

Department of Computer Science
Ph.D. Student Handbook
April 2023

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1. Program of Study

1.1 Overview of the Program

The program is organized to lead you through a process of study and skill acquisition, starting with a structured program in the first year and then moving quickly towards a more unstructured program involving independent research and the Ph.D. dissertation.

The first and second years are spent acquiring breadth in computer science in general and gaining research skills in your area of interest. It is possible, and indeed desirable, for you to engage in original research in your first year. The second year also includes research in the form of the area paper. After the area paper, you are in a position to focus on planning and conducting dissertation research. The third year consists of defining a dissertation topic, performing research, and defending a thesis proposal. The year(s) thereafter are devoted to continuing your research and writing a dissertation.

The faculty seek to provide students with frequent and individual feedback on their progress, throughout their studies in the department. Twice a year, usually in January and May, the department's faculty hold Plenary Advising Sessions. At the Plenary Advising Session (PAS) each student is considered individually by the entire faculty. Progress is assessed and feedback—both positive and negative—is prepared in writing for each student in the form of a letter from the Chair. The idea is to make sure nobody “falls through the cracks”. The decision as to whether adequate progress is being made is based on each student's individual circumstances.

First and Second Years: Broad Foundations in Computer Science and Research Skills

The first and second years are spent acquiring and applying research skills in your area of interest (AI, HCI, systems, or theory) and acquiring breadth in the other areas. You will need to find an area advisor no later than the end of your first year. The advisor will guide you in proposing and writing an area paper (Area process; Section 1.3). The paper's topic must be approved by the area faculty in advance. You will also take an area exam at the end of the second year. Finally, you will need to satisfy the breadth requirement by completing two courses in each area (AI/HCI, systems, and theory) with a grade of B or better (Breadth courses; Section 1.3).

Third Year: Research and Thesis Proposal Defense

The third year is devoted to continued refinement and application of your research skills. You will need to choose a dissertation advisor and preliminary committee soon after the start of the fall term, and a full dissertation advisory committee soon after the start of the second term (Dissertation advisor and preliminary dissertation advisory committee; Section 1.4). You are then required to perform research (often the preliminary work on the dissertation, and necessarily in the same area—AI, HCI, systems, or theory—as your area exam) to the point at which there is a demonstrable contribution to the field. This is most easily satisfied by writing a paper that is accepted in a respectable refereed conference or journal. Finally, you must prepare and defend a thesis proposal.

Fourth Year and Beyond: Dissertation

During the remaining year(s), you will work primarily on your own and with your dissertation advisor, under the supervision of your dissertation advisory committee. Progress will be evaluated via RA/TA contracts (Section 2.4) and semiannual meetings with your committee (Six-month reviews; Section 1.5).

1.2 Year One: Breadth in Computer Science

General Advisor

Each student is assigned a general advisor upon arrival. This first advisor helps determine which courses to take, helps to set up a contract for the work required for support (beginning with the second semester—unless you register for research credit CSC595 in your first year, in which case a contract is required beginning with the first semester), and tries to answer questions about the program, the department, the University, Rochester, and, indeed, just about any topic. Once you choose an area advisor (at the end of your first year), you will no longer have a general advisor.

Courses

The department offers a broad program of study in computer science with research-level training in a specialized area of the student's choice. There is no required sequence of courses. There is only one course requirement, CSC 400 (Problem Seminar):

An introduction to the technical, social, economic, and political aspects of graduate education in computer science at Rochester. Class meetings consist primarily of group discussions and presentations that focus on a broad range of topics, and are intended to improve the critical analysis, technical writing, presentation, and problem-solving skills of students. Both class discussions and written assignments are drawn from material presented in other first-year graduate courses offered within the department. The course also offers a forum for individual department faculty members to discuss their research interests and recent results. Satisfactory performance is required of all first-year graduate students.

CSC 400 generally takes the place of a first-semester teaching or research assistantship. It is a 4-credit course. During this one semester, because there is no assistantship, you are expected to carry a total of four 4-credit courses—unless you and your advisor agree that you should begin your research early, in which case you will register for CSC 400, four credit hours of CSC 595 (research), and two additional 4-credit courses. During subsequent semesters, three courses is the normal load.

1.3 Year Two: Depth and Research Skills

Area Advisor

By the end of the first year, you should choose—and register with the graduate coordinator—an area advisor, who will directly advise the preparation of the area paper. However, as the area paper will be read by all area faculty members, it is a good practice to seek advice and input from all of them.

In the best of worlds, your area advisor will become your dissertation advisor, and your area paper research will become a springboard to dissertation research; however, this is not required, and changes of topic and/or advisor are fairly common. For further thoughts on choosing advisors, see Section 1.4 on committee formation.

Area Process

In addition to the breadth requirements, PhD students must complete an area's Area Requirements. All research areas require writing an area paper and passing an oral area exam during the second year of graduate study. Each area also requires additional coursework (“depth courses”), beyond the breadth requirement. This coursework must be completed by the end of the fourth year, and with a minimum grade of B.

The form and content of the area exam, which occurs at the end of the second year, is determined by the faculty in each research area. It may include a written exam, a take-home exam, an oral exam, or some combination of these. Each area will define and publicize the structure of its exam early in the academic year. The up-to-date area process requirements can be reviewed here: <http://cs.rochester.edu/graduate/phd-requirements.html>

The goal of the second year is to develop research skills. The area paper is expected to explicitly demonstrate these skills. Its research contribution should be comparable to that of a refereed publication. In certain cases a fresh analysis of previous work—usually including original and critical derivations, synthesis, and commentary—may be considered profound enough to constitute a research contribution in and of itself. It is expected to include a more comprehensive survey of existing work in the field than is found in the typical conference paper.

The area paper's topic should be important, interesting, and relevant in the context of the current state of the field, and it should take pains to make this context clear. What was the earlier relevant research? How do the contributions of this paper relate to that research? What motivates this stream of research? Why does the student's work adopt its particular approach? What other approaches have been eschewed, and why? What open questions remain? What problems prevented the student from resolving these open questions, and what lines of attack suggest themselves for future work?

Breadth Courses

Students must complete two courses from each group (AI/HCI, systems, and theory). These breadth courses must be taken in the first or second year of graduate study. At least one

course in each group must be taken in the first year. At most one starred (*) course per area can be used toward the breadth requirement, and at most two starred (*) courses, total, can be used toward the breadth requirement. Students have the flexibility to complete all of the breadth requirements during their first year, or to complete as few as one course per group in that year in order to allow more time for research.

PhD students must earn a B or better in all breadth courses.

The courses that can be used for breadth requirements are as follows (as of November 2022)

AI/HCI	Systems	Theory
CSC 412: Human-Computer Interaction CSC 440: Data Mining CSC 442: Artificial Intelligence (*) CSC 444: Knowledge Representation & Reasoning in Artificial Intelligence CSC 446: Machine Learning CSC 447: Natural Language Processing CSC 448: Statistical Speech and Language Processing CSC 449: Machine Vision CSC 466: Frontiers in Deep Learning CSC 578: Deep Learning	CSC 404: Multiprocessor Architecture CSC 478: Computer Security Foundations CSC 451: Advanced Computer Architecture CSC 452: Computer Organization (*) CSC 453: Collaborative Programming and Software Design CSC 454: Programming Language Design and Implementation CSC 455: Software Analysis and Improvement CSC 456: Operating Systems CSC 457: Computer Networks CSC 458: Parallel and Distributed Systems CSC 463: Data Management Systems CSC 576: Adv Topics in Data Management	CSC 480: Computer Models and Limitations (*) CSC 481: Introduction to Cryptography (*) CSC 482: Design and Analysis of Efficient Algorithms (*) CSC 483: Topics in Cryptography CSC 484: Advanced Algorithms CSC 485: Algorithms and Elections CSC 486: Computational Complexity CSC 487: Advanced Modes of Computation CSC 488: Analytic Methods in Computer Science CSC 489: Algorithmic Game Theory

The current list of acceptable breadth courses can always be found here:
<http://cs.rochester.edu/graduate/phd-requirements.html#Breadth>

Master's Degree

A Master's degree may be awarded to students when they satisfactorily complete 30 credit hours and either submit a master's report or pass an oral master's exam. A successful area paper can be used as a master's report. The Master's degree will be conferred on the standard University cycle (May, August, or December) following the submission of the master's report or the master's exam.

1.4 Year Three: Committee Formation and Thesis Proposal Defense

In your third year, you are expected to form a thesis committee and defend a thesis proposal. The proposal defense constitutes the “Ph.D. qualifying exam” discussed in the University’s Graduate Studies Bulletin and Regulations and Policies Concerning Graduate Studies. This section outlines the necessary hurdles for completing the thesis proposal defense and gives dates for negotiating these hurdles.

By the end of your third year, we expect that you will perform research to the point at which there is a significant contribution to the field. This is most easily satisfied by writing a paper that is accepted in a respected refereed conference or journal. Barring that, you may produce a paper judged to be of a similar quality (quality of paper judged by the dissertation advisory committee) or may incorporate such a contribution in your thesis proposal.

Dissertation advisor and Preliminary Dissertation Advisory Committee

Soon after the area process, you should concentrate on narrowing down your interests to more specific ideas, such as:

- ï “Semantic parsing of natural language”
- ï “Collapsing Complexity Classes via Counting”
- ï “Parallel Visual Shape Recognition”
- ï “Latency Tolerance in Distributed Shared Memory Systems”

Part of this process will be exploring ideas with faculty and finding a dissertation advisor and a preliminary advisory committee.

You must register your dissertation advisor and a preliminary advisory committee with the graduate coordinator no later than December 31 of your third year.

Your advisor will play a major role of guiding you through the process of completing a PhD. Your advisor will:

- ï Help you in planning your thesis proposal defense
- ï Point you towards appropriate literature
- ï Advise proposal-related (and other) research
- ï Read drafts of your proposal
- ï Give general advice
- ï Play a crucial role in the actual exam itself.

In the usual case, you will have a single advisor, who must have a primary or secondary appointment in Computer Science. In some cases, it may be appropriate to choose a pair of co-advisors, in which case one of the advisors must have a primary appointment in Computer Science. Choosing an advisor should not be done lightly; changing advisors can significantly delay completion of your studies.

The preliminary advisory committee must contain at least three faculty members with tenure-track appointments (at least two of them primary appointments) in computer science.¹ A faculty member from outside the department can also be included, and must be included when the final dissertation advisory committee is formed in the second term of the third year.²

Thesis Topic

After choosing an advisor and a general category, the next step is to decide what you really want to do. This involves finding, with the help of your advisor, a suitable topic.

After choosing a topic, you should search through literature to answer the following questions:

- ï What (if anything) has been done already?
- ï What has not been done?
- ï What are the major gaps in previous work?
- ï What are recognized “next steps”?

After you have a grasp of the area and the problem, you will need to outline how your research will address the problem. This outline should include ideas on:

- ï How the research will attack the problem
- ï What it will not attack
- ï How it will fit in with previous work
- ï What the essential contribution of the work will be

You should be actively engaged in research on the topic by the fall of your third year.

Dissertation Advisory Committee

Your preliminary advisory committee members will usually become your dissertation advisory committee. If your preliminary advisory committee had no outside member, you must bring one on board at this time.

Each member must sign your thesis proposal defense form immediately after the thesis proposal defense. Your advisor should promptly return this form to the graduate coordinator.

Producing a Thesis Proposal

This proposal should explain:

- ï The context of the problem
- ï The problem itself
- ï Previous approaches

¹ This is a department requirement. Exceptions can be granted by the faculty.

² Members external to the University can serve in place of the outside department member if approved beforehand by the Dean’s Office through a petition process. Please consult the graduate coordinator if this possibility is of interest.

ï Your proposed research

You should also include a well-researched bibliography. The thesis proposal should be of high quality in style, content, and exposition.

The thesis proposal and all other publications you have written should be distributed to the dissertation advisory committee at least ten days before your thesis proposal defense.

The thesis proposal will usually describe your:

- ï Research
- ï The specific research directions you will pursue in the immediate future
- ï The general research directions you will pursue in the more distant future
- ï The theme that will unify your research into a coherent PhD dissertation
- ï Proposed timeline for your thesis research

The thesis proposal should demonstrate that you have acquired the skills needed to perform dissertation-quality research. You are expected to have performed new research of substantial strength and novelty since your area paper. Except in exceptional cases, this new research should be appropriate for inclusion in the dissertation.

The thesis proposal should demonstrate that you have the technical strength needed to do PhD-quality research, and the vision to see the “big picture” into which that research fits. Furthermore, the thesis proposal should show that you not only know how to solve problems, but also how to frame the issues. Finally, the thesis proposal should demonstrate that you have developed strong and insightful intuitions as to which research themes are promising. The thesis proposal defense serves to verify these points.

In short, the proposal should demonstrate to the dissertation advisory committee that an entire dissertation is indeed likely to result within a reasonable time frame.

A successful thesis proposal is not a guaranteed formula for producing a successful dissertation. As the research progresses, the research goals may change dynamically. Some initial goals may be too hard to be solved within the time frame; some may be solved by other researchers concurrently. We therefore expect that the dissertation project will evolve to meet these contingencies, and that this evolution will be the primary topic of six-month reviews.

Scheduling the Thesis Proposal Defense

Once sufficient feedback on the thesis proposal has been gathered, you can schedule the Thesis Proposal Defense. This is best done early in the spring of the third year, though it can be done earlier, and must be done before the spring PAS. Scheduling late in the spring semester often proves to be logistically challenging, or even impossible.

When you are ready to schedule the thesis proposal defense, see the graduate coordinator to reserve a room and date, and to complete a Thesis Proposal Defense Appointment Form. This must be completed no later than April 1 of a student's third year.

The graduate coordinator will not schedule more than two events in the same day—one in the morning and one in the afternoon—to ensure the availability of interested faculty members. Students should try to schedule events well in advance to make sure they meet the spring PAS deadline.

Defending the Thesis Proposal

A public presentation is a required part of the thesis proposal defense. It is a chance for you to publicly present your ideas to the community and for your committee to judge both the ideas and the presentation.

The presentation should take no more than an hour, and should concentrate on the proposed research and the current year's research progress.

You should provide the graduate coordinator with the date, time, place, and abstract of the talk at least ten days in advance. The graduate coordinator will then advertise the talk to the faculty, staff, and students.

The actual exam, which will normally occur immediately following the public presentation, is a meeting of the dissertation advisory committee and the student. Other faculty may attend and freely question and comment.

The purpose of the exam is for the committee—now that it has read the thesis proposal and heard the public talk—to ask you further questions and give you feedback. Questions may address any aspect of the proposal, including the actual research, the larger problem, your familiarity with previous work, and your expected attack on specific sub-problems. In addition to direct feedback, the committee will also report to the PAS.

Admission to Candidacy

Candidacy status is an indication that a doctoral student has developed sufficient mastery of a discipline to produce an original research contribution in their field. When the associate dean of a school certifies that a student has passed the PhD qualifying examination (or in CS, the thesis proposal defense), the student is a candidate for the PhD Degree. Upon request, the University dean of graduate education may issue a certificate attesting to this fact.

1.5 Years 4-N (for Small Finite N): The Home Stretch

After passing the Thesis Proposal Defense, your research will now be in progress, you will know what you want to accomplish, and you will know how you plan to accomplish it. At this point you will have a very concrete basis for your further work: the background will have been done (a careful literature review), a document of some size and clarity will have been written, you will have results and feedback from faculty and students, and your plan will have been made and approved. Work closely with your advisor, who will help make sure that you do not fail, and keep in close contact with your committee members, to benefit from their insights.

Five years from entry (with or without a Master's degree) generally suffice to complete a Ph.D. It is possible to take more than five, but the University will automatically terminate your Ph.D. candidacy after seven years unless you successfully petition the Graduate Dean for an extension.

Six-Month Reviews

Twice each year, at the end of each semester but before the PAS, you must schedule a meeting with your dissertation advisory committee for a six-month review. Through this mechanism, your committee keeps a handle on your progress and provides continuing feedback and advice. You should plan at each review to update your committee on (1) progress since the proposal or the previous review, (2) any changes in your research plan, and (3) your current schedule for completion. It helps if you prepare a *short* presentation—maybe half a dozen slides. Plan to see the graduate coordinator well before the intended date of the review, to make sure the time slot is available and to arrange a room reservation. The date and time will be announced to the faculty and is open to any faculty members wishing to attend. A six-month review form, available from the graduate coordinator, must be taken to this meeting and later returned for your file.

The Dissertation

When your dissertation is finished and approved, you will give a public seminar, after which you will defend your work in an executive session (“grilling”) with the committee. The full specifications for dissertation requirements can be found in the Red Book (“Regulations and University Policies Concerning Graduate Study”), which is available online here: <http://www.rochester.edu/GradBulletin/PDFbulletin/Regulations.pdf>

You will need the approval of your advisor, your committee, and the department Chair to register your dissertation before you register. Your committee should have at least two weeks to read the dissertation. You will then need them to submit their approvals online in the PhD Completion Site (the graduate coordinator will assist you with the online registration of your thesis). The Dean's Office requires thesis registration to be completed 15 working days before the defense date. Thus, your dissertation needs to be ready approximately five or six weeks before the defense takes place. See the graduate coordinator for assistance with the PhD Completion Site, blackout dates, conferral/registration deadlines, and for more details about this procedure.

1.6 PAS Materials

At the end of each term, you must provide your advisor (general advisor, area advisor, or dissertation advisor, depending on your year) with your “PAS materials.” (Maintaining your PAS materials on your computer and updating them each term is a time-saving approach.) Your spring PAS materials should be cumulative for the year. However, please make clear what was done each term. Your advisor may request additional PAS materials beyond those described below. At the least, however, they should include the following:

- ï A brief description of your semester/year in the program, the milestones you have passed so far, and what you've been doing this year (including a description of any research you have done).
- ï A complete publication list (TRs, conference and journal papers, etc.), with any written (or substantially revised) this semester/year specially indicated.

- ï A discussion of your plans for the coming terms, with as much specificity as possible about your plans for the next term.
- ï (Optional) If you have had any special problems, your PAS materials are a good place to discuss and explain them, and to propose concrete mechanisms that will allow you to surmount them.

1.7 Summers

The department believes that practical experience in industrial settings is crucial to motivating, guiding, and advancing research in computer science. Therefore, students are encouraged to arrange summer research internships during one or more of their first three years in the department. Summer employment within the department is generally available only to students working on a project with suitable grant support. Since national competition for summer positions in industry is stiff, you should discuss your summer plans with your advisor as early as possible in the spring term, or even late in the fall term. Both department support and research internships should be reported in your fall PAS materials (see Section 1.6).

Students are expected to return to campus in time for the first day of classes (or a week before, if they have TA responsibilities), unless they obtain permission from their advisor and the chair for a delayed return.

1.8 Sample Schedule and Yearly Deadlines

Below is a typical schedule. Each year, near the start of the fall term, the Department will publicize a calendar of events for the year, including the exact dates of exams, the exact deadlines for selection of various advisors and committees, and so forth.

Year	Term	Event
1	Fall	CSC 400 (and three other 4-credit courses)
1	Spring	Breadth Requirement(s); Select Area Advisor by end of semester
2	Fall	Breadth Requirement(s)
2	Spring	Breadth Requirement(s); Area Paper; Area Exam
3	Fall	Select Dissertation Advisor; Select Preliminary Advisory Committee
3	Spring	Select Dissertation Advisory Committee; Thesis Proposal Defense
4	Fall	Six-Month Review
4	Spring	Six-Month Review
N	Fall	Six-Month Review
N	Spring	Six-Month Review
N	Any	Thesis Registration and Defense

1.9 Problems

This guide has given dates for running the hurdles in the program. If the deadlines are not met, the department may take some drastic action, such as terminating your support. It is up to you to exhibit "satisfactory progress" throughout your graduate career. Students can be terminated

for failure to make adequate progress, which includes grades of B- or below in breadth or depth classes, failing or missing the deadlines for the area exam and thesis proposal, and poor evaluations (C or below) on RA and TA contracts.

If for some reason a problem arises that is not covered in this guide, bring it to the attention of your advisor or any other appropriate faculty member. Such problems may include change of topic, change of advisor, and getting out of “sync” (taking leaves, etc.). For instance, if you started in the spring term or took a leave, it is important to find out what the “end of the third year” means for you. Problems (such as change of advisor or topic) that you feel may require you to spend extra time on your dissertation should also be brought to the attention of the department. It should be noted that problems under your control (you chose the wrong topic or advisor) are likely to be treated differently from those not under your control (your advisor leaves, you are seriously ill, your thesis problem is solved by someone else after you pass your thesis proposal defense). If, for some extraordinary reason, you need to request an extension, it is essential to petition the faculty in writing at the earliest possible moment, certainly well before the deadline that might be missed.

2. Registration, Grades, Money, Etc.

2.1 Graduate Student Offices and Policies

You will be assigned an office by a mysterious algorithm. First-year students are placed in one of two group offices (WH 3602 and WH 3209). After the first year, students are moved to offices with more senior students, generally from disparate research areas (unless a faculty member has specifically requested that their students be seated together, and/or has a research lab). Desks, bookshelves, and reasonably comfortable chairs are provided. You are entitled to a workstation on the desk, or a monitor if you prefer to use your own laptop/notebook. You may not modify, move, or re-arrange computer components without approval from department lab staff. If you want to modify/move/re-arrange any of the department-provided computing components (including monitors, CPUs, keyboards, mice, network cables, etc.), you should contact labstaff@cs.rochester.edu for approval/assistance. If there is any additional specialized equipment that you need for your research, you should speak with your advisor. Keep in mind that office space should be evenly distributed among occupants. Be considerate of your officemates.

2.2 Grades

The University grading scheme for graduate students is as follows:

A	Excellent	S	Satisfactory
A-		E	Failure
B+		I	Incomplete
B	Good	W	Withdrawal from course
B-		N	No grade reported
C	Poor		

University policy does not provide for a grade of A+, but faculty members are free to assign it for intra-departmental purposes.

The letter grade I is assigned only when there are circumstances beyond the student's control, such as illness or personal emergency, that prevented the student from finishing the course work on time, and the instructor and student involved have agreed that additional time has been granted for the completion of the work in the course. A written Memorandum of Understanding (MOU) between the student and the instructor describing precisely what additional work must be completed by what date must be submitted to the graduate coordinator for each grade of I. In all but exceptional circumstances, this work must be completed within two semesters. If an MOU is not submitted to the graduate coordinator within one semester, the instructor will be asked to assign a grade based on the work completed. If the terms of the MOU are not satisfied by the date specified, then either (1) the instructor may fail the student or award a grade based on the work completed; (2) a revised MOU may be negotiated (though the instructor is under no obligation to do so); or (3) the I may be converted to an N.

The letter grade N is of a conjectural status and is not a substitute for E or I. It may be used if a student never appeared in class, if the student failed to complete the course and did not arrange for an "Incomplete" (see above), or if the faculty member was instructed by the Board on Academic Honesty to assign a grade of N. In all other circumstances, the appropriate temporizing grade is I. Operationally, N is equivalent to W (withdrawn). It does not count toward degree requirements and may trigger a review of the adequacy of a student's performance.

Students receive graduate credit for adequate grades received (A, B, S, and up to one grade of C). 30 hours of graduate credit is required for a Master's degree; 90 hours for a doctorate. Note that stricter requirements adhere to grades in breadth and depth courses (Section 1.3).

No more than one C is acceptable over the course of a graduate program. The University rule, from the "Regulations and University Policies Concerning Graduate Studies," states:

Minimum grades for courses or research work carrying graduate credit are C or S. C is, however, considered to be a failing grade for any student who is on probation. Moreover, a student who receives the grade of C in each of two courses, or for eight hours of work toward the degree (even if in only one course), will thereby have raised the question of the adequacy of his or her academic performance. In those circumstances the student's record must be reviewed by the associate dean of graduate studies (in the School of Nursing, the Student Affairs Committee) in consultation with the student and the program director.

Two other important aspects of support are the following:

- i Students who have accumulated 90 hours of credit must still maintain full-time enrollment through a continuing enrollment fee.

- ï Students who receive an I, N, or E accumulate no credit hours, although tuition for registration of the course has already been paid by the department.

To deal with these matters, the department has adopted the following policy: The department will pay tuition for all graduate students making adequate progress up to 90 hours minus incoming transfer credit. Students may be required to pay for any additional tuition they might need to graduate. Continuing enrollment will be paid for all students otherwise supported by the department.

A student has *satisfactory grades* if a current transcript contains fewer than two unsatisfactory grades. A grade of C, U, or E is unsatisfactory, as is an outstanding grade of I or N that has remained on the transcript for more than one semester.

For any other questions on official policy on grades, hours needed for completion of a degree, or other “officialese” concerning your life as a graduate student, refer to “Regulations and University Policies Concerning Graduate Studies” <https://www.rochester.edu/graduate-education/wp-content/uploads/2022/07/UR-Graduate-Regulations-and-Policies-1.pdf> and consult with the Chair, the graduate coordinator, or an appropriate faculty member.

2.3 Registration

To be considered a full-time graduate student by the University, you must register for at least 9 credit hours per semester (during the academic year) in addition to your RA or TA duties. Regular courses are 4 credit hours each, so this usually means three courses. Department policy calls for first-semester Ph.D. students to take 16 credits, 4 of which come from CSC 400. In any subsequent semester, absent special circumstances, a student who is taking 2 or 3 classroom (non-x9x) courses should sign up for a total of 12 credits. A student taking 0 or 1 classroom courses should sign up for a total of 9 credits. In general, this means that students will transition from 12 credits a semester to 9 credits a semester after their second year in the program, when they have completed their depth and breadth requirements.

There are four kinds of courses: (1) regularly scheduled courses, most of which are four credit hours, (2) seminar courses (the 57X numbers), which may allow a variable number of credits, (3) internship course (594), which is one credit hour, and (4) research (and reading) courses, which allow a variable number of credits.

Reading courses (591) are used when you wish to pursue material that is not directly related to your research. The University allows no more than six credits of research and reading courses to count toward the 30 credit hours for the Master’s degree (unless completing a Master’s thesis).

If you wish to audit a course, you will need approval prior to registration from the Dean’s Office. See the graduate coordinator for details.

Once you have accumulated 90 credit hours, you should register for CSC 997 (if you are in your 4th year) or 999 (if you are in your 5th year or beyond). This is a zero-credit course that certifies that you are a full-time student completing a dissertation. You must register for this each semester until you have completed the requirements for the Ph.D. If you wish, you may audit courses while you are registered for 997 or 999, but you may not register for credit courses.

2.4 Money

Research and Teaching Assistantships

You are expected to be either a research assistant (RA) or a teaching assistant (TA) each term (except for the first semester of the first year, unless you are registered for research credits). At the beginning of each semester as well as at the beginning of summer (if you are spending the summer here in the department), you should meet with your advisor (in the case of an RA) or the faculty member teaching the appropriate course (in the case of a TA) to clearly set out plans and expectations for the term. Note that it is possible to have an RA contract with a faculty member other than your advisor. An RA contract is not required in your first semester, unless you are registered for research credits—in which case you should complete an RA contract with the faculty member supervising your research credits. Because an RA contract is required whenever you are registered for research credits, it may sometimes be required during a semester in which you also have a TA contract.

You will receive an Assistantship Contract at the beginning of each semester (including summers that you spend in the department). You and the faculty member with whom the contract will be held should enter on the contract a proposal for the work planned for the term. Both of you should sign the form. The form must be returned to the graduate coordinator before the end of the second week of the term. It will be held there until the end of the semester, at which time it will be returned for faculty evaluation and signatures. Then it is returned to the graduate coordinator to be kept with your records.

TA assignments are made during the term preceding the course. You can exercise some control over your assignment by going to professors and mentioning your lifelong dream of TAing one of the courses they will be teaching. Generally, students are required to be a TA for three semesters during their time at Rochester (or two, if they are supported by an external fellowship). Usually, TAing is done during the first two years. Most TA assignments involve either teaching small undergraduate laboratory sections at the introductory level or grading and consulting for upper-level undergraduate or first-year courses.

Graduate Student Support

The department will make every effort to support each student whose performance and progress is adequate. This support includes a monthly stipend and health insurance in addition to full tuition coverage. For “adequate” progress there are four criteria: (1) satisfactory grades (Section 2.2); (2) life-time accumulation of fewer than two formally unsatisfactory performances on TA/RA contracts, and, more generally, appropriate overall TA/RA

performance; (3) satisfactory and timely completion of the area process, thesis proposal defense, six-month reviews, and other milestones; and (4) generation of research results, and development of research skills, at an acceptable rate. One mechanism for monitoring criterion (4) is the six-month review process, through which you and your dissertation committee will discuss your research progress and set goals for the next period. The committee then reports its prognosis to the PAS, along with a recommendation regarding continuation of support and its nature.

Final decisions on continuation of support rest with the PAS. These semiannual meetings review all the committees' recommendations, as well as the availability of funding and jobs. Priority is given to continuing support for those students most clearly making adequate progress. When withdrawing support, the faculty will indicate to the student, in writing, what is necessary for reinstatement of support. If the circumstances that led to withdrawal of support have changed, the student may petition for renewed support.

Most of our students are supported by federal grants. The granting agencies require us to keep track of the service associated with their financial support. Therefore, we need to state clearly the policy connected with the financial support of graduate students. If there is a need to deviate from the following guidelines, students should obtain approval from their advisor and the department Chair.

As a general rule, graduate fellowships take the place of the department stipend. It is our policy, however, to ensure that such fellowships are a net financial win for the student. If you receive a fellowship that pays between 10% and 100% of the department's usual stipend, we will augment it to bring the total to 110% percent of the stipend.

The stipend is paid semi-monthly starting in September and ending in May. To remain in good standing, students are expected to do their work during the period for which they are being supported. With the exception of the break between fall and spring semesters, students should not be away from the Department for more than a week. Students with summer jobs should not leave the department before the end of classes in spring, and are expected to return by the start of the first day of classes in fall. A student who has been assigned to be a TA should return at least a week before classes begin (this is true for the spring semester as well). While receiving a stipend from the Department, students should notify the department of any outside employment, and any significant (over 8 hours per week) outside employment may have stipend implications.

The PhD program is a full-time commitment. As a general rule, stipends are associated with half of that commitment — i.e., 20 hours/wk. The other half is devoted to academic pursuits. The department recognizes that many students — particularly those in later years of the PhD program — may devote much of their academic time to research as well.

Teaching assistantships are an academic requirement of the PhD program, and are expected regardless of the student's source of funding. TA duties can be expected to require on the order of 10 hours/wk of effort (plus, in some cases, an expectation to attend class sessions).

Payroll

If you would like your paycheck to be automatically deposited into your checking or savings account, you may do so in HRMS: www.rochester.edu/people by logging in with your NetID and password, and navigating the following: Main Menu>Self Service>Payroll and Compensation>Direct Deposit and filling out the appropriate fields.

Grant Support Acknowledgement

Any article you publish (a Technical Report, conference or journal paper, etc.) must acknowledge the agencies sponsoring your work. This is both an academic/professional and legal/political requirement. Most department students are at least partially supported by a grant. When you are finished writing an article, go to both the department administrator and your advisor to find out which grant(s) have been supporting that particular research. If in doubt as to whether a particular grant applies, it is better to err on the side of caution and include it. Because support changes quite often, it is best to request information at the time you actually need it. In addition to funding agencies, you will need to acknowledge support from any person or organization that provides you with access to resources used in your research—e.g., off-site computers.

Student Travel

The faculty tries, insofar as possible, to underwrite expenses for students attending conferences. The question of whether a trip will be supported, and the level of support, depend on many factors—money available, reason for the trip, etc. For example, travel to a research conference to present a paper (your own or a faculty member's) is of higher priority than travel to a conference to listen, though the latter is often partially supported. In all cases, the question of whether your trip will be supported, and the level of support, should be raised with your advisor at the earliest possible moment (certainly before submission of any paper whose acceptance would require travel). Your advisor will work with you, and sometimes with the Chair, to determine whether funding is available.

After your advisor has determined the source of funding, and you and your advisor have determined the amount of funding, you and your advisor must complete a Graduate Student Travel Request form before you make your travel plans. This form is available from the department coordinator. It identifies the source of funding and any limits and conditions on the funding. All travel forms require the signature of the faculty member who is paying for the travel. Once your signed form is on file with the department coordinator, you can make your travel arrangements. If you do not have an approved Travel Request form on file and have already taken the trip, it is possible that you will not be reimbursed for any expenses.

The University has agreements with a travel agency that can help you make arrangements once your signed Travel Request form is on file. Air and rail tickets purchased through these

agencies can be paid for in advance by the Department (note that the process for advance travel tickets must be initiated with the help of the department coordinator). The department can also pay for your conference registration ahead of time if you have a signed Travel Request form on file. All other covered expenses must be paid out of pocket (keep all original, itemized receipts) and reimbursed upon a student's return. See the department coordinator with any questions.

The department coordinator or administrator can provide you with details about allowable and non-allowable expenses, and the forms of receipts required for reimbursement. Note that certain expenses, notably for entertainment and alcoholic beverages, cannot be charged to federal grants. In addition, some grants require that any air travel be made on a U.S.-flag carrier (though in this case certain exemptions may apply: see <https://www.gsa.gov/policy-regulations/policy/travel-management-policy/fly-america-act>).

When you return from a trip, you will need to tape your original, itemized receipts down (tape on all four sides of the receipt) on paper (front only) in chronological order. If the receipts are in a language other than English, please provide translation. Please note if the amount paid covers the expenses of more than one person (for example, if you shared the hotel room with another conference attendee and the reimbursement should be split). The department coordinator processes these reimbursements, and should be contacted with any questions.

2.5 Getting Help

Your advisor (general, area, or dissertation, as appropriate) should be your first point of contact for help with academic or research issues. For purely administrative matters, you may want to start with the graduate coordinator (as of Oct. 2019, [Emily Tevens](#)) instead. These two individuals can direct you to a host of other resources as well, for a sympathetic ear, active assistance, or, if all else fails, filing of a formal grievance. Some of these resources are also listed below.

Concerns specific to coursework should be directed to the course instructor. In general, most faculty members wish that students would talk to them more often.

If a situation arises in which you are uncomfortable talking to your advisor—or if you are unhappy with your advisor's response—you can talk directly to the department Chair (as of May 2021, [Michael Scott](#)) or to the College-Level Graduate Ombudsperson (as of May 2021, [Kara Bren](#) of Chemistry). The role of the ombudsperson is to provide confidential, impartial, and independent advice. They can act as a sounding board, connect you to others who can help, accompany you in discussions with faculty or administrators, or act as an informal mediator or advocate.

Depending on the issue, you may also want to consult

- i [The Hajim School Dean of Graduate Studies](#) (as of May 2021, Nicolas Vamivakas)
- ii [The University Counseling Center](#) (free, confidential psychological assistance)

- ï [The CARE Network](#) (to express a concern [perhaps on behalf of someone else] when you're not sure where to go)
- ï The [University Ombuds Office](#) (for general issues of fairness and inclusion)
- ï [The Employee Assistance Program](#) (for issues around University employment)
- ï [The Title IX Office](#) (for official reporting of sexual misconduct)
- ï [Clergy at the Interfaith Chapel](#) (for help specific to a faith tradition)
- ï [The College Writing Center](#) (for help with written English)
- ï [The International Services Office](#) (for students from outside the US)
- ï The Office of Disability Services (for students with a documented

You can find a listing of resources relating to sexual harassment, discrimination, and retaliation at www.rochester.edu/respect/resources and also a more extensive listing of resources (for all manner of concerns) compiled by the CARE Network here: www.rochester.edu/care/resource-center/