COMPUTER SCIENCE GRADUATE STUDENT HANDBOOK

Revision: Spring 2026

Department of Computer Science

School of Engineering and Applied Science

Rice Hall and Olsson Hall

University of Virginia

Charlottesville, VA 22904

Last update: April 15, 2026

Changelog

March 2026

- Master's
  - **Sections:** Add switch to PhD section.
  - **Committee:** Remove committee information which is in the UVA record.
  - **Requirements:** Add some info about the program assessment forms.
- PhD
  - **Sections:** Move en route Master's subsection to PhD section.
- Appendix
  - **Links:** Clean up links table, add email lists.

February 2026

- General Updates
  - **People:** Updated admissions chair.
- Breadth Requirements
  - **Courses:** Added new breadth course listing to handbook.

January 2026

- General Updates
  - **Formatting:** Various fixes and reformatting.
  - **Links:** Updated program links.
  - **People:** Updated contact info.

August 2024

- General Updates
  - **Formatting:** The handbook was converted to LaTeX for improved formatting and readability.
  - **Changelog:** A changelog section was added to document updates.
- Ph.D. Qualification Committee
  - **Simplified Process:** The process for forming the Ph.D. Qualification Committee was simplified and rewritten for clarity.
- Ph.D. Qualifying Examination
  - **Expected Timing:** Added expected timing for completing the qualification proposal and presentation.
  - **Phase Structure:** The depth component of the qualifying examination was restructured into two phases (proposal and presentation) with detailed steps for each.
  - **Proposal Document:** Clarified requirements for the proposal document, including mandatory disclosure of related papers.

  - **Reading List:** Updated guidelines for the reading list included in the proposal document.
  - **Presentation:** Added requirements for the presentation, including the use of numbered slides and public announcement.

- Ph.D. Student Assessment Policy and Process
  - **Assessment Frequency:** Specified that student progress will be evaluated twice a year, at the end of the Spring and Fall terms.
  - **Confidential Information:** Provided a link for students to submit confidential information that will not be shared with their advisor.

- First-Year Ph.D. Rotation Program
  - **Eligibility:** Clarified eligibility criteria for the rotation program.
  - **Procedure:** Detailed the procedure for each rotation, including proposal, execution, and report stages.
  - **Outcomes:** Defined possible outcomes after each rotation and responsibilities of rotation advisors.

- Ph.D. Proposal
  - **Expected Timing:** Added expected timing for completing the Ph.D. proposal.
  - **Proposal Document:** Clarified structure and page limit for the proposal document.
  - **Proposal Presentation:** Added requirements for the proposal presentation, including public announcement and use of numbered slides.

- Ph.D. Defense
  - **Defense Form:** Added requirement for initiating the Ph.D. Dissertation Defense form on the morning of the defense.
  - **Defense Presentation:** Clarified components of the defense presentation and requirements for distributing presentation materials.

- Ph.D. Program Termination
  - **Termination Process:** Detailed the process for terminating a Ph.D. program due to unsatisfactory performance, including notification and petition procedures.

- Miscellaneous
  - **Useful Forms and Resources:** Updated URLs and added new resources.
  - **Policy on Graduate Student Leave:** Clarified expectations for GTAs and GRAs regarding absences and leave.

Contents

1. Introduction

1.1 Handbook goals

This handbook is designed to help students and faculty understand the policies and procedures associated with the Master's and Ph.D. programs in Computer Science. It is meant to complement, not replace, the Graduate Degree Requirements of the *School of Engineering and Applied Science (SEAS)* and the University of Virginia *(UVA) Graduate Record*.

1.2 Graduate degrees

The Department of Computer Science offers three graduate degrees in the School of Engineering and Applied Science (SEAS).

- *Doctor of Philosophy (PhD).* The Ph.D. program is designed for students interested in academic positions in colleges/universities and/or research positions in industrial or commercial laboratories.
- *Master of Science (MS).* The M.S. degree introduces students to research at the graduate level with a focus on proposing and executing, and then documenting a research experience with a formal, written thesis, and oral presentation.
- *Master of Computer Science (MCS).* The M.C.S. degree is a graduate professional degree with an emphasis on coursework. It enhances the knowledge obtained in an undergraduate program by providing students with broader knowledge and a deeper technical understanding of Computer Science concepts.

1.3 Contacts

Position	**Name**	**Contact**
Master's Graduate Program Director (MGPD)	Prof. Brad Campbell	bradjc@virginia.edu
PhD Graduate Program Director (PGPD)	Prof. Brad Campbell	bradjc@virginia.edu
Ombudsperson	Prof. David Evans Prof. Nada Basit	evans@virginia.edu, Rice 507 basit@virginia.edu, Rice 405
Graduate Coordinators	Jai Maupin Marion Hight	jm3xe@virginia.edu qnx5re@virginia.edu
CS Department Chair	Prof. Sandhya Dwarkadas	bay7xc@virginia.edu, Rice 521
CS Director of Operations	Debbie Rose	dcr4f@virginia.edu, Rice 526
Chair of Graduate Admissions Committee	Prof. Lu Feng	lf9u@virginia.edu, Olsson 271
SEAS Director of Graduate Programs	Dr. Amy Clobes	amc5hu@virginia.edu, Thornton A109

1.4 Current UVA Graduate Record Links

UVA Record year: 2025-2026

- Computer Science, M.S.
- Computer Science, M.C.S.
- Computer Science, Ph.D.

1.5 Policy Exceptions

In rare cases, the Master's Graduate Program Director (MGPD) or the Ph.D. Graduate Program Director (PGPD) may waive a policy or requirement for valid reasons. The term "Graduate Program Director" (GPD) in this handbook refers to either the MGPD or PGPD.

2. Master's Degrees

Master of Science (MS) degree: a student completes the coursework and conducts independent research under the supervision of a professor that requires a written thesis and oral defense; the level of research effort is commensurate with **two** typical academic courses.

Master of Computer Science (MCS) degree, which either focuses on *all coursework* (the student performs no independent research) or involves a *project* (student conducts independent research overseen by a professor where the level of research effort is commensurate with **one** typical academic course).

Note: A Master's degree student is assigned an academic advisor upon entering the program. If the student selects an MS or MCS (project) degree, their research advisor becomes the academic advisor.

Terminology. In this document, "Master's degrees" refer to MS, MCS (project) and MCS (coursework); "MCS" refers to both MCS (project) and MCS (coursework).

2.1 Master's Degree & Committee Requirements

Please refer to the University Graduate Record for degree requirements for the Master's Degrees in Computer Science:

Graduate Record	MS Page Link	MCS Page Link
2025-2026	Computer Science, M.S. Committee Requirements	Computer Science, M.C.S.
2024-2025	Computer Science, M.S. Committee Requirements	Computer Science, M.C.S.
2023-2024	Computer Science, M.S. Committee Requirements	Computer Science, M.C.S.

2.1.1 MCS Engineering Program Assessment Forms

MCS students must submit three program assessment forms. You must select a faculty member to complete each assessment. Please choose individuals who can speak to your academic performance during your MCS program. While your advisor may be an option, please only select them if they have taught a course in which they can directly evaluate your performance. You may choose the same faculty member for all three forms or select different faculty members for each.

See Section A for a link to the forms.

- **Engineering Analysis Assessment**: Should be completed by a faculty member who observed you (as part of a course or otherwise) use, create, and present a model to analyze a computing-related system.
- **Engineering Design Assessment**: Should be completed by a faculty member who observed you (as part of a course or otherwise) create and present the design of a computing-related project.
- **Engineering Plan of Study Assessment**: Should be completed by the faculty advisor.
- **Engineering Oral Communication Assessment**: Should be completed by the faculty member who attended the presentation of the MCS project.

2.2 Master Teaching Assistant Positions (MTA)

Depending upon demand, Master's students (typically those in their second year) may have the opportunity to apply for a limited number of *Master Teaching Assistant (MTA)* positions. An MTA is an excellent way to gain teaching experience and supplement income. MTA positions pay an hourly wage without any other benefits.

MTAs typically help a professor by grading assignments and exams, holding office hours, etc. It is UVA policy that all graduate TAs whose first language is other than English must first take the SPEAK test to assess their fluency with oral English and to determine the types of actions they may perform. See Section 4.2.

2.3 Typical Timeline

In the description below, "Master's students" refer to MS, MCS (project), and MCS (coursework); "MCS students" refer to MCS (project) and MCS (coursework) students.

Most students finish within three or four semesters. However, the official deadline to complete a degree is 5 years for an MS student and 7 years for an MCS student. In response to the COVID-19 pandemic, students registered in the MS program in Spring 2020 have a deadline of 6 (rather than 5) years; the deadline for MCS students is unchanged.

UVA policy is that all students whose first language is other than English who wish to serve as an MTA or a GTA must take the UVELPE Oral (formally known as SPEAK) test upon arrival.

First semester (Fall): All first-semester Master's students take CS 6190 (Computer Science Perspectives) for 1 credit and 4 graded, 3-credit graduate courses (total 13 credits). MS and MCS (project) students should use this semester to explore departmental research projects, discuss potential research ideas with faculty advisors, and finalize their research plans.

Second semester (Spring): MCS students typically take 4 graded courses (12 credits). MS students typically take 3 graded classes and 3 credits of CS 8999 (Thesis) with their thesis advisor.

Summer: Students typically are away on internships, potentially facilitated through the SEAS *Center for Engineering Career Development*. International students use the Curricular Practical Training program (CPT) organized by the UVA *International Studies Office* (ISO) and the *International Students and Scholars Program* (ISSP).

Third semester: Master's students typically take the remaining courses necessary to fulfill their academic requirements. An MS student typically takes 3 credits of CS 8999 (Thesis) with the research advisor in this semester (in addition to the 3 credits of CS 8999 taken in the previous Spring semester). An MCS (project) student typically takes CS 7995 (Supervised Project Research) with the research advisor in this semester.

Students must use SIS to apply for graduation with a Master's degree at the start of the semester during which they expect to graduate – usually no later than 1 October (Fall), 1 February (Spring), or 1 June (Summer). Students should check their completion of the requirements using the Academic Requirements tool within Stellic or the *Student Information System* (SIS). If a Master's candidate decides to defer graduation for another semester, they should seek advice and assistance from the MGPD.

2.4 Switching from a Master's Degree to Ph.D.

If a Master's student wishes to pursue a PhD in UVA CS:

1. The student should first identify a CS professor and then confirm that he or she is willing to fund and advise the student's PhD research.
2. With a confirmed advisor, the student should then consult with the Chair of the CS Graduate Admissions Committee (Section 1.3) to determine the necessary forms and procedures used to apply to our PhD program.
3. Once application forms have been filed with the Graduate Coordinator, the CS Graduate Admissions Committee will determine whether to offer admission to the PhD program.

3. Ph.D. Degree

To obtain a Ph.D. degree, several steps are required, including:

1. Completing required coursework (see section 3.2).
2. Transferring credits from another university, if applicable (see section 3.3).
3. Finding an advisor through the first-year rotation program (see section 3.6).
4. Passing the Ph.D. qualifying exam (see section 3.7).

5. Forming a Ph.D. committee (see section 3.8).
6. Writing and presenting a Ph.D. proposal (see section 3.9).
7. Writing a Ph.D. dissertation (see section 3.10).
8. Presenting a public defense of the dissertation (see section 3.11).
9. Completing four semesters of part-time work (or equivalent) as a Graduate Teaching Assistant (GTA).

A typical timeline for completing a Ph.D. is described in Section 3.12, while financial support options are discussed in Section 3.13.

Terminology. A person who has an undergraduate degree and who wishes to pursue a Ph.D. is known as *Ph.D. student* or *doctoral student*. That person advances to the status of *PhD candidate* or *doctoral candidate* after completing all the coursework and passing the Ph.D. Qualification Examination.

3.1 Graduate Record Links

The following links lead to the relevant pages of the Graduate Record, which outlines UVA's official procedures and policies. The Graduate Record is updated annually, potentially including minor adjustments.

Topic	Program Page Link
2025-2026	
Coursework & Program Requirements	Computer Science, Ph.D.
Transfer Credit	Transfer Credit
Breadth Courses	Computer Science, Ph.D.
Committee Requirements	Committee Requirements
2024-2025 (archived)	
Coursework & Program Requirements	Computer Science, Ph.D.
Transfer Credit	Transfer Credit
Breadth Courses	Computer Science, Ph.D.
Committee Requirements	Committee Requirements
2023-2024 (archived)	
Coursework & Program Requirements	Computer Science, Ph.D.
Transfer Credit	Transfer Credit
Breadth Courses	Computer Science, Ph.D.
Committee Requirements	Committee Requirements
2022-2023 (archived)	
Coursework & Program Requirements	Computer Science
2021-2022 (archived)	
Coursework & Program Requirements	Computer Science
2020-2021 (archived)	
Coursework & Program Requirements	Computer Science
2019-2020 (archived)	
Coursework & Program Requirements	Computer Science

3.2 Ph.D. Coursework

Please refer to the Graduate Record for Ph.D. degree requirements.

3.3 Ph.D. Transfer Credit

If a graduate student enters the CS Ph.D. program *with a Master's degree in a computing field*, they will receive 24 bulk transfer credits.

- At least 6 additional credits of graded, graduate-level CS coursework must be taken at UVA (i.e., they cannot be transferred). A minimum grade of "B" is required.

If entering *without a Master's degree*, then a maximum of 6 credits of graded, graduate-level computer science coursework may be transferred. Transferred credits must not have been used to fulfill the requirements of any other degree.

Whether an individual transfer course counts toward the Qualifying Exam Breadth Requirement is determined by the PGPD. For such requests, the student must provide the syllabus of the original coursework. The Graduate Program Coordinator facilitates this process via the Ph.D. Internal Transfer Form. Students are encouraged to take additional courses beyond those required for graduation.

Please refer to the Graduate Record (Section 3.1) for more information.

3.4 En Route Master's Degree

A current PhD student can obtain a CS Master's degree along the way to the PhD degree by completing all the requirements for the Master's degree. A PhD student terminating the PhD program before graduation can also obtain a Master's degree if he or she has completed all requirements for the degree. In either case, please consult with the MGPD and the Graduate Student Coordinator.

3.5 Ph.D. Student Assessment Policy and Process

3.5.1 Goal

The Department of Computer Science is committed to maintaining a strong and nurturing Ph.D. degree program. To achieve this, the UVA CS Department evaluates the progress of each Ph.D. student. The purpose of this assessment is to provide both the student and their advisor with feedback that will help ensure the student's timely completion of the Ph.D. and support the achievement of their professional goals.

3.5.2 Process Overview

Ph.D. students will have their progress and achievements assessed twice a year by their faculty advisor and a three-member faculty committee. The results of the committee's assessment will be shared with both the student and the faculty advisor.

3.5.3 Ph.D. Student Assessment

A Ph.D. student assessment committee consists of three faculty members. Students will be randomly assigned to committees, ensuring they are not paired with their advisor or co-advisor. The review load will be evenly distributed among the committees.

Student progress will be evaluated twice a year, at the end of the Spring and Fall terms.

During each assessment period, the student will fill out a self-assessment form, while their advisor will complete a corresponding assessment form for the student. The student's assessment committee will review both the student's self-assessment and the advisor's assessment before completing the committee's assessment form.

The committee and student reports will be submitted to the faculty advisor for feedback. Based on any comments from the faculty advisor, the committee may choose to revise their assessment report. Once the assessment report is finalized, the advisor will meet with the student to review the committee's assessment and discuss plans to address any concerns raised in the report, as well as plans for the next assessment period.

Please note: To avoid any potential mixed messages and confusion, only the committee's assessment will be provided to the student. However, the advisor may choose to share their own assessment report with the student.

3.5.4 Assessments of Concern

In the case of assessments that require further attention, the Ph.D. Graduate Program Director (PGPD) will work with the student and their advisor to determine the appropriate course of action. The PGPD will also notify the Department Chair of any assessments of concern and recommended actions.

3.5.5 Confidential Information

If a student desires to provide information that is not to be shared with the advisor, the student can provide such information via this feedback form:

https://app.smartsheet.com/b/form/b5cd18894d8d4479a9696ca07530faa3

This information will be made available only to the student's assessment committee, the PGPD, the CS Graduate Coordinators, and the Department Chair. They must not disclose this information to the student's advisor or use it in the student's committee assessment, which will eventually be visible to the advisor.

If the student is an advisee of the Department Chair or the PGPD, any confidential information provided by the student will not be shared with them.

3.6 First-Year Ph.D. Rotation Program

3.6.1 Eligibility

Entering Ph.D. students(excluding students who transfer into the CS Ph.D. program from a different graduate program in CS, from another UVA department, or from another institution's graduate program) shall participate in the rotation program; they are typically supported by a First-Year Fellowship, which provides funding for their Fall and Spring semesters during the first year.

3.6.2 Goals

Students should use the rotation program to:

1. Engage in research with CS faculty to establish a permanent PhD advisor-advisee relationships.
2. Build a solid foundation of knowledge by taking graduate-level courses.
3. Fulfill any English as a Second Language (ESL) course requirements

Students are expected to balance research activities and coursework; however, they **should not reduce their coursework** to prioritize research.

3.6.3 Procedure

The rotation program includes two rotations: one in the fall and one in the spring semester. In each rotation, the student conducts a one-semester research project under the supervision of a faculty member (referred to as a *rotation advisor*, see details below).

A typical rotation schedule is as follows:

- **Proposal.** Early in the rotation (by no later than week 4), students must engage in discussions with their rotation advisor and submit a 2-page proposal. This proposal should include the following elements:
  - A description of the project and its objectives.
  - An explanation of the project's importance.
  - A discussion of its novelty compared to prior work addressing similar problems.
  - An outline of how the project's success will be evaluated.
- **Execution.** During the middle weeks of the rotation, students should focus on executing the activities outlined in their proposal. It is essential for students to schedule regular meetings with their rotation advisor and/or members of the advisor's research group for design discussions, contingency planning, and other related activities.
- **Report.** By the end of the rotation (by no later than week 9), students are required to prepare a final report that is 4-5 pages in length, formatted in a style suitable for workshop or conference submissions. Additionally, students must deliver a brief oral presentation of their findings to the rotation advisor and/or members of the research group.

Rotation 2 Proposal with Advisor of Rotation 1. Before the end of Rotation 1, if a student wishes to continue working with the same rotation advisor in Rotation 2, they should

prepare a new 2-page proposal for the advisor. This proposal may draw on the experiences and results from the current rotation, but doing so is not a requirement.

3.6.4 Outcomes

1. Upon the completion of Rotation 1 or 2, the student and professor agree to match permanently: this takes the student out of the rotation process. Then the rotation advisor also becomes the student's PhD advisor.
2. After completing Rotation 1, if the student and professor have not agreed on a permanent match, the student remains in the rotation program. The student must provide a prioritized list of potential advisors with whom they have discussed research opportunities. These preferences are used to match each student with a research advisor for Rotation 2. Please note that even if both the student and the rotation advisor express a desire to continue working together for Rotation 2, this is not guaranteed. The availability of rotation advisors will ultimately determine whether this arrangement can be made.
   If a student does not secure a successful match upon completing Rotation 2, the PhD Graduate Program Director (PGPD) and the Department Chair will meet with the student to discuss the next steps to take.

3.6.5 Rotation Advisors & Responsibilities

In Rotation 1, a student shall work with the faculty member who championed their PhD admission, unless the student and another faculty member mutually agree to a different arrangement.

Rotation advisors are responsible for evaluating the quality of the student's research activities and outcome. This evaluation from Rotation 1 serves as a component of the student's grade in CS 6190: Computer Science Perspectives, a required course.

Rotation advisors are expected to clearly indicate any dissatisfaction with the student's research progress, particularly when such concerns contribute to the decision *not* to form a permanent advisor-advisee relationship. This feedback can be communicated through various channels, including CS 6190 input, departmental PhD assessments, and grades for research credits or independent study.

A student's rotation advisor also functions as their PhD academic advisor. This means that the advisor for the Fall semester will be the student's Fall rotation advisor, and the advisor for the Spring semester will be their Spring rotation advisor.

3.7 Ph.D. Qualifying Examination

The *qualifying examination (quals)* is designed to evaluate a student's ability to pursue and successfully complete graduate-level research.

The qualifying examination consists of two parts: breadth (Section 3.7.2) and depth (Section 3.7.3). The *breadth* portion of the exam helps students obtain broad, graduate-level

knowledge in several major areas of CS. The *depth* portion of the exam focuses on the student's ability to pursue high-quality independent research and their ability to effectively communicate about their research, and requires the student to write a proposal, present it to their quals committee (Section 3.7.1), and then complete a nominally one-semester independent research project guided by the student's research advisor.

Students who have already passed their qualifying examinations in *Computer Science or Computer Engineering* at a previous institution may petition the Graduate Program Committee for an exemption from the UVA CS qualifying exam upon presentation of acceptable evidence. The student shall contact the PGPD to initiate such a petition.

Expected timing. By the end of the student's fourth semester (since starting work with their Ph.D. advisor), the student shall complete the qualification proposal (Phase 1, see Figure 1). Within six months since completing the qualification proposal, the student should complete the qualification defense (Phase 2).

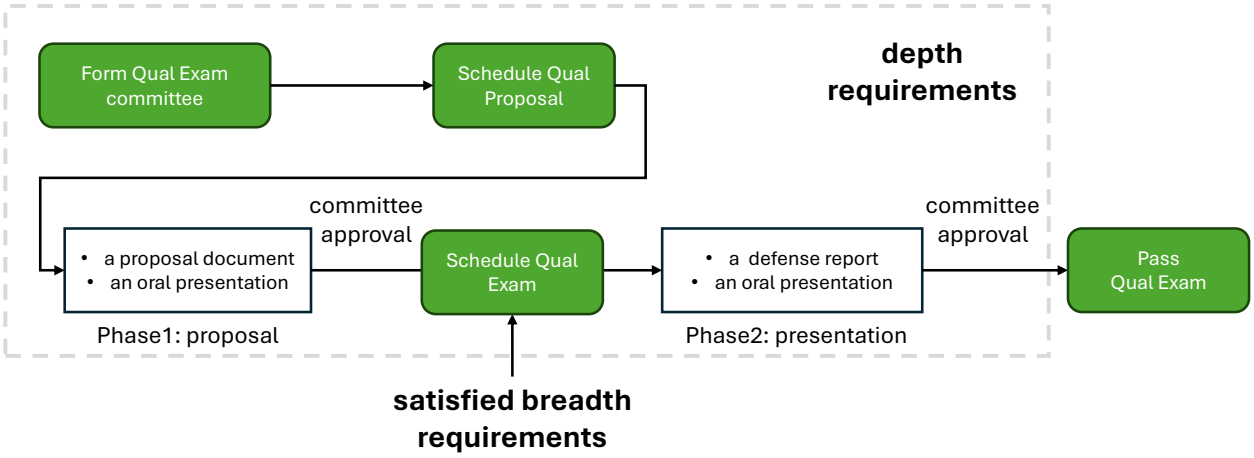

Figure 1: Qualifying Examination Process

3.7.1 Ph.D. Qualifying Examination Committee

This committee must consist of the student's advisor(s) and two additional Computer Science (CS) faculty members, totaling at least three CS faculty members.

CS faculty are defined as those with primary or secondary appointments in Computer Science. Courtesy appointments in CS do not count toward the required number of CS faculty members on the committee.

The student must form a committee and schedule the qualifying exam at least two weeks prior to the exam. The committee must have an explicitly designated chair who will direct meetings and ensure proper procedure. The advisor(s) may not serve as the chair. Once the committee is formed, the student submits the Committee Form to the Graduate Program Coordinator.

3.7.2 Qualifying Examination Breadth Requirement

To satisfy the breadth requirement, a minimum of one course in any four of six topical areas must be taken. The list of courses that are allowed in each of the six areas can be found on the CS degree programs page of the Graduate Record (Section 3.1) which is updated annually, as well as the department-maintained Google doc which is updated throughout each year.

3.7.3 Qualifying Examination Depth Requirement

The depth component of the qualifying examination proceeds in two phases. In Phase 1, the student prepares a written and oral research proposal for an independent research project and presents this proposal to their evaluation committee. In Phase 2, the student completes the proposed research, prepares a written and oral project report, and presents the results to their evaluation committee. Completing all the proposed tasks is often challenging. We advise students to clearly explain the difficulties they encountered if they were unable to complete all tasks. The committee will consider well-supported explanations. After both phases, the committee provides feedback and determines the phase outcomes.

The proposal process is intended to assist the student in the formalization of the research project and to ensure that the student is not undertaking too much or too little work and that prior work has been properly examined and understood.

3.7.3.1 Qualifying Examination Depth Proposal

For Phase 1 the student prepares a written proposal document and oral presentation. The student should propose a research project that can be completed in approximately one semester. The proposal must also include a specific reading list (Section 3.7.3.1.1).

To help develop the student's ability to propose new research, the proposal must *not* be a previously submitted or published paper, or an existing paper that has been reformatted with minor edits (e.g., to recast work already completed as if it were work to be performed in the future).The proposal may build upon individual or group research that has already been completed, provided it represents a meaningful extension of that work to be undertaken solely by the student. The student must disclose any papers related to the proposal, including those that have been published, are under review, or have been posted as preprints, to the committee.

The proposal must have only one author (i.e., the student). Although, the advisor may help with revisions, the proposal must ultimately reflect the student's own research activities.

For the oral presentation, the student must schedule a meeting with their qual evaluation committee. The qualifying examination depth proposal is not open to the public. During the meeting, the student starts with a ~20-minute presentation about the proposed work, followed by questions from the committee members about the proposed work and the reading list.

The student should inform the Department Coordinator of their scheduled proposal at least one week before their oral presentation.

In preparation for the depth proposal, students are encouraged to communicate with their committee members to gather advice concerning the proposed topic, work, reading list, and timeline.

3.7.3.1.1 Qualifying Examination Proposal Document

Qualifying Examination Research Proposal. The student's proposal document should be sufficient for the committee to evaluate the research quality of the proposed project. As such, it should contain the following elements:

- **Abstract.** An executive summary, no more than one-half page.
- **Motivation.** What is the problem and why is it important?
- **Hypothesis.** What is the hypothesis of the proposed research?
- **Contributions.** What are the main ideas and why do they matter? In what way are these ideas novel?
- **Related work.** What is the relevant prior work and the state-of-the-art in this area?
- **Detailed research plan.** What specific goals or milestones will be completed during the research project and how will they be implemented, designed, and evaluated? For projects with a significant implementation component, give enough details of the features to be implemented and the experimental setup involved for the committee to judge the feasibility of the proposed work. For projects with a significant formal component, give enough details of the formalisms used (e.g., proposed theorems, proof schemas, and logical frameworks) for the committee to judge the feasibility of the proposed work. Note that the research plan must explain how the research is to be evaluated (i.e., what are the metrics of success?).
- **Summary and Future Work.** A short summary of the above, and identification of potential future work.

In the document, the student must disclose all papers related to the proposal, including those that are published, under review, or posted as preprints.

Qualifying Examination Reading List. The qualifying exam proposal should include a reading list that the oral examination may cover. The student and the advisor should prepare an initial reading list, which should be included as an appendix in the proposal document.

The reading list should include:

- **Focus papers**. A small number of papers (typically two or three) representing the area's state of the art. The student will be expected to know these papers in detail.
- **Background readings**. Typically, a textbook and/or one or two book chapters or survey papers. The student will be expected to have a firm command of the material covered in these readings, as shown through general understanding and the ability to place the work in context.

3.7.3.1.2 Qualifying Examination Proposal Outcomes

The possible outcomes of Phase 1 are:

1. The student may proceed to Phase 2. In this case, the committee may request amendments or changes, make changes or additions to the reading list, set appropriate due dates, and/or indicate weaknesses in the proposal that must be addressed in the final report and presentation. The committee will also indicate deadlines for any required revisions.
2. The student may not proceed to Phase 2 and should re-attempt the proposal.

3.7.3.2 Qualifying Examination Presentation

Phase 2 requires the student to write a project report about their qualifying exam research and complete an oral presentation.

Before the qualifying exam presentation can be scheduled, the Graduate Coordinator must certify that the student has fulfilled the *breadth* requirement.

The student's qualification exam presentation is open to the public. The student arranges for the Graduate Student Coordinator to publicly announce and publicize the time, date, place, committee members, and abstract to the CS Department at least 2 weeks before the qualifying exam.

3.7.3.2.1 Qualifying Examination Report

The student must prepare a written report based on their research project.

Students must email their written report to all committee members at least seven days before the qualifying exam.

3.7.3.2.2 Qualifying Examination Presentation

The student must present their research project outcomes to their examination committee. Two hours should be allocated for the qualifying exam. The meeting begins with the student presenting a ~30-minute overview of the project, followed by Q&A. The committee will ask questions about the research project and about the material from the reading list.

To prepare for the presentation, the student should be ready to answer questions about their depth area in general and their research project in particular.

- Students should be able to explain the main idea, conclusions, and relevance of any paper included in their report's bibliography. They are not expected to know every detail of every paper.
- Students should be familiar with the papers from their reading lists, as these represent the state of the art in the field. A higher standard of understanding will be expected for these papers, and students should be prepared for in-depth questioning regarding them.

The presentation should use numbered slides. The student should electronically send the presentation to the committee no later than the day before the qualification exam presentation.

At the end of the qualification exam, the committee deliberates and decides on an outcome.

3.7.4 Qualifying Examination Outcomes

After reviewing the student's final project report and oral presentation, the examination committee will determine whether the student has passed the depth portion of the qualifying exam. If the student's performance is not acceptable, the committee may permit a second attempt, in which case the exam *must be re-taken within 60 days* (excluding holidays or days when the University is not in session). A maximum of two attempts is permitted.

3.8 Ph.D. Doctoral Committee

Students should consult "Committee Requirements" in the SEAS Academic Rules section of the Graduate Record (Section 3.1). The policies detailed here complement the SEAS Requirements and clarify their applications to Computer Science.

The PhD committee (Dissertation Proposal and Dissertation Defense) should be arranged by the student after the qualifying exam. The committee must consist of a minimum of five faculty members. Membership must include at least three Computer Science faculty members, at least one UVA faculty member from outside the Computer Science department and at least one other member with expertise in the research area, i.e. 3 CS faculty + 1 UVA faculty (outside CS) + 1 outside expert. The Department recommends that one of the committee members be an expert from outside the University.

CS faculty are defined as those with primary or secondary appointments in CS. Faculty with courtesy appointments in CS do not count toward the required number of CS faculty members on the committee.

Responsibility of a Faculty Co-Advisor: A faculty co-advisor shares the responsibility of guiding the student's academic progress and fostering interdisciplinary collaboration. The co-advisor is expected to provide mentoring comparable to that offered to their sole advisees, including regular guidance on research direction, professional development, and academic milestones. While co-advisership may not entail immediate GRA support, the co-advisor should be prepared to provide GRA to the student if funds become available, in the same spirit as with their other advisees. In addition, the co-advisor bears responsibility for tracking the student's PhD progress and milestone completion, and for contributing meaningfully to the student's overall success.

3.9 Ph.D. Proposal

A Ph.D. student must develop a written dissertation proposal, created under the guidance of the student's advisor(s). This proposal should be presented to the student's Ph.D. Committee prior to performing extensive research, to receive early faculty approval of the suitability of the proposed research.

The Ph.D. student's advisor must have read and approved the dissertation proposal document and the proposed presentation before the Oral Examination is scheduled.

Expected timing. A Ph.D. student should complete the PhD proposal within five years of starting their work with the PhD advisor.

3.9.1 Ph.D. Proposal Document

The student's Ph.D. proposal document *should have the same structure as the Ph.D. Qualifying Examination Proposal Document* (section 3.7.3.1.1) and should clearly and unambiguously convey the scope of the work and the criteria for success. Proposals can also include a section devoted to the student's work thus far, although this section is not formally required.

Proposal documents should not exceed 15 single-spaced pages (or 30 double-spaced pages). The bibliography and any appendices (appendices are not required to be read by the student's committee) are not included in this page limit. Significant departures from these guidelines must be approved in advance by the student's proposal committee. The written proposal document must be submitted to the committee at least two weeks in advance of the proposal presentation. Students are encouraged to follow the National Science Foundation (NSF) grant proposal formatting guidelines.

3.9.2 Ph.D. Proposal Presentation

The Ph.D. Proposal Oral Presentation must be announced publicly at least *two weeks* in advance through the Graduate Student Coordinator.

The Ph.D. proposal meeting should be scheduled for 2 hours, with the presentation lasting about 30 to 45 minutes, as committee members are expected to have already read the proposal. After the presentation, the committee members discuss the proposed work, ask questions, and offer suggestions or identify required changes. The student initiates the *"Dissertation Proposal and Admission to Candidacy"* and *"Engineering Dissertation Proposal Assessment"* form the morning of their presentation.

Students are encouraged to provide the committee members with copies of the slides used in the proposal presentation. Slides can be distributed in electronic form a few days in advance of the presentation or printed out and distributed at the presentation itself. Providing *numbered* slides is a courtesy that helps the committee follow the presentation and keep track of their comments.

3.9.3 Ph.D. Proposal Outcomes

After the proposal meeting, there are several possible outcomes:

- The proposal is accepted without changes.
- The proposal is not accepted until amendments to the written document are made and approved by all committee members.
- The proposal is not accepted, and the student will need to write another proposal or modify the proposed work.
- The proposal is not accepted, and the committee indicates that the student does not have sufficient research potential to complete a dissertation in a timely fashion; in this case, the student is subject to dismissal from the program.

Once the proposal is accepted, it serves as a binding document for the committee. If the student successfully carries out the work outlined in the proposal, the committee will not

reject the student's Ph.D. dissertation due to insufficient progress. The proposal is not binding for the student, who can modify the research plan as necessary. However, there is no guarantee that any research conducted outside of the proposed plan will meet the depth and scope required for the PhD program. Therefore, students who decide to adjust their research plans should consult with their committees. Significant departures from the proposed work *must* be approved in advance by the committee.

3.10 Ph.D. Dissertation

The dissertation should convey the research hypothesis, research paradigm, and research results and then defend the proposition that the results are valid and correct. The exact form of the dissertation can vary across topics, but in general a dissertation will include the following elements:

- Presentation of the motivation, hypothesis, and contributions of the research.
- Placement of the work in the context of prior art.
- An explanation of how the proposed work was carried out.
- Where applicable, the experimental design of any experiments should be provided which provides enough information for the reader to replicate the results.
- Conclusions drawn from the work and a discussion of future research directions suggested by the project.

A dissertation should be a self-contained document. It should not assume that the reader has read the corresponding proposal, so it should provide enough context that a reader who has read the proposal can readily understand how the performed work fulfills the promises in the proposal. Parts of the proposal can be included in the dissertation.

The written dissertation document must be submitted to the committee at least two weeks before the oral defense.

3.11 Ph.D. Defense

The dissertation defense, which must be announced publicly two weeks in advance via the Graduate Student Coordinator, is an oral defense before the student's Ph.D. dissertation committee and other faculty, students, and visitors. Generally, a defense should be scheduled for at least two hours to allow audience questions and a post-presentation discussion by the committee. The student initiates the Ph.D. Dissertation Defense form the morning of their defense.

Before the oral defense, students are encouraged to give committee members copies of the presentation materials used in the oral defense. These materials can be distributed electronically a few days in advance of the presentation or printed and distributed at the defense itself. Providing *numbered* slides is a courtesy that helps the committee follow the presentation and keep track of their comments.

A typical defense at UVA CS comprises the following components:

- Presentation. It should not exceed 45 minutes. During the presentation, questions from the committee and other members of the audience are expected.
- Q&A. The committee and other members of the audience ask the candidate questions to answer.
- Deliberation. The committee members have closed-door discussion; the candidate and other audience shall be excused.
- Announcement of the outcome. The chair of the committee notifies the candidate of the decision and any requirements or comments.

The Graduate Student Coordinator will send the *Report on Dissertation or Thesis Final Examination* and *Engineering PhD Dissertation Assessment forms* to the committee on the morning of the presentation. The student must also complete the *Survey of Earned Doctorates* and submit the dissertation electronically to LIBRA at the UVA Library.

3.11.1 Ph.D. Defense Outcomes

Based upon the student's dissertation document and oral exam, the dissertation committee will either:

- approve the dissertation, indicating the student has passed the dissertation defense component of the Ph.D. degree, and fill out the forms indicating approval, or
- require amendments to the written dissertation and hold the evaluation forms until the changes are made satisfactorily, or
- specify significant amendments to the dissertation to be followed by a new defense, or
- declare the work unsatisfactory and dismiss the student from the program.

Students should double-check the completion of their requirements using the Academic Report option offered by the Student Information System (SIS) website.

To receive a Ph.D.degree, students must apply for graduation using SIS at the start of the semester during which they expect to graduate.

3.12 Typical Timeline

If entering without a Master's degree:

- First semester: Take graded, graduate-level courses, CS 6190, and CS 8999 with Rotation One advisor.
- Second semester: Take graded, graduate-level courses and CS 8999 with Rotation Two advisor. Match with a research advisor.
- Third semester: Take remaining coursework. Form a qualifying examination committee. Work with your research advisor (CS 8999). Work as half-time TA and take CS 8897 (Graduate Teaching Instruction).
- Fourth semester: Work as half-time TA and take CS 8897 (Graduate Teaching Instruction). Continue working with your research advisor (CS 8999). Take Qualifying Examination to fulfill the depth requirement and certify completion of the breadth requirement.

- Fifth semester and beyond: If the Qualifying Examination has been successfully completed, then take CS 9999; otherwise, take CS 8999. Prepare and defend the Dissertation Proposal. Execute the work proposed for the dissertation. Finally, write the dissertation and pass an oral defense.
- Submit the dissertation electronically to LIBRA and submit the survey of earned doctorates.

If entering with a Master's degree:

- Present appropriate documentation (e.g., transcript) for your Master's degree in a computing field. SEAS will make a "bulk transfer" of 24 credits (regardless of the actual number of credits taken for the Master's degree). Before choosing your two additional CS courses required to be taken at UVA, verify that the graduate courses taken for your Master's degree also fulfill our Qualifying Examination breadth requirement (consult the Ph.D. Graduate Program Director). If the breadth requirement is not completely satisfied by the graduate courses taken elsewhere and used to generate the 24-credit "bulk transfer," then choose courses as necessary to fulfill the breadth requirement. You must complete a minimum of 6 credits taken at UVA.
- If you passed a Ph.D. Qualifying Examination *in Computer Science* at a previous institution, you may petition the Graduate Study Committee to waive the depth portion (but not the breadth portion) of the CS quals and present appropriate documentation (e.g., a letter from the previous institution).
- If you took an equivalent course to our CS 6190 (Perspectives), submit the appropriate documentation (e.g., transcript) and you will be exempted from our CS 6190 (3 credits) requirement.
- If you are entering as a third-year (or later) PhD student, you can request an exemption from CS 6190 from the PhD Graduate Program Director.
- As soon as practical, form your Ph.D. Doctoral Committee and file the appropriate form. The Graduate Coordinator will help with this.
- Prepare and defend your Ph.D. Dissertation Proposal. File assessment paperwork when satisfactorily completed.
- Complete the work defined in your proposal and then write and defend your written dissertation in an oral presentation. File assessment form when satisfactorily completed.
- Submit your dissertation electronically to LIBRA and take the survey of earned doctorates.

3.13 First-Year Fellowship, GRAs and GTAs

A Ph.D. student is usually employed by the department as a *Graduate Teaching Assistant (GTA)*, a *Graduate Research Assistant (GRA)*, or via a *First-Year Fellowship*. The First-Year Fellowship provides student support for required duties such as classwork, research, and rotations; as such, it represents taxable income (unlike other Fellowships which impose no duties). As per SEAS policy, a funded student is not allowed to have outside employment without permission from the Computer Science Chair and the SEAS Director of Graduate Programs. Full-time graduate students must not unilaterally accept internships without the prior approval of their advisor.

With some exceptions, all full-time graduate students with departmental funding must sign up for at least 12 credit hours for the fall and spring semesters. CS 6190, CS 6993, CS 7993, CS 7995, CS 8987, CS 8999, CS 9897, and CS 9999 all count toward the full-time requirement.

Stipends increase after successful completion of the PhD qualifying examination, and again after successful completion of the PhD proposal presentation.

3.13.1 First-Year Fellowship

See Section 3.6.

3.13.2 Graduate Teaching Assistant (GTA) Responsibilities

Graduate Teaching Assistants (GTAs) are important members of the department's professional teaching staff. GTA responsibilities for each course are assigned by the instructor. Duties typically include grading, proctoring laboratory sections, holding office hours and help sessions, attending class, reading instructional materials, completing assignments, answering email or forum questions, and tutoring students in need of additional help. GTAs may also contribute study questions or examination questions at the discretion of the instructor. GTA assignments are made by the Graduate Student Coordinator early in the semester (and may change early in the semester) and are accompanied by an expected number of hours the GTA should devote to each course. GTAs without a firm grasp of course concepts should obtain guidance from the instructor or request a change in course assignments from the CS staff when given the course assignment. Students concerned that specific duties of the GTA are inappropriate/off-topic or require more effort than allocated may seek resolution through the course instructor, their advisor, or the Graduate Student Ombudsman.

PhD students are *required* to serve as GTAs as a component of their degree. A GTA must sign up for 3 credit hours of CS 8897/9897 (Graduate Teaching Instruction), using the specific section assigned to the instructor, for each 10 hour/week segment. PhD candidates (those who have already successfully completed the Qualifying Examination should enroll in CS 9897; otherwise use CS 8897. GTAs assigned to multiple courses should split the amounts among those courses at their discretion, noting that it is not possible to sign up for fractional credit hours. Completion of the GTA portion of the PhD requirement is signified by having accumulated 12 credit hours of CS 8897/9897, typically over Year 2 and Year 3 of PhD studies.

GTAs are representatives of the Department and the University. As such, they are expected to behave with professional courtesy and politeness in all their official communications and activities, including handling student questions in a polite, constructive, inclusive, and accurate manner. GTA conduct is governed by the general conflict of interest policies of UVA.

The period of GTA engagement begins at the start of each semester and lasts until final grades are submitted to the registrar. GTAs should be reliable in all their duties. Non-emergency absences from scheduled duties within that time must be approved by the course instructor

and PGPD. As an example, GTAs may not depart before final exams are graded and course grades are submitted without the advance approval of their instructor and the PGPD.

3.13.3 Graduate Research Assistant (GRA) Responsibilities

Ph.D. students receiving research funding through one or more professors are called Graduate Research Assistants (GRAs). Much of a typical Ph.D. student's academic tenure is spent as a GRA. GRAs and advisors are colleagues in research and the employer-employee relationship is rarely visible as they work together to engage in a research project. While a GRA officially a 20 hour/week position, with respect to funding, success in graduate school requires substantially more effort. For instance, a student is expected to devote at least 3 hours/week outside the classroom for each academic credit. In general, a GRA is expected to work as directed by his or her research advisor. However, a student who is concerned that specific duties are inappropriate, or off-topic may seek resolution with their research advisor or the Ph.D. Graduate Program Director (PGPOD) or the Graduate Student Ombudsman. GRAs are expected to be physically present from the first day of classes until the last day of exams. All absences must be approved by the research advisor and must conform to the School of Engineering's policy regarding graduate student leave.

3.13.4 Summer Support

Students may wish to gain direct experience with government or industrial research through summer internships (during any summer). A student interested in an internship should get the approval of his/her advisor. Graduate-level summer internships often lead to a publication, provide external committee members and help in the student's evaluation of possible careers. Research advisors, the SEAS Center for Engineering Career Development, and the UVA Career Center can help find suitable summer employment. PhD students who do not pursue internships are typically supported over the summer as GRAs (funded by their advisors) and must register as full-time students (6 credits in the summer). Students who have passed the Ph.D. Qualifying Exam enroll in CS 9999; those who have not enroll in CS 8999.

4. International Students

According to UVA policy, international students should directly consult the International Studies Office (ISO) regarding any matters affecting their legal status.

International Studies Office Website

4.1 Full-Time Status

Please consult with the International Studies Office regarding full-time status requirements: https://issp.virginia.edu/enrollment

4.2 English Language Proficiency Assessments (Written and Oral)

The Center for American English Language and Culture (CAELC) administers the University of Virginia English Language Proficiency Exam (UVELPE). For more information regarding UVELPE, refer to https://caelc.virginia.edu/assessment.

The UVA Computer Science Department believes that University-provided ESL (English as a Second Language) courses are provided solely for the the benefit of the student in both academics and future employment

Please refer to the SEAS Graduate Record for language requirements: http://records.ureg.virginia.edu/content.php?catoid=57&navoid=5188#esl-courses

According to CS department policy, students must comply with the ESL recommendations. UVELPE tests and ESL requirements are Engineering School requirements and cannot be waived by the CS Department.

4.3 Curricular Practical Training (CPT)

International students should contact the International Studies Office (ISO) when considering a summer internship.

UVA CS Master's and Ph.D. students pursuing CPT should do the following: in the Fall semester *after* the summer internship, register for one credit hour of CS 6890 (Industrial Applications) with their academic or research advisor.

The general requirement of the CS 6890 course is to report on (1) when, where, and with whom the internship was served, (2) what was learned and what new insights were gained, and (3) how the internship experience is expected to assist future academic or employment pursuits. The details and specific requirements of the course are supervised by the advisor. CS 6890 is evaluated as Satisfactory or Unsatisfactory (S/U) and does not count for any of the graduate degree requirements.

In the rare event that a student completes a CPT internship in the Fall or Spring, the student may enroll in CS 6890 in the same semester *or* the subsequent semester.

4.4 Optional Practical Training (OPT)

Optional Practical Training (OPT) is available after graduation for students on an F-1 visa. Contact the International Studies Office (ISO) for more details.

Appendices

A Useful Forms and Resources

Student Groups	URL
The Computer Science Graduate Student Group (CSGSG)	Link

UVA Websites and Resources	URL
Student Information System (SIS)	Link
UVA Stellic	Link
UVA Canvas	Link
UVA Record	Link
Hoos' List	Link
University of Virginia	Link
UVA Computer Science	Link
Curricular Practical Training (CPT)	Link
Optional Practical Training (OPT)	Link
SEAS Graduate Student Forms	Link
SEAS Program Assessment Forms	Link

Centers and Organizations	URL
Center for American English Language and Culture (CAELC)	Link
Center for Engineering Career Development	Link
International Students and Scholars Program	Link
International Studies Office	Link

External Resources	URL
Survey of Earned Doctorates	Link
NSF Proposal Formatting Guidelines	Link

Email Lists	Email Address
All Graduate Students	cs-grads@virginia.edu
Ph.D. Students	cs-phds@virginia.edu
Master's Students	cs-masters@virginia.edu

B Computer Science Breadth Courses

B1 Breadth Areas

1. Cyber Physical Systems, Internet of Things, Embedded Systems
2. Machine Learning, Natural Language Processing, Information Retrieval, Text Mining, Data Mining
3. Security, Privacy, Cryptography
4. Theory and Algorithms
5. Computer Systems
6. Software Engineering

B2 Courses in Each Area

The official list is in the Graduate Record. However, that record is only updated annually. This documents changes between updates to the graduate record.

A course may only be used to fulfill the requirement of at most one breadth area.

B2.1 Added 2026-2027

- **Cyber Physical Systems, Internet of Things, Embedded Systems**
- **Machine Learning, Natural Language Processing, Information Retrieval, Text Mining, Data Mining**
  - CS 6501 Trustworthy Machine Learning (Peng)
  - CS 6501 Online Optimization & Learning in Games (Wei)
- **Security, Privacy, Cryptography**
- **Theory and Algorithms**
- **Computer Systems**
- **Software Engineering**

B2.2 Added 2025-2026

- **Cyber Physical Systems, Internet of Things, Embedded Systems**
  - CS 6205 Human-Computer Interaction
- **Machine Learning, Natural Language Processing, Information Retrieval, Text Mining, Data Mining**
  - CS 6501 Trustworthy AI (Zeng)
  - CS 6501 AI for Digital Health (Nepal)
  - CS 6501 Constrained-Aware Generative AI for Sci & Engr (Fioretto)
  - CS 6501 Workshop on Building AI Agents (Kautz)
  - CS 6770 Natural Language Processing
- **Security, Privacy, Cryptography**
  - CS 6501 Security of AI Systems: Attacks & Defenses (Ul Hassan)
- **Theory and Algorithms**
- **Computer Systems**

  - CS 6457 Computer Networks
  - CS 6501 Networking Infrastructure Within Data Centers (Cai)
  - CS 6501 Serverless AI (Cheng)
- **Software Engineering**

C CS Policy on Graduate Student Leave

Please refer to the School of Engineering's Vacation and Leave policy in the Graduate Record.

We aim to foster a friendly, cooperative, and professional relationship among graduate student assistants and faculty mentors in both education and research.

GTAs are expected to be available for the entire semester, starting from the planning of classes until grades are submitted. However, changes in GTA assignments can often happen at the beginning of each term. Once a GTA is assigned to a course, they should reach out to the instructor to clarify their duties, confirm whether attendance is required, and understand the instructor's plans and timeline for grading the final exam and submitting final grades. Any absences that are not due to acute illness must be approved by the instructor in advance. In accordance with UVA policy, the instructor will determine whether the GTA's responsibilities will be carried out in person or via telepresence.

GRAs work directly with their dissertation supervisor. GRAs should be in frequent contact with their supervisor to determine research assignments, publication deadlines, and expectations for on grounds vs. electronic participation. Absences other than acute illness should be approved in advance by the supervisor. Consistent with UVA policy, the supervisor will determine whether the GRA's activities are to be performed in person or via telepresence.

Students should not plan extensive travel until the dates of their duties have been determined.

C1 Student Leaves

1. Short-term, acute illness should be reported via email to the course instructor or the research advisor.
2. In the case of lingering illness, the student must notify the research advisor and the Graduate Program Director. In the event of chronic illness, a student may wish to (a) try working remotely, (b) consider withdrawal, (c) consider taking a medical leave of absence (which is *not* paid leave), or (d) seek temporary financial support from another source.
3. If a student is unable to return to the US because of visa issues, the student must inform the research advisor and a Graduate Program Director. Stipends may be affected based on the circumstances involved. Whenever visa issues arise, students should consult with the UVA International Studies Office (ISO).

C2 Significant Life Events

1. GTAs, MTAs and GRAs who experience a significant life event (e.g., birth, death, or trauma of a family member) should seek the advice of a Graduate Program Director. These special cases will be resolved individually in accordance with the Provost's Policy on Significant Life Events (PROV-027). See https://uvapolicy.virginia.edu/policy/PROV-027.

2. GTAs and GRAs who anticipate the birth of a child should seek the advice of a Graduate Program Director and may be able to take advantage of the Provost's Parental Accommodation for Graduate Students on Assistantship (PROV-028). See https://uvapolicy.virginia.edu/policy/PROV-028).

D CS Policy on Ph.D. Program Termination

Once a Ph.D. student has matched with a faculty research advisor (referred to as "advisor" in the rest of this policy), that event establishes a two-way obligation such that (1) the student agrees to make continuous and satisfactory progress toward his or her degree, and (2) the advisor agrees to provide mentoring and GRA support throughout the student's tenure, assuming the student is making satisfactory progress. A student's performance may be deemed unsatisfactory for reasons such as:

- An individual graduate course has a grade below C
- Graduate GPA is lower than the required B average
- As determined by the advisor or Ph.D. Graduate Program Director (PGPD):
  - Student is substantially late finishing the required coursework
  - Student is not making progress on program milestones such as the qualifying exam, Ph.D. proposal, or dissertation
  - Student is not making adequate progress on research, is not producing papers of apparent publishable quality, or repeatedly fails to meet reasonable milestones set out by the advisor
  - Student has significant difficulty working within a research group (i.e., working collegially with peers)
- Student has significant difficulty with oral and/or written communications not remedied by ESL courses
- Violation of the policy on GTA/GRA leave
- Violation of the policies on acceptable use of CS and/or UVA computing equipment
- Other specific criteria as predefined by the advisor and approved by the PGPD.

Special situations such as long-term illness or parental leave are covered by other departmental and/or Provost policies.

If a student fails to maintain continuous and satisfactory performance, and if as a result the advisor assesses that the student is not capable of finishing a PhD and/or no longer wishes to advise the student, then, in accordance with the Provost's policy on Graduate Assistantships PROV-001 (available at https://uvapolicy.virginia.edu/policy/PROV-001) and SEAS rules, the following procedures should be followed.

1. The advisor must meet with the student to (a) identify what aspects of the student's performance are unsatisfactory, and (2) explain in writing what changes must occur and on what timeline (minimum of two months) for the student's performance to be once again considered satisfactory. If the student wishes to continue working with this advisor, they must be given adequate time to improve their performance and meet the advisor's set of milestones.

2. The advisor is obligated to report any such ongoing situation to the PGPD each time the department conducts its PhD student assessment. The advisor may report their concerns to the PGPD separately from the PhD assessment process.

3. The advisor is obligated to signal unsatisfactory performance via course grades, including assigning grades that reflect the student's unsatisfactory performance to the student's research credits (e.g., CS 9999) and/or to the student's independent study (e.g., CS 6993 and CS 7993). If a student's performance has been borderline and an advisor needs more time to determine a grade (e.g. if a U is warranted for CS 9999), an incomplete (IN) may be assigned temporarily to give the student time to improve their performance. This may be done in conjunction with step 1 above.

4. If mentoring attempts by the advisor (and optionally the PGPD) as described above are not successful, then the following procedures are invoked:

    - The advisor notifies the student and the PGPD of the advisor's intent to terminate their advisor-advisee relationship and the advisor's intended date of termination (end of the current semester is strongly encouraged).
    - The advisor provides the student and PGPD with a termination letter, explaining the reasons for the termination. This is a separate notification (and later by at least two months) from the first notification (warning letter) described in #1 above.
    - GRA funding from the current advisor shall continue for the *longer* of (1) two months or (2) the remainder of the current term (Fall, Spring, Summer). For terminating in the *Spring* semester, the termination letter should be delivered no later than *Mar 15th* of the same year; For terminating in the *Fall* semester, the termination letter should be delivered no later than *Oct 15th* of the same year.
    - If desired by the student, they may petition to search for a new Ph.D. advisor. A petition should be submitted to the PGPD no later than one month after the advisor's notification of termination; it will be reviewed for approval by the CS graduate committee.

Termination of Ph.D. Program without a permanent advisor If a student fails to establish a permanent advisor-advisee relationship by the end of their first year, and there is insufficient evidence showing that the student can successfully complete PhD in the department, they will be dismissed from the Ph.D. program.

In such a case, a student may submit a petition to seek a new Ph.D. advisor. This petition must be submitted to the PGPD within one month of the match outcome from the student's second rotation. The petition will be reviewed by the CS graduate committee, and approval is not guaranteed.

Deviations from this policy due to exceptional circumstances will be handled on a case-by-case basis.

E Frequently Asked Questions (FAQ)

- I would like to count a non-CS course towards my graduate degree. How do I get approval?
  - First, ensure the course has substantial computer science material and is not a replacement for an existing CS course.
  - Second, ensure you meet any requirements for counting non-CS courses as documented in the Graduate Record.
  - Please fill out the form "Petition for Requirement Change to the Graduate Studies Committee" from the SEAS Graduate Student Forms webpage.