource Center, the LGBTQIA Resource Center and the Veteran's Resource Center.

Put the Georgia Tech Police number in your phone (404-894-2500) to call for any safety concerns. Call 911 for emergencies.

All these links (and more!) are collected at one site: GT United. Please bookmark this site.