

Academic Year 2025-2026

School of Computer Science
Human-Computer Interaction Institute

Doctoral Student Handbook

Human-Computer Interaction PhD

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SECTION 1: Welcome & Introduction

Welcome to the School of Computer Science's pioneering and prestigious Human-Computer Interaction, PhD program. While you are here a multitude of faculty and staff will act as guides, mentors, educators, and collaborators while you and your peers conduct research that not only connects you with CMU at large but prepares you to be a responsible, curious and innovative contributor to the growing legacy of the Human-Computer Interaction discipline. The contents that follow will act as a comprehensive resource whenever you need a reminder of the mission, curriculum, best practices, and procedural guidelines that aid in shaping the Carnegie Mellon experience and environment.

While this handbook is specific to your academic experience in the department, it is just one element of the Graduate Student Handbook Suite. There are several other resources within the suite that you should consult when needed:

- [HCII PhD Companion Guide](#)
- [University-Wide Graduate Student Handbook](#) (Office of Graduate & Postdoctoral Affairs)
- [The Word Student Handbook](#)

SECTION 2: Program Vision, Mission and Values

2.1: Vision

The Human-Computer Interaction Institute – an interdisciplinary academic department within the School of Computer Science – is one of the world's leading centers for research in Human-Computer Interaction (HCI). Beginning with its first class in the fall of 2000, the HCI Institute began admission of highly qualified students to its Ph.D. program in Human-Computer Interaction. Its graduates are now making a significant impact on the HCI community, with faculty positions in top-ranked academic departments and positions in major industrial research laboratories.

Since HCI encompasses aspects of both people and technology, the Institute takes a strongly interdisciplinary approach. The Institute brings scientific and engineering knowledge from computing together with that of the behavioral sciences (e.g., psychology and the social sciences), the Tepper School of Business, and the expansive world of Fine Arts. Further, in order to produce efficient, effective and pleasing technology, this scientific basis is also combined with the integrative methods of the discipline of design which are directed towards the conception of "total products." Mirroring this diversity, we encourage applicants from a range of disciplines.

2.2: Mission

To create a transformative educational experience for students focused on deep disciplinary knowledge; problem solving; leadership, communication, and interpersonal skills; and personal health and well-being. To always remember people are at the heart of our work, that we strive to deliver artifacts,

services, and systems that improve people's lives. Finally, to consistently apply scientific rigor and creativity in pushing the boundaries of problems HCI addresses.

2.3: Values

To cultivate a transformative university community committed to (a) attracting and retaining diverse, world-class talent; (b) creating a collaborative environment open to the free exchange of ideas, where research, creativity, innovation, and entrepreneurship can flourish; and (c) ensuring individuals can achieve their full potential. To impact society in a transformative way — regionally, nationally, and globally — by engaging with partners outside the traditional borders of the university campus.

2.4: Research and Curriculum

Students accepted to the Ph.D. program will participate in the wide-ranging and innovative research programs of the Institute. For an overview of some of the research going on, see our research summary page on the web (<https://www.hcii.cmu.edu/research>). HCI Ph.D. students have access to the excellent computational, and laboratory facilities of the School of Computer Science and the HCI Institute, as well as facilities of the Department of Psychology and the School of Design. These include usability and other laboratory facilities, as well as office space in Newell Simon Hall and University facilities on Craig St. In addition to wide-ranging research opportunities, students will have the opportunity to explore a rich set of course work and other activities designed to prepare them for a career in HCI research. Requirements for the Ph.D. course of study are designed to accommodate students with a range of backgrounds by providing highly individualized programs of study which are reviewed semesterly in collaboration with a faculty advisor to reflect the development of ongoing research.

Program Principles and Strategies

The goal of the program is to produce a steady stream of high quality, innovative Ph.D. graduates prepared to do impactful HCI research. Toward this goal, the program seeks to provide each student with depth in some aspect of HCI research, but also to prepare them to smoothly integrate the methods and knowledge from the underlying disciplines as called for by the work, rather than as dictated by disciplinary outlooks.

These guiding principles are used in structuring and administering the program:

Quality first. We seek quality in everything we do. That is almost a cliché, but taken seriously, it means that the program maintains very high expectations for its students and communicates that to them early and often. It also means that when there are conflicts between the best education for a particular student and the official rules, or what precedent might be set, a significant effort is made to choose the course that provides the best education for that student.

Correspondingly however, exceptions to rules and policies made on this basis are not normally considered to set precedent for other students.

Research from day one. The primary goal of the program is to create world class researchers and it is

important that students clearly focus on research from the beginning. To accomplish this, the program requirements are structured to “clear the path” of some of the non-research activities typical of other programs. There are no qualifying or preliminary exams and typically students are not allowed to do teaching work early. Other requirements (such as the communication requirement) are also structured to motivate students to produce research results early. Our program is unique in that we encourage and expect students to engage in research from their first day in the Department.

These guiding principles are supported by a series of strategies which in turn play out in the curriculum and requirements for the program. These include at least:

Highly individualized education. Across the interdisciplinary breadth of the program, students will need to know different things and present themselves differently. At the core, students will undertake problems and questions in the places where people meet technology. To accommodate this, and to allow each student to maximize their own talents and interests, many of the program requirements are individualized. Most notably, within an overall loose framework, the courses taken by each student are proposed by the student and advisor to meet the student’s needs. This framework is subject to constant review and adaptation in response to evolving research directions. We are committed to the principle that students may achieve competence through a variety of methods, including courses, seminars, projects, and independent study. We consider each student’s individual strengths, weaknesses, and interests in designing the best method for the student to fulfill these requirements.

Strong interdisciplinary interaction. Finally, several aspects of the program are structured to attempt to promote the development of strong interdisciplinary interactions among the students. This includes incorporation of an interdisciplinary project in the required introductory course, housing students in mixed shared spaces rather than in advisors’ lab spaces during at least the early portions of their study, and facilitating pathways that allow interdepartmental collaboration and advising communities.

SECTION 3: Degrees Offered

This program offers the Ph.D. in Human-Computer Interaction degree. Upon graduation from this program, students can expect this title to appear on their diploma:

The Degree of Doctor of Philosophy

in Recognition of The Completion of the Course of Study Prescribed For The Field(s) of

Human-Computer Interaction

The Human-Computer Interaction Institute offers a Dual-Degree experience hosted in Portugal. Time is expected to be split between the Pittsburgh and Portugal campuses. The schedule is determined through collaboration with a student's faculty advisor and the Portugal administrative team. A typical thesis defense for Dual-Degree students is hosted in Pittsburgh but individual exceptions are open to discussion.

The requirements and degree awarded are the same whether a student is accepted into the traditional PhD program or the Portugal Dual-Degree program. The [FAQs](#) are an excellent resource.

SECTION 4: Departmental Personnel

The HCII Ph.D. Leadership Team can be contacted for program support:

Geoff Kaufman

Ph.D. Program Director
Robert E. Kraut Associate Professor
RAND Building, Suite 101
gfk@cs.cmu.edu

Bill Carney

Ph.D. Program Manager
Newell-Simon Hall 3509
bcarney@andrew.cmu.edu

Ryan Ries

Business Manager
Newell-Simon Hall 3519
ryanries@andrew.cmu.edu

Lindsay Olshenske

Employment Process Manager
Newell-Simon Hall 3519
lindsayo@cmu.edu

HCII staff members are available to help with a variety of administrative requests. View the [Administrative Contacts](#) page to learn more about these contacts.

The School of Computer Science can also serve as a resource for students. View the [SCS Home Page](#) to learn more.

Key contacts for the School of Computer Science are available here: [SCS Key Contacts](#)

SECTION 5: Departmental Resources

The Human-Computer Interaction Institute main office is located:

3rd floor of Newell-Simon Hall

4804 Forbes Avenue
Pittsburgh, PA 15213

Most offices and classrooms used by HCII are located in Newell-Simon Hall.

Our mailing address is:

Carnegie Mellon University

School of Computer Science
5000 Forbes Ave.
Pittsburgh, PA 15213 USA

Our physical address (for GPS and sat-nav devices and online mapping programs) is: 4902 Forbes Ave., Pittsburgh, PA. You can also find directions on [Google Maps](#).

[Map of the SCS complex and nearby parking areas](#)

Lab/Office/Studio Space: First year students in the HCII PhD program share a communal office space in Newell-Simon 2602. Once they have established a network of collaborators most students share/utilise office/lab space nearest to or with their chosen faculty advisors. Office assignment and tracking can be addressed with Bill Carney, the Program Manager.

SCS Building Facilities: [Building Facilities](#) This office provides office keys, damage reports, repair requests, and security concerns, both for routine maintenance and emergencies.

SCS Computing Facilities: <https://computing.cs.cmu.edu/> This office will coordinate selection, delivery, and set-up of a departmentally provided computer.

HCII Facilities and Resources: <https://hcii.cmu.edu/facilities-and-resources>

HCII Calendar: <https://hcii.cmu.edu/news/calendar>

Purchasing/Reimbursement: Any purchases/reimbursement made towards research materials, facilitation, proposal and defense will go through the assigned administrative staff for any student's faculty advisor. The same goes for travel expenses.

Supply Room: Located in Newell-Simon Hall 3508 is a supply room which houses a printer/copy machine, first aid supplies, student, staff, and faculty mailboxes, and an office supply closet.

Department Approach to Press and Media Relations: If you are invited for an interview by a media representative and would like to consult with our in-house team, contact Aaron Aupperlee, CMU School of Computer Science Senior Director of Media Relations (aaupperlee@cmu.edu; 412-268-9068). For HCII media tracking purposes, please notify Karen Harlan, HCII Communications Specialist (kharlan@andrew.cmu.edu) of any pieces that mention you and your work.

Department/College/University Brands and Logos: For guidelines on the use of department, college, or university brands and logos, please contact Karen Harlan, HCII Communications Specialist (kharlan@andrew.cmu.edu).

SECTION 6: Advising

The Research-Matching Process in HCII

Carnegie Mellon is a research institution. We are strongly committed to scientific excellence, both in research and education. In particular, we believe that a close personal interaction among students, faculty, and staff is of the utmost importance for educating the next generation of leaders in academia

and industry. HCII students are therefore matched to a faculty advisor(s) in the very beginning of the program who will guide their research and advise them in academic matters.

6.1: Role of an Advisor and Advisor Assignments

When new HCII Ph.D. students arrive at CMU, they should begin scheduling meetings with faculty with whom they would like to work. We encourage new students to meet with as many faculty as possible, even faculty they might not have initially thought would be a match. This serves two purposes: helping the faculty get to know you and helping you understand the breadth of research opportunities available to you. Students and faculty are expected to identify a research match **by the end of September**.

Advisors are likely to come from within the HCII but may come from outside the department as well. A student may be advised by a single faculty member or co-advised by two faculty members. A student's advisor may change if the research direction changes and there is no longer an appropriate match. In this case, the change must be discussed with both the old and new faculty advisors, approved by the Ph.D. Program Director (Geoff Kaufman/gfk@cs.cmu.edu), and communicated with the Ph.D. Program Manager (Bill Carney/bcarney@andrew.cmu.edu) and Business Office (Ryan Ries/ryanries@andrew.cmu.edu) for appropriate documentation and financial procedure.

The HCII faculty holds a Student Evaluation at the end of each regular semester (Fall and Spring), typically around the time that final course grades are due (e.g., December, May). The entire HCII faculty meets and discusses the academic progress of each student.

For each student, an evaluation letter is written and given to the student as hard copy, as well as being accessible in the gsaudit system. The letter indicates whether or not the student is making "satisfactory progress" towards completing their degree based on their coursework, proficiencies, and research progress.

Students can appeal any/all of these decisions as outlined in the [Summary of Graduate Student Appeal and Grievance Procedures](#).

6.2: Advisor/Advisee Collaboration

The faculty advisor is a student's primary contact, both in research and in academic matters. Typically, a student has strong interests in the research area of the faculty advisor, and they will closely collaborate with the faculty member. The advisor is typically the primary person directing the student's research and is also typically expected to provide financial support (stipend and tuition) for the student.

Individual Development Plan (IDP): Individual Development Plans (IDPs) are meant to promote professional and personal growth by formally documenting goals and facilitating dialogue, collaboration, and accountability between advisors and advisees. Carnegie Mellon has developed a set of templates that can be used by doctoral students and their advisors to create an Individual Development Plan. You can find the templates here: <https://www.cmu.edu/graduate/resources/index.html>

Advisors and students are expected to discuss and document their advising- and productivity-related expectations at the beginning of each academic term, using the above-referenced resources or alternative methods of their own choosing, and to assess progress at the end of each term. Formally, students are expected to document the goals established with their advisor(s) in their Plans and Accomplishments document (and upload and share this document with the faculty and PhD team before the end-of-semester Doctoral Student Review Meeting). In addition, during the Doctoral Student Review meeting, advisors will provide individualized updates on their students' progress and, with the faculty, produce a letter to their students detailing their assessments of progress and expectations for the following academic term(s).

6.3: Review/Redress of Academic Conflicts

The HCII faculty holds a Student Evaluation at the end of each regular semester (Fall and Spring), typically around the time that final course grades are due (e.g., December, May). The entire HCII faculty meets and discusses the academic progress of each student.

The primary purpose of the Evaluation Meeting is to help guide the student and give performance feedback. It also aids the faculty advisor(s) in establishing ways to more positively impact the student's trajectory towards attainment of the degree in a reasonable period of time.

For each student, an evaluation letter is written and given to the student as hard copy, as well as being accessible in the gsaudit system. The letter indicates whether or not the student is making "satisfactory progress" towards completing their degree based on their coursework, proficiencies, and research progress.

The advisor is expected to convey more detailed feedback about the conclusions of the evaluation to the student.

There are normally three overall outcomes from the evaluation: **"satisfactory progress"**, **"concern"** and **"N-1" (or probation)**. A good letter typically simply indicates that the student is making "satisfactory progress" (these words will appear in the first few sentences). If the student is doing exceptionally good work, a stronger adjective such as "excellent" might be used, however, this is atypical and there is no difference in the impact of the letter.

Students who are seen as struggling or headed in a troubling direction, but remaining in good standing may receive a letter indicating concern (in that case the word **"concern"** will appear in the first few sentences along with "satisfactory progress"). Concern letters normally provide additional advice and steps to be undertaken. They may also place additional specific requirements on the student to remain in good standing. Students should carefully discuss any concerns with their advisor(s), and in some cases with the program director. They should plan steps to alleviate the concerns so that they may remain in good standing in the program.

Students who are evaluated by the faculty as no longer making satisfactory progress in the program will be placed on a probationary status (**"N-1 status"**). These students are not considered to be in good standing and will receive a letter (referred to as an *"N-1 letter"*) establishing a clear set of steps that the student needs to undertake in the next semester in order to return to good standing. An *N-1 letter*

should be considered a wake-up call and a warning, and as such should be taken seriously. However, it is not a permanent "black mark" on the student’s record; **if the student begins making satisfactory progress again, there is no official record of the letter in the student’s transcript.**

We would further emphasize that the faculty very much wants our students to succeed – graduated Ph.D. students are one of our most important benchmarks for success. In addition, even at the time of admission, each student already represents a significant investment in faculty time and energy, due to the rigor of the admissions and recruitment process. As time goes on, each student also represents a large investment of research funding. Thus, it is in the faculty’s interest that the students succeed. We do however have a duty to maintain the program’s standards.

Students who do not clearly meet all the expectations set out in an *N-1 letter* may be terminated from the program (and correspondingly lose financial support).

Based on this mechanism, **it normally takes at least a semester after receiving the *N-1 letter* to be removed from the program for poor performance.** (In very unusual cases, e.g., severe ethical violations, a student may be removed from the program immediately.)

Students can appeal any/all of these decisions as outlined in the [Summary of Graduate Student Appeal and Grievance Procedures](#).

SECTION 7: Doctoral Degree Requirements

7.1: Residency Requirements

U.S. government regulations require F-1 and J-1 international students to be enrolled in an in-person degree program, with in-person expectation coursework. Even though this immigration requirement is specifically for international students, residency requirements in a degree program must be consistent for both international and domestic students.

Carnegie Mellon Graduate Students, including international students, live off-campus in a variety of Pittsburgh neighborhoods. Many options can be reviewed on the [Off-Campus Housing](#) page International students would be wise to utilise resources offered by the [Office of International Education](#).

7.2: Expected Timeline

Graduation requirements for this program are met through a combination of efforts in three major areas: research, coursework, and teaching, further described in the previous pages. Here is a list of the expectations of the program (not intended to be absolutely comprehensive), along with a general timeline.

Timeline

TYPICAL STEPS - First Year

<i>During First Year or Early First Year</i>
Advisor selected; Ph.D. Program Director & Manager informed via email
Discuss outside funding with advisor, apply as appropriate

Take 05-771 Process and Theory in HCI course
Take first two required mini courses
Take first two additional course towards 4:1:1 course requirements
Submit initial Plan of Study
Perform research (each year!) and be prepared to present it at the end of the summer
Oral Communications requirement #1
ICC testing, if English was not first language
Inform Advisor, Ph.D. Manager, & HCII business manager re: Summer plans (each year!)

TYPICAL STEPS - Within First Two Years

<i>Within First Two Years</i>
Plan of study has been approved
Take third & fourth required minis
Complete most required courses
Plan for completing usability requirement
Oral Communications requirement #2

TYPICAL STEPS - Typically Third Year

<i>Typically Third Year</i>
TA #1
Completed 4:1:1 course requirements
Completed all required courses (including studio course)
Identified research area
One or more "substantive" publications

TYPICAL STEPS - Typically Post-Third Year

<i>Typically Post-Third Year</i>
Choose committee members & have approved by PhD Program Director
TA #2
Usability skills requirement completed by now
Propose (often spring of fourth year, depending on area, etc.)
Sign and submit ABD form to Program Manager
Apply for external funding (grants/fellowships) by now

TYPICAL STEPS - The Final Stretch!

<i>The Final Stretch!</i>
Finish oral and written dissertation (including required forms)

Degree Completion:

The PhD is granted when all the above requirements are satisfied. The average time to degree completion for the HCI PhD is 4th/5th year. However, longer-than-standard degree completion may occur due to academic interruptions in making progress toward the degree as defined by the academic program, interruptions of full-time study or progress towards the degree due to serious, documented medical

issues, or other unusual or unforeseen circumstances. In these scenarios it is helpful to keep in mind that a doctoral student has 10 years from their original matriculation to complete the PhD. Once this time-to-degree limit has lapsed, the person may resume work towards a doctoral degree only if newly admitted to a currently offered doctoral degree program under criteria determined by that program. Please refer to the [Doctoral Student Status Policy](#) with questions.

Immigration status for students in F-1 and J-1 non-immigrant status is tied to making normal progress toward completing degree requirements. Therefore, F-1 and J-1 students who are considering completing their degree requirements early or who are anticipating longer than standard completion should consult with their designated advisor in the Office of International Education (OIE) to ensure compliance with immigration regulations.

Under extraordinary circumstances, such as leave of absence, military or public service, family or parental leave, or temporary disability, a school or college may, upon the relevant department's recommendation and with the written approval of the dean, defer the lapse of All But Dissertation status for a period commensurate with the duration of that interruption. Students who are pursuing the Ph.D. degree as part-time students for all semesters of their program, as approved by their program, may also appeal to their program or department for extension of the time to degree limit.

In addition to the above requirements, students are expected to:

- Keep their contact information (addresses and phone numbers) up-to-date with the Ph.D. Program Manager, the HR Coordinator, and the Student Information System ("S3", via the HUB website, <https://www.cmu.edu/hub/>) This is important for several reasons, including the prompt delivery of tax information from CMU Payroll and in the event of an emergency.
- Report any awards, fellowship, or other funding to the HCII Business Manager and to the Ph.D. Program Manager as soon as the information becomes available. While graduate students are not required to take an external fellowship, SCS policy requires graduate students to disclose all external fellowships they are awarded.
- Notify the Ph.D. Program Manager about any internship or other reason for an extended absence.
- Discuss with the Ph.D. Program Director and Manager before engaging in any consulting (more on that later in this document).
- Talk with the Ph.D. Program Director and Manager about any plans for changing advisors, or even about the possibility of changing advisors.
- Meet with your Advisor(s) on a regular basis, as well as your other Committee members later on.
- Actively pursue research ideas and submit publications.

Doctoral Student Status

An HCI Ph.D. student is considered "All-But-Dissertation" (ABD) when they have completed all requirements for the HCI's Ph.D. degree except for the thesis defense (in particular, the student has had a thesis proposal accepted). Note that ABD status is different from ABD in absentia (ABS) status. A student in ABS status cannot receive any support from the university (including any research projects within the

university), cannot use most university facilities, and does not pay any tuition until they are ready to defend their thesis. ABS students must register for five (5) units of dissertation research in the semester they defend. The student can (and should) register for these five units only after they defend, just in case the defense date slips to the next semester. The Program Manager will work with the student to complete the All But Dissertation Status Agreement and submit it to the Registrar.

Leave of Absence

We encourage you to reflect carefully on the decision to take an LOA, to discuss the decision with their advisors and the PhD Team. A student in good standing may be granted a LOA of at most 1 year, upon written request to the Ph.D. Program Director and with consent of the student's advisor. It is the responsibility of the student on LOA to contact the HCI to initiate a return to the program. Students taking or returning from a leave of absence must follow the university's [Leave of Absence Process](#). We also encourage paying close attention to the add/drop deadline for semester length courses. This is typically the second week of courses. If the leave process is initiated and the form is dated before the proper deadline, the Registrar will honor the tuition adjustment policy.

7.3: Registration Process

The Ph.D. Program Manager will register all students for at least 24 units of Reading & Research (05997) as soon as registration opens for each semester. The remaining credits on a student's schedule should be dedicated to other course requirements and electives depending on their progress in the curriculum. The HCI PhD Department considers 48 credits to be full-time enrollment. If a student has completed all their coursework and is only conducting research, they should notify the Ph.D. Program Manager and request to be registered for 48 units of Reading & Research.

Students should consult with their faculty advisor prior to registering for courses. If there are questions or concerns regarding specific courses, the Ph.D. Program Director can provide guidance and should be also consulted prior to the registration deadline.

Students should register for their courses in SIO as soon as the Ph.D. student registration opens. It is the responsibility of the student to monitor their course registration and ensure they are registered for at least 48 units when the semester begins.

7.4: Required Units for Degree Attainment

Based on the guiding principles and strategies for the program, it uses a set of requirements which is fairly loosely structured, especially with respect to coursework. There are seven requirements for graduation: ***the traditional proposal and defense of a dissertation, a communications requirement, a teaching requirement, coursework, a usability skills requirement, and an external funding application requirement.*** As indicated above, there are no qualifying exams, nor is there a minor requirement.

The dissertation proposal and defense requirements, along with the written dissertation, are much like most other Ph.D. programs in the United States. The committee which judges these activities is required to be interdisciplinary and must contain at least one external member (***who either comes from within the University but outside the HCI, or more commonly from outside the University but within the field of HCI***).

The communications requirement is designed to ensure that students can communicate research results

effectively. This component reinforces our belief in “conducting research from day one.” Students are required in both their first and second years to present their work to an Institute-wide audience. The first opportunity is traditionally in August during the HCI PhD Orientation. For students who were pre-occupied with summer internships another round of talks is held in October.

To provide some training in the methods and skills of teaching, and to support the educational mission of the Institute, each student is also required to do two classes’ worth of teaching assistantship (TA) work. Students are generally encouraged to do TA work only after they have completed their course requirements.

Finally, there is an external funding application requirement. The mentored experience of writing grant and fellowship applications as a graduate student is viewed as a valuable part of their doctoral education. As such, doctoral students are required to apply for external funding no later than the end of the fourth year of their PhD program. There is no requirement on the amount of the external funding requested or that the proposal results in a successful award.

7.5: Core Courses

Course requirements are constructed very loosely in accordance with the strategy of individualized education. The PhD Department maintains a fluid, semi-comprehensive list of courses in each required category. This document evolves as students explore new courses in accordance with their research and collaboration with their advisors. Each student must take the equivalent of nine semester-long courses of 9 units or more each:

- The “HCI Process and Theory” course (taught in the first semester),
- four half-semester (or mini) courses covering in-depth background material (in cognitive and social psychology, CS, and design respectively),
- At least one full (9-unit or 12-unit) graduate-level course from each of the following categories: (1) Behavioral Science; (2) Computer Science & Engineering; and (3) Design, combined with three other courses in your chosen area(s) of concentration. One common option for this requirement is to complete a “4-1-1” plan: taking four courses in a primary area, one course in a secondary area, and one course in the third area (e.g., 4 CS courses, 1 design studio course, and 1 behavioral methods or theory course).
 - ***You may also propose a custom plan of study.*** One option here is to propose a 3-2-1 plan: taking three courses in one primary area, 2 courses in a second area, and 1 course in a third area (e.g., 3 design courses, 2 behavioral courses, and 1 CS course). Another option is to propose an area of concentration outside of the three areas defined above. In this case, you would still need to take at least one behavioral science, CS, and design course, but you may choose your other courses in a different area (e.g., taking 3 policy courses, 1 behavioral course, 1 CS course, and 1 design course). In addition to these specific course requirements, each student is required to meet a “usability skills”

requirement. This requirement is designed to ensure that all students have at least a basic knowledge of usability practice so that they could, for example, be called on to teach an introductory HCI course.

7.6: Electives

Electives can be chosen by students at their discretion. We encourage students to explore a variety of courses provided by CMU to enhance their experience outside of the Ph.D. program.

7.7: Department Policy on Double Counting Courses

Double counting courses are not generally accepted within the HCII Ph.D. program. However, an HCII PhD student can have their Masters in HCI certified upon completion of the Core Course Requirements. Please reach out to the PhD Program Manager to complete the Masters certification in S3. ***This is optional and purely an informal benchmark.***

7.8: Department Policy for Courses Outside the Department/College

Students have the option to take courses at other institutions. Approval by the Ph.D. Program Director for course credit must be received in advance of registering. The CMU process is here: <https://www.cmu.edu/hub/registrar/registration/cross/incoming.html>

To take a course at The University of Pittsburgh, students need to complete and submit the PCHE cross-registration form. The form is first approved by the home institution (Carnegie Mellon University) and approved by the host Institution (ex. University of Pittsburgh) secondarily. Students will be notified when a PCHE course has been added to their course schedule for the semester.

All approved PCHE students are registered for courses by the CMU Registrar's Office. You may not register for courses on your own. When you log into Student Information Online (SIO) to view your course schedule, you will see a notice reading "There is a registration hold. In order to resolve the hold, please contact your advisor." This hold has been placed so that the Registrar's Office may register you independently, and there is no need to reach out regarding the message. You will still be registered for the approved course.

7.9: Course Exemptions

While not generally accepted, a request for course exemption should be submitted to the Ph.D. Program Director. Consultation with the students' faculty advisor is advised. A clearly stated email request or documentation of the request in the student's Plan of Study will satisfy submission parameters. Any student approved for a course exemption must replace it with another course to complete a full slate of nine CMU courses.

7.10: Protocol for Evaluation of Transfer Credit

Residency Requirement and Transfer Credits

All students are required to complete a minimum of 9 courses at CMU. As a result, transfer credits are not accepted. However, transfer credits may be used to waive course requirements with approval of the

Ph.D. Program Director.

Application Timing and Transfers

All new students to the program must begin in the fall semester. Consequently, applications for admission are only considered once a year – in the early spring semester. Historically, admission to the program has been extremely competitive, with many good students turned away each year due to resource limitations.

Students from other universities seeking to transfer into the HCII Ph.D. program should simply apply to the program in the normal manner. Like other applicants with varying levels of prior education (i.e., applicants applying with a Master's degree vs. directly from undergraduate work), students with some prior work towards a Ph.D. will be judged based on their record in comparison to their level of education and time of study.

Students wishing to transfer into the HCII Ph.D. program from another Ph.D. program in the School of Computer Science should also submit materials at the time of regular admissions. However, SCS transfer students may request that the admissions materials used for their original admission in their current department be reused, if that is appropriate. All SCS transfer applications will be considered by the admissions committee in the context of regular admissions.

Transfers will only be granted for students who are evaluated as being comparable to the other students admitted that year. All successful transfer students will begin their work in the HCII program the next fall (i.e., with the next entering class).

7.11: Teaching Requirements/Opportunities

The ability to teach is an important skill for all scientists, not only for those who plan to teach after completing their degrees. Teaching skills include the ability to communicate technical material ranging from elementary to advanced, and to communicate technical material to audiences ranging from general to specialized. Thus, we expect students to develop and exercise teaching skills as part of their graduate education.

Students must successfully complete two Teaching Assistantships (TAs). Successful completion is determined by the faculty member for whom the student serves as TA. Courses eligible to receive TAs are determined by the Faculty Curriculum Committee. The faculty member in charge of TA assignments will collaborate with the HCII Ph.D. Ombudsman to gather information regarding TA preferences among the students and faculty and will submit recommendations to the Ph.D. Program Director for approval.

This process attempts to be responsive to the department's needs, student preferences, and faculty requests.

When serving as a TA, a student will be registered for ***05982, Independent Teaching Experience, which is a 9.0 credit course.*** The faculty member of record for the course being TA'ed will assign a grade to the student. Students should confirm the expectations for the TAs with the faculty supervisor, to understand what they need to do to get a good grade. A grade is assigned to the TAs to make it clear that the faculty as a whole takes teaching seriously and that the student should take their teaching responsibilities seriously as well.

When deemed appropriate and approved by the Ph.D. Program Director and the student's advisor(s) in advance, a student can teach or co-teach a course. In these cases, a student may wish to receive FCEs (Faculty Course Evaluations) from the students taking their course. In order to do this, the Ph.D. student teaching the course must submit the university's "Consent to Evaluate and Release Results for the Faculty Course Evaluation" form. This can be obtained from and returned to the Ph.D. Program Manager, or the student can find it on the Faculty Course Evaluations [webpage](#).

Graduate students are required to have a certain level of fluency in English before they can instruct in Pennsylvania, as required by the English Fluency in Higher Education Act of 1990. Through this Act, all institutions of higher education in the state are required to evaluate and certify the English fluency of all institutional personnel, including teaching assistants and interns.

The fluency of all instructional personnel will be rated by Language Support in the Student Academic Success Center to determine at what level of responsibility the student can TA. In addition to administering the International Teaching Assistant (ITA) Test (a mandatory screening test for any non-native speaker of English), Language Support in the Student Academic Success Center helps teaching assistants who are non-native English speakers develop fluency and cultural understanding to teach successfully at Carnegie Mellon. Visit the Student Academic Success Center website for additional information.

If English was not the student's native-born mother-tongue, then as a nonnative English speaker, the student is required to take the International Teaching Assistant Test (regardless of citizenship or where the student received his/her previous degrees). This is required by Carnegie Mellon policy and Pennsylvania state law and must happen before a student can work as a teaching assistant.

This test evaluates whether a student has the robust academic fluency to communicate effectively in the U.S. classroom. More information can be found on the Intercultural Communication Center's (ICC) website (<http://www.cmu.edu/icc/>).

The Student Academic Success Center (SASC) is also charged with certifying the language of International Teaching Assistants (ITAs), ensuring that nonnative English speakers have the language proficiency needed to succeed as teaching assistants in the Carnegie Mellon classroom. Students preparing to do an ITA Certification should plan to meet with a member of the language support team from the beginning of their first semester.

You can start by completing the ITA Language Certification Application.

7.12: Research Requirements/Opportunities

Best Practice/Grading System

Ph.D. students divide their time between courses and research. Typically, the time spent on courses and research together is equivalent to a fulltime job.

Most students choose to complete their courses during the two years of the program, although that is not required. It is equally common sometimes to choose to spread their courses over three or more years to enable them to get a faster start on their research. This decision should be made in collaboration with their faculty advisor.

Students receive a grade for their research each semester during the Faculty Review Meeting. At this time the student is typically graded on a Satisfactory/Non-Satisfactory scale, in accordance with the language of an N-1 Letter.

Resources and Regulations Governing Research at Carnegie Mellon

Office of Sponsored Programs - <https://www.cmu.edu/osp/>

Office of Research Integrity & Compliance - <https://www.cmu.edu/research-compliance/index.html>. The Office of Research Integrity & Compliance (ORIC) is designed to support research at Carnegie Mellon University. The staff work with researchers to ensure research is conducted with integrity and in accordance with federal and Pennsylvania regulation. ORIC assists researchers with human subject research, conflicts of interest, responsible conduct of research, export controls, intellectual property rights and regulations, and institutional animal care & use. ORIC also consults on, advises about and handles allegations of research misconduct.

Intellectual Property Policy - The HCII adheres to the University's Intellectual Property Policy: <http://www.cmu.edu/policies/documents/IntellProp.html>

Policy on Restricted Research - <https://www.cmu.edu/policies/research/restricted-research.html>

Human Subjects in Research Policy - Any study that involves people requires approval in advance by the university-wide "Institutional Review Board" ("IRB approval"). This is very, very important and it is necessary in order to be in compliance with federal law (as well as ethical guidelines). Discussion of the details of IRB applications and the requirements for ethical human subjects research will be considered in the introductory HCI Process and Theory course (normally taken in a student's first semester). All human subjects work should be discussed with, and approved by, your advisor(s) or another faculty supervisor.

7.13: Internship/Co-op Requirements and Outside Opportunities

The Institute encourages students to gain experience in industry through research internships – most typically in the summer months during one or two years of their study. All internships need to serve an educational purpose and be approved in advance by the student's advisor(s). All students on internship must register for ***at least 5 units of 05888 Practicum in HCI*** to represent this educational component and, at the conclusion of that course, complete a very brief report describing internship activities and indicating educational relevance, that will be emailed to the PhD Program Manager, Bill Carney. ***Students are limited to four instances of practicum unless special permission is granted by the Ph.D. Program Director.*** Note that nothing in this requirement should be interpreted as requiring disclosure of any intellectual property or other matters sensitive to the host of the internship. Students not on internship during the summer will be registered full-time (48 credits) for Reading & Research. Tuition is not charged to student accounts during Summer.

Internships are typically scheduled during the summer. ***A student on summer internship cannot receive any support from the university (including any research projects within the university), cannot use***

university facilities, and does not pay any tuition until they have returned from internship in the Fall. They must register for five units of the 05-988 course (HCI Summer Internship). In certain cases, it is possible to schedule or extend an internship during the fall or spring semester; the details are complex, especially for international students due to visa restrictions, so the student should discuss this as early as possible with the Ph.D. Program Manager. For international students it will involve a new [CPT Form](#) and a letter from the internship supervisor verifying the relevance of the experience to their research. In the case of an internship extended into Fall or Spring the student can be registered for up to 8.0 units of said internship.

In the case of an internship extended beyond the summer term, CMU policy and advice by the Office of International Education is to keep those extensions to a minimum. In accordance with this, the HCII department requires the tuition cost of the minimum 5.0 credits of HCII Practicum, when extended into Fall/Spring, will be the responsibility of the student. In addition, students who are on internship the semester before they have agreed to TA a course, should discuss their return date with the course instructor, and should return before the next semester begins.

Outside of internships and leaves of absence (see below), students are normally expected to be in residence full time and work full time on their research and other program activities. In these circumstances, outside employment or consulting work can only be undertaken with the permission of the advisor and the program director. Requests to allow outside work will normally be granted only in cases where the work serves a specific educational purpose.

Students may also be required to limit approved outside employment in order to be in compliance with university and government rules.

International students are required to consult with the Office of International Education for eligibility before seeking an internship/co-op or signing an offer contract (required addition to ensure the university is in compliance with immigration laws for F & J status students). The Office of International Education requests that no Summer internships are extended into the following academic semester (Fall).

Finding a suitable internship is the student's responsibility. However, for most Ph.D. students, the Ph.D. advisor and the student's professional network developed from attending and talking to people at conferences will be of tremendous support in the search. The PhD Team also consistently shares internship opportunities as they arise.

SECTION 8: Dissertation Preparation & Requirements

8.1: PhD Qualifying Exam Requirement

There are no qualifying or preliminary exams and typically students are not allowed to do teaching work early. There are no qualifying exams, nor is there a minor requirement.

Continuous evaluation. The program has no preliminary, qualifying, or other traditional exams except

the dissertation proposal and defense. Instead, every student is evaluated by the full faculty each semester (in a day-long meeting). In addition to maintaining high standards, these evaluations are intended to provide regular feedback on progress and direction. This evaluation process provides guidance from multiple perspectives (beyond that of just the student's advisor(s)) and conversely allows our diverse faculty to compare notes, stay abreast of the activities of the full student body, and create more uniformity in an otherwise fairly unstructured curriculum.

8.2: PhD Criteria for Advancement to Candidacy

Until the curricular requirements are completed (e.g., core and elective courses, teaching, speaking & writing skills) and the thesis proposal is approved and all requirements are recorded as completed in DSR the status assigned is "student." Upon completion of the curricular requirements and approval of the thesis proposal the student transitions to "doctoral candidate," which is designated formally as having "*all but dissertation*" (ABD) status.

A doctoral candidate with ABD status may choose to continue as a regular student *In Residence*; alternatively, if the residency requirement above is fulfilled; they may choose to be *In Absentia (ABS)*. Most students continue *In Residence* until their defense.

In Absentia (ABS, i.e., off campus): Students who leave CMU but plan to continue working on the thesis will be classified as ABS. These students should not require substantial use of university resources, but are permitted use of the libraries and consultation with faculty or students as necessary. While the candidate is ABS, they are required to pay the university technology fee each semester. No formal enrollment or payment of tuition is required, with the exception of the academic semester in which the degree requirements are completed. A candidate who is ABS can return to campus to defend or defend remotely. For returning to campus, it is required to enroll for a minimum of five units during the academic semester in which the degree requirements are completed. For students defending remotely without returning to campus a Dissertation Completion Fee is charged at the beginning of the final semester. Charges for these units are the responsibility of the candidate.

Since an ABS candidate will not be certified by the University as a "student" for immigration purposes, students who are in the United States on a student visa and who become ABD should not choose to become ABS.

Students are advised to talk to the program administrator and their advisor to understand the implications of ABS status, including fees and immigration status, before making any decisions. For details on fees, see the [Doctoral Student Policy](#), especially section "In Absentia Student Status Including the Final Semester Fees."

8.3: PhD Dissertation

Dissertation Proposal

Reference the [HCLL Companion Guide](#) for specific instructions on how to proceed with proposing and defending. The dissertation or thesis proposal is a document that clearly specifies the problem being

addressed; the significance of this problem and expected scientific contributions; relevant other research, including competing approaches; the student's preliminary results; the specific work remaining to be done; evaluation metrics; and a projected timeline for completion. The student needs to show that the proposed research is original and interesting and is likely to succeed. The proposal typically occurs by the spring semester of the student's fourth year.

Fulfilling the requirement involves writing and orally presenting a proposal and obtaining advice and approval from the thesis committee. Students should meet with the committee members at least once to discuss their work before the proposal. Some students choose to go over their proposal talk with multiple committee members ahead of time. Whenever possible, we strongly recommend meeting with the full committee as a whole, to generate early discussion and expose any possible conflicting views early on.

A dissertation committee, formed in consultation with, and approved by, the advisor(s) will judge the acceptability of the proposal (and the final dissertation). Dissertation committees have at least four members including:

- the student's advisor(s),
- a total of at least three HCII faculty members (including the advisor(s)) coming from at least two clearly separable disciplinary specializations relevant to HCI, and
- at least one external member (who may be an expert coming from outside the university, or a non-HCII faculty member coming from inside the university).

Once a student has established a dissertation committee, they must fill out an HCII [*"Declaration of Committee"*](#) form (available from the Ph.D. Program Manager) and submit it to the Ph.D. Program Director for signature.

Note also that one purpose of the public thesis proposal is to protect the student, both in guaranteeing that their thesis is interesting to someone in addition to their advisor, and that if they successfully complete the work described in the proposal, they will indeed be finished. During the final thesis oral defense, the student will not be required to show that he or she has done everything that was proposed. It is quite common for the resulting dissertation to differ somewhat from the work originally proposed, as approved by the committee. In this sense, the proposal is an opportunity to present the student's best current ideas about the thesis research, and obtain some useful early feedback from experts in the research area. The proposal need not have answers to every question it raises, but it should bring up a good list of questions that will drive the research.

A list of the specific dissertation proposal procedures can be found in the [HCII Companion Guide](#).

Final Dissertation and Oral Defense

The Dissertation must describe a significant piece of original research work. It provides evidence of proficiency, high attainment, and ability to do independent research in HCI. The written dissertation document should include a detailed description of the work done, including a clear evaluation and a discussion of its scientific contributions. There are no fixed style or document length guidelines, or other

formatting requirements, except that the title page should be suitable to be issued as an HCII Technical Report, and the document should be recognizable as typical of high-quality written communication in the area.

The dissertation oral defense is a public presentation and defense of the dissertation results. The dissertation work, document, and defense will be assessed and approved by the dissertation committee.

A list of the specific final dissertation and graduation procedures can be found in the [HCII Companion Guide](#).

SECTION 9: Department Policies & Protocols

9.1: Petition Procedures

All petition requests should be submitted to the Ph.D. Program Manager.

9.2: Department Policy for Withdrawing from a Course

When withdrawing from a course is necessary, the student should confer with their faculty advisor and the Ph.D. Program Manager to complete a form. Once the form has been signed by the required parties, the Ph.D. Program Manager will submit it to the CMU Registrar's Office to be processed. Then students will be officially withdrawn from the course.

Add, drop, withdrawals, and pass/no pass election procedures and deadlines are described on the [HUB](#) web page. Note that the deadlines for doctoral courses may differ slightly; see the deadlines for doctoral course sections in the [Academic Calendar](#).

9.3: Process for Completing a Master's Degree en route to a PhD

M.S. in Human-Computer Interaction

A Ph.D. student in good standing in the HCI program who has completed all of the required coursework will be eligible to earn a Master's Degree (M.S.) in HCI (which is distinct from the M.H.C.I., which is the professional master's degree given by our HCI Master's Program). Eligible students may request the M.S., in writing, by emailing or submitting a letter to the Ph.D. Program Manager, who will review the student's coursework, and submit the request to the Ph.D. Program Director. If the Ph.D. Program Director approves, the Manager will certify the M.S.

9.4: New Policies / "Grandfather" Policy

Grandfather Policy and Time Limit

A student can graduate under the requirements and policies in effect at the time they entered the program or choose to change to the requirements of new curricula adopted at a later point.

After the presentation of an acceptable thesis proposal, and satisfying all other requirements except for the dissertation and its oral defense, students are regarded as "all but dissertation" (ABD). Students reaching ABD status should work with the Ph.D. Program Manager to ensure that relevant University paperwork is completed at that time. Once students achieve ABD status, their doctoral candidacy

continues, unless terminated earlier by conferral of the degree within ten years from initial enrollment, or by academic or administrative action.

9.5: Time Away from Academic Responsibilities

Ph.D. students that are supported by sponsored research, fellowships, or scholarships are expected to remain on campus and work full time on their education and research throughout the year, regardless of whether classes are in session or not. 40 hours per week is a common level of effort.

Ordinarily, students are not expected to work during official university holidays; however, students may need to consult their advisor about expectations and alternate arrangements if there are challenges with taking time off during a university holiday, for example, if an experiment requires continuous monitoring. In such situations, the student and their advisor may agree for the student to take an equal number of days off at another time.

Students with full time financial support are entitled to four weeks per year of paid vacation, which must be scheduled in consultation with their advisor.

See also the University expectation on time away:

<https://www.cmu.edu/leadership/the-provost/campus-comms/2022/2022-03-16.html>

Leaves of Absence

Students who wish to leave the program temporarily (outside of research internships) may request a leave of absence by submitting a request to the Ph.D. program director. If granted, leaves are initially extended for a period of no more than one year. However, an extension of up to one additional year may be granted under exceptional circumstances. When an extension is granted, the conditions for return must be negotiated with the advisor and approved by the Program Director prior to returning to the program. Students on leave of absence should contact the Ph.D. Program Director two months prior to the end of the leave to indicate their plans for the next year. Further extensions of leave will not be granted. Normally, a student must be in good standing in order to be granted a leave of absence.

Students on leave of absence must contact the Ph.D. Program Manager two months prior to the end of the leave to indicate their plans. While a leave can in principle start at any time, university regulations allow students to return only at the beginning of a semester (usually late August or January). A student on Leave is limited in their access to CMU resources so be sure to review the Leave of Absence [practices](#) thoroughly.

9.6: Other Policies and Protocols / Inclusion of Any Variations to University Policies and Protocols

University Policies and Expectations

It is the responsibility of each member of the Carnegie Mellon community to be familiar with university policies and guidelines. In addition to this departmental graduate student handbook the following resources are available to assist you in understanding community expectations:

The Word/Student Handbook	www.cmu.edu/student-affairs/theword//index.html
Academic Integrity Policy	https://www.cmu.edu/policies/student-and-student-life/academic-integrity.html
University Policies Website	www.cmu.edu/policies/
Office of Graduate and Postdoc Affairs	https://www.cmu.edu/graduate/

Please see [Appendix A](#) for additional information about The Word and University resources.

Additional Policies

Policy Context: SCS & University Policies Apply

This document is intended to be used in conjunction with the Carnegie Mellon Graduate Student Guidebook which may be referred to for university policies, regulations and community standards. All HCII policies not explicitly described in this document conform to School of Computer Science (SCS), and/or university policies as defined at the official University Policies website (including policies on cheating and graduate academic disciplinary actions) and/or in the Graduate Student Guidebook.

Academic Calendar

The Academic Calendar can be found at <https://www.cmu.edu/hub/calendar/index.html> and provides information on all deadlines including registration dates, class start dates, add/drop deadlines, exam dates and more.

SECTION 10: Grading & Evaluation

10.1: Grading Scale/System

Grading system for research:

A course must be taken for a letter grade whenever possible. If a course is only offered as pass/fail or satisfactory, the grade will be accepted and factored into the student's QPA in compliance with the university's grading policies, detailed at <http://www.cmu.edu/policies/>.

Graduate classes are subject to +/- grades, and all grades will be factored into the student's QPA accordingly. The minimum acceptable grade on courses is a B-. If a grade of C+ or lower is earned for a course, the student must retake or replace the course and achieve a B- or better. All students must maintain a GPA of 3.0 or above to remain in good standing in the program. (Some Fellowships may require a higher than 3.0 QPA.)

All courses offered by HCII are graded on the 4.3 Graduate Student Grading Standard described in full at <http://www.cmu.edu/policies/documents/Grades.html>.

10.2: Department Policy on Grades for Retaking a Course

If a grade of C+ or lower is earned for a course, the student must retake or replace the course and achieve

a B- or better.

10.3: Department Policy on Pass/Fail, Satisfactory/Unsatisfactory

Pass/Fail is permitted for a required course if previously discussed with the faculty advisor and approved by the PhD Team.

10.4: Department Policy for Incompletes

Course instructors have the option of awarding a grade of Incomplete if there are extenuating circumstances and it is likely that the student can complete all remaining work soon after the course concludes. The HCI does not prevent Ph.D. students from receiving grades of Incomplete.

Whether it is through a prior arrangement with the course instructor to complete missing coursework or if the student can demonstrate that the Incomplete was improperly received, a [Grade Change Form](#) will need to be completed.

10.5 Department Opportunities for Student Roles

Throughout the semester students have many opportunities to collaborate with their peers outside of research and the classroom. The students are encouraged to participate in Open House & Orientation to foster connections with the incoming students. The students have initiated a Peer Mentor Program that creates a more formal relationship dynamic between new students and their peers who are further along in their studies. Allowing them to act as guides and resources.

10.6: Independent Study/Directed Research

We are committed to the principle that students may achieve competence through a variety of methods, including courses, seminars, projects, and independent study. We consider each student's individual strengths, weaknesses, and interests in designing the best method for the student to fulfill these requirements.

A Ph.D. student is permitted to do an Independent Study, but Independent Study courses usually do not count toward satisfying Ph.D. requirements. **A student that wants to do an Independent Study course must do the following prior to the start of the semester.**

- Locate an SCS faculty member willing to supervise the work and provide a grade.
- Write a brief document that describes the topic, the work to be done, and monthly milestones.
- Agree with the independent study advisor on a written rubric for the final grade.
- Obtain approval from the Ph.D. Program Director.

Independent studies can be done at any point in a Ph.D. student's academic career. Often they are done in Years 3-5 to broaden a student's experience at a time when the majority of their work is focused on a thesis topic. Often, the goal is to do research that will produce a conference paper or broaden the student's professional network. It requires the completion of the [Independent Study Form](#). If a PhD student is the one conducting the study they need the signature of the Program Manager. If a PhD student is supervising the Independent Study of an undergraduate or Masters student they need the approval of their Faculty Advisor.

10.7: Satisfactory Academic Standing

If a student does not make satisfactory progress each semester toward completing the degree, the HClI may remove them from the program. Students may appeal any/all of these decisions; see the Summary of [Graduate Student Appeal and Grievances Procedures](#) for more information.

10.8: Regular Reviews and Evaluations by Department

The HClI reviews each Ph.D. student at the end of the Fall and Spring semesters. A student may also be reviewed at the end of the Summer semester if they appear to be struggling.

Near the end of the semester, the student must prepare a statement that describes his or her achievements in the current semester and plans for the next semester. At the end of the semester, the faculty evaluates each student's academic progress. The student's advisor serves as the student's advocate in this process. The result of the evaluation is a letter from the faculty to the student that indicates whether the student is making satisfactory progress towards completing the degree.

A good letter typically indicates that the student is making satisfactory progress. If the student is doing exceptionally good work, a stronger adjective such as “excellent” might be used, but this is unusual.

If a student seems to be having trouble, the faculty determines whether it believes the student can finish the degree, and if so, what needs to be accomplished to get back on track. This type of letter should be considered a serious warning. It is not a permanent “black mark” on the student's record; if the student begins making satisfactory progress again, there is no official record of the letter in the student's transcript.

In the most serious cases, the faculty gives the student an “N-1” letter that specifies a list of conditions that the student must satisfy by specific deadlines. Failure to meet all the specified conditions may result in the student’s termination from the program.

10.9 Review/Redress of Academic Conflicts

Final grades are changed only in exceptional circumstances and only with the approval of the instructor and the department, unit, or program.

Grading is a matter of sound discretion of the instructor, and final grades are rarely changed without the consent of the instructor who assigned the grade. The following circumstances are the unusual exceptions that may warrant a grade appeal: (a) the final grade assigned for a course is based on manifest error (e.g., a clear error such as arithmetic error in computing a grade or failure to grade one of the answers on an exam), or (b) the faculty or staff member who assigned the grade did so in violation of a university policy.

SECTION 11: Funding & Financial Support

11.1: Statement of Department Financial Support

Financial Support

The Institute endeavors to provide financial support for all students in the program so long as they

remain in good standing. Financial support is not tied to a particular advisor and support for students in good standing will be provided when students change advisors or are between advisors for limited periods.

However, in nearly all cases funds for student support are provided from the research projects they work on (including the advisor(s) research grants), and they are expected to contribute to those research projects appropriately. Also, because of the central educational role of the advisor, students cannot remain in good standing indefinitely without an advisor.

We encourage students to seek their own external funding since often the award is prestigious (e.g., NSF or Hertz) or the source provides an opportunity to make professional connections (e.g., an industrial fellowship). The Institute (typically the advisor) supplements the stipends of students with an outside fellowship to meet (and usually exceed) the stipends of students with internal funding. The Institute also provides a supplemental dependent allowance for any student whose spouse or qualifying domestic partner earns less than \$200 per month.

11.2: Stipend

The HCII PhD Department provides all PhD students with a stipend currently set at \$3,575 per month. This is subject to change per CMU policy. The stipend is paid out through CMU Workday in a bi-monthly payout. Students will coordinate the set up and documentation with the HCII PhD Business Office personnel. You can find the payroll calendar at <https://www.cmu.edu/hr/service-center/payroll/payroll-calendars.html>

11.3: Health Insurance Requirement

Carnegie Mellon has a Student Health Insurance policy requiring full-time, degree seeking students to carry adequate medical insurance. Students must either purchase the plan offered by the University or an application for a waiver can be made if the student is “enrolled as the dependent, partner/spouse or principal in an employer or government-sponsored insurance plan.” (See the Carnegie Mellon University [Student Health Insurance Policy](#) (SHIP)).

It is the responsibility of each student to make arrangements with Student Health Services to either pay for their insurance at the beginning of the semester or elect a payment plan over the course of the academic year. More information is available at the [Student Health Services Website](#).

11.4 Department Fees

The semesterly Technology, Transportation, and Student Activities Fees are the responsibility of the PhD student to pay. This can be done by logging into the student’s SIO page.

11.5: Travel/Conference Research Funding

Business and Travel Expense Reimbursements

Expenses necessary for your work on research are paid either directly by your advisor’s admin in advance or they can be paid by you personally and then reimbursed afterward. Prior to spending any

money, please get approval from your advisor and the name (or Oracle string) of the award they want to use to cover the expenses.

You should discuss the purchases with your advisor's admin prior to incurring any charges, to understand what they can pay for directly on your behalf, what will need to be reimbursed, and what documentation you will need to provide. Always talk to your admin before starting a study involving payments to participants. The admin will need to know who attended (you!, most likely), what you did, when you did it, where it happened, and why you went.

Specifically for expenses related to workshops/conferences, you will need to provide a copy of the event agenda (program on the web will suffice). For study-related expenses, you will need to provide a copy of the IRB approval letter.

11.6: Additional Sources of Internal & External Financial Support

We encourage students to seek their own external funding since often the award is prestigious (e.g., NSF or Hertz) or the source provides an opportunity to make professional connections (e.g., an industrial fellowship).

if a student receives an external fellowship/scholarship they must notify Ryan Ries in the HCII PhD Business Office.

11.7: Department Policy on Outside Employment

International students must contact the Office of International Education regarding their ability to hold employment. Working (i.e., doing anything for pay) either within or externally to the university, beyond your responsibilities as a teaching assistant or research assistant, is a privilege, not a right. Work is permitted under exceptional circumstances, and with the written approval of the student's advisor (or with the written approval of all advisors, in case of multiple advisors) and of the Human Computer Interaction Program Director, the following is permissible:

- Outside consulting will be limited in time, and should consist of no more than 8 (eight) hours of consulting per week.
- The purpose of the consulting must be closely related to the research area of the student and be clearly aligned with the student's thesis goals.
- The consulting project must be self-contained. In particular, it cannot use any Carnegie Mellon University intellectual property.
- Likewise, the project cannot make any use of university facilities (e.g., buildings), or equipment (e.g., laptops, or computing resources, including networking and email).
- Approval from the advisor(s) and the program director must be renewed every semester.

Students are responsible for understanding the tax implications and are encouraged to consult with a tax advisor if needed. International students should consult with OIE, as outside employment is usually

forbidden. Students who are not on a leave of absence must abide by all Carnegie Mellon rules and policies while performing these activities, including, but not limited to, rules governing potential conflicts of interest and ownership of intellectual property. We require that students limit employment to follow university and government rules, but the more important principle is maintaining adequate focus and creative energy for the research that is at the core of the Ph.D. degree.

11.8: Procedure for Written Notification of Change in Financial Support

The HCII does not have a formal procedure for written notification of change in financial support. Instead, it has a set of common practices that are applied and adapted as necessary to fit each individual situation.

Generally, the HCII provides stable financial support through sponsored research funding to Ph.D. students that are making good academic progress. The semi-annual student evaluation provides written feedback to students about their academic progress to help students correct problems. If there is uncertainty or risk related to a student's funding, these written reviews usually discuss it clearly. Common practice is to give the student a semester of warning if there is substantial risk of a significant change in financial support.

If a research sponsor terminates research funding suddenly, the department usually helps the student find new funding and/or provides brief interim funding until a new funding source is in place. If a student does not meet obligations to a sponsored research project, the sponsored research funding may be withdrawn. Usually, the student receives substantial prior written warning, for example, through semi-annual student evaluations (Section 9.6). If the student is in good standing, the department usually instructs the student to find a new source of funding, for example, from a sponsored research project more compatible with the student's interests and skills. The department may also provide brief interim funding until a new funding source is in place.

If a student loses funding, Carnegie Mellon's Office of Graduate and Postdoctoral Affairs provides information about student emergency support funding, national and international fellowships and scholarships, and other information about alternate funding sources (<https://www.cmu.edu/graduate/funding/>). Students also may want to see the Lost Funding Section (5.8. p. 21) in the [University-Wide Graduate Student Handbook](#) for more information

SECTION 12: Additional Departmental Information

Program of Study

Students seeking guidance about their program of study and degree requirements should consult with their Program Manager and/or Program Director.

ADDITIONAL REQUIREMENTS

Student Concerns & Grievances

The HCI Institute prides itself on its sense of community, and historically our community culture has been one of welcoming feedback and actively responding to it. Students are encouraged to raise any concerns

early by speaking with their advisor(s) and/or the program director. In addition, there are University-level policies and mechanisms for addressing concerns, appeals and grievances.

Orientation

The HCI Ph.D. program provides a week-long orientation for all new students in the week prior to the beginning of fall classes. Although not a degree requirement per se, all incoming HCI Ph.D. students are very strongly encouraged to attend this orientation. It is at this time that students are introduced to PhD Dept personnel, helpful resources, and second and third year students will present their Comm Talks.

Community and Citizenship

Our sense of community is well-known as a distinguishing aspect of the HCI Institute and the School of Computer Science at Carnegie Mellon. It is one of the reasons many students choose to come here. The Institute is proud of our strong community spirit, which we foster through close working relationships between students and advisors, among faculty, and among students. Many working relationships turn into friendships for life.

Our community works. People volunteer their time, energy, intellect, talent, and other skills to do many of the things that keep our environment running smoothly. These efforts include organizing academic activities, serving on departmental committees, planning and running social activities, giving tours, hosting visitors, and a number of other tasks. Students are expected as a normal course of their studies to contribute to this community in appropriate ways. Some of the many ways to contribute include:

Attending Seminars

The Human-Computer Interaction Institute sponsors seminars by leading researchers from within and outside Carnegie Mellon, which are attended by faculty, staff and graduate students. While not strictly a requirement, students are strongly encouraged to attend these talks, and meet and interact with visiting scholars. This is extremely important, both to get a sense of the academic projects that are pursued outside of Carnegie Mellon and to get to know the leaders of such projects. That applies not only to seminars directly relevant to a student's research interests; the seminars provide an opportunity to widen one's perspective on the field. There are also a wide variety of relevant and interesting seminars outside the HCII (in other departments in SCS and elsewhere in the university) that students should consider attending.

Mentoring and Assistance

There will be many opportunities for students to play a mentorship/assistance role to both students in their year or below, and even above their year, as well as faculty and staff. This occurs in classes through asking questions and contributing to group discussions. It occurs from having some particular expertise that others can leverage (e.g., visual design), or general expertise in HCI (being able to comment on a practice talk, reading a colleague's paper) that can be leveraged. Students should make themselves available for opportunities such as these and provide assistance wherever possible. Just as students come to other students for assistance, students should also call on faculty, to best leverage the incredible resources we have in the HCII. This of course works both ways: not only should students provide assistance when requested, but if a student identifies a piece of research or paper that could be

of use to another member of the department, he/she should pass it on to that person. In order to do so, students should be roughly familiar with the research interests and goals of other students and faculty in the department.

In addition to academic support, students and faculty should also be available for moral support. We expect the very best of our students and faculty, and, at times, this can be overwhelming and stressful. Being able to listen to others about issues they have is an important part of providing mentorship and assistance.

Volunteering

Occasionally, there are times when the department/school/university requests your assistance with activities. Students are asked to volunteer/step up to take on these volunteer tasks, when they are able to. In particular, we rely on our students to help us organize an exciting, attractive, and successful recruiting program for incoming doctoral students. You remember best what worked to attract you, and you are our best advertisement for the department – we will be looking to you to take leadership positions in the organization and implementation of the doctoral student visits.

Similarly, if students identify an issue with courses, the program, the department, etc., they should notify the appropriate person to appropriately address it. Being a good citizen definitely includes looking for ways to improve it, providing constructive criticism, and, in general, keeping it healthy.

Carnegie Mellon University offers a (several day long) orientation for all new graduate students, held two weeks before fall classes begin. Certain parts of the university-wide Graduate Student Orientation are specifically geared towards international students and international students are required by the Office of International Education (OIE) to attend this orientation.

Communication Requirements

In each of their first two years, students are expected to give an oral presentation of their work to the Institute. Presentations are normally done at the end of each academic year (during August's PhD Orientation, the week prior to the start of Fall semester classes), but may be scheduled at other times (typically during the first month of the fall semester) due to special circumstances. This sometimes happens, for example, when a student has a personal emergency or is still away on a summer internship past the August presentation date.

The presentation content should be appropriate for our multidisciplinary institute. This means that the talk should be understandable to a diverse audience, including researchers who may not be well-versed in the technical, methodological, or theoretical aspects of your work. A conference talk designed for a highly specialized audience that includes disciplinary jargon and assumptions of prior knowledge of a specific area of research, for example, would likely not be appropriate for this presentation.

The talk may present research at any stage of development (including work in progress) but, preferably, should present work the student is doing as part of their PhD or as part of an internship or practicum experience conducted while enrolled in the PhD program.

Talks are expected to be delivered in person (with exceptions for remote presentation granted based on a case-by-case evaluation). The expected length of the talk is 15 minutes with 10 minutes for audience questions.

Under the current policy, talks are rated along five dimensions, each using a 7-point Likert Scale:

Criterion 1: Mechanics of Communication

- Was the speaker present and prepared to begin on time?
- Was the speaker familiar with the A/V equipment?
- Did the speaker appear well prepared (e.g., no typos, slides in order, presentation timed correctly, etc.)?
- Were the slides easy to read and follow?
- Was the talk audible from every seat in the room?
- Did the speaker exhibit clear enunciation?

Criterion 2: The “Why”

- Did the talk have a distinct introductory section?
- Did this section make it clear what the talk would be about?
- Did this section provide adequate motivation for the work, explaining its goals and why they are important (e.g., from the perspective of intellectual merit or societal impact)?
- Did this section provide sufficient discussion of how the work builds on or extends current theories, methods, or approaches in HCI?
- Did the introduction make the audience curious about the promised content?

Criterion 3: The “How”

- Did this section explain crucial aspects of the methods (participants, procedures, technical details etc.) clearly and correctly?
- Did the speaker avoid jargon and explain all crucial concepts clearly for a general audience?
- Did the speaker effectively communicate the methods of their research in a way that conveyed the work was executed well?
- Did the speaker effectively communicate why their chosen method was suitable for the expressed goals of the research?
- Did the speaker effectively communicate why their approach to evaluation fit the expressed goals of the research?

Criterion 4: The “What’s Next”

- Did the talk have a distinct concluding section?

- Did this section summarize the important ideas, results, and implications?
- Was it clear what the audience should take away from the talk?
- Did the speaker reiterate the significance of the contributions (e.g., the practical and/or theoretical significance of the work)?
- Did the speaker mention applications and directions for future work?

Criterion 5: Audience Interaction

- Did the speaker anticipate problems that a general audience might have (i.e., "At this point, you might think that X, but actually...", "The real point of that last example was...", "This is a complex concept, but I'll walk you through it...")?
- Did the speaker strive to understand audience questions (e.g., by repeating or paraphrasing questions that were unclear)?
- Did the speaker answer questions adequately and professionally?

Students must earn an average overall score of at least 5.5/7 from faculty evaluators on at least one talk in order to be considered to have passed the communication skills requirement.

Usability Skills Requirement

The intent of this requirement is for the student to demonstrate that they possess basic usability skills (which would, for example, enable the student to teach an Introductory HCI course). Opportunities to pass the usability requirement are:

- TA for the User-Centered Research and Evaluation course (05410/05610); the Programming Interactive Experiences course (05635); or the Software Structures for User Interfaces course (05431/631)
- Take (and receive at least a B- in) the User-Centered Research and Evaluation course (05610)

If a student serves as a TA for the User-Centered Research and Evaluation course, they will also receive credit toward one of their two required TA positions. Students should note that while serving as a TA for the User-Centered Research and Evaluation course can be incredibly rewarding, it is also more time-consuming than most other available TA positions.

Purchases Directly by Admins (preferred when possible)

Admins can use their respective purchasing cards to pay for many research related expenses such as: conference registration, office supplies, computing supplies, transcription services, prototyping materials, gift cards for study participants, and more. If you aren't sure, admins are here and happy to help, just send them an email or stop by their desk and they can let you know how they can best assist you.

Reimbursements

Please submit all requests for reimbursement within 30 days of the business or travel expense. The IRS states that any receipts that are processed for reimbursement 90 days past the payment/purchase

date are considered taxable to your reimbursement.

You must submit ORIGINAL/ITEMIZED receipts:

- In general, we always need the itemized receipt and charge receipt for expenses, including meals. Some advisors prefer to cover meals while traveling through per diem, rates are set by the U.S. General Services Administration (<https://www.gsa.gov/travel/plan-book/per-diem-rates>). Please confirm with your advisor before traveling what they prefer. We recommend keeping all your receipts and turning them in just to be safe.
- Expenses like airfare and lodging for a conference can be reimbursed when the expenses are incurred, before the travel happens, with a conference registration confirmation. Many hotels default to payment after your stay - your admin can help you book the hotel so that payment is made in advance.
- All charge receipts must include your name and method of payment. Please note that any receipts that do not possess this information MUST be accompanied by a copy of your credit card statement showing the charge amount. Please redact sensitive information (i.e., account information).