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ROADMAP

Ph.D.

A Ph.D. DEGREE GUIDE
FOR INFORMATION SCIENCES
AND TECHNOLOGY STUDENTS

PENNSTATE

COLLEGE OF INFORMATION
SCIENCES AND TECHNOLOGY

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Graduate Programs – An Introduction by the Associate Dean

Welcome to the College of IST. Congratulations – you have arrived at IST – a new kind of College that specializes in interdisciplinary understanding of Technology, Information, People, and Society - T.I.P.S - in diverse applications.

Philosophy. Thomas Jefferson once wrote that *information is the currency of democracy.* Daily struggles and challenges that we experience attest to the power of information both individually and collectively in all that we do and think. Without access to timely information, we are doomed. Harnessing information to cultivate freedom and change, making better decisions, and fostering creativity provides the basis of why it is important for a community of interdisciplinary scholars to study information within the crucible of technology, people, and social context. At this point in history the acceleration of information in different forms through different venues is creating vast research opportunities that define the information age. Information may be sought, consumed, processed, and retrieved via intelligent systems designed to support human quests. Information hence is the lifeblood that makes the world go round and with the advent of intelligent systems and communication technologies users can be supported through unique measures. The College of IST strives to produce scholarly insights in leading edge research that facilitates discovery, capture, retrieval, security, privacy, and connectivity of various forms of information as related to human and global challenge problems. As one of the top I-Schools, it is our purpose to be *relevant* in a) understanding interdisciplinary science and the nature of information, b) putting information science knowledge to use in building humanized technologies, and c) assessing how the social / organizational context of use influences and sustains information growth. Together these qualities specify a wholistic approach and reinforce the ideal that a scholar needs to be able to see and evaluate a situation from multiple perspectives, utilize multiple methodological approaches, in order to obtain transformation science that makes a difference in people's lives.

Breadth. The Latin word, *informare* reflects the idea of the mind-in-formation. Hence information as derived refers to people interacting with the world to represent, share, communicate, connote and interpret meaningful occurrences or circumstances; that consequently shape learning and action in their world. Information connects people with the culture they exist in and beyond, and comes forth in a variety of forms and media, while informatics looks at computational tools and technology to support human endeavors for a given milieu. Taken together, research in the information sciences and technology covers a broad spectrum of human activities that utilize information vis-à-vis innovative technological means. However, that is not the whole story. Research looks at the reciprocal relationships among information-people, people-technology, information-technology in order to afford inter-and transdisciplinary understanding.

Vision. The vision of our programs places a great emphasis on research within information sciences that is:

- relevant
- cutting edge
- culturally current
- socially responsible
- scientifically grounded

Destination – a place to go to that has specific appeal, a sense of unique identity and place, and is known both far and wide. IST may be your destination if you are seeking relevance in exploring cutting edge, culturally current research, and obtaining significance in solving interdisciplinary, complex problems that matter to society and the world. Part of getting to a given destination is to embark on a journey to arrive at where you want to be. Part of the journey IST affords is that of *embracing innovation for the next generation.* Cutting edge science involves discovering how information sciences and technology can

creatively serve people in ways they could not previously imagine. Our future is intimately defined by transformation science that allows human kind to create new tools that solve complex problems.

Graduate School Training. IST graduate research training entwines and integrates insight, knowledge, skills, and methodologies to generate incisive scholarship and sound research practices. Students will encounter intellectual diversity in a variety of ways emphasizing rigor as well as creativity. We believe that research practice requires breadth and in-depth experience utilizing the interdisciplinary fundaments of multiple perspectives, approaching complex problems through different channels while using appropriate tools. Many problems, solutions, and methods presented to students involve teamwork that: explores contemporary theory and issues, engages analytical and inductive thinking, designs and creates innovative systems, and tests /evaluates information use as related to socio-technical, economic, and global factors.

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About the College of Information Sciences and Technology

Vision: The Penn State College of Information Sciences and Technology is a premier information school (i-school), both in the US and internationally. Our academic enterprise is noted for excellence in learning, scholarship, and innovation. We produce graduates who are innovators by profession. We achieve this through partnerships for excellence. We are a new breed of College, founded on and organized for the achievement of outstanding outcomes in all that we do.

Mission: Through teaching, research, and service activities, our faculty and students seek to change the world with inspired socio-technical solutions. In so doing, we empower people, organizations and communities to make effective and humane decisions. Through this work, we not only help ourselves and others to better understand the information age, we also become thought leaders who affect the course of development of the digital, global society.

Founded in 1999, the College of Information Sciences and Technology (IST) is Penn State's visionary response to the rapidly growing need across many fields of study for leadership in information sciences and related technologies.

We are a community of scholars and practitioners comprised of faculty, students, and partners from industry, government and other academic institutions. We value collaboration and interdisciplinary thinking. Our collaborative efforts, in both education and research, are producing advances in technology and our understanding of the way IT shapes our lives.

IST offers interdisciplinary programs at both the graduate and undergraduate levels, with courses designed to provide students with a broad knowledge base and the skills needed to address complex problems through technology.

To shape the leaders of our digital society, we have engaged a diverse community of renowned faculty who are thought leaders in a wide range of fields that include computer science, sociology, engineering, psychology, education, chemistry, artificial intelligence, and more. By synthesizing their varied expertise, they work together to inform and guide development of the diverse and expanding field that is information sciences and technology.

Research in IST impacts nearly every aspect of people's lives: education, work, entertainment, health, safety, and national security. We fuel our research through dynamic partnerships with corporations, government, and other learning institutions. These partners provide important connections for the exchange of data and information, the creation of new knowledge, opportunities for internships, and funding to support initiatives by IST faculty members and graduate students.

The physical and symbolic center of our college is the state-of-the-art IST Building on Penn State's University Park campus, a place that brings academics and professionals together on common ground for learning, research, and collaboration.

I. Faculty Advisor and Annual Review

Each IST Ph.D. student is assigned a member of the IST Graduate Faculty to serve as his or her faculty advisor. The role of the faculty advisor, process used to make initial assignments of faculty advisors to students entering the Ph.D. program, and explanation of the annual review are all described below.

A. Role of Faculty Advisor

The faculty advisor provides advice and mentoring to the Ph.D. student (advisee) on issues related to research and academics. During the first year of a student's Ph.D. study, the advisor helps the student to identify potential research topics and to begin the reading and synthesis of related literature; as appropriate the advisor also guides the student toward specific research projects and outcomes, either individually or as part of a larger ongoing research team. The advisor also provides feedback to the student about research ideas, research progress, and research outcomes. The advisor helps the student regarding his or her academic studies; after the student passes the candidacy examination (see page 7) the advisor helps in formation of the student's doctoral committee and in the preparation of the dissertation proposal. In general the faculty advisor helps the student become familiar with the program and its requirements. Finally, the advisor assists and advises the student on career planning.

B. Advisor Matching Process for Newly Admitted Students

The IST Graduate Programs Office coordinates the assignment process for new students, working with the students and faculty members to ensure a good match. In some cases, new students have already been in contact with their preferred advisors (e.g., through email or as part of the recruiting and decision process). In other cases, the office assists students in scheduling face-to-face meetings with faculty members whose research interests seem to match their own. While these meetings will take place between August and September, students are encouraged to interact with faculty members of interest using e-mail/phone conversations during the summer. New students should arrive on campus before mid-August so these face-to-face meetings can be conducted before the start of the fall semester.

Based on the preferences of new students, the availability of preferred faculty advisors and funding, advisors are assigned by filling out a Student-Advisor Agreement Form (p. 18). New students are expected to begin their work with their advisor by mid-September.

C. Annual Review

An annual review will be conducted each April to evaluate the progress of Ph.D. students in their graduate studies. As a part of the review process, each Ph.D. student completes an Annual Activity Report (p. 25) and updates his/her curriculum vitae (CV). Then, each student meets with his/her advisor to discuss coursework completed or to be taken, research progress, related issues, and to plan for the following year. After this meeting, the advisor completes an additional summary form (p. 26) to provide more elaborate qualitative comments as relevant. These forms are submitted with the student's CV to the IST Graduate Programs Office.

In the event that a student's progress is viewed unsatisfactory by the faculty advisor, steps are taken to understand the nature of the problems and to develop a plan for addressing these issues. On some occasions, an advisor change will be recommended; in other cases, the student may be required to complete specific tasks on a stated timeline. In yet other situations, the student may be counseled to transfer to the Master's program rather than continue on with Ph.D. studies.

II. General Assistantship Policies

A. Assistantships

Assistantships for Ph.D. students fall into two categories: Research Assistantship (RA) and Teaching Assistantship (TA). Research assistantships are provided by a student's faculty advisor (or by another faculty member who has extra funds available), while teaching assistantships are provided by the college.

Assistantship appointments in IST are generally on a half-time basis requiring service of approximately 20 hours per week. Students with half-time appointments receive tuition to cover the mandatory course load of 9 to 12 credits per semester. Most appointments automatically end at the conclusion of each semester, if not before, and appointments carry no guarantee of renewal. Both research and teaching assistantships are contingent on satisfactory performance of assigned duties. Students may lose funding in the event that they fail to meet the responsibilities of the position.

1. Research Assistantships

An RA's supervisor is most often the student's faculty advisor, and will, to some degree, dictate the supporting course work and other aspects of the research assistant's preparation needed to fulfill the assistantship responsibilities. When the two roles are performed by the same faculty member, supervision of research assistant duties and progress towards completion of the doctoral thesis are difficult to separate. The combination of the research appointment and the registration for thesis credits must represent a realistic workload, particularly when the research assistant is still pursuing supporting course work.

RAs may be expected to do any of the following: design and implement software; design and conduct experiments involving human subjects, including applications for Institutional Review Board (IRB) approval; collect and process data; search for materials at the University Libraries or perform Web research; interact with sponsors and vendors; prepare reports and related presentation materials; attend meetings and seminars; participate in writing manuscripts for conference and journal submissions; participate in preparing presentations for conferences; and assist in preparing research funding proposals as directed.

The RA's supervisor will clarify the specific work needed for a given research assistantship position, regularly oversee the work, and evaluate the work, dependability, and readiness of the RA to move to higher levels of responsibility such as taking the lead on data analysis, helping to supervise undergraduate research assistants, crafting of manuscripts, and making presentations.

2. Teaching Assistantships

A TA is assigned to support one or more specific courses for a particular semester, not to support a faculty member. In other words, if a faculty member other than the student's advisor teaches a course to which a TA is assigned, the student is supervised in his/her teaching-related responsibilities by this other faculty member. We will refer to the faculty member who teaches the course section(s) to which a TA is assigned as the TA's supervisor.

TA's should meet with their supervisors prior to the start of the semester, as well as during the semester. Once assignments have been announced, TAs should contact their supervisors to let them know when they are available for meetings prior to the start of the semester. Initially, the TAs should expect to receive a course syllabus, a textbook if one is used, any information to be distributed to the students, and specific details about what they are expected to do over the course of the semester. TAs and their supervisors should discuss the instructional goals and objectives of the course and the means to accomplish

them. Periodically, meetings should be held to emphasize how specific assignments or projects and how these should be evaluated. TAs should expect to attend course lectures and labs, and be aware of the instructor's emphasis and expectations of the students.

TA's may expect a wide variety of assignments including the following: grading homework, projects, and examinations; preparing assignments; preparing solutions for posting or distribution; maintaining office hours and holding special lab or review sessions; helping to prepare, photocopy, and administer examinations; prepare and set up demonstrations; processing grade data, and perhaps, assigning grades.

If a TA must be absent from an assigned job due to illness, a personal emergency, or professional trips, they must notify the supervisor at the first knowledge of such an absence and work with the supervisor to ensure that his/her responsibilities are covered. *IMPORTANT: TAs should not make travel plans the week before the semester begins, during the last week of the semester, or the week immediately following the end of classes.* These periods are critical for preparation before the semester begins, and for end-of-semester grading and grade calculations. In exceptional conditions a supervisor may agree to allow a TA to depart early or arrive late, but this should <u>never</u> be assumed by the TA. Permission for such exceptions must be requested in advance.

Before the first week of the semester, the TA and supervisor should meet and complete a check sheet to assure that all start-up details have been discussed and arranged. At mid-semester and again at the end of the semester, the TA and the supervisor should complete separate evaluation forms. Copies of these forms are available from Graduate Programs.

3. **Teaching Fellows**

The IST Ph.D. program encourages all Ph.D. students to take on some degree of primary teaching responsibility during their program of study. This is particularly important for students seeking academic positions after graduation. Thus, the College has initiated a Teaching Fellow program, wherein advanced students, or those who arrive with prior experience, may apply to teach a class independently. This program is based on resources and student qualifications; in all cases a teaching mentor will also be assigned to provide oversight of the teaching process.

B. **Student Insurance**

All international graduate assistants and any dependents who accompany them must have health insurance. A student may choose to purchase insurance separately and provide evidence that their policy meets the standards of Penn State. Otherwise, a student will be enrolled in a group policy for students. More information can be obtained by contacting the Graduate Student Association (http://www.clubs.psu.edu/up/gsa/) or the Graduate Student Insurance Office (http://studentaffairs.psu.edu/health/services/insurance/).

C. **Stipends**

Stipends are delivered electronically into the student's local bank account five times each semester on the last working day of the month and twice during the summer (if hired for summer). **Please note - a newly appointed graduate assistant arriving in August may not receive his or her first paycheck until the end of September.**

D. **AEOCPT**

All international students are required to take the American English Oral Communication Proficiency Test (AEOCPT) upon arrival. No international student will be assigned to a teaching assistantship until this test is passed or remediation steps (typically taking English language

courses) have been completed. Enrollment in IST 602 (Supervised Experience in College Teaching) is required for all students TA'ing during their first semester regardless of their assistantship appointment. This course is offered every fall semester and is designed to help new teaching assistants become more effective in their teaching. It also provides teaching assistants with the opportunity to learn some pedagogy and to discuss problems that arise in the classroom.

III. Ph.D. Degree Requirements

A. Full-time Matriculation

Graduate students in the IST Ph.D. program are expected to pursue their program on a full-time basis at the University Park campus. There are no exceptions to this requirement. During at least one year of this process the student must be in-residence at the University Park campus. In addition, applicants to the Ph.D. program are ordinarily expected to start in the fall semester of each year. Students do not need to be registered in summer if they have been registered the previous fall and spring semesters. Students must maintain a GPA of 3.0 in order to complete milestones and graduate.

B. General Requirements (41 credits)

The doctor of philosophy degree in Information Sciences and Technology (IST) offers advanced graduate education for students contemplating careers in academic teaching and research, as well as research in non-academic settings. The program is interdisciplinary and expects scholarship at the highest levels with each student exhibiting depth of competency in at least one of the core areas of IST.

The curriculum consists of a core requirement which provides a common theoretical foundation for all Ph.D. students in IST. Students will be expected to complete a minimum of 40 course credits plus additional dissertation credits (for example, IST 600/601). Reflecting the interdisciplinary nature of the program, many elective courses will be those offered by other colleges.

6 credits IST 501 (required first semester)
2 credits IST 590 (colloquium)
9 credits foundations courses:
510; 520; 530
12 credits research methodology courses, no specific requirement
12 credits specialization courses

1. Foundation Requirement (17 credits)

All Ph.D. students are expected to develop a broad understanding of *foundations theories and methods <u>across</u> the disciplines that together constitute the research landscape* of the College. Thus the foundation of the Ph.D. program consists of an introductory course (IST 501), and three foundations courses IST 510, 520 and 530, two semesters of colloquiums (see below) and four semesters of the one credit Graduate Colloquium (IST 590).

Graduate Colloquium (two semesters of 1 credit each). If desired, up to two semesters of IST 594X (if approved by Graduate Programs) can be used to satisfy this requirement.

2. **Research Methodology Requirement (12 credits)**

   All candidates must take courses that will guide them to acquire and practice research methods relevant to their dissertation projects or other research activities. One of these courses must be Philosophy of Science. Other methodology courses should be 500-level and selected with the help of the faculty advisor to ensure that they best support the student's research program. The number of research methodology courses at Penn State is large, but any course used to fulfill this requirement must be justified through its focus on methods, not on a problem domain. To assist with this, Graduate Programs maintains a list of research methodology courses that have proven to be useful to IST Ph.D. students in the past.

3. **Specialty Area Requirements (12 credits)**

   All candidates should identify graduate courses in IST or other units that provide in-depth concepts and skills related to support their dissertation projects or other research activities. A maximum of nine credits of these elective courses may be fulfilled by undergraduate courses at the 400-level.

4. **Language and Communication Requirements**

   All candidates must be competent in the English language and must have demonstrated skills in the communication of ideas orally and in writing that are commensurate with the requirement of scholarly and professional work. One outcome of the candidacy examination taken after the first year of study is an assessment of written and oral English proficiency. If problems are detected the student must work with his/her advisor to plan for remediation, including additional courses, mentoring, or other activities.

5. **Registration Requirement**

   After admission to the doctoral program, students must be registered full-time (a minimum of nine credits) for at least two semesters in a one-year period (fall and spring or spring and the following fall). Summer semesters do not count towards the registration requirement.

IV. Minor

Minor Field--A Ph.D. candidate is not required by the Graduate Council to have a minor field of study. However, a department or a committee in charge of a major field may require a candidate to offer work in a minor field, or a student may elect such a program with the permission of the doctoral committee.

A doctoral minor consists of no fewer than 15 graduate credits of integrated or articulated work in one field related to, but different from, that of the major. Programs should consider that a doctoral minor should represent curriculum and study that reflect graduate-level concepts and scholarship, with a preponderance of courses at the 500-level, however, at a minimum, 6 credits must be at the 500-level. A minor may be taken in one of the approved graduate degree programs offered at Penn State. The minor field chosen must have the approval of the departments or committees responsible for both the major program and the minor field. If more than one minor is being proposed, a separate group of courses must be taken for each (i.e., none of the courses may be used concurrently). If the student received a master's minor in the same field as is being proposed for a doctoral minor, the 15 credits taken must be above and beyond those used for the master's minor. However, credits earned in the master's program over and above those applied to either the master's minor or major may be applied to a minor in the Ph.D. program.

At least one faculty member from the minor field must be on the candidate's doctoral committee. Minor forms are available here http://forms.gradsch.psu.edu/GES/addGRMinor.pdf

V. Candidacy Examination for Ph.D. in Information Sciences and Technology

The candidacy examination is a University-mandated procedure to assess whether the student is capable of conducting doctoral-level research. Toward this goal, the candidacy examination is comprised of three questions, one from each of three committee members. The candidacy examination is administered by a committee assigned by the College. The committee is chaired by the Graduate Programs Director or Graduate Programs Advisor. Voting members of the committee represent a mix of faculty members from more than one research area. Examples of research areas are computational informatics, artificial intelligence and cognitive science, human-computer interaction, and social/enterprise informatics.

A. Candidacy Examination Timeline

1. The student works with his or her faculty advisor to submit an abstract summarizing a current research topic of interest which will become the topic of the candidacy examination. The student and advisor also propose up to three committee members to the college by mid-April. The members are selected such that the research expertise of one overlaps with that of the student but the other two members are working with complementary research topics and methods.

2. The student is assigned a candidacy examination committee comprised of three faculty members by mid-May. Committee composition is a function of students' suggestions, disciplinary breadth, and load balancing within the entire population of graduate faculty.

3. The student submits the written candidacy examination to the committee and the IST Graduate Programs Office on or before the first week in August. Each committee member submits their written evaluations of the exam responses to the College. Each voting committee member grades only the question that he or she wrote. The outcome of the written portion of the exam is based on these scores.

4. The committee conducts an oral examination in late-August or early-September. Based on the committee's evaluation of the critical literature review and the oral examination, the committee generates a report to recommend the outcome of the examination to the College. The report consists of review and breakdown of the strengths and weaknesses of the student.

B. Candidacy Examination Outcomes

Possible outcomes (and resulting actions) for the examination are summarized below.

1. *Pass* —A student successfully completes the examination (as determined by each Candidacy Exam committee) and may proceed with his or her Ph.D. studies.

   - In some cases, the committee may recommend a Pass outcome that is contingent on additional work, for example, completing extra course work. Such cases will be accompanied by a remediation rationale that is generated by the committee. All remediation recommendations will be reviewed by GAC (without any involvement from committee members or advisors who happen to be part of the committee). In general, GAC will defer to the committee's judgment but has the authority to initiate an appeal process if serious concerns are raised.

2. *Fail with opportunity for Retake* —The student must retake the candidacy exam. This retake may include a Retake of the written answers (e.g., if the committee feels that the student has provided useful content but the writing is poor); a Retake of the oral exam (e.g., if the committee feels that the critical literature review was adequate but the oral exam was poor); or a Retake of both parts of the exam. The Retake exam will be scheduled to take place approximately two weeks after the original exam.

If the student passes the Retake examination, he or she will be recommended to continue on with the Ph.D. program. If the student fails the Retake, he or she will be treated in the same fashion as students failing on their first effort.

3. *Fail* — The student is not eligible to continue the Ph.D. program. In such a case, the student's faculty advisor, the Graduate Programs Director, and Graduate Programs Advisor will counsel the student. The student *may* be provided an opportunity to complete a Master of Science degree in IST. If the student accepts this opportunity, a Resume Study/Change of Degree form (available from Grad Programs Office or the Graduate School) must be completed and sent to the Graduate School.

C.   Documentation of Candidacy Examination Results

All examination results and actions are coordinated by the Graduate Programs Director, who notifies the candidate and the candidate's advisor of outcome. Any issues or appeals regarding exam outcomes will be handled in consultation with the Graduate Programs Director, Graduate Programs Advisor, and if needed the Associate Dean for Research and Graduate Programs. Graduate Programs will complete a doctoral candidacy report and file it with the Graduate School. This report and all examination materials will be filed in the student's graduate file.

The next major milestone for doctoral students who successfully complete the candidacy examination is to complete his or her course work and prepare for their Ph.D. dissertation proposal and the comprehensive examination. This exam is normally taken early in the student's third year in the Ph.D. program (12-18 months after completing the candidacy examination).

VI. Doctoral Committee Selection

After successful completion of the candidacy examination and before the comprehensive examination, the student must formally select his or her Ph.D. committee. *It is expected that all members of this committee design and plan the student's comprehensive examination and that the entire committee is responsible for the intellectual development and research activities of the student during the post-candidacy period.* To document this step, a Graduate Student Committee Procedures and Doctoral Committee Appointment Signature Form must be completed. Please get this form from Graduate Programs Office or the Graduate School.

This committee will be composed of four or more graduate faculty members with at least three members of the committee having current graduate faculty appointments in IST. The committee chair must be a graduate faculty member who has a full or partial budgetary appointment in IST. The committee must have one outside member who is a Penn State graduate faculty member with no budgetary connection or conflict of interest with the IST program. An affiliated faculty member of IST with graduate appointment at Penn State may be counted as an outside member of an IST student's doctoral committee, but only those with full or partial budgetary appointments in IST can serve as a committee chair or internal member.

VII. Comprehensive Examination

When a candidate for the Ph.D. degree has completed most or all of their course work, a comprehensive examination is given. *The comprehensive examination is generally taken within twelve to eighteen months of passing the candidacy examination.* The comprehensive examination is intended to evaluate the candidate's mastery of the major, and if appropriate, minor field.

- An international candidate for the Ph.D. must have satisfied the English competency and the communication and foreign language requirement before taking the comprehensive examination.

- All candidates are required to have a minimum grade-point average of 3.00 for course work done at the University at the time the comprehensive examination is given and may not have deferred or missing grades.

- The candidate must be registered as a full-time or part-time student for the semester in which the comprehensive examination is taken.

- The candidate can have no more than 12 graded "600-level" research credits. After a student reaches the 12 credit limit, he/she should be assigned the grade of "R."

The examination is scheduled and announced officially by the IST Graduate Programs Office. Students should fill out an Exam Scheduling Request Form (page 23 and return it to Graduate Programs Office along with a research abstract. A two week notice is required by the university's Office of Graduate Enrollment Services for preparing the paperwork for this examination, which may be open to the public at the department's discretion. Therefore, notice should be given to the IST Graduate Programs Office at least three weeks prior to the anticipated date. The exam has written and oral components and is given and evaluated by the entire doctoral committee. In many instances, the doctoral committee may choose to have the comprehensive examination as part of the IST dissertation research proposal (described subsequently). A favorable vote of at least two-thirds of the members of the committee is required for setting the format of the examination and recommending the passing of the comprehensive examination. If a student fails the examination, it is the responsibility of the doctoral committee to determine whether the candidate may take another examination. The results are reported by IST Graduate Programs to the Office of Graduate Enrollment Services.

At least three members of the doctoral committee (including the thesis advisor or Chair) must be physically present at the comprehensive examination. The graduate student also must be physically present at the exam. (Thus, for a five-person committee, two members may participate via distance.) No more than one member may participate via telephone; a second remote member may choose to participate via video-conferencing. The examination request and a request for exceptions must be submitted to the Director of Graduate Enrollment Services by the IST Graduate Programs Office for approval at least two weeks prior to the date of the exam. Special arrangements (i.e., requirements for meeting participation via distance) should be communicated to the student and the doctoral committee members well in advance of the examination.

When a period of more than six years has elapsed between the passing of the comprehensive examination and the completion of the program, the student is required to pass a second comprehensive examination before the final oral examination will be scheduled.

A. **Content and Format of the Comprehensive Examination**

The examination is designed, administered, and evaluated by the entire doctoral committee and may be either written or oral, or both. In many instances, the doctoral committee may choose to have the comprehensive examination consist of the IST dissertation research proposal (described subsequently).

Questions on the comprehensive examination should evaluate the candidate's mastery of the major, and if appropriate, minor field. This includes the candidate's mastery of the relevant literature, research methods, and how perspectives from the vantage point of information, technology, and people affect or is affected by the proposed research.

If the examination has a written component, all members of the doctoral committee must be solicited by the chair of the committee to provide questions. The committee as a whole sets the written examination. A written examination can be a take-home examination, a closed-book, proctored examination, or both.

As mentioned earlier, a possible design of the comprehensive examination is the dissertation proposal, which is described in detailed in the next section.

If the examination has an oral component, all members of the doctoral committee must be given the opportunity to ask questions.

Students who pass the comprehensive examination are expected to have an in-depth expertise in the research area of their dissertation and an integrated understanding of the implications of their proposed research on broader issues related to information, technology, and people.

A student must be registered continuously for each fall and spring semester from the time he or she passes the comprehensive exam until his or her dissertation defense (final oral examination).

VIII. Dissertation Research Proposal

A. Objective

The objective of the dissertation research proposal is to assess the direction and the appropriateness of the research that will serve as a basis of a Ph.D. dissertation. The Ph.D. candidate must submit to their doctoral committee a dissertation research proposal that will be presented and defended at a formal meeting of the student's committee. This meeting is open to the University community.

B. Written Dissertation Research Proposal Format

The written proposal must include a review of the relevant literature, definition of the research concepts and approaches, and a research schedule with milestones. The written proposal should be given to the candidate's doctoral committee at least three weeks prior to the scheduled research proposal meeting. A sample dissertation research proposal outline is presented below.

Sample Research Proposal Outline

I. Abstract

II. Introduction
   - Problem definition and scope
   - Motivation from the perspectives of information, technology, and people
   - Research objective(s)
   - Research question(s)

III. Review of literature

IV. Proposed research
   - Research framework and approaches to be used
   - Rationale for proposed approaches

V. Research plan
   - Key tasks and activities
   - Schedule
   - Expected contributions of the research

VI. Bibliography/references

If human subjects are to be used, the student must complete the *Application for the Use of Human Participants* and submit it for approval to the Office of Research Protections (ORP) upon successful defense of the proposal. Forms are available at ORP, 330 Building, Suite 205 University Park (814) 865-177) or they can be downloaded from the ORP Human Participants Web page at http://www.research.psu.edu/orp/areas/humans/applications/index.asp

C. Defense of Dissertation Research Proposal

The dissertation research proposal defense is scheduled by IST Graduate Programs to ensure that notification can be given to the University community. Notice should be given to IST Graduate Programs at least three weeks prior to the anticipated date along with a research abstract. The chair of the student's doctoral committee chairs the meeting. At least three members of the doctoral committee (including the thesis advisor or chair) must be physically present at the dissertation proposal defense. The graduate student also must be physically present at the defense. (Thus, for a five-person committee, two could participate via distance.) No more than one member may participate via telephone; a second member could participate via video-conferencing. If the dissertation proposal defense is being held as the comprehensive examination, the proposal defense request and a request for exceptions must be submitted to the Director of Graduate Enrollment Services by the IST Graduate Programs Office for approval at least two weeks prior to the date of the exam. Special arrangements, i.e., requirements for meeting participation via distance, should be communicated to the student and the doctoral committee members well in advance of the examination.

The candidate is asked to present and defend his or her dissertation research proposal to those attending the meeting. Questions are permitted from any of those in attendance. At the conclusion of the presentation and defense, all attendees except the candidate and the candidate's doctoral committee are requested to leave the meeting. Committee members can then ask any additional questions they feel are appropriate. The candidate is then asked to leave the meeting for a short period of time as the committee discusses and evaluates the proposal, the presentation, and the proposal's defense. The candidate then will be called back to discuss the evaluation.

A favorable vote of at least two-thirds of the members of the committee is required for passing the dissertation research proposal. If a student fails the dissertation research proposal, it is the responsibility of the doctoral committee to determine whether or not the candidate can schedule a second dissertation research proposal. If the dissertation research defense is being held as the comprehensive exam, the results are reported by the IST Graduate Programs Office to the Office of Graduate Enrollment Services at the Graduate School.

D. Proposal Timeline

In general, a dissertation research proposal presentation occurs 12 to 16 months after the successful completion of the candidacy examination. The Ph.D. candidate should work closely with the chair of the doctoral committee with respect to scheduling the research proposal defense and should consult with all committee members with respect to the contents of the dissertation research proposal.

E. Evaluation of the Proposal

The Ph.D. committee gives an evaluation of the research proposal to the candidate at the end of the defense. The evaluation includes an assessment of the research direction and the appropriateness of the intended work as a basis of a Ph.D. dissertation. Constructive criticism and suggestions for improvement will be part of the assessment as well. The proposal is deemed

to be adequate if at least two-thirds of the committee approves the proposal. If the proposal is deemed to be inadequate for dissertation-level research, the committee can require the candidate to rewrite the proposal and ask that it be defended again at a later date. If a student defense is found inadequate a second time, the student will be released from the Ph.D. program. The committee chair will prepare a short report (one-page maximum) of the evaluation to be submitted to IST Graduate Programs, and it will be included in the Ph.D. candidate's file.

IX. Dissertation Defense (Final Oral Examination)

A. Objective

The objective of the dissertation defense (final oral examination) is to assess a Ph.D. candidate's research accomplishments based on the completion of a final draft of the candidate's dissertation thesis. This is to be facilitated by the Ph.D. candidate submitting the final draft of the dissertation to the their Ph.D. committee and by presenting and defending the thesis to his or her committee at a formal meeting that is open to the University community. The final draft should be in a format that meets the editorial standards of the Graduate School.

B. Graduate School Guidelines

Guidelines and policies in official publications of the Graduate School and changes to them, take precedence over the content of this section. Please see http://bulletins.psu.edu/bulletins/whitebook/index.cfm

The doctoral candidate who has satisfied all other requirements for the degree will be scheduled to take a final examination. Two weeks' notice is required by the Office of Graduate Enrollment Services for scheduling this examination. Paperwork must be submitted to the IST Graduate Programs three weeks in advance of the examination. Normally, the final oral examination may not be scheduled until at least three months after the student has passed his or her Ph.D. dissertation proposal (oral comprehensive examination). The Director of Graduate Enrollment Services may grant a waiver in appropriate cases. The deadline for holding the examination is 10 weeks before commencement. It is the responsibility of the doctoral candidate to provide a copy of the thesis to each member of the doctoral committee *at least two weeks* before the date of the scheduled examination.

Both the thesis advisor and the student are responsible for ensuring the completion of a draft of the thesis and for adequate consultation with members of the doctoral committee well in advance of the final oral examination. Major revisions to the thesis should be completed before the examination. The dissertation should be in its final draft, with appropriate notes, bibliography, tables, etc., at the time of the final oral examination; both the content and style should be correct and polished by the time the final draft of the thesis is in the hands of the doctoral committee.

The final examination of the doctoral candidate is an oral examination administered and evaluated by the entire doctoral committee. It consists of an oral presentation of the thesis by the candidate and a period of questions and responses. These will relate in large part to the dissertation, but may cover the candidate's entire program of study because a major purpose of the examination is also to assess the general scholarly attainments of the candidate. The portion of the examination in which the thesis is presented is open to the public.

At least three members of the doctoral committee including the thesis advisor or chair must be physically present at the final oral examination. The doctoral candidate must also be physically present at the examination. No more than one member may participate via telephone or video-conferencing. The examination request and a request for exceptions must be submitted to the Director of Graduate Enrollment Services through the IST Graduate Programs Office for approval at least three weeks prior to the date of the examination. Special arrangements, such as

requirements for meeting participation via distance, should be communicated to the student and the doctoral committee members well in advance of the examination.

The doctoral candidate must also meet the following criteria:

- The student must be registered as a full-time or part-time degree student for the semester in which the final oral examination is taken.

- The student is required to have a minimum grade-point average of 3.00 for work done at the University at the time of the final oral examination and may not have deferred or missing grades.

- The student can have no more than 12 graded "600-level" credits.

- The student must have completed his residency requirement by the time the final oral examination is scheduled.

- There must be a three-month time elapse between the comprehensive exam and the final examination.

- The final oral examination must be scheduled within six years of the comprehensive examination.

A favorable vote of at least two-thirds of the members of the committee is required for passing. The results of the examination are reported by IST Graduate Programs to the Office of Graduate Enrollment Services within ten days of the examination. If a candidate fails, it is the responsibility of the doctoral committee to determine whether or not another examination may be taken.

C. General Dissertation/Thesis Requirements

The Graduate School, the University Libraries, and the graduate faculty of Penn State have established format standards that a dissertation or thesis must meet before it receives final approval as fulfillment of a graduate requirement. The Thesis Office is the unit of the Graduate School responsible for certifying that dissertations and theses have been prepared in accordance with these established regulations.

A dissertation or thesis is a requirement of the IST doctoral program. Every dissertation/thesis must be reviewed and approved by Thesis Office staff. That office reviews for format only and does not edit for spelling, grammar, or punctuation. When a dissertation or thesis is submitted to the Thesis Office, it must meet the formatting and deadline requirements set forth in the latest edition of the *Thesis Guide* (http://forms.gradsch.psu.edu/thesis/thesisguide.pdf). The Information Technology Services (ITS) provides a list of thesis resources to facilitate the writing process and offers PSUThesi (http://css.its.psu.edu/node/66), a software package that contains a collection of templates including styles, macros, toolbars, menus, and layouts. In addition, the Statistical Consulting Center http://scc.stat.psu.edu/ gives free advice to graduate students working on thesis research.

A doctoral dissertation or thesis must be submitted to the University. For more information on electronic dissertations or theses (eTDs), visit the eTD Web site at http://www.etd.psu.edu/.

In all cases, the dissertation or thesis author bears the ultimate responsibility for meeting Graduate School requirements. It is the dissertation or thesis author who must pay the dissertation/thesis fee, activate the intent to graduate, meet deadlines for submission and corrections, and obtain signatures from appropriate faculty members.

A summary of the dissertation or thesis submission requirements is provided below. The dissertation or thesis author should:

- Become familiar with the format requirements by reading the *Thesis Guide* carefully (http://forms.gradsch.psu.edu/thesis/thesisguide.pdf).

- Be aware of all Graduate School and Thesis Office deadlines as indicated on the Graduate School Calendar at http://www.gradsch.psu.edu/calendar/gradcal.html

- Activate the intent to graduate on eLion during the semester in which you plan to graduate. Go to http://www.gradsch.psu.edu/current/thesis.html for deadline.

- Send a Submission Form and a draft of the dissertation (as a Word or PDF file) to the Thesis Office by the specified deadline (format review).

- Defend the dissertation and make any changes required by the committee. This can be done either before or after the format review, as long as deadlines are met. Receive approval from the committee in the form of signatures on the doctoral approval page.

- Review the dissertation one final time to be sure that no further changes are needed. It will not be possible to make corrections after final approval by the Thesis Office. Convert the file into a PDF for eTD submission. If you cannot do this, contact the Thesis Office for assistance.

- Go to the eTD website (http://www.etda.libraries.psu.edu/index_maint.html) and upload the final eTD. Submit supporting materials to the Thesis Office. Supporting materials are:
    - signed Doctoral Approval Page,
    - ProQuest/UMI Agreement,
    - Survey of Earned Doctorates,
    - $95 thesis fee. To pay this fee go to the Payment Portal https://secure.gradsch.psu.edu/paymentportal/
    - Note: It doesn't matter if you upload the dissertation first or submit supporting the materials first).

- Await notification of eTD approval by e-mail. If changes are required, you will be notified. Your eTD will be accessible on the eTD website immediately after graduation unless you have restricted access.

- If bound copies are needed, contact the Multimedia & Print Center on campus (http://www.multimediaprint.psu.edu) or you may use an off-campus source. All copies are the author's responsibility. The Graduate School does not provide copies.

X. Additional Information

Intent to Graduate

Students who plan to graduate at the end of the semester are responsible for indicating their intent to graduate on eLion by the deadline stated on the graduate calendar (http://www.gradsch.psu.edu/calendar/gradcal.html). Any changes to a student's graduation status after the designated time period must be made by contacting the IST Graduate Programs Office.

All degrees conferred are tentative until final grade reports have been received and all requirements have been fulfilled, even though the student's name may appear in the commencement program. A student's transcript or diploma, or both, may be withheld until any outstanding financial obligations to the University have been paid.

XI. IST Graduate Program Policies

A. Credit Transfer Policy

The College of Information Sciences and Technology (IST) will follow the guidelines set by The Graduate School regarding credit transfers from an external institution. A maximum of 10 credits may be transferred from an external institution. Transfer credits must meet the following criteria:

1. Have been earned at an accredited institution,
2. Be of "A" or "B" grade value ("B-" grades are not acceptable; pass-fail grades are not transferable unless substantiated by former institution as having at least "B" quality),
3. Appear on an official graduate transcript
4. Be earned within the five years prior to the date of registration to a degree program at Penn State.
5. Transfer credits may not have been used towards a previous degree.

The grade obtained in the transferred course will appear on the student's official PSU transcript.

Furthermore, IST will also enforce the following internal guidelines:

1. All credit transfer requests must be processed by May 15 of the end of the student's first year. No credit transfer requests will be accepted after this date.
2. Please refer to the Course Substitution Policy regarding credit transfers to be used for course substitutions, whether proposed for core, methodology or elective courses.
3. Students requesting credit transfers to meet credit requirements without specific course substitutions must obtain the Graduate School Credit Transfer Form from the Graduate Programs Office. The student must fill out this form, obtain the student's advisor's signature and return it to the Graduate Programs Office. The Graduate Programs Office will submit the form to the Graduate School.

*Please note that this policy works in conjunction with the IST Course Substitution Policy. Consequently, a student can only substitute a maximum of six credits for the core requirements and six credits for the methodology requirements utilizing the credits allowed under both policies.

B. Course Substitution Policy

The College of Information Sciences and Technology (IST) will allow graduate students to substitute external courses for IST graduate courses to fulfill the IST graduate curriculum requirements. The College course substitution guidelines are below:

1. If a student wants to substitute a graduate course taken in another institution for an IST graduate course, the course must satisfy the following requirements.
    a. The course must be from an accredited institution.
    b. The student must have received an "A" or "B" grade value.
    c. The course must appear on an official graduate transcript.
    d. The course must have been taken within five years prior to the date of registration in the IST graduate program.
2. When requesting a course substitution, the student must submit a syllabus of the external course with an IST Course Substitution Request Form to the Graduate Programs Office. The Graduate Programs Office will then send the request and syllabus to the instructor of the IST

course for which the substitution is being requested. The student will be notified by Graduate Programs to schedule a time to meet with the IST course instructor so that the course instructor can evaluate whether the substitution should or should not be allowed. The course instructor will sign the request form approving or disapproving the substitution. The student will then be notified of the decision.
Note: If the substitution is proposed for a course not currently taught in IST (e.g., a research methodology course), the syllabus review and determination will be conducted by the Graduate Programs Director, in consultation as needed with the Graduate Programs Advisor and the Associate Dean for Research and Graduate Programs.

3. If the course substitution is not approved, the student may request a meeting with the Graduate Programs Director and the instructor of the IST course. After this meeting, the Graduate Programs Director will make a recommendation to the Associate Dean for Research and Graduate Programs to either uphold or overturn the original decision.
4. All course substitution requests must be submitted by May 15 of the end of the student's first year. No course substitution requests will be accepted after this date.
5. The course substitution process is an internal IST process and the course's grade will not appear on the student's PSU transcript.
6. Students will be able to substitute a maximum of ten credits. Of these ten credits, a maximum of six credits will be approved for meeting the core requirements, and a maximum of six credits will be approved for meeting the methodology requirements.

*Please note that this policy works in conjunction with the IST Graduate Student Credit Transfer Policy. Consequently, a student can only substitute a maximum of six credits for the core requirements and six credits for the methodology requirements utilizing the credits allowed under both policies.

C. Specialization Area Course Waiver Policy

The College of Information Sciences and Technology (IST) requires graduate students to take a minimum of four courses (12 credits) to fulfill the specialization area requirement. The student should select these courses in consultation with his or her faculty advisor. The College will also accept courses from other accredited institutions to meet the specialization area requirement under the following guidelines:

1. The course must be from an accredited institution.
2. The student must have received an "A" or "B" grade value.
3. The course must appear on an official graduate transcript.
4. The course must have been taken within the five years prior to the date of registration to the IST graduate program.
5. To receive a specialization area course waiver, the student must submit the following to the Graduate Programs Office:
   a. An IST Graduate Specialization Area Course Waiver Form with the student advisor's signature.
   b. An official transcript with the course and grade listed if the Graduate Programs Office does not have this already on file.
   c. The syllabus for the course that is proposed for specialization waiver credit
6. All course waiver requests must be submitted by May 15 of the end of the student's first year. No course waiver requests will be accepted after this date.

D. Independent Study Policy

The College of Information Sciences and Technology (IST) allows students to take independent study courses with IST graduate faculty members to learn about areas that are not taught in regular IST graduate courses or in graduate courses in other department and programs. The College will use the following guidelines for the Independent Study policy:

1. Students requesting an independent study course must submit a completed <u>Independent Study Form</u> to the Graduate Programs Office.
2. The maximum number of independent study credits a student can obtain is six. The maximum hours per independent study course is three but can range from 1-3 depending on the work proposed. These credits will count towards the specialization area requirements.
3. Independent study is not to be used for Ph.D. dissertation research. Rather, it is for students to do independent coursework on a subject that is not being offered in IST or elsewhere at Penn State.
4. The student must meet with independent study instructor for the contact hours related to the number of requested credits. For example, a three-credit independent study would require three contact hours a week.
5. The output of the independent study course must be a deliverable that is relevant to the course and agreed upon by the student and the instructor.

PENNSTATE
College of
Information Sciences and Technology

STUDENT/ADVISOR
AGREEMENT FORM

STUDENT

I agree to have _____ as my advisor for my Ph.D. studies at IST.

_____   _____
Student Signature   Date

ADVISOR

I agree to advise _____ during their Ph.D. studies at IST.

_____   _____
Advisor Signature   Date

Return form to Grad Programs, 321F IST Building for Graduate Program Director approval.

_____   _____
Grad Program Advisor Signature   Date

PENN STATE

College of
Information Sciences and Technology

STUDENT/ADVISOR CHANGE FORM

STUDENT

I agree to change my advisor from _____ to _____ for my Ph.D. studies at IST.

_____   _____   _____

Student Name (printed)   **Student's Signature**   **Date**

ADVISOR

I agree to advise _____ during the remainder of his/her Ph.D. studies at IST.

_____   _____   _____

New Advisor Name (printed)   **New Advisor's Signature**   **Date**

I agree to **NOT** advise _____ during the remainder of his/her Ph.D. studies at IST.

_____   _____   _____

Previous Advisor Name (printed)   **Previous Advisor's Signature**   **Date**

Return to Graduate Programs in 102H IST Bldg. for Graduate Program Director approval.

_____   _____

Grad Program Advisor's Signature   **Date**

PENN STATE

**College of
Information Sciences and Technology**

STUDENT/CO-ADVISORS CHANGE FORM

STUDENT

I agree to change my co-advisors from _____ and _____ to
_____ and _____ for my Ph.D. studies at IST.

_____ _____ _____
Student Name (printed) **Student Signature** **Date**

NEW CO-ADVISORS

We agree to advise _____ during the remainder of his/her Ph.D. studies at
IST.

_____ _____ _____
Co-Advisor Signature **Co-Advisor Signature** **Date**

PREVIOUS CO-ADVISORS

We agree to **NOT** advise _____ during the remainder of his/her Ph.D.
studies at IST.

_____ _____ _____
Co-Advisor Signature **Co-Advisor Signature** **Date**

**Return form to Graduate Programs in 102H IST Bldg. for GRADUATE PROGRAM
ADVISOR APPROVAL**

_____ _____
Grad Program Advisor's Signature **Date**

PENNSTATE

**College of
Information Sciences and Technology**

Request for Independent Study* IST 596

IST 596 is available for all graduate students. However, you are responsible for finding an IST faculty member willing to serve as your instructor. Please complete the following information with the instructor and then set up an appointment with your advisor to review this application form with them.

Name of Student: _____ **PSU I.D. #**_____

Email: _____

Faculty member you will be working with: _____

Number of credits for which student is enrolling: _____

Semester for which student is enrolling: please <u>CIRCLE</u> appropriate semester/session

  FA 2011   SP 2012   SU 2012 (1ˢᵗ 6-week)   SU 2012(2ⁿᵈ 6-week) SU 2012 (all semester)

Brief description of course - **<u>Please complete full description on back page as well.</u>**

A statement indicating why the applicant's interest cannot be served by a regularly scheduled IST course:

<u>Approved:</u>

Instructor: _____ **Date:** _____

Advisor: _____ **Date:** _____

Grad Director: _____ **Date:** _____

Return form to Graduate Programs, 321F IST Bldg., to obtain Grad Director's signature and add the course.

*Be sure you fully understand how your independent study credits will be used in your overall plan of study.

Request for Independent Study (Page 2)

Title:

Course Description:

Learning Objectives:

Course Activities:

Assessment:

Professor-Student Interaction:

PENNSTATE
College of
Information Sciences and Technology

Exam Scheduling Request

_____Ph.D. Dissertation Proposal (Oral Comprehensive)

_____ Final Thesis Defense (Masters or Ph.D.)

Name of Student: _____ **I.D.** _____

Degree: _____

Date of Exam: _____   **Time:** _____

For Final Defense Only: **Title of Thesis:** _____

_____

Note: Please send electronic copy of thesis abstract to **skelleher@ist.psu.edu** or **mhill@ist.psu.edu** 7-10 days before exam.

Room will be scheduled by the Graduate Program Coordinator (do not complete)

Room _____

Committee Chair: _____
                          Name

Co-Chair: _____
                  Name

Major Field Member(s):   _____
                               Name

_____
Name

Outside Member(s):   _____
                           Name

Special Member(s):   _____
                           Name

Return form to Grad Programs, 321F IST Building to schedule exam. Thank you.

PENNSTATE
College of Information Sciences and Technology

Request for Research Study Credits 2010-2011
IST 600/601/610/611

IST 600, 601, 610 and 611 research courses are available for all IST graduate students. Please complete the following information with the faculty member who is directing (Chair of your committee) your thesis or dissertation research.

Please circle appropriate course and semester below (and fill in credits if appropriate).

Name of Student: _____ I.D._____

Email: _____

Faculty Member who is directing your research (Chair of your committee) _____

MASTERS STUDENTS OR PHD STUDENTS WHO STILL HAVE COURSE REQUIREMENTS TO MEET.

IST 600 – Number of credits for which student is enrolling: _____
A letter grade is not assigned for these courses—you will receive a grade of "R" for successful thesis research completion. If thesis research is unsatisfactory, you will receive an "F".

IST 610 – part-time research -- only to be used by students not in residence.
Number of credits for which student is enrolling: _____
A letter grade is not assigned for these courses—you will receive a grade of "R" for successful thesis research completion. If thesis research is unsatisfactory, you will receive an "F".

*****

PHD STUDENTS—successfully completed comps and no longer need to take courses.

IST 601 is **full-time dissertation research on-campus**. Number of credits for which you are enrolled is Zero (0)—however**, your enrollment will reflect full-time status**.

IST 611 is **part-time dissertation research off-campus. Only to be used by students not in residence.**
Number of credits for which you are enrolled is Zero (0)—**your enrollment will reflect part-time status**.

Semester for which student is enrolling: please <u>CIRCLE</u> appropriate semester/session

    FA 2013   SP 2014   SU 2014 (1st 6-week)   SU 2012 (2nd 6-week) SU 2011 (all semester)

Approved:

Faculty: _____ Date: _____

Grad. Program Approval: _____ Date: _____

Return form to Graduate Programs, 321F IST Building to add course.

Information Sciences and Technology (IST) Graduate Student Annual Evaluation Form
Instructions: Complete/discuss with advisor, both of you sign/date, submit to Grad Office <u>with current CV</u>

Student name:

Date:

IST Program: ☐ Masters   ☐ Ph.D.

GPA: **PSU Graduate Credits:** _____

Year entered IST graduate program: _____

Program Milestones:

☐ Candidacy   ☐ Comprehensive

Recent coursework (Sum2010; Fall2010; in progress Spr2011)	Term	Grade

In what ways have you collaborated on research or other activities over the past year – with your advisor, with other IST professors, or with any other collaborators?

How would you characterize your current progress in gaining relevant research understandings and skills? Are you satisfied with your progress – why or why not?

What are your current feelings about your academic progress, e.g. course work that is required or expected of you, milestones that you have completed or are striving to achieve?

Advisor's overall rating: ☐ Outstanding   ☐ Satisfactory   ☐ Unsatisfactory

Advisor's comments generated DURING advising meeting to explain rating:

_____ _____
Student signature   Date

_____ _____
Advisor Signature   Date

_____ _____
Co-Advisor Signature (if applicable)   Date

25

PhD Student Annual Evaluation – Advisor's comments [CONFIDENTIAL]
Instructions: Complete AFTER meeting with the student to discuss their form .

_____   _____
Student (print name)   Advisor (print name / list co-advisor if applicable)

1. In what ways have you and this student collaborated on research or other activities this year? What other collaborations has the student pursued with other faculty or peers?

2. What is your current understanding of this student's coursework or other studies? Please focus particularly on successes or concerns you wish to share. (If the student is post-coursework, you may leave this blank.)

3. How would you characterize this student's progress in acquiring relevant research understandings and skills? Are you satisfied – why or why not?

4. Please rate this student's current progress in the Ph.D. program.

☐ Outstanding   ☐ Satisfactory   ☐ Unsatisfactory

Please explain your rating if it is not clear from your answers above.

Date this form was completed: _____ /Your email submission of this form constitutes your signature.

College of Information Sciences and Technology
Graduate Programs

Exam Request Form

_____ Ph.D. Dissertation Proposal (Oral Comprehensive)
_____ Final Thesis Defense (M.S. or Ph.D.)

Name of Student: _____Student ID: _____

Degree: _____ Date of Exam: _____ Time: _____

Title of Thesis (for final defense only): _____

_____

Note: Please send electronic copy of thesis abstract to Michelle Hill mhill@ist.psu.edu if your last name begins with A-M, or Sue Kelleher skelleher@ist.psu.edu if your last name begins with N-Z, seven to ten days before exam date.
Room will be scheduled by Graduate Programs office: Room _____

Committee Chair: _____

Committee Co-Chair: _____

Major Field Member(s): _____

_____

Outside Unit Member
(formerly External Member) _____

Outside Field Member:* _____

Special Member: _____

Minor Field Member: _____

*Can be the same as the Outside Unit Member.
If a committee member cannot be present, due to extenuating circumstances, we need to know as soon as possible so that we can get Graduate School permission.

Return form to IST Graduate Programs Office. Thank you.