



2012 - 2013

# ROADMAP

M.S.

A MASTER'S DEGREE GUIDE  
FOR INFORMATION SCIENCES  
AND TECHNOLOGY STUDENTS

PENNSSTATE



COLLEGE OF INFORMATION  
SCIENCES AND TECHNOLOGY

## IST Graduate Programs Contact Information

**Dr. Michael McNeese**

Associate Dean for Research and Graduate Programs

[mmcneese@ist.psu.edu](mailto:mmcneese@ist.psu.edu)

**Dr. Madhu Reddy**

Associate Professor of Information Sciences and Technology

Graduate Programs Director

[mreddy@ist.psu.edu](mailto:mreddy@ist.psu.edu)

**Dr. Mary Beth Rosson**

Professor of Information Sciences and Technology

Graduate Programs Advisor

[mrosson@ist.psu.edu](mailto:mrosson@ist.psu.edu)

**Michelle Hill**

Administrative Support Coordinator, Graduate Programs

[mhill@ist.psu.edu](mailto:mhill@ist.psu.edu)

**Sue Kelleher**

Administrative Support Coordinator, Graduate Programs

[skelleher@ist.psu.edu](mailto:skelleher@ist.psu.edu)

College of Information Sciences and Technology  
Office of Graduate Programs  
321F Information Sciences and Technology Building  
University Park, Pennsylvania 16802-6823  
Ph: 814-865-8711 or 863-9455  
Fax: 814-865-6426

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## Graduate Programs – An Introduction by the Associate Dean



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

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

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

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

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

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

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

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

## About the College of Information Sciences and Technology

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

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

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

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

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

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

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

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

## **I. Faculty Advisor and Annual Review**

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

### **A. Role of Faculty Advisor**

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

### **B. Advisor Matching Process for Newly Admitted Students**

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

Based on the preferences of new students, the availability of preferred faculty advisors and funding, advisors are assigned by filling out a [Student-Advisor Agreement Form \(p. 12\)](#). New students are expected to begin their work with their advisor by mid-September.

### **C. Annual Review**

An annual review will be conducted each April to evaluate the progress of M.S. students in their graduate studies. As a part of the review process, each M.S. student completes an Annual Activity Report (p. 20) and updates his/her curriculum vitae (CV). Then, each student meets with his/her advisor to discuss coursework completed or to be taken, research progress, related issues, and to plan for the following year. After this meeting, the advisor completes an additional summary form (p. 21) to provide more elaborate qualitative comments as relevant. These forms are submitted with the student's CV to the IST Graduate Programs Office.

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

## **II. General Assistantship Policies**

### **A. Assistantships**

In some cases, M.S. students will be offered assistantships to support their studies and research activities. Assistantships into two categories: Research Assistantship (RA) and Teaching Assistantship (TA). Research assistantships are provided by a student's faculty advisor (or by another faculty member who has extra funds available), while teaching assistantships are provided by the college.

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

#### **1. Research Assistantships**

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

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

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

#### **2. Teaching Assistantships**

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

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



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

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

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

**IMPORTANT:** *TAs should not make travel plans the week before the semester begins, during the last week of the semester, or the week immediately following the end of classes. These periods are critical for preparation before the semester begins, and for end-of-semester grading and grade calculations. In exceptional conditions a supervisor may agree to allow a TA to depart early or arrive late, but this should never be assumed by the TA. Permission for such exceptions must be requested in advance.*

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

## **B. Student Insurance**

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

## **C. Stipends**

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

## **D. AEOCPT**

All international students are required to take the American English Oral Communication Proficiency Test (AEOCPT) upon arrival. No international student will be assigned to a teaching assistantship until this test is passed or remediation steps (typically taking English language courses) have been completed. Enrollment in IST 602 (Supervised Experience in College Teaching) is required for all students TA'ing during their first semester regardless of their assistantship appointment. This course is offered every fall semester and is designed to help new teaching assistants become more effective in their teaching. It also provides teaching assistants with the opportunity to learn some pedagogy and to discuss problems that arise in the classroom.

### III. Current M.S. Degree Requirements

#### A. 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. 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.

#### B. General Requirements

Master students must complete a minimum of 32 credits; 27 of these credits must be earned at University Park. These include 14 credits of core requirements and 18 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 (14 credits)

All M.S. students are expected to develop a broad understanding of the core elements of people, information, technology, and the significant interactions among those elements. Thus the core of the M.S. program consists of an introductory course (IST 501), at least one core course from three complementary areas (see below) and two semesters of the one credit Graduate Colloquium (IST 590).

The core requirement for M.S. consists of the following courses:

- a) IST 501 – IST Integration (3 cr.)
- b) IST 511 - Information Management: Information and Technology (3 cr.)  
or  
IST 512 – Information Processing Architecture and Technology (3 cr.)
- c) IST 521 – Human-Computer Interaction. The User and Technology (3 cr.)  
or  
IST 522 – Models and Theories of Human-Computer Interaction (3 cr.)
- d) IST 531 – Human Information Behavior: Information and the User (3 cr.)  
or  
IST 532 – Organizational Informatics (3 cr.)
- e) IST 590 – Graduate Colloquium (2 cr.)

##### 2. Research Methods Requirements (6 credits)

All candidates must develop a basic understanding of the scientific research process, statistical techniques, and research methods utilized in the information sciences. Appropriate methodology courses should be selected from IST or other units under consultation with the student's advisor.

##### 3. Specialty Area Requirement (6 credits)

A candidate is expected to identify courses that cover topics that will support the thesis requirement. A support area could be a selection of courses in law, business, education, engineering, the liberal arts, science, or any area that is linked to the information sciences. Students who register for IST 596 as part of their coursework must fill out a Request for Independent Study form (p. 13).

**4. Research Credits Requirement (6 credits)**

All students must take six credits of research (IST 600).

**C. Proposed MS Degree requirements\* (upon approval of the University in Fall 2012)**

**\*The information presented below reflects the new MS course requirements that will be implemented once the University has given final approval in Fall 2012.**

Master students must complete a minimum of 30 credits for both the thesis or project option with 27 of these credits must be earned at University Park. These include 9 credits of core requirements and 21 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 (14 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 choosing three from the list of core courses listed below:

<b>PROPOSED-THESIS</b>	<b>PROPOSED-PROJECT</b>
30 credits	30 credits
9 credits core courses: - Choice of 3 from: IST 501, IST 511, IST 512, IST 521, IST 522, IST 531, IST 532	9 credits core courses: - Choice of 3 from: IST 501, IST 511, IST 512, IST 521, IST 522, IST 531, IST 532
12 credits specialization	15 credits specialization
3 credits research methods	3 credits research methods
6 credits 600 for thesis	3 credits 594 for project

**2. Research Methods Requirements (3 credits)**

All candidates must develop a basic understanding of the research methods utilized in the information sciences, by taking at least one research methods course 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 topic.

**3. Specialization Courses (12-15 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 project requirement. In addition to advanced courses in IST, a support area could be in law, business, education, engineering, the liberal arts, science, or any area that is linked to the information sciences. Students pursuing the thesis option must take 12 credits of specialization courses; those pursuing the project option must take 15 credits.

**4. Thesis or Project (3-6 credits).**

Students may choose a thesis or project option. Students who choose the thesis option must write a thesis and register for 6 credits of IST 600. Students who choose the project option must complete a project and register for at least 3 credits of IST 594. The student must present the thesis or project in a public presentation and successfully defend the thesis/project to the adviser and committee.

**5. Language and Communication**

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. The foreign language and communication requirement may be fulfilled through demonstrating computer language proficiency (assessed through courses taken).

**IV. 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. A completed M.S. Degree Committee Appointment Signature Form (page 17) must be submitted to the IST Office of Graduate Programs.

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. At least two of the committee members should be tenured or tenure-track. The chair of the committee (normally the student's advisor) must be a tenured or tenure-track graduate faculty member 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.

**V. M.S. Thesis Defense**

**A. 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 dissertation to the candidate's M.S. committee and by presenting the thesis at a formal meeting of his or her committee that is open to the University community. The final draft should be in a format that meets the editorial standards of the Graduate School.

**B. Graduate School Guidelines**

Changes to the official Graduate School publication take precedence over the content of this section. Please see [http://bulletins.psu.edu/bulletins/whitebok/degree\\_requirements.cfm](http://bulletins.psu.edu/bulletins/whitebok/degree_requirements.cfm)

The M.S. candidate who has satisfied all other requirements for the degree will be scheduled by the Graduate Programs office on the recommendation of the M.S. committee chair, to take a final examination. Two weeks' notice is required for scheduling this examination. Please fill out the Completion of Master's Final Defense Form (page 19). The deadline for holding the examination is four 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 advisor 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 dissertation should be in its final draft, with appropriate notes, bibliography, tables, etc., at the time of the final oral examination; both the content and style should be correct and polished by the time 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 dissertation, but may cover the candidate's entire program of study, because a major purpose of the examination is also to assess the general scholarly attainments of the candidate. The portion of the examination in which the thesis is presented is open to the public.

At least two members of the M.S. committee (including the thesis advisor 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.

**The student does not need to be registered as a full-time or part-time degree student for the semester in which the final M.S. Thesis oral examination is taken if the student is not funded on a graduate assistantship and has already completed all the required coursework.**

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 Office of Graduate Programs 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 Approval Page (<http://forms.gradsch.psu.edu/thesis/mastersApprovalPage.pdf>) 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.

## VI. 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 (<http://gradsch.psu.edu/current/thesis.html>)

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*, which is available for download from <http://forms.gradsch.psu.edu/thesis/thesisguide.pdf>. Information Technology Services provides a list of thesis resources to facilitate the writing process and offers PSUThesis (<http://css.its.psu.edu/node/66>), a Penn State thesis package for Microsoft Word users that includes Word templates, styles and functions to help produce a dissertation, master's thesis or Schreyer honors thesis according to guidelines set forth by Penn State University. In addition, the Statistical Consulting Center (<http://scc.stat.psu.edu/>) gives free advice to graduate students working on thesis research.

An M.S. thesis must be submitted electronically. For more information on electronic dissertations/theses (eTDs), visit the eTD Web site at <http://www.etd.psu.edu/>

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 (<http://www.gradsch.psu.edu/current/thesis.html>). Be aware of all Graduate School and Thesis Office deadlines as indicated on the Graduate School Calendar at <http://forms.gradsch.psu.edu/thesis/Calendar.pdf>
- Activate the intent to graduate on eLion during the semester in which you plan to graduate. Go to <http://forms.gradsch.psu.edu/thesis/Calendar.pdf> for deadline.
- Upload a draft of your thesis for format review (Word or pdf file) to the eTD Web site ([http://www.etsd.libraries.psu.edu/index\\_maint.html](http://www.etsd.libraries.psu.edu/index_maint.html)) 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 advisor and readers. Receive approval in the form of signatures on the Master's Approval 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. If submitting electronically, convert the file into a pdf for eTD submission. If you cannot do this, contact the Thesis Office for assistance.
- Go to the eTD website <http://www.etsd.psu.edu/> 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 Approval Page and \$25 thesis fee (cash or check payable to Penn State).
- 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.
- If bound copies are needed, contact any Multimedia & Print Center on campus (<http://www.multimediatprint.psu.edu>) or you may use an off-campus source. All copies are the author's responsibility. The Graduate School does not provide copies.

## **VII. Additional Information**

### **A. Transfer of Credits**

Students may request a transfer of up to five credits into the IST M.S. program by addressing a memo to the Graduate Program Director with a detailed description of the coursework taken, the credits of each course and the comparable course in the IST field. In addition, a memo from the student's advisor should be submitted that he or she is in agreement with the transfer. This memo will then be presented to the IST Graduate Advisory Committee for consideration and approval or denial of the request.

If the request is denied, the student may not petition the committee again regarding the issue of the transfer of credits from another program.

Credits earned to complete a previous master's degree, whether at Penn State or elsewhere, may not be applied to a second master's degree program at Penn State.

## **B. Intent to Graduate**

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

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

## **C. Independent Study Policy**

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

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

College of  
Information Sciences and Technology

**STUDENT/ADVISOR  
AGREEMENT FORM**

**STUDENT**

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

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date

**ADVISOR**

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

\_\_\_\_\_  
Advisor Signature

\_\_\_\_\_  
Date

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

\_\_\_\_\_  
Grad Program Advisor Signature

\_\_\_\_\_  
Date



## ***Request for Independent Study\* IST 596***

IST 596 is available for all graduate students. However, you are responsible for finding an IST faculty member willing to serve as your instructor. Please complete the following information with the instructor and then setup an appointment with your advisor to review this application form with them. Please remember, you are only allowed to take a maximum of 6 units' total (3 per semester) of IST 596 and it must have a deliverable.

**Name of Student:** \_\_\_\_\_ **PSU I.D. #:** \_\_\_\_\_

**Email:** \_\_\_\_\_

*Faculty member you will be working with:* \_\_\_\_\_

**Number of credits for which student is enrolling:** \_\_\_\_\_

**Semester for which student is enrolling:** please CIRCLE appropriate semester/session

**FA 2012   SP 2013   SU 2013 (1<sup>st</sup> 6-week)   SU 2013 (2<sup>nd</sup> 6-week)   SU 2012 (all semester)**

Brief description of course - **Please complete full description on back page as well.**

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

**Approved:**

**Instructor:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Grad Director:** \_\_\_\_\_ **Date:** \_\_\_\_\_

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

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

## ***Request for Independent Study (Page 2)***

**Title:**

**Course Description:**

**Learning Objectives:**

**Course Activities:**

**Assessment (Please be specific on how the course activities will be assessed):**

**Meeting Times (Please be specific on when you will meet with the instructor):**

## Graduate Student Committee Procedures and Master's Committee Appointment Signature Form

(For a complete list of master's committee policies, please refer to the Graduate Bulletin or on-line at [www.gradsch.psu.edu/bulletins/whitebook/](http://www.gradsch.psu.edu/bulletins/whitebook/))

## I. Justification:

A graduate student's committee is responsible for approving a student's program and promoting communication among the graduate student, the committee chair (or adviser), and the members of the committee, and, more generally, for helping to ensure the successful completion of a student's program. The committee should be appointed no later than the completion of their general degree requirements. This normally occurs after completing the first year of studies. The following **Master's Student Committee Policies and Procedures** are designed to achieve these goals, minimize misunderstandings, and help foster a collegial relationship among the graduate student, the committee chair, and the members of the committee throughout the graduate student's program. **Each master's student, chair and committee member should receive a copy of these policies and procedures.**

## II. Policies and Procedures for Master's Students and Committees:

1. The **master's committee** should meet with the student **at least once per year** to (1) provide guidance, (2) finalize and approve the research proposal of the student so that there is a clear understanding of the research goals and objectives, (3) assess the quality and progress of the research, and (4) discuss programmatic issues (e.g., course requirements).
2. Both the **chair** and the **student** are responsible for providing a copy of the final draft of the dissertation/paper to the committee **at least 2 weeks** prior to the scheduled date of the final oral examination. The chair should schedule a date for the examination **at least three weeks** prior to the examination.
3. Both the **chair** and the **student** are responsible for ensuring the completion of a draft of the dissertation/paper and **for adequate consultation** with members of the **master's** committee well in advance of the final oral examination. Major revisions of the dissertation/paper should be completed before this examination. The dissertation/paper should be in its "final" draft, with correct and polished content and style, appropriate notes, bibliography, tables, etc., at the time it is distributed to the committee members. **If committee members find that the draft submitted to them is not in this form, the chair is notified and postponement of the examination is considered.**
4. **If a committee member finds that the "final" draft is not correct and polished with respect to content and style, it is his/her responsibility to notify the committee chair (or advisor) at least one week in advance of the final oral examination date.** The **committee member** should indicate his/her concerns regarding the draft and recommend consideration of postponement of the examination to the committee chair (or advisor). The **committee chair** (or advisor), in consultation with committee members, is responsible for notifying the student and assessing whether the student can make the necessary revisions to the "final" draft before the examination date. If it is determined that revisions cannot be made in time, the examination should be postponed. If differences exist among committee members, the **dean of graduate programs** should be consulted to hear the expressed concerns and determine whether the examination should be postponed.
5. **If the dissertation is deemed unsatisfactory at the time of the examination by at least two-thirds of the committee, the student will fail the examination.** If a candidate fails, it is the responsibility of the committee to determine whether another examination may be taken by the student.
6. The primary responsibilities of The Outside Member are to (1) maintain the academic standards of the Graduate School and (2) assure that all procedures are carried out fairly. The Outside Member represents the Graduate School and, as such, The Outside Member shall be a member of the Graduate Faculty but need not have direct expertise in the research area of the candidate. The Outside Member may contribute technical expertise, but this role is subordinate to the aforementioned primary responsibilities. The Outside Member shall not hold an appointment having a budgetary connection to or other conflict of interest in the department or academic unit to which the master's program belongs, or to the department or academic unit of the chair or dissertation advisor, and cannot serve as either chair or co-chair of the committee.

## Master's Committee Appointment Signature Form

\_\_\_\_\_  
Student Name (Print or Type)

\_\_\_\_\_  
Student Number

- III. Master's Committee Appointment Signature Page: This committee will be composed of at least three members of graduate faculty with the majority of the members being tenured or tenure-track. These may all be within IST or two within IST and one external member. (The committee must have an odd number of members.) The chair of the committee must be a tenured or tenure-track graduate faculty member.

As the student/chair/committee member, I have carefully read and agree to the policies and procedures outlined on page 1, and, if a committee member, agree to serve as a chair/committee member for the student specified.

**Student:**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Chair of the Committee:**

(Must be a tenured  
or tenure-track  
graduate faculty member of  
IST)

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Co-Chair (if applicable):**

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Thesis Advisor**

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Major Field  
Member(s):**

(In addition to the chair or  
co-chair)

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Outside Member:**

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Department

**IST Dean of Graduate  
Programs**

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Please note:**

- (1) **If the composition of the master's committee changes, a new committee appointment signature page must be resubmitted to the IST Office of Graduate Programs to be signed by the Dean of Graduate Programs but only the new committee member needs to sign the form.**

## Completion of Master's Final Defense

On \_\_\_\_\_, \_\_\_\_\_  
Date Student Name

defended her thesis titled:

Approved

Committee Chair: \_\_\_\_\_  
Name Date

Committee Co-Chair: \_\_\_\_\_  
Name Date

Major Field Members(s): \_\_\_\_\_  
Name Date

Major Field Member(s): \_\_\_\_\_  
Name Date

Outside Member: \_\_\_\_\_  
Name Date

**Committee Decision** *(A favorable vote of at least two-thirds of the committee is required for passing.)*

The committee decision is:

**PASS**                       **FAIL**

The decision was:     Unanimous                       Divided

**After exam, please return this form to Grad Programs, 321F IST Building.**

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

<b>Student name:</b> _____		<b>IST Program:</b> <input type="checkbox"/> Masters <input type="checkbox"/> Ph.D.
<b>Date:</b> _____		
<b>GPA:</b> _____	<b>PSU Graduate Credits:</b> _____	<b>Program Milestones Completed:</b> <input type="checkbox"/> Candidacy <input type="checkbox"/> Comprehensive
<b>Year entered IST graduate program:</b> _____		

<b>Recent coursework (Sum2011; Fall2011; in progress Spr2012)</b>	<b>Term</b>	<b>Grade</b>

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

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

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

**List papers accepted in journals or conferences with peer-reviewed proceedings for April 2011 – April 2012:**

**List papers submitted and under review for April 2011 – April 2012:**

**Talks or presentations:**

**Awards:**

**Other research-related accomplishments:**

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

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

_____ Student signature	_____ Date	_____ Advisor Signature	_____ Date
		_____ Co-Advisor Signature (if applicable)	_____ Date

M.S. Student Annual Evaluation – Advisor’s comments [CONFIDENTIAL]

*Instructions: Complete AFTER meeting with the student to discuss their form .*

---

Student (print name)

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

Please share with us any concerns that you have about this student that you are not comfortable sharing with the student at this point, so that we can assist you in addressing these concerns if possible.

This might include issues such as...

- Personality conflicts
- Too little personal initiative
- Lack of focus or too narrow a focus
- Specific academic skills like writing, quantitative analysis, etc.
- Too little attention to detail and quality of research products