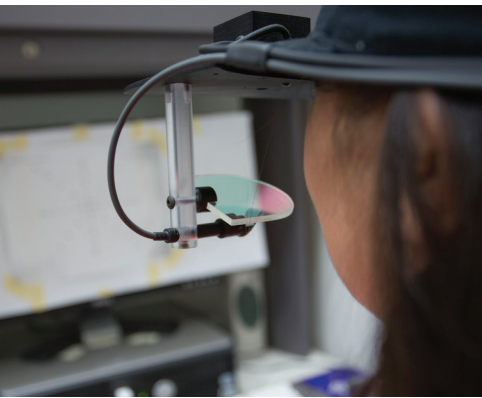


2017 - 2018

Graduate Degree Guide



THE ROADMAP



PennState
College of Information
Sciences and Technology



Office of Graduate Programs
graduateprograms@ist.psu.edu

IST Graduate Programs Contact Information

Dr. Andrew Sears

Dean of Information Sciences and Technology
asears@ist.psu.edu

Dr. Mary Beth Rosson

Associate Dean for Undergraduate and Graduate Education
mrosson@ist.psu.edu

Dr. Michelle Corby

Assistant Dean for Academic Services
mec18@psu.edu

Dr. Andrea Tapia

Graduate Programs Director of Information Sciences and Technology
atapia@ist.psu.edu

Dr. Lisa Lenze

Director of Graduate and Undergraduate Academic Affairs
llenze@ist.psu.edu

Betty Jo Houser

Administrative Support Coordinator, Graduate Programs
graduateprograms@ist.psu.edu

Priscilla Cetnar

Administrative Support Assistant, Graduate and Undergraduate Academic Affairs
pcetnar@ist.psu.edu

College of Information Sciences and Technology Office of
Graduate Programs
Westgate Building, University Park, Pennsylvania 16802-6823
Phone: 814-865-8711 or 814-867-5787
Fax: 814-865-7490

Table of Contents

About the College of Information Sciences and Technology.....	1
Faculty Adviser and Annual Review.....	2
Role of Faculty Adviser	2
Adviser Matching Process for Newly Admitted Students.....	2
Annual Review.....	2
General Assistantship Policies.....	3
M.S. and IUG Students	3
<i>Instructional Assistant (IA) - Tech Support/Grader</i>	3
Ph.D. Students	4
<i>Research Assistantships (RA)</i>	4
<i>Teaching Assistantships (TA)</i>	4
<i>Teaching Fellows</i>	5
Additional Information	6
Student Insurance	6
Stipends- (Ph.D. Students Only)	6
AEOCPT	6
Scholarship and Research Integrity (SARI) Training	6
Masters Degree Requirements (M.S.)	8
Full-time Matriculation	8
General Requirements	8
<i>Core Requirements (6 credits)</i>	8
<i>Research Methods Requirements (6 credits)</i>	9
<i>Specialty Area Requirements (12 credits)</i>	9
<i>Thesis or Scholarly Paper (6 credits)</i>	9
<i>Time Limitation</i>	9
<i>Language and Communication</i>	9
M.S. Committee Selection.....	9
M.S. Thesis Defense.....	10
Objective	10
Graduate School Guidelines.....	10
General Thesis Requirements.....	11
M.S. Scholarly Paper	11
Objective	12
IST Guidelines	12
Integrated Undergraduate Graduate (IUG)	14
Double Counting of Coursework	14
Enrollment Guidelines	15
General Requirements	15
<i>Academic Performance Requirements</i>	15
<i>Student Record Notation</i>	15
Committee and Thesis/Scholarly Paper.....	15
Opting Out	15
Doctor of Philosophy Degree Requirements (Ph.D.).....	17
Full-time Matriculation.....	17

General Requirements (38 credits).....	17
<i>Core Requirements (14 credits)</i>	18
<i>Research Methodology Requirements (12 credits)</i>	18
<i>Specialty Area Requirements (12 credits)</i>	18
<i>600-level credits</i>	18
<i>Time Limitation</i>	18
<i>Language and Communication Requirements</i>	19
Minor	19
Candidacy Examination	19
Purpose	19
Committee	19
Eligibility	19
Grading.....	20
PART 1: PORTFOLIO	20
PART 2: WRITTEN EXAMINATIONS	20
PART 3: ORAL EXAMINATIONS.....	21
Exam Results	21
Doctoral Committee Selection	22
Comprehensive Examination	22
Content and Format of the Comprehensive Examination	22
Dissertation Research Proposal	23
Objective	23
Written Dissertation Research Proposal Format	24
Sample Research Proposal Outline	24
Defense of Dissertation Research Proposal.....	24
Dissertation Defense (Final Oral Examination)	25
Objective	25
Graduate School Guidelines.....	25
General Dissertation/Thesis Requirements	26
IST Graduate Program Policies	27
Credit Transfer Policy	27
Course Substitution Policy.....	28
Specialization Area Course Waiver Policy.....	28
Independent Study Policy	29
Graduate Student Termination Policy.....	29
Forms	30
APPENDIX A	31
Reporting and Assistance Resources	31
APPENDIX B	33
IST and University Forms.....	33

About the College of Information Sciences and Technology

Solving society's most challenging problems—from responding to natural disasters to improving human health and well-being, from protecting national security to making sense of big data, from exploring the connections between gender and technology to utilizing GIS for humanitarian efforts—calls for approaches that transcend traditional disciplinary boundaries. Precise computational models are needed to learn from the vast datasets available. Scientific theory needs to describe the complex relationships we encounter in the ecosystem we live in, networked with an increasing number of virtual friends, collaborators, and customers.

At Penn State's College of Information Sciences and Technology (IST), you will receive multidisciplinary training to prepare you to address complex issues related to technology and society. Our graduate students come from a variety of backgrounds, including computer science, engineering, psychology, sociology, economics, philosophy, visual arts, and math.

The College of IST's faculty and graduate students engage in cutting-edge research in areas such as human-computer interaction, artificial intelligence and cognition, health- and bio-informatics, and psychology of terrorism, to name just a few. We excel in security informatics (or cybersecurity) research, exploring how we can better protect companies from cyber-attacks and nations from cyber war. We examine information retrieval, search engines, and big data as means to understand complex knowledge and societal and economic relationships. We study cognition and human-computer interfaces in order to comprehend how an individual's abilities and limitations fit into a connected world full of technology. To succeed in all of these areas, as a graduate student in IST you will develop important skills in math, computer science, and social and behavioral sciences. You will learn how to analyze qualitative and quantitative effects in data, and be able to understand, test, and contribute to scientific theory.

Rankings

Penn State is ranked by Times Higher Education in the top 1 percent of higher education institutions worldwide. U.S. News & World Report consistently ranks highly Penn State's graduate schools in disciplines relevant to IST. Among iSchools, a consortium of information schools dedicated to advancing the information field in the 21st century, IST at Penn State is unique in its focus on social technology, cognition, and business.

Faculty Adviser and Annual Review

Each IST M.S., Integrated Undergraduate Graduate (I.U.G.), or Ph.D. student must identify a member of the IST Graduate Faculty who is willing to serve as his or her faculty adviser. The role of the faculty adviser, the process used to make initial assignments of faculty advisers to students entering the M.S., I.U.G, or Ph.D. program, and an explanation of the annual review are all described below.

A. Role of Faculty Adviser

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

B. Adviser Matching Process for Newly Admitted Students

Students are encouraged to interact with faculty members of interest using e-mail/phone conversations during the summer prior to arriving at Penn State (or, in the case of I.U.G students, during the semester in which the student applies). In some cases, new students have already been in contact with their preferred advisers (e.g., through email or as part of the recruiting and decision process). New graduate students should arrive on campus before mid-August to participate in Orientation, and should also use this time to conduct face-to-face meetings with potential advisers. In other cases, the student can meet with the Graduate Programs Director to suggest potential adviser matches.

New graduate students are expected to begin working with their adviser by the first day of fall classes. Advisers are officially recorded by filling out a Student-Adviser Agreement form to be submitted to the Graduate Programs Office by **October 1st**.

C. Annual Review

An annual review will be conducted each March/April to evaluate the progress of Ph.D. /M.S. /I.U.G. students in their graduate studies. As part of the review process, each graduate student completes an Annual Evaluation form and updates his/her curriculum vitae (CV). Then, each student meets with his/her adviser to discuss coursework completed or to be taken, research progress, related issues, and plans for the following year. After this meeting, the adviser rates the student's performance and provides comments to explain the rating. This form should then be submitted with the student's CV to the IST Graduate Programs Office.

In the event that the faculty adviser determines a student's progress is in need of improvement or fails to meet performance expectations, steps are taken to understand the nature of the problem and to develop a plan for addressing these issues. On some occasions, an adviser change will be recommended, while in other cases, the student may be required to complete specific tasks on a stated timeline. In yet other situations, a student may be terminated from the program, or—in the case of the doctoral program—a Ph.D. student, may be counseled to transfer to the Master's program rather than continue on with Ph.D. studies.

General Assistantship Policies

D. M.S. and IUG Students

Masters students accepted to the College of IST are generally unfunded. In special cases where there are teaching support needs, a master's student or an I.U.G. student may be hired to fill a wage payroll instructional assistant position. Appointments automatically end at the conclusion of each semester and appointments carry no guarantee of renewal.

(1) Instructional Assistant (IA) - Tech Support/Grader

An IA is assigned to support one or more specific courses for a particular semester, not to support a faculty member. Funds are provided by the College. In other words, if a faculty member other than the student's adviser teaches a course to which an IA 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 an IA is assigned as the IA's supervisor. Students who receive IA support generally possess specialized skills or experience gained through prior work experience.

IAs should meet with their supervisors prior to the start of the semester, as well as during the semester. Once assignments have been announced, IAs should contact their supervisors to let them know when they are available for meetings prior to the start of the semester. Initially, the IAs should expect to receive a course syllabus and possibly 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. IAs 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 specific assignments or projects and how these should be evaluated. IAs should expect to attend course lectures and labs, and be aware of the instructor's emphasis and expectations of the students.

For this position, only wages are paid. IAs 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; preparing and setting up demonstrations; processing grade data, and perhaps, assigning grades.

Before the first week of the semester, the IA and supervisor should meet and complete a Work Agreement form to assure that all start-up details have been discussed and arranged. At mid-semester and again at the end of the semester, the supervisor and students enrolled in the course should complete evaluation forms electronically.

If an IA must be absent from an assigned job due to illness, a personal emergency, or professional trips, the IA must notify the supervisor at the first knowledge of such an absence and work with the supervisor to ensure that responsibilities are covered.

IMPORTANT: *IAs should not make travel plans the week before the semester begins, 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 situations a supervisor may agree to allow an IA to depart early or arrive late, but this should never be assumed by the IA. Permission for such exceptions must be requested in advance.*

NOTE: Enrollment in IST 602 (Supervised Experience in College Teaching) is required for all students during the first semester they are serving as an IA. This course is offered every fall and spring semester and is designed to help new instructional assistants become more effective in their teaching. It also provides instructional assistants with the opportunity to discuss particular issues that arise in the classroom.

E. Ph.D. Students

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 adviser (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. Appointments automatically end at the conclusion of each semester 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.

IMPORTANT: Students who are receiving Assistantship funding should be aware of requirements regarding their arrival to campus at the beginning of the semester and their departure from campus at the end of the semester. These students should plan to arrive the week before the semester begins and should not schedule a departure date prior to the end of Finals Week.

(2) Research Assistantships (RA)

An RA's supervisor is most often the student's faculty adviser, and will, to some degree, dictate the supporting coursework 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 dissertation are difficult to separate. The combination of the research appointment and the registration for coursework or dissertation credits should represent a realistic workload.

RA's 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.

(3) Teaching Assistantships (TA)

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 adviser 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. Students who receive TA support generally possess specialized skills or experience gained through prior work experience. 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, TA's should contact their supervisors to let them know when they are available for meetings prior to the start of the semester. Initially, the TA's 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. TA's 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 should be evaluated. TA's should expect to attend course lectures and labs, and to 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.

Before the first week of the semester, the TA and supervisor should meet and complete a Work Agreement form to assure that all start-up details have been discussed and arranged. At mid-semester and again at the end of the semester, the supervisor and students enrolled in the course should complete evaluation forms electronically.

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: TA's should not make travel plans the week before the semester begins, 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 never be assumed by the TA. Permission for such exceptions must be requested in advance.

NOTE: Enrollment in IST 602 (Supervised Experience in College Teaching) is required for all students during the first semester that they serve as a TA. This course is offered every fall and spring semester and is designed to help new teaching assistants become more effective in their teaching. It also provides teaching assistants with the opportunity to discuss particular issues that arise in the classroom.

(4) 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 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 resource availability and student qualifications; in all cases a teaching mentor will also be assigned to provide oversight of the teaching process.

Additional Information

F. Student Insurance

All graduate assistants (RA's and TA's) 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](#) or the [Graduate Student Insurance Office](#).

G. Stipends- (Ph.D. Students Only)

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.**

H. AEOCPT

It is mandatory that all international students 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. More information can be obtained by contacting the [Department of Applied Linguistics](#).

I. Scholarship and Research Integrity (SARI) Training

All graduate students are required to complete Scholarship and Research Integrity (SARI) training specified by their college/department. Penn State's Scholarship and Research Integrity (SARI@PSU) program is designed to offer Penn State researchers and scholars comprehensive, multilevel training in the responsible conduct of research (RCR), in a way that is tailored to address the issues typically faced by individual disciplines. SARI@PSU programs address topics such as publication practices and responsible authorship, conflicts of interest, research misconduct, peer review, mentoring, data management, collaborative research, human subjects' protections, and animal welfare. In general, SARI@PSU addresses these issues through two initiatives: an online RCR training program offered by CITI (Collaborative Institutional Training Initiative at the University of Miami), and interactive, discussion-based RCR education. All graduate students at Penn State, who matriculate in fall of 2009 or later, are required to complete the SARI@PSU requirements prior to graduation.

The College of IST requires two online module trainings in Human Subjects Research and Responsible Conduct of Research, along with five hours of discussion based training that is covered at the new student orientation. This training plan and student participation report is available from the [Office for Research Protections](#) upon request.

Masters (M.S.)
Information Sciences and Technology

The M.S. in Information Sciences and Technology

In the M.S. program, you can engage more deeply in an intellectual conversation with research and science than an undergraduate degree allows. It typically opens up advanced career opportunities, both in industry and as a preparation for a Ph.D. As an M.S. student, you will take many of the same courses as the Ph.D. students, and have the option to produce a thesis worthy of publication or a scholarly paper that could be submitted to a conference. The M.S. program is designed to be completed in two years.

On the following pages, you will find useful information about how our M.S. program is structured, and a description of the expectations we have for our graduate students. In addition, this Handbook provides details of the University and College policies and procedures that will govern your time here at Penn State.

Masters Degree Requirements (M.S.)

Master's degree students complete a minimum of 30 credits. M.S. students have the option of completing a Thesis or a Scholarly Paper. This decision is made in conjunction with the student's adviser and should be determined during the first year of study. Students electing to complete a Thesis take IST 600 research credits and those electing a Scholarly Paper take IST 594 research credits. Students cannot substitute IST 600 credits for IST 594 credits except by exception, approved by both the IST Graduate Programs Office and the Graduate School.

Thesis	Scholarly Paper
30 total credits	30 total credits
6 credits core courses: <ul style="list-style-type: none">- IST 504- IST 505	6 credits core courses: <ul style="list-style-type: none">- IST 504- IST 505
12 credits specialization	12 credits specialization
6 credits research methods	6 credits research methods
6 credits 600 for thesis	6 credits 594 for scholarly

J. Full-time Matriculation

Graduate students in the IST M.S. program are expected to matriculate on a full-time basis at the University Park campus each fall and spring semester. There are no exceptions to the requirement for full-time on-site matriculation. In addition, applicants to the M.S. program are ordinarily expected to start in the fall semester of each year.

K. General Requirements

Master's students must complete a minimum of 30 credits for both the thesis and scholarly paper option with 20 of these credits earned at the University Park campus. These include 6 credits of core requirements and 24 credits of primary and supporting field requirements. Reflecting the interdisciplinary nature of the program, many of the approved elective courses are offered by other colleges.

(1) Core Requirements (6 credits)

All M.S. students are expected to develop a broad understanding of the core constructs of people, information, technology, and the significant interactions among those elements by taking IST 504 in the fall and IST 505 in the spring of their first year.

(2) *Research Methods Requirements (6 credits)*

All candidates must develop a basic understanding of the research methods utilized in the information sciences, by taking two graduate level research methods courses offered in IST or elsewhere. The focus of the course must be on the methods being learned rather than application of some method to a research domain.

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

In consultation with his/her adviser, a candidate is expected to choose courses in one or more areas customized to support the thesis or scholarly paper requirement. In addition to advanced courses in IST, a specialty area could be in law, business, education, engineering, the liberal arts, science, or any area that is linked to the information sciences. These courses can be at the 400 or 500 level with a maximum of 6 credits at the 400 level. Students who register for IST 596 as part of their coursework must fill out a Request for Independent Study form.

(4) *Thesis or Scholarly Paper (6 credits)*

In conjunction with their adviser, students may choose a thesis or scholarly paper option. Students who choose the thesis option must write a thesis, orally defend the thesis to the thesis committee, and register for 6 credits of IST 600. The thesis should focus on a well-defined problem relevant to the information sciences. Students who choose the scholarly paper option must complete a scholarly paper and register for 6 credits of IST 594. The scholarly paper is to be a focused piece of technical work that applies the student's expertise and knowledge base, and that is documented and presented as a scholarly research paper. The scholarly paper is to be submitted to the student's committee; an oral presentation is at the discretion of the student's adviser.

(5) *Time Limitation*

All requirements for a master's degree (including acceptance of a thesis or scholarly paper as may be specified), whether satisfied on the University Park campus or elsewhere, must be met within two years of admission to degree status.

(6) *Language and Communication*

In addition to successfully fulfilling the English competency expectation through the AEOCPT exam and/or remediation, all candidates must be competent in the English language and must have demonstrated skills in the communication of ideas both orally and in writing commensurate with the requirement of professional work.

M.S. Committee Selection

An M.S. degree-seeking student must formally select his or her M.S. degree committee no later than the completion of their general degree requirements. This normally occurs after completing the first year of studies.

This committee will be composed of at least three Penn State graduate faculty members. At least two of the committee members should be graduate faculty members of IST.

By the end of the first semester of study, the student should formulate a plan of research and begin to identify members of the Master's Degree Committee.

M.S. Thesis Defense

L. Objective

The objective of the M.S. Thesis Defense is to assess a M.S. candidate's research accomplishments based on the completion of a final draft of the candidate's thesis. This is to be facilitated by the M.S. candidate submitting the final draft of the thesis to the M.S. committee and by presenting the thesis at a formal meeting of his or her committee that is open to the University community. Once the final thesis is approved, it will be submitted and archived electronically via eTD's to be accessible worldwide.

M. Graduate School Guidelines

Changes to the official [Graduate School Bulletin](#) take precedence over the content of this section.

The M.S. candidate who has satisfied all other requirements for the degree will schedule the final examination on the recommendation of the M.S. committee chair. One month's notice is required for scheduling this examination. Please go to the [IST Graduate Student website](#) to submit the IST Exam Request Form and IST Degree Audit. The deadline for holding the examination is six weeks before commencement. It is the responsibility of the M.S. candidate to provide a copy of the thesis to each member of the M.S. committee *at least two weeks* before the date of the scheduled examination.

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

The M.S. thesis defense is an oral examination administered and evaluated by the entire M.S. 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 thesis, 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.

At least two members of the M.S. committee (including the thesis adviser or chair) must be physically present at the final oral examination. The graduate student also must be physically present at the exam. No more than one member may participate via telephone or video conferencing. The M.S. thesis defense request and a request for exceptions must be submitted to the Graduate Programs Office for approval at least two weeks prior to the date of the exam. Special arrangements, such as requirements for meeting participation via distance, should be communicated to the student and the M.S. committee members well in advance of the examination.

A favorable vote of at least two-thirds of the members of the committee is required for passing the final M.S. oral examination. The results of the examination are reported to the IST Graduate Programs Office via the Completion of Master's Final Defense form to become part of the student's graduate file. Students should go to the Thesis Office website and print a copy of the [Master's Signatory Page](#) and have each committee member sign this form. If a candidate fails, it is the responsibility of the M.S. committee to determine whether or not another examination may be taken.

General Thesis Requirements

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

Every dissertation/thesis must be reviewed and approved by the Thesis Office staff. That office reviews for format only and does not edit for spelling, grammar, or punctuation. When a dissertation/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](#). Information Technology Services (ITS) offers [PSTT](#) (Penn State Thesis Template). This is a software package that contains templates including styles, macros, toolbars, menus, and layouts. The [Statistical Consulting Center](#) gives advice to graduate students working on thesis research. The [Graduate Writing Center](#) in 111-H Kern Graduate Building provides consultation to graduate students in all disciplines.

An M.S. thesis must be submitted electronically. For more information on electronic dissertations/theses (eTDs), visit the [eTD's website](#).

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

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

- Become familiar with the format requirements by reading the [Thesis Guide](#) carefully and be aware of all Graduate School and Thesis Office deadlines as indicated on the [Thesis, Dissertation, and Performance Calendar](#)
- Activate the intent to graduate on [LionPATH](#) during the semester in which you plan to graduate. Go to the [Thesis, Dissertation, and Performance Calendar](#) for deadline.
- Upload a draft of your thesis for format review (Word or pdf file) to the [eTD website](#) by the specified deadline. Corrections and detailed instructions will be returned to you by e-mail within two weeks.
- Make any changes required by the adviser and committee members. Receive approval in the form of signatures on the [Master's Signatory Page](#)
- Review the thesis 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.
- Go to the [eTD website](#) and upload the final eTD; submit supporting materials to the Thesis Office (note: It doesn't matter if you upload first or submit the materials first). Supporting materials are: signed Master's Signatory Page and \$25 thesis fee collected via PSUPAY.
- Await notification of thesis 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 (See top of Master's Signatory Page).
- If bound copies are needed, contact [Multimedia & Print Center](#) on campus or you may use an off-campus source. All copies are the author's responsibility. The Graduate School does not provide copies.

M.S. Scholarly Paper

N. Objective

The objective of the M.S. Scholarly Paper is for it to be a focused piece of technical work that applies the student's expertise and knowledge base. This option is for those whose primary goal is to gain advanced knowledge and skills in the information sciences and technology field. The scholarly paper will be submitted to the student's committee; an oral presentation is optional. The scholarly paper does not get submitted to the Thesis Office and is not archived.

O. IST Guidelines

The M.S. candidate who has satisfied all other requirements for the degree will submit the scholarly paper on the recommendation of the M.S. committee chair and schedule an oral presentation if desired. If a presentation is to be scheduled, one month's notice is required for scheduling the oral presentation. Please go to the [IST Graduate Student website](#) to complete and upload a degree audit and submit a request for the completion of your M.S. scholarly paper. The deadline for holding the presentation is four weeks before commencement. It is the responsibility of the M.S. candidate to provide a copy of the scholarly paper to each member of the M.S. committee *at least two weeks* before the date of the scheduled presentation.

Both the adviser and the student are responsible for ensuring the completion of a draft of the scholarly paper and for adequate consultation with members of the M.S. committee. Major revisions to the scholarly paper should be completed before submission to the committee and oral presentation if one is scheduled. The M.S. scholarly paper is evaluated by the entire M.S. committee and the results are reported to the IST Graduate Programs Office via the Completion of Master's Scholarly Paper form. If an oral presentation is scheduled, it will consist of an oral presentation of the scholarly paper by the candidate and a period of questions and responses. These will relate in large part to the scholarly paper, but may cover the candidate's entire program of study, because a major purpose of the presentation is also to assess the general scholarly attainments of the candidate. The portion of the presentation in which the scholarly paper is presented is open to the public.

If an oral presentation is scheduled, at least two members of the M.S. committee (including the adviser or chair) must be physically present. The graduate student also must be physically present. No more than one member may participate via telephone or video conferencing. The M.S. presentation request and a request for exceptions must be submitted to the Graduate Programs Office for approval at least two weeks prior to the date of the presentation. Special arrangements, such as requirements for meeting participation via distance, should be communicated to the student and the M.S. committee members well in advance of the presentation.

A favorable vote of at least two-thirds of the members of the committee is required for approval of the scholarly paper and passing the M.S. oral presentation, if one was scheduled. The results are reported to the IST Office of Graduate Programs via the Completion of Master's Scholarly Paper form to become part of the student's graduate file. If a candidate fails, it is the responsibility of the M.S. committee to determine whether or not another examination may be taken.

**Integrated Undergraduate Graduate (I.U.G.)
Information Sciences and Technology**

Integrated Undergraduate Graduate (IUG)

The Integrated Undergraduate Graduate (IUG) Degree Program offers the chance for highly qualified students to obtain the baccalaureate and master's degree in less time than it would take to obtain these degrees sequentially. The IUG allows students accepted into the program to count up to 12 credits toward both their baccalaureate and master's degree requirements. This IUG program introduces undergraduate students to graduate faculty and to the rigors of graduate study.

I. IUG Degree Requirements

Students in the IUG program must satisfy the requirements for both their B.S. degree (either in Security and Risk Analysis or in Information Sciences and Technology) and the M.S. degree in Information Sciences and Technology. The first three years of the IUG program are identical to the first three year of the students' chosen B.S. program. The fourth year of the IUG program differs from the fourth year of the B.S. program because of the inclusion of courses that count toward the Master's of Science degree requirements.

The graduate portion of the program requires 30 credits of coursework (6 credits of core courses, 6 credits of research methods, 12 credits of specialization, and 6 credits of research). These requirements are the same as for the M.S. degree (see above). Double-counting of courses aids the I.U.G. student in completing these requirements within the projected 5-year period for the B.S. and M.S. degrees.

I.U.G. students have the option of completing a Thesis or a Scholarly Paper. This decision is made in conjunction with the student's adviser and should be determined during the first year of study. (Note: Schreyer Honors College students should choose the thesis option, because the Master's thesis can double count for the undergraduate honors thesis). Students electing to complete a Thesis take IST 600 research credits, and those electing a Scholarly Paper take IST 594 research credits. Students cannot substitute IST 600 credits for IST 594 credits except by exception, approved by both the IST Graduate Programs Office and the Graduate School.

Thesis	Scholarly Paper
30 total credits	30 total credits
6 credits core courses: - IST 504 - IST 505	6 credits core courses: - IST 504 - IST 505
12 credits specialization	12 credits specialization
6 credits research methods	6 credits research methods
6 credits 600 for thesis	6 credits 594 for scholarly

P. Double Counting of Coursework

Students admitted to the IUG program may double-count a maximum of 12 credits to their graduate and undergraduate degrees in the College of Information Sciences and Technology, of which at least 50% of the courses proposed to double-count must be at the 500 or 800 level. In their senior year, IUG students will take 6 credits of specified graduate work, courses IST 504 and IST 505, along with their other courses. These 6 credits of IST 504 and IST 505 will apply to both the graduate program and the undergraduate IST/SRA support of option requirement. As part of the graduate specialty course requirements (12 credits), students will choose an additional 6 credits to double-count for both the undergraduate and graduate

degrees. These courses must be at the 400-level or above. Students in the IST B.S. / IST MS IUG program may choose any 400-level undergraduate option course (IST 411, IST 412, IST 413, IST 420, IST 421, IST 431, IST 432) that they are using to fulfill an undergraduate option requirement and apply the credits to both the undergraduate option requirement and the graduate specialty course requirement. Students in the SRA B.S. /IST MS IUG program may choose any 400-level undergraduate option course (SRA 433, SRA 468, SRA 471, IST 451, IST 452, IST 454, IST 456) that they are using to fulfill an undergraduate option requirement and apply the credits to both the undergraduate option requirement and the graduate specialty course requirement. Credits associated with the thesis or culminating scholarly paper, such as IST 594 and IST 600, may not be double-counted.

Q. Enrollment Guidelines

Student should follow the IUG enrollment guidelines listed in Appendix B (forms). Failure to follow the guidelines may impact a student's financial aid.

Students should note that depending on the guidelines for a given student's situation, students may need to use a paper form and manual processing to enroll (instead of simply enrolling via LionPATH). A manual override is required to allow for cross-career (i.e., undergraduate and graduate) enrollment. This occurs when graduate (500/800) level courses are shared between the undergraduate and graduate record while the student is primarily enrolled as an undergraduate student. A form is submitted to Graduate Enrollment Services (GER) for approval that is then forwarded to the Office of the University Registrar (OUR) for processing. If a student fails to follow the IUG enrollment guidelines, a student must use a 'Swap' form for correct registration. The form is submitted to GES for approval then forwarded to the Office of the University Registrar for processing.

R. General Requirements

Academic Performance Requirements

A student admitted into the IUG program will be monitored by his or her adviser and the IST Graduate Programs Office on an on-going basis. Students who have not maintained a 3.5 GPA in their senior year will be put on probationary status with respect to the IUG program. Their ability to continue in the IUG program will be based on their academic performance in the first semester of their graduate year.

Student Record Notation

All IUG students have a prov/provision on their student record to confirm their bachelor's degrees until the undergraduate degree is conferred. IUG students with the provision to complete their undergraduate degree should not have holds on their records.

S. Committee and Thesis/Scholarly Paper

All requirements and direction provided in the M.S. Degree section (above) for Committee Selection, M.S. Thesis Defense, General Thesis Requirements, and M.S. Scholarly Paper Requirements hold for I.U.G. students.

T. Opting Out

If for any reason a student admitted to the IUG program is unable to complete the requirements for the master's degree, the student will be permitted to receive the B.S. degree, assuming all the undergraduate degree requirements have been satisfactorily completed.

**Doctor of Philosophy (Ph.D.)
Information Sciences and Technology**

The Ph.D. in Information Sciences and Technology

The Ph.D. program provides foundational training that will prepare you for a career in information science, related sciences, and technology research. The first-year core curriculum will give you the skills and background to conduct interdisciplinary technology research. A flexible elective structure will provide customization for your interests and needs. After the first two years of courses, you will engage in further research, leading to a comprehensive exam and dissertation proposal, followed by a dissertation defense. Typically you will graduate in 4-5 years after you enter the program.

As a Ph.D. student, you will work on a series of research projects, publishing work with your adviser(s) and fellow lab members in international conferences and journals, effectively beginning a career in research while still a student. As you progress through the program, you will be advised and become self-directed, rather than managed. Given this level of autonomy, students find the Ph.D. program particularly challenging and rewarding.

On the following pages, you will find useful information about how our Ph.D. program is structured, and a description of the expectations we have for our graduate students. In addition, this Handbook provides details of the University and College policies and procedures that will govern your time here at Penn State.

Doctor of Philosophy Degree Requirements (Ph.D.)

U. Full-time Matriculation

Graduate students in the IST Ph.D. program are expected to matriculate on a full-time basis at the University Park campus each fall and spring semester. In addition, applicants to the Ph.D. program are ordinarily expected to start in the fall semester of each year. To be considered full-time, students do not need to be registered in summer if they have been registered the previous fall and spring semesters.

V. General Requirements (38 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 38 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.

Course Requirements:

- 3 credits IST 501 (required first semester)
- 2 credits IST 590 (colloquium required in the first and second semesters)
- 9 credits foundations courses: IST 510; IST 520; IST 530
- 12 credits research methodology courses, no specific requirement, must be graduate level
- 12 credits specialization courses, maximum of six 400-level credits

NOTE: Students must maintain a GPA of 3.0 in their coursework in order to complete milestones and to graduate.

(1) Core Requirements (14 credits)

All Ph.D. students are expected to develop a broad understanding of foundations, theories and methods across the disciplines that together constitute the research landscape of the College. During the first year, students take IST 501 and three foundations courses - IST 510, 520 and 530, as well as two semesters of colloquiums, IST 590 (one credit each).

NOTE: In rare cases, a graduate student may not be required to take IST 510, 520 or 530 because of mastery in the area. Mastery in each of these areas is determined by the Graduate Program Director and the Graduate Advisory Committee (as needed), who examine the previous coursework taken by the student.

Students who believe they have mastery in an area and do not need one of the core courses should contact the Graduate Program Director within the first month of arrival at Penn State. Students may claim mastery in up to two out of three core courses. They may not claim mastery in all three.

(2) Research Methodology Requirements (12 credits)

All candidates must take courses that will guide them to acquire and practice research methods relevant to their dissertation project or other research activities. The research methodology courses should be 500-level and selected with the help of the faculty adviser 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 in this selection, Graduate Programs maintains a list of research methodology courses that have proven to be useful to IST Ph.D. students in the past. Students seeking to designate a course as a methods requirement that has not been pre-approved should have the syllabus reviewed in advance by the Graduate Programs Office.

(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 the support of their dissertation projects or other research activities. A maximum of six credits of these elective courses may be fulfilled by undergraduate courses at the 400-level.

(4) 600-level credits

In addition to the 38 credit requirement, students also register for IST 600 research credits. All 600-level credits are to be assigned an "R". Upon successful completion of the comprehensive exam, students register for IST 601. The following is a list of the various research courses and a brief description of each:

IST 600 Thesis Research (Thesis Research) (This is for BOTH MS and PhD students. This is for MS students writing a thesis and for PhD students who have **not yet passed** their comprehensive exams, who are actively doing research **on campus**)

IST 601 Ph.D. Dis Full-Time (Dissertation) (This is for PhD students who **have passed** their comprehensive exams, who are actively doing research **on campus**)

IST 610 Thes Res Off Campus (Thesis Research) (This is for PhD students who have **not yet passed** their comprehensive exams, who are semi-actively doing research **OFF campus**)

IST 611 Ph.D. Dis Part-Time (Dissertation) (This is for PhD students who **have passed** their comprehensive exams, who are semi-actively doing research **OFF campus**)

(5) Time Limitation

A doctoral student is required to complete the program, including acceptance of the doctoral dissertation or the passing of the final performance, within eight years after the date of

successful completion of the candidacy examination. To request an extension, the IST Graduate Programs Office must send a memo to the Director of Graduate Enrollment Services for review. The extension may be granted in appropriate circumstances.

(6) Language and Communication Requirements

In addition to successfully fulfilling the English competency expectation through the AEOCPT exam and/or remediation, 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 professional work. One component of the candidacy examination is an assessment of written and oral English proficiency. If the outcome of the candidacy exam is remediation, the student must then work with his/her adviser to plan for remediation, including additional courses, mentoring, or other activities.

Minor

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 pursue 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, six 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 to fulfill the requirements of two or more minors). 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. To be identified on the official transcript as a minor, students must formally declare it by submitting a Request to Add Graduate Minor form to the Graduate Programs Office.

Candidacy Examination

W. Purpose

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 of the College of Information Sciences and Technology assesses the student's ability to reason about a research topic of personal interest from multiple perspectives (e.g., as represented by the core curriculum). In keeping with Penn State Graduate School policies to assess high-level competence of the English language, the exam will include an assessment of both written and oral communication fluency.

X. Committee

The candidacy examination is administered by a committee assigned by the college. Each committee will administer an exam to 3-6 students. There will be as many committees as deemed necessary to cover the number of students to be examined. Voting members of the committee will consist of three IST graduate faculty members. Ideally, these three committee members would come from different academic background representing the breadth of research in IST.

Y. Eligibility

To be eligible to take the candidacy exam a student must be enrolled in the PhD. Program in

the College of IST at Penn State. The student must have completed 20 graduate credits at Penn State by the end of the first spring semester. The student must have a cumulative GPA of 3.0. The student must have received credit for IST 501, IST 510, IST 520, and IST 530, and have received a grade of B- or higher in each. The student must have the support of her/his advisor to continue with her/his PhD studies in the form of a letter of support.

Z. Grading

There will be 3 parts to the overall exam; Portfolio, Written and Oral.

A. PART 1: PORTFOLIO

Due April 1

From the student: Each student eligible to take the candidacy exam will submit a Portfolio to the Candidacy Committee by April 1. The Portfolio should include.

1. A current CV
2. A copy of the student's transcript plus the anticipated grades for spring.
3. A 500-word Abstract. The student, with his or her adviser's assistance, will identify a research area that he or she is currently interested in pursuing. Following this, he or she will write an abstract of approximately 500 words, including all appropriate citations to relevant scientific research. Although research discussions between student and adviser are expected and encouraged, the exam abstract will be written by the student *without assistance from the adviser*.

From the adviser: A confidential letter to the candidacy committee detailing the student's readiness and potential to do research.

From the instructors of the 5 core courses (IST 501, 510, 520, 530 and 590): Each instructor will be asked to provide feedback on the performance of each student in their class, who is taking the Candidacy Exam. Instructors are not required to provide feedback on high performing students, but may offer it if they wish. Instructors are required to provide feedback on all students who have received a grade of "B-" or less.

B. PART 2: WRITTEN EXAMINATIONS

Written exam questions will then be created and evaluated by the Candidacy Committees during the month of April. With respect to the goals for the exam questions, the resulting reviews should demonstrate that students can make sense of research literature both inside and outside their research areas, and that they can apply their new understanding to identify and discuss implications for their research topics. The suggested word limit of 3,000 words (not counting bibliography) is a guideline, but is intended to aid with further consistency across questions and students.

Question Answering — 5 days in early May

The three exam questions will be distributed to the student the last day of final exam week of the spring semester. After receiving the questions, students will have 24 hours to send via email a request for question clarification from exam committees. These requests must be brief and focus on clarifications of terminology or phrasing; they should not preview literature search directions or arguments that the student plans to make. It is up to the discretion of each committee whether and how to reply to a clarification request. Example responses might include definition or scoping of concepts, paraphrasing of a point made in the question; if the question has provided no pointers to the literature a few such pointers may be provided at this time. A committee may also indicate that no further clarification will be given. All clarification responses must be provided no later than **5:00 p.m. the following day**.

As a critical literature review, each response should present and synthesize research issues, approaches and findings related to the question posed. Students are also evaluated on their ability to follow standard guidelines for citing references and formatting their text, including the labeling and appropriate references to any figures or tables. Students may not seek or receive any

outside help in searching for literature or in formulating and writing the question responses as this exam is an assessment of their individual aptitudes and communication competencies.

Written question grading will take place immediately after the 5 day writing period has ended. Each committee member is responsible for reviewing **all answers in preparation for the oral exam**. The evaluation will focus on the strengths and weaknesses of the written response. The exam is evaluative rather than formative; critical feedback may be given as appropriate, but in the interest of committee workload, such feedback is delegated to the students' advisers.

C. PART 3: ORAL EXAMINATIONS

All oral examinations will take place at the end of the week following final exams for the Spring semester.

The Candidacy Committee meets with each student for approximately one hour. Note that an oral exam will take place even if the committee has recommended a failing grade for the portfolio and written portions of the exam. During the exam, the student will first present his research proposal (15 minutes) (the preparation of this presentation must be the sole work of the student; no consultation is permitted). The committee members will then ask questions related to the proposal. After the oral exam, the student will depart and the committee will discuss the oral exam performance. The committee will follow a rubric that requires evaluation of the student's performance in categories related to presentation, argumentation, and relevance of research ideas, literature review, and the answers to the committee's questions.

D. Exam Results

For students who receive a passing grade, no further action is required and they will be encouraged to move on to their next milestone (Comprehensive Exam). For students who receive a failing grade, counseling will ensue to determine whether a terminal master's degree is warranted or whether the student should terminate his or her studies. The outcome determined by the exam committee will be shared as soon as possible with the student, the student's adviser, and the committee. The adviser and/or any dissenting committee member will have one week to register concerns about this outcome. Such concerns should be shared with the committee chair and should include a description of the concern and rationale for any requested review.

Failed Exams

- *Students who fail the exam will be dropped from the Ph.D. program by the Graduate School after notification from IST Graduate Programs.*
- *If the student wants to continue with a Master's Degree, she/he will fill out a Change of Degree form and submit to Graduate School.*
- *If Change of Degree form is not filled out, the student's status will be changed to Non-Degree starting with the semester after the Candidacy Exam is taken.*

Exam Appeals

- Appeals by the student, adviser or committee member concerning an exam outcome will be submitted for review to GAC, who will in turn appoint an appeal committee of two graduate faculty members not part of the original committee. Remediation conditions attached to a Pass outcome may also be the subject of appeal. The appeal requests must be submitted no later than 48 hours after the outcome determination is communicated to the student and his or her adviser.
- The appeal committee will review the entire set of exam documents and comments and submit a recommendation to GAC, who will make a decision about the appeal and communicate this to the parties involved. Note that if GAC at that time includes a member from the committee whose exam result is being appealed (or an adviser of a student submitting an appeal), that individual will not be involved in the appeal process.
- If the secondary decision is appealed, a final review and decision will be made by the Associate Dean for Undergraduate and Graduate Studies.

The next major milestone for doctoral students who successfully complete the candidacy examination is to complete his or her coursework 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).

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 at the time of scheduling your comprehensive exam. The form can be obtained from the IST Graduate Programs Office. 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 field/unit 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 field/unit 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.

There are additional committee composition requirements for those students pursuing a Dual-Degree or a Minor. Please see the Graduate Programs Office to determine the specific composition needs for these unique cases.

Comprehensive Examination

When a candidate for the Ph.D. degree has completed most or all of their coursework, a comprehensive examination is given. The comprehensive examination is generally taken within 12-18 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.

Content and Format of the Comprehensive Examination

- 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 coursework 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 College of IST does not allow students to receive a letter grade for a research class. Students may only receive an "R" in the following classes. IST 600, IST 601, IST 610, IST 611. IST 594 is the only class that may receive either an "R" or letter grade, depending on whether it is used for a MS scholarly paper or MS Cumulative experience.
- When a period of more than six years has elapsed between the passing of the comprehensive examination and the completion of the dissertation defense, the student is required to pass a second comprehensive examination before the final oral examination will be scheduled.

The comprehensive exam has a written and oral component. Each College in the University determines how the comprehensive exam will be structured. In the College of IST, the Graduate Faculty have chosen to combine the comprehensive exam and the proposal defense into a single session. In this section, we offer details specific to the comprehensive exam process and in the following section, we highlight expectations for the dissertation research proposal defense itself. Students are encouraged to familiarize themselves with *both* activities and the way that they are linked in the College of IST.

Because the comprehensive exam and proposal defense happen in a single session, students are assessed on their mastery of their major (and minor, if appropriate) as demonstrated by the content of their literature review and methodology sections presented in the written proposal, and as ascertained through oral questioning by the committee members. Committee members assign a rating of the candidate's mastery (Superior, Above Average, Average, Below Average or Fail). A vote of at least two-thirds is required for passing the comprehensive. Students should note that a two-thirds assessment of Fail results in the student's termination from the Ph.D. program. The results are formally reported by the IST Graduate Programs Office to the Office of Graduate Enrollment Services.

Working with their adviser and other committee members, the student prepares a dissertation proposal (see the next section for details). The proposal must be available to the committee to review at least two weeks prior to the date of the examination. The proposal is evaluated by the committee members completing the College of IST Doctoral Comprehensive Examination Dissertation Proposal Approval form after the proposal defense. The examination is scheduled by the IST Graduate Programs Office. Students should go to the [IST Graduate Student website](#) to submit the IST Exam Request Form and IST degree audit. Since 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 adviser's and student's discretion, the IST Graduate Programs Office requires notification at least one month prior to the anticipated date.

The exams are announced by the IST Graduate Programs Office one week prior to the exam. Students must submit electronically a research abstract to graduateprograms@ist.psu.edu at the time of scheduling their exam.

At least three members of the doctoral committee (including the dissertation adviser or Chair) must be physically present at the comprehensive examination. The graduate student also must be physically present at the exam. 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.

A student must be registered continuously for each fall and spring semester following the semester he or she passes the comprehensive exam until his or her dissertation defense (final oral examination) by selecting IST 601.

Dissertation Research Proposal

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 the Ph.D. dissertation. As part of the Comprehensive Exam, the Ph.D. candidate submits 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, and scheduling timelines have been presented in the previous section.

Written Dissertation Research Proposal Format

The written proposal must include a review of the relevant literature, definition of the research concepts and methods, and a research schedule with milestones. The written proposal should be given to the candidate's doctoral committee at least two weeks prior to the scheduled comprehensive exam/proposal defense meeting.

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.

Defense of Dissertation Research Proposal

The candidate is asked to present and defend his or her dissertation research proposal to those attending the comprehensive exam/proposal defense meeting. Questions are permitted from any of those in attendance as instructed by the Committee Chair. 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.

The committee's assessment of the proposal defense focuses on the candidate's readiness to conduct the proposed research. This assessment includes conceptual readiness and methodological readiness. Candidates will be assessed as Acceptable to Proceed, Needs Revision or Needs a Complete Overhaul before proceeding. In addition, the committee members may request additional committee review of any revisions prior to proceeding to the research phase.

Dissertation Defense (Final Oral Examination)

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. This is to be facilitated by the Ph.D. candidate submitting the final draft of the dissertation to his or her Ph.D. committee and by presenting and defending the dissertation 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.

Graduate School Guidelines

Changes to the official [Graduate School publication](#) take precedence over the content of this section.

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. The student must submit his/her request by going to the [IST Graduate Student website](#) one month prior to 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 ten weeks before commencement. It is the responsibility of the doctoral candidate to provide a copy of the dissertation to each member of the doctoral committee at least two weeks before the date of the scheduled examination.

Both the dissertation adviser and the student are responsible for ensuring the completion of a draft of the dissertation and for adequate consultation with members of the doctoral committee well in advance of the final oral examination. The dissertation should be in its final draft, with appropriate notes, bibliography, tables, etc., when it is submitted to committee members for review. 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 dissertation by the candidate and a period of questions and responses. These questions will relate, in large part, to the dissertation, but may also 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 dissertation is presented is open to the public.

At least three members of the doctoral committee, including the dissertation adviser 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 one month 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.

At the time of the dissertation defense, 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 must have completed the residency requirement by the time the final oral examination is scheduled. This means that over some twelve-month period during the interval between admission to the Ph.D. program and completion of the Ph.D. program, the candidate must spend at least two semesters (**summer sessions are not included**) as a registered full-time student engaged in academic work at the University Park campus.
- There must be a three-month time lapse 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 committee members 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. Frequently the committee requests clarification and/or revision to one or more sections in the dissertation before believing the dissertation to be successfully completed. The committee can determine whether these clarifications can be monitored by the student's adviser or whether the committee seeks to review the clarifications in a revised version.

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.

Every dissertation 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 is submitted to the Thesis Office, it must meet the formatting and deadline requirements set forth in the latest edition of the [Thesis Guide](#). The Information Technology Services ([ITS](#)) provides a list of thesis resources to facilitate the writing process and offers [PSST](#) (Penn State Thesis Template). This is a software package that contains a collection of templates including styles, macros, toolbars, menus, and layouts. In addition, the [Statistical Consulting Center](#) gives free advice to graduate students working on thesis research. The [Graduate Writing Center](#) in 111-H Kern Graduate Building provides consultation to graduate students in all disciplines.

A doctoral dissertation must be submitted to the University. For more information on electronic dissertations or theses (eTDs), visit the [eTD's website](#)

In all cases, the dissertation author bears the ultimate responsibility for meeting Graduate School requirements. It is the dissertation 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 submission requirements is provided below. The dissertation author should:

- Become familiar with the format requirements by reading the [Thesis Guide](#) carefully and be aware of all Graduate School and Thesis Office deadlines as indicated on the [Thesis, Dissertation, and Performance Calendar](#)
- Activate the intent to graduate on [LionPATH](#) during the semester in which you plan to graduate. Visit [Thesis, Dissertation, and Performance Calendar](#) for deadline.
- Upload a draft of your dissertation for format review (Word or pdf file) to the [eTDs website](#) by the specified deadline. Corrections and detailed instructions will be returned to you by e-mail within two weeks.

- 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 signatory 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 [eTDs](#) submission. If you cannot do this, contact the [Thesis Office](#) for assistance.
- Go to the [eTDs website](#) and upload the final eTD. Submit supporting materials to the Thesis Office. Supporting materials are:
 - Signed [Doctoral Signatory Page](#)
 - [ProQuest/UMI Agreement](#)
 - [Survey of Earned Doctorates](#)
 - \$95 dissertation fee. To pay this fee go to the [Payment Portal](#)
 - Note: It doesn't matter if you upload the dissertation first or submit the supporting 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 (see top of Doctoral Signatory page).
- If bound copies are needed, contact the [Multimedia & Print Center](#) on campus or you may use an off-campus source. All copies are the author's responsibility. The Graduate School does not provide copies.

IST Graduate Program Policies

Credit Transfer Policy

The College of IST will follow the guidelines set by the Graduate School regarding credit transfers from an external institution. A maximum of ten (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 the fulfillment of a previous degree.

The grade obtained in the transferred course will appear on the student's official Penn State 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 methodology or elective courses.
3. Students requesting credit transfers to meet credit requirements without specific course substitutions must submit the [Graduate School Credit Transfer Form](#) (see p. 37) 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 transfer credits for the methodology requirement.

Course Substitution Policy

The College of 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 at 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 Director will then review the request and syllabus for which the substitution is being requested. 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 Associate Dean for Education.
3. If the course substitution is not approved, the student may request a meeting with the Graduate Programs Director. After this meeting, the Graduate Programs Director will make a recommendation to the Associate Dean for Education 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 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 methodology requirements utilizing the credits allowed under both policies.

Specialization Area Course Waiver Policy

The College of 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 adviser. The College will also accept courses from other accredited institutions to meet the specialization area requirement under the following guidelines:

2. The course must be from an accredited institution.
3. The student must have received an "A" or "B" grade value.
4. The course must appear on an official graduate transcript.
5. The course must have been taken within the five years prior to the date of registration to the IST graduate program.
6. 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's adviser'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
7. 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.

Independent Study Policy

The College of 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 departments and programs. The College will use the following guidelines for the Independent Study policy:

8. Students requesting an independent study course must submit a completed Independent Study Form to the Graduate Programs Office.
9. 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 toward the specialization area requirements.
10. 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.
11. The student must meet with the 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 per week.
12. 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.

Graduate Student Termination Policy

IST Graduate Student Termination Policy (Approved by the Graduate Advisory Committee February 2017)

The College of IST Graduate Student Termination Policy is derived from the university's policy, found in Appendix III of the Graduate Programs portion of the University Bulletin (http://bulletins.psu.edu/bulletins/whitebook/general_information.cfm?section=appendix3).

This policy will pertain to Ph.D., M.S., M.P.S., and I.U.G. students.

Students may be terminated from the graduate program in the College of IST for unsatisfactory scholarship, which includes not meeting academic standards, such as, but not limited to, minimum required grade-point average or grades in required courses for the program as well violating ethical, moral and professional standards. A violation of these standards may result in academic sanctions including suspension or dismissal by the graduate program in which the student is enrolled, from that academic program, and/or by the Graduate School from continued or future enrollment in any graduate program at the University.

Examples of unsatisfactory scholarship may include, but are not limited to, behavior which demonstrates a failure to exhibit acceptable ethical, moral, and professional standards; violations of the academic integrity policy or other university policies, inadequate grade-point average; failure to obtain satisfactory grades in required courses for the program; failure to make satisfactory progress in research or other activities related to the culminating experience; or failing the candidacy, comprehensive, or final oral examination for doctoral students. Behaviors, which violate the Student Code of Conduct, will result in a referral to the Office of Student Conduct for further action. Once the Office of Student Conduct completes their review of the matter, the program will proceed with their review and determine appropriate academic sanctions.

The termination process may be initiated by the student's adviser, the student's M.S. or Ph.D. (thesis or dissertation) committee, the student's research or teaching supervisor, the Director of the College's graduate programs or the Graduate Advisory Committee (GAC) for the College.

When one of these entities determines that the program of a graduate student must be terminated, a letter describing the need for termination will be sent to the Director of Graduate Programs. The termination recommendation will be reviewed by the Director of Graduate Programs, and with concurrence, the student will be notified by the Director of Graduate Programs that the termination process has been initiated. This termination recommendation then will be reviewed by the Graduate Advisory Committee. If approved by the GAC, the student will receive a letter from the Director of Graduate Programs indicating the reason for the termination and the date the termination will be effective, along with any other necessary information regarding the student's status.

Upon receipt of this notice, the student has the opportunity to seek a review of the decision per Appendix III of the Graduate Degree Programs Bulletin. If the student desires such a review, the student must, within ten days of receipt of the notice, submit a written appeal to the Director of Graduate Programs of the College. The Director of Graduate Programs then provides an opportunity for the student to meet with the faculty member(s) who made the decision to terminate the student's program, including the members of the Graduate Advisory Committee. This meeting must be held within 30 days of receipt of the student's written appeal.

Following this meeting, the Director of Graduate Programs must notify the student within five days, in writing, whether the termination decision has been sustained or reversed. If it is sustained, the program head shall notify the student in writing, providing the reasons for the termination, the evidence upon which the termination decision was sustained and notice of the right to appeal in writing to the Graduate School. The program head will also notify the Graduate School of the decision. Termination will be effective at the end of the semester in which the final decision is made, unless circumstances warrant immediate termination from the program.

If the termination is based upon failure to exhibit and promote the highest ethical, moral, and professional standards expected of graduate students, the Graduate School may also make a determination to dismiss the student from continued or future enrollment in any graduate program at the University.

Forms

Examples of student forms can be found in Appendix B. To obtain IST graduate forms please visit the [Grad Student Website](#). The Graduate School forms are available on the [Graduate School Website](#).

APPENDIX A

Reporting and Assistance Resources

As we welcome new and returning students to campus, all members of the Penn State community are asked to be mindful of their individual responsibility to help keep the University a safe and ethical institution and an accountable steward of University funds whether generated from state, federal, student, or any other sources.

The University does not condone wrongful conduct by any member of the Penn State community no matter what position he or she may hold.

Thus all members of the University community are urged to speak up if they see or suspect illegal, unethical, or unsafe conduct. If you do so, be assured that the University will protect you from retaliation. See [AD67](#) or contact the [Office of Ethics & Compliance](#) for more information.

The following resources are available for faculty, staff, students, and others:

TO MAKE A REPORT

Crime or emergency situation

- Contact the campus police or security office
- In an emergency, dial **911**

Child abuse, including child sexual abuse

- Contact the [Pennsylvania Child Welfare Services](#) "ChildLine" at **800-932-0313**
- If the child is in immediate danger, dial **911** first
- Penn State Authorized Adults (per AD72) are to also email AD72@psu.edu communicating that a report has been made. More information on [AD72](#)

Behavioral threat

- Contact the [Behavioral Threat Management Team](#) at **855-863-BTMT (2868), 814-863-BTMT (2868)**, reportBTMT@psu.edu

Bias or discrimination

- Contact the [Affirmative Action Office](#) at **814-863-0471**
- Visit the [Report Bias](#) website
- Students at University Park should call the Lion Support Help Line at 814-863-2020 to report acts of intolerance
- Students at other campuses may contact their campus Student Affairs office to report acts of intolerance

Sexual Harassment and other forms of sexual misconduct

- Contact the [Affirmative Action Office](#) at **814-863-0471** or another appropriate office listed
- To file a complaint outside of the University, contact:
 - The Office for Civil Rights (Philadelphia Office) at **(215) 656-8541** or email OCR.Philadelphia@ed.gov
 - The Equal Employment Opportunity Commission (Philadelphia District Office) at **800-669-4000**
 - The Pennsylvania Human Relations Commission (Harrisburg Regional Office) at **714-787-9780**

Research-related

- Contact the [Office for Research Protections](#) at **814-865-1775** or ORProtections@psu.edu

Suspected ethical or policy violations

(Including fraud, theft, conflict of interest, retaliation, athletics compliance)

- Use Penn State Ethics and Compliance Hotline at **800-560-1637** or <https://psuethicsandcompliance.tnwreports.com>
(Both are anonymous and available 24/7)

TO ASSIST VICTIMS

Sexual violence, sexual abuse or sexual harassment

- The Penn State Sexual Assault and Relationship Violence Hotline is available 24/7 at **800-550-7575 (TTY 866-714-7177)**
- The [University's Sexual Harassment and Assault Reporting and Education](#) (SHARE) website, which includes a list of sexual assault resources for each campus location
- The University-wide designated sexual harassment resource person for students, regardless of sex or gender, is the Director of the [Center for Women Students](#) at **814-863-2027**
- The University-wide designated sexual harassment and sexual misconduct resource person for employees is the Vice Provost for Affirmative Action at **814-864-0471**
- For University Park, the Centre County Women's Resource Center Hotline is available 24/7 at **814-234-5050** or **877-234-5050**

All others

- Contact the [Center for Counseling and Psychological Services](#) (CAPS) at **814-863-0395**
- Contact the [Employee Assistance Program](#) (EAP) at **866-799-2728**

RESOURCES

All employees should be aware of Penn State's Conflict of Interest policy. Please see the following for more information:

- <http://news.psu.edu/story/143476/2013/01/04/employees-reminded-disclose-conflicts-interest>
- Policy [HR91](#) – Conflict of Interest
- Policy [RA20](#) – Disclosure and Management of Significant Financial Interests:
- Policy [AD86](#) – Acceptance of Gifts and Entertainment

If it is not clear where to turn for assistance, any of these offices will guide the individual to someone who can help:

- [Office of Human Resources Employee Relations Division](#) at **814-865-1412**
- [Office of University Ethics and Compliance](#) at **814-867-5088**
- [Office of Affirmative Action](#) and Title IX Coordinator at **814-863-0471**
- [Office of Student Conduct](#) at **814-863-0342**
- [Office of Internal Audit](#) at **814-865-9596**
- [Clery Act](#) Compliance Manager at **814-863-7459**
- Your campus, college, or unit's Human Resources representative. Contact information is available <http://ohr.psu.edu/hr-representatives>

TRAINING

Training is available on many of the above topics. Contact the [Office of Human Resources' Center for Workplace Learning and Performance](#) at **814-865-8216**

APPENDIX B

IST and University Forms

Forms used by the Ph.D., M.S., and I.U.G. programs vary. For the most up-to-date versions, please visit the “Current Graduate Students” page located on the IST website at <https://ist.psu.edu/students/grad>

The Pennsylvania State University is committed to the policy that all persons shall have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by University policy or by state or federal authorities. It is the policy of the University to maintain an academic and work environment free of discrimination, including harassment. The Pennsylvania State University prohibits discrimination and harassment against any person because of age, ancestry, color, disability or handicap, national origin, race, religious creed, sex, sexual orientation, gender identity, or veteran status. Discrimination or harassment against faculty, staff, or students will not be tolerated at The Pennsylvania State University. Direct all inquiries regarding the nondiscrimination policy to the Affirmative Action Director, The Pennsylvania State University, 328 Boucke Building, University Park, PA 16802-5901; Tel. 814-865-4700/V, 814-863-1150/TTY. U. Ed. IST 18-14

This publication is available in alternative media on request.



PennState

College of Information
Sciences and Technology