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**Introduction**

This handbook is for students in the Doctoral Program of the Department of Information and Library Science (ILS) at School of Informatics and Computing (SOIC), Indiana University Bloomington (IUB). It addresses degree requirements, program milestones, and procedures involved in completion of the degree of Doctor of Philosophy in Information Science.

Any questions about the content of the handbook, including requests for clarification, should be directed to:

Dr. Ying Ding, Director of the ILS Doctoral Program (dingying@indiana.edu)

**Goals of the Ph.D. Program**

The Doctor of Philosophy (Ph.D.) is a research degree traditionally awarded to a student who has attained a broad understanding of the content, theories, and methods of a field of knowledge and their relation to the content, theories, and methods of other fields. In line with this tradition, the program for the Doctor of Philosophy in Information Science emphasizes research and scholarly endeavor to advance the field of information science.

The ILS Doctoral Program is designed to prepare students for scholarly research, for teaching positions in information science, library science, or cognate fields, and for consultancy in academic and non-academic environments. ILS has identified the following goals for the Ph.D. program:

- To promote understanding of the research process and what constitutes scholarly research;
- To prepare scholars to identify and conceptualize significant research problems;
- To prepare scholars who are qualified to undertake relevant research and contribute new knowledge to the field;
- To prepare students for professional roles as researchers, teachers, and consultants in both academic and non-academic settings.

Upon completion of the Ph.D. program, a doctoral student should be able to generate original research that meets the scholarly standards of the field and to communicate the results of this research, both orally and in writing, in a clear, cohesive, and convincing manner to scholars in ILS and in related disciplines.

**University Graduate School (UGS)**

The Doctor of Philosophy in Information Science is awarded by the Indiana University Graduate School (UGS). UGS establishes minimum standards for graduate work at Indiana University, and candidates for the doctoral degree must satisfy all requirements as stated in the General Requirements for Advanced Degrees section of the University Graduate School Academic Bulletin. All doctoral students should be familiar with the requirements in the UGS Academic Bulletin as well as those in the ILS Ph.D. Handbook.
Overview of Degree Requirements

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Residency requirement

UGS stipulates that a graduate student seeking an advanced degree must be enrolled on the Bloomington (IUB) campus for at least two consecutive semesters in a single academic year.

Credit hour requirement

A minimum of 90 credit hours of coursework is required for the Ph.D. At least 60 of these credit hours must be taken at the Bloomington (IUB) or Indianapolis (IUPUI) campuses of Indiana University.

Transfer of credits

Up to 30 credit hours of coursework with a minimum grade of B may be transferred from another graduate program if the coursework is both relevant to a student's of concentration in ILS and current (see Currency requirement and the seven-year rule, below). Coursework that is to be transferred but does not meet the currency requirement must be validated (see Validation of Doctoral Coursework, p. 18).

For graduates of ILS master's programs, 36 credit hours of coursework may be transferred from the Master of Library Science (MLS) program or 42 credits from the Master of Information Science (MIS) program. However, internship credits earned in completion of a master's degree cannot be applied towards the 90 credit hours required for the Ph.D. degree.
Currency requirement and the seven-year rule

UGS has established a currency requirement for coursework that is to be counted towards the doctoral degree as well as absolute time limits on completion of the qualifying examination and defense of the doctoral dissertation.

With the exception of a maximum of 15 credit hours of Z799 Ph.D. Thesis, all doctoral coursework leading to the qualifying examination must be completed within seven years of matriculation in the ILS doctoral program. All coursework that is to be used in partial fulfillment of doctoral degree requirements must be current (i.e., it must have been completed within the seven consecutive calendar years immediately preceding defense of the qualifying examination) or it must have been validated prior to the qualifying examination according to procedures outlined under Validation of Doctoral Coursework (p. 18).

The dissertation must be completed and successfully defended within seven years of passing the qualifying examination. The date of successful completion of the qualifying examination (i.e., the date of acceptance of the qualifying examination by the student's qualifying committee, not the date of approval of candidacy by UGS) is the date used to determine both the seven-year period for currency of coursework and the seven-year period for completion of the dissertation. Doctoral candidacy will be terminated automatically for students who do not complete the dissertation within the seven-year timeframe.

Timeline for completion of doctoral studies

In consultation with the chair and other members of her advisory committee, each student will plan a course of study that adheres to the requirements set out in this handbook while meeting her personal objectives and circumstances. Completion of outside minor coursework and the research requirement may be spread over any of the years preceding defense of the qualifying examination paper.

Students should strive to complete the ILS doctoral program in four to five years. A sample timeline of courses has been provided (see Appendix A: Optional Timeline(s) for Doctorate in Information Science, p. 36) to indicate general sequencing of required ILS, research and minor coursework. A student may take more or less time to complete the doctoral program depending on individual initiative and resources and the transfer of previous graduate coursework.

Program of doctoral studies

The Program of Doctoral Studies form records all coursework completed by the student as well as all projected coursework for completion of the requirements for the Ph.D. The program of studies should indicate any graduate coursework transferred from another university and any graduate coursework that has been or will need to be validated. It should also include any course with an incomplete (I) or deferred (R) grade.

By the end of the first year in the doctoral program, the student must provide the program director with a Program of Doctoral Studies form approved by all members of the student's advisory committee. If a completed Program of Doctoral Studies form is not submitted within one year of matriculation, the student's enrollment in the ILS doctoral program may be discontinued.

A current, updated Program of Doctoral Studies form is to be included as part of the student's Annual Student Progress Report (see Annual Student Progress Report, p. 26).
Outside doctoral minor

A doctoral student must select at least one minor subject area from the areas of graduate study approved by the University Graduate School. Determination of minimum requirements and examination procedures for the outside doctoral minor is at the discretion of the minor department or program.

Minimum grade requirements

A doctoral student must earn a minimum grade of B- for any course that is to be applied toward the doctoral degree. Courses in the research skills component must be completed with a grade of B or higher.

A doctoral student must maintain a cumulative grade point average (GPA) of 3.5 for all doctoral coursework.

Termination of registration

ILS may terminate the registration of any student who fails to demonstrate satisfactory progress towards completion of doctoral studies or whose cumulative grade point average falls below 3.5.

Official student files

Each doctoral student is responsible for ensuring that her official files are kept up to date. The student should check with the ILS Ph.D. Recorder periodically, especially as each program milestone is completed (e.g., appointment of committee members, completion of outside minor), to ensure that all appropriate documentation is contained in her official student file.

Qualifying exam

As required by UGS, the qualifying examination includes both a written component and an oral component and is taken after the student has completed all coursework required for the Ph.D., with the exception of up to 15 credit hours of Z799 Dissertation Research. This includes major coursework, ILS required coursework, coursework required for the outside minor and coursework satisfying the research skills requirement (see Qualifying Examination, p. 19).

The qualifying examination must be passed at least eight months prior to the date the doctorate is awarded. If a qualifying examination consists of more than one part (e.g., revisions and/or a subsequent oral defense required by the qualifying examination committee), the date of passing the examination is the date of passing the final portion(s) of the examination. Students who fail the qualifying examination are normally allowed to retake it only once.

After successful defense of the qualifying exam, the doctoral candidate must maintain continuous enrollment (see Continuous enrollment, p. 7; Failure to Register, p. 22).

Candidacy

A doctoral student is admitted to candidacy by the University Graduate School upon completion of all required coursework, successful completion of the qualifying examination in ILS and certification that all requirements have been met for the outside minor.

The student will have seven years from the date of successful completion of the qualifying examination (not the date when UGS approves the student's admission to candidacy) to complete all requirements for the Ph.D., including formal defense and acceptance of the dissertation. The student is expected to provide evidence of steady progress toward completion of the dissertation (e.g., keeping in touch with members of the research committee, producing dissertation drafts).

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Absence of such evidence will result in the recommendation that continuation in the program be terminated prior to the seven-year deadline (see *Currency requirement and the seven-year rule*, p. 5).

**Continuous enrollment**

After successful defense of the qualifying exam, the doctoral candidate must maintain continuous enrollment. UGS requires all doctoral candidates to maintain continuous enrollment until completion of the dissertation: a doctoral candidate must be enrolled every semester, excluding summers, until successful defense of the dissertation. Failure to meet this requirement will automatically terminate candidacy status, and the student will be deemed to have withdrawn from the program. Per UGS policies, application for reinstatement will require retaking the qualifying exam (see also *Failure to Register*, p. 22).

**Readmission**

A student whose candidacy has been terminated through failure to register may apply for re-admission. The process is initiated with a formal letter to the Director of the Doctoral Program requesting readmission.

A student applying for readmission is subject to current admissions criteria. If readmitted, UGS requires the student to retake the qualifying exam and fulfill any other conditions required by ILS to establish currency. When the qualifying examination has been passed and all conditions satisfied, the student will be readmitted to candidacy and will have a maximum of three years from the date of readmission to complete and successfully defend the dissertation.

**Dissertation prospectus**

The student will prepare a one-to-two-page dissertation prospectus that includes a clear statement of the questions to be addressed in the dissertation research, the research methods to be used, and a brief discussion of the contribution of the study to theory and/or practice in information science. Because faculty members normally agree to serve on a research committee only after they are acquainted with the proposed research, the prospectus should be developed in concert with the candidate's dissertation director prior to finalizing the membership of the research committee.

**Nomination of research committee**

The members of the candidate's research committee must be approved by the University Graduate School at least six months prior to the final defense of the dissertation. After prospective faculty have agreed to serve on the research committee, the student must provide the Ph.D. Recorder with a *Nomination of Research Committee for the Ph.D.*, signed by all committee members, a copy of the dissertation prospectus, and evidence of IRB approval if the dissertation research involves human subjects. The Ph.D. Recorder will submit these materials to UGS for approval of the research committee.

**Dissertation proposal and defense**

Doctoral candidates are required to develop a dissertation proposal and to defend it in a public forum.

The proposal forms the basis of the research contract for the final dissertation. It will be considerably more detailed than the prospectus and should contain the following elements: a statement of purpose, a rationale, a literature review, research questions to be investigated, proposed research procedures, sources of data and methods of data collection, pilot study results, methods of data analysis, and the significance of the study.
Dissertation defense

After completing the dissertation, the doctoral candidate must defend it in a public forum.

Degree conferral

Submitting copies of the completed dissertation and abstract (see Submission of the Dissertation) constitutes application for conferral of the Ph.D. degree. To be listed in the commencement program and participate in the graduation ceremony, the candidate must ask her chairperson to approve the Ph.D. Commencement Participation Application and submit it to The University Graduate School no later than October 1st for December Commencement and no later than March 1st for May Commencement.

UGS considers the 30-day announcement deadline prior to the defense of the dissertation and the 30-day deadline prior to degree conferral to be non-overlapping time periods.

Research committees frequently require revisions and corrections after the defense of the dissertation and these revisions must be made before the dissertation is ready for submitting to the University Graduate School.

The University Graduate School will recommend the candidate to the Board of Trustees for the degree only upon completion of all requirements. Degrees are awarded on the last day of each month of the year. Required documents must be submitted to the University Graduate School by the 27th of the month for the degree to be granted on that month; contact UGS in February and September to learn the submission deadlines for May and December.
Advisory Committee

Upon admission to the program, each student is assigned a preliminary advisor who will provide direction in selecting appropriate coursework for the student’s first semester(s) of study.

The student must form an advisory committee before the end of her first year in the doctoral program. All members of the advisory committee will advise and mentor the student; however, the chair of the advisory committee will be the student's primary advisor and therefore critical to her success in the doctoral program. The student may decide to keep her preliminary advisor as chair of the advisory committee or ask another faculty member to serve in this role. It is the student's responsibility to select a chair with whom she is comfortable and who will support and advance her research interests.

The advisory committee consists of at least three faculty members who will work with the student until she has successfully completed the qualifying examination. The chair of the advisory committee must be a full-time faculty member in ILS. At least two members of the advisory committee (including the chair) must be ILS faculty, and one member must be a faculty member from the outside minor area (see Outside doctoral minor, p. 15). At least half of the members of the advisory committee, including the chair, must be members of the University Graduate School faculty.

Meetings of the advisory committee

Meetings of the student's advisory committee may be called at any time by the student or by any member of the committee. For all meetings, the student is responsible for scheduling a date and time convenient for all members, for reserving a room, and for distributing copies of any materials to be discussed at the meeting (e.g., Program of Doctoral Studies form, Annual Student Progress Report). Committee members should receive discussion materials at least one week prior to the meeting. To reserve a meeting room, consult the ILS Administrative Secretary in the ILS Administrative Offices, 011 Wells Library.

At least once a year, the student should meet with her entire advisory committee to update her Program of Doctoral Studies, to review and approve the Annual Student Progress Report, and to discuss her overall progress in the doctoral program. Topics for discussion with the student's advisory committee include:

- approval or revision of the Program of Doctoral Studies;
- appropriate coursework, including courses outside ILS;
- completion of the research methods and teaching requirements;
- transfer of previous credits;
- validation of coursework;
- completion of the qualifying exam.

It is highly recommended that the student prepare a summary of the decisions reached at each meeting and provide copies of this summary to all members of the advisory committee.
Program of Doctoral Studies

By the end of the first year in the doctoral program, the student must provide the program director with a Program of Doctoral Studies form that has been approved by all members of the student's advisory committee. The Program of Doctoral Studies form records the coursework completed during the student's first semester(s) as well as projected coursework that will satisfy ILS and UGS requirements for the doctoral degree. It will indicate any courses with an incomplete (I) or deferred (R) grade as well as coursework to be transferred from another university and coursework that has been or will need to be validated (i.e., coursework that will be more than seven years old at the time of the qualifying examination). If a completed Program of Doctoral Studies form is not submitted within one year of matriculation, enrollment in the program may be discontinued.

A meeting of the student's advisory committee will be required so that all committee members can review and approve the Program of Doctoral Studies. The student will be responsible for scheduling this meeting and for distributing copies of the Program of Doctoral Studies at least one week prior to the meeting. The signed Program of Doctoral Studies form must be submitted to the ILS Ph.D. Recorder for review by the program director; a copy will be placed in the student's file.

The Program of Doctoral Studies form is cumulative and should be updated every semester to reflect courses taken or validated during the past semester as well as any changes in projected coursework. The current, up-to-date Program of Doctoral Studies form must be included as part of the student's Annual Student Progress Report (see Annual Student Progress Report, p. 26).
Course Requirements for Doctor of Philosophy in Information Science -- Students matriculating after 5 May 2010

• Major area (21 cr.)
  A minimum of 21 credit hours of coursework in a major area of concentration in information science.

• Z701 Introduction to Doctoral Research in Information Science (6 cr.)

• Doctoral research sequence (9 cr.)
  A three-course sequence of research seminars:
  - Z702 Research Practicum I (3 cr).
  - Z703 Research Practicum II (3 cr.)
  - Z710 Research in Information Science (3 cr.)

• Doctoral seminars in information science (9 cr.)
  A minimum of three semesters of Z764: Seminar in Information Science is designed to provide an in-depth introduction to a range of topic areas within the domain of information science.

• Research skills (9 cr.)
  The 9 credit hours of research methods and statistics will consist of (a) a basic graduate-level statistics course; (b) either an intermediate graduate statistics course or a graduate course in research design; (c) a third graduate-level course in statistics or a course in research design. Courses in the research skills component must be completed with a grade of B or higher.

• Minor area (9-15 cr.)
  Minor coursework in an area outside ILS that is related to the student's research interest. The minor advisor must approve the selection of courses in the minor area. Total credit hours for the minor are set by the minor department.

• Other courses
  Other graduate coursework, generally in areas of information science outside the major area of concentration, as approved by the student’s advisory committee. These credits can count toward the required 75 non-dissertation credit hours.

• Dissertation credit
  Up to 15 credit hours of deferred dissertation credit may be used to complete the required 90 credit hours. Students do not enroll in Z799 until they have completed a minimum of 75 non-dissertation credit hours and successfully defended the qualifying exam.
Course Requirements for Doctor of Philosophy in Information Science -- Students matriculating before 5 May 2010

• Major area (21 cr.)
  A minimum of 21 credit hours of coursework in a major area of concentration in information science.

• Z701 Introduction to Doctoral Research in Information Science (3 cr.)

• Doctoral research sequence (9 cr.)
  A three-course sequence of research seminars:
   Z702 Research Practicum I (3 cr.)
   Z703 Research Practicum II (3 cr.)
   Z710 Research in Information Science (3 cr.)

• Research skills (9 cr.)
  The 9 credit hours of research methods and statistics will consist of (a) a basic graduate-level statistics course; (b) either an intermediate graduate statistics course or a graduate course in research design; (c) a third graduate-level course in statistics or a course in research design. Courses in the research skills component must be completed with a grade of B or higher.

• Minor area (9-15 cr.)
  Minor coursework in an area outside ILS that is related to the student's research interest. The minor advisor must approve the selection of courses in the minor area. Total credit hours for the minor are set by the minor department.

• Other courses
  Other graduate coursework, generally in areas of information science outside the major area of concentration, as approved by the student's advisory committee. These credits can count toward the required 75 non-dissertation credit hours.

• Dissertation credit
  Up to 15 credit hours of deferred dissertation credit may be used to complete the required 90 credit hours. Students do not enroll in Z799 (formerly L799) until they have completed a minimum of 75 non-dissertation credit hours and successfully defended the qualifying exam.
**Coursework**

Each doctoral student is required to complete at least 90 credit hours of advanced study. Of these 90 credit hours, UGS requires that at least 60 must be taken on the Bloomington (IUB) or Indianapolis (IUPUI) campuses of Indiana University.

Up to 30 credit hours of graduate coursework may be transferred from another program if it is current, if the earned grade for each course was B or better, and if the coursework is relevant to the student's work in ILS. Any transferred courses that do not meet the currency requirement must be validated (see *Currency requirement and the seven-year rule*, p. 5; *Validation of Doctoral Coursework*, p. 18).

For graduates of master's programs in ILS, 36 credit hours of coursework may be transferred from the Master of Library Science (MLS) program or 42 credits from the Master of Information Science (MIS) program. However, internship credits earned in completion of a master's degree cannot be applied towards the 90 credit hours required for the Ph.D. degree.

**Major coursework (21 credits)**

The student must earn a minimum of 21 credit hours of coursework in information science. The student should consult with members of her advisory committee to identify major coursework that will enhance her knowledge of information science, advance her research, and help her to prepare for the qualifying examination.

**Required ILS courses (24 credits)**

Every doctoral student in the ILS Doctoral Program is required to complete the following sequence of 700-level courses in information science:

- Z701 Introduction to Doctoral Research in Library and Information Science (6 cr.)
- Z702 Research Practicum I (3 cr.)
- Z703 Research Practicum II (3 cr.)
- Z710 Research Practicum III (3 cr.)
- Z764 Seminar in information science (9 cr.)

The Z701/Z702/Z703/Z710 sequence of courses comprises a logical progression from an introduction to research, through hands-on supervised experiences in research practice, to supervised independent research. Students are required to take these courses in sequence and may not enroll in a higher numbered course without having successfully completed the previous courses in the sequence.

**Z701 Introduction to Doctoral Research in Library and Information Science (6 credits)**

Research is the currency of the academic world. This course explores research traditions in information science, identifies key issues in the conduct of research in the field, critically evaluates key concepts in library and information science (LIS), and examines the range of approaches taken by ILS researchers. It is designed to introduce the student to established and emerging areas of scholarly research in information studies and to encourage her to identify a research agenda that will guide her research efforts and contribute to scholarly productivity across her career.


**Z702 Research Practicum I/Z703 Research Practicum II (6 credits)**

After completion of Z701 Introduction to Research in Library and Information Science, the student will take Z702 Research Practicum I and Z703 Research Practicum II for 3 credit hours each. The Z702 and Z703 practica should be taken during the first three consecutive fall and spring semesters after completing Z701. Only one practicum may be taken in the summer, and only if permission is obtained from the director of the doctoral program. Two practica cannot be taken simultaneously.

Each practicum must be taken with an ILS faculty member. The student will assist the faculty member in some aspect of his/her research. Because the objective of the research practica is to provide the student with broad experience of IS research, the student may be working on a project not directly related to her specific research interests.

In order to gain experience with various research practices, the student will be expected to conduct research with a different faculty member for each practicum. Exceptions will not normally be granted. After completing Z702/Z703, the student may continue to work on a research project as an independent study (see *Z765: Doctoral Research in Information Science*, p. 16); however, Z765 may not be substituted for Z702 or Z703.

It is the student's responsibility to identify research practicum opportunities in consultation with her advisory committee and the director of the doctoral program. Approval forms for *Z702 Research Practicum I* and *Z703 Research Practicum II* must be completed in full and submitted to the Ph.D. Recorder for review and approval by the director of the doctoral program. For a more detailed description of the practicum experience, see *Appendix B: Z702/Z703 Research Practicum Guidelines* (p. 37).

**Z710 Doctoral Research Practicum III (3 credits)**

In Z710, the third course in the research practica sequence, the student will conduct research under the supervision of an ILS faculty member. In order to obtain approval to register for Z710, the student must have successfully completed Z701, Z702, and Z703. Before registration for Z710 will be authorized by the Ph.D. Recorder, the student must submit a written plan that has been approved and signed by the student's sponsoring faculty member, the chair of the student's advisory committee, and the director of the doctoral program.

The Z710 research project should contribute to the student's knowledge of and experience with research methods. Appropriate research projects for Z710 include developing a research design, conducting a pilot study or a portion of a research project, analyzing data, or field testing of an evaluation or survey instrument. The project should be demanding yet manageable within a one-semester time frame. It may originate with the student with an ILS graduate faculty member serving as the advisor; or it may be a project on which a faculty member is working and seeks student assistance. A publishable paper is not a requirement for successful completion of Z710; however, it is possible that Z710 projects will lead to submission of a paper for publication.

Students enrolled in Z710 will meet on a schedule determined by the faculty member responsible for the course, but usually not more than twice a month. During these meetings, students will discuss the progress of research projects. Responsibility for serving as instructor for Z710 will be shared among the graduate faculty members in ILS, with a different instructor appointed for each semester. The supervising faculty member and the Z710 instructor will share responsibility for a student's final grade on a 70/30 ratio.

Ph.D. Handbook
Z764 Seminar in Information Science (9 credits)

Z764 Seminar in Information Science involves reading-and-writing intensive study of a relatively narrow research topic. Doctoral seminars in IS introduce students to topic areas within the domain of information science (e.g., social informatics, scientometrics, information retrieval, representation and organization of resources, philosophy of information, human computer interaction, visualization).

A doctoral seminar emphasizes depth over breadth, concentrating on research questions relevant to the topic, methods used to investigate those questions, and any associated problems or issues. Seminar members will be expected to participate actively in discussions and to produce written work that demonstrates doctoral-level depth of understanding and synthesis of concepts (e.g., a paper of publication quality that addresses a significant problem related to the course topic).

Doctoral students matriculating after 5 May 2010 are required to complete three sections of Z764 Seminar in Information Science. To meet this requirement, students may choose to pursue an independent study.

Research skills requirement (9 credits)

Each doctoral student must complete a minimum of 9 credit hours of basic, intermediate and advanced research courses with a grade of B or better:

Basic-level research (3 credits) -- An introductory or advanced graduate course in statistics.
Intermediate/advanced research (6 credits) -- Two non-introductory graduate courses in statistics, research methods or research design.

Ideally, in selecting coursework to satisfy the research skills requirement, the student should identify courses that will develop skills relevant to her projected research.

Transferred courses cannot be used to satisfy the research skills requirement; and a course used to satisfy a research skills requirement may not be used to satisfy another requirement. For example, a course cannot be used to satisfy both a research skills requirement and a minor coursework requirement. If a course could satisfy more than one requirement, the student should consult with her advisor to determine the appropriate category in which to count it.

Outside doctoral minor (9-15 credits)

Because knowledge in a minor subject adds depth and breadth to the student's doctoral program, UGS requires each doctoral student to complete at least one minor outside the major department. The doctoral minor should be selected from among the areas of study listed in the UGS Academic Bulletin. Indiana University Bloomington doctoral students may take a minor in a Purdue University graduate degree program offered through Indiana University–Purdue University Indianapolis (IUPUI).

In some cases, special interdepartmental minors (12 or more credit hours of work in two or more departments) or interdisciplinary minors not specifically listed in the UGS bulletin may be approved by the dean of the University Graduate School. If an interdepartmental or interdisciplinary minor is recommended by the student’s advisory committee, UGS approval is required before the student enrolls in any of the courses proposed as part of the minor.

The number of credit hours, specific courses, and any other requirements for an outside minor, are determined by the minor department, including whether a qualifying examination will be required. Because each department establishes its own criteria for the doctoral minor, the student
should consult with the director of the minor department’s doctoral program before deciding on a minor area.

**Outside minor advisor**

After deciding on the area of the outside minor, the student must choose an advisor from the minor area who will serve as a member of the student's advisory committee. Prior to the first meeting of the full advisory committee, the student should consult with the minor advisor to identify coursework for completing the outside minor and. The minor advisor will indicate on the nomination to candidacy form that the student has passed the minor department's qualifying examination or that the examination has been waived.

**Ph.D. outside minor approval form**

The Ph.D. Outside Minor Approval form must be completed by the student and her minor advisor. The form must be signed by the minor advisor and by the chair of the student's advisory committee before it is submitted to the ILS Ph.D. Recorder for approval by the program director. A copy of the Ph.D. Outside Minor Approval form will also be placed in the student's doctoral file.

Any changes in minor coursework must be approved in writing by the outside minor advisor; and changes in minor coursework involving non-Graduate School courses (i.e., courses not listed in the Graduate School Bulletin) require written approval from UGS. Any such request will be submitted to UGS by the director of the ILS doctoral program.

**Other coursework**

A doctoral student may count up to 21 credit hours of other graduate coursework toward the 90 credit hours required for completion of the doctoral degree. These courses will generally be in areas that are relevant to but outside the student's major area of concentration in information science.

**Other doctoral level courses in ILS**

**Z706 Introduction to Research (3 credits)**

Z706 Introduction to Research introduces the research process, including concepts, design, conduct, evaluation, and methods of statistical description and analysis. Principles and characteristics of methods relevant to IS research are covered as well as data sources and ethical issues. Successful completion of Z706 satisfies the research skills requirement for an intermediate-level graduate course in research design.

**Z763: Research Problems and Methods in Information Science (3 credits)**

Z763 Research Problems and Methods in Information Science address current problems and methodological approaches in information science research. Completion of one section of Z763 will satisfy one intermediate/advanced research skills requirement (3 cr.).

**Z765 Doctoral Research in Information Science (1-6 credits)**

Z765 Doctoral Research in Information Science provides an opportunity for intensive, independent research or study. Students may enroll for multiple sections in one semester.

**Z790 Dissertation Proposal in Information Science (3 credits)**

Z790 Seminar in Doctoral Research offers a structure within which to develop the dissertation proposal. It is open only to doctoral students who have successfully completed the qualifying examination and should be taken in the semester immediately following completion. If only one
student is enrolled in Z790, it will be conducted as an independent study; if more than one student is enrolled, Z790 may meet regularly as a seminar.

In Z790, the doctoral candidate works on the proposal under the guidance of an ILS faculty member and with regular input from the chair of her research committee. The candidate will compose and revise each section of the proposal until the chair of her research committee determines that a satisfactory first draft is ready for submission to other committee members. No grade is assigned for Z790 until the proposal has been successfully defended. If development of the proposal extends beyond the semester in which the candidate registers for Z790, a deferred grade (R) will be assigned.

Z799 Ph.D. Thesis (15 credits)

Z799 Ph.D. Thesis is open only to students who have been admitted to candidacy and requires electronic permission from the Ph.D. Recorder before a student can register. Enrollment in one credit hour of Z799 gives the candidate fulltime academic status; however, it does not satisfy the University requirement that a student with a Student Academic Appointment (SAA) be enrolled for a minimum of 6 credit hours.

A student can enroll in Z799 Ph.D. Thesis for a maximum of 15 credit hours. No grade is assigned for Z799: A deferred grade (R) will be assigned until the dissertation has been defended, at which time deferred grades for Z799 will be converted to S.

G901 Advanced Research (6 credits)

G901 Advanced Research is a flat rate, 6 credit hour course offered through the University Graduate School: "To keep their candidacies active, doctoral students with 90 credit hours or more … may enroll in G901 for a flat fee of $150.00 (Bloomington). Also, they must have completed all graduate degree requirements except for the dissertation or final project/performance. Enrollment in G901 is limited to six times. Students who do not meet these criteria pay the applicable credit hour rate for dissertation research.

G901 provides a doctoral student with fulltime status for a minimal semester fee (currently $150, but subject to change) and is open only to students who have been admitted to candidacy. To be eligible to enroll in G901, a candidate in ILS must have completed all requirements for the Ph.D. (i.e., the candidate must have satisfied all course requirements and must have completed a minimum of 90 credit hours toward the Ph.D.). Enrollment in G901 requires electronic permission from the Ph.D. Recorder before the candidate will be able to register.

G901 is an inexpensive way for a candidate to maintain fulltime status and satisfy the UGS requirement for continuous enrollment (see Continuous enrollment, p. 7). Like enrollment in one credit hour of Z799 Ph.D. Thesis, enrollment in G901 gives the candidate fulltime status; unlike Z799, however, enrollment in G901 also satisfies the University's requirement that a student with a Student Academic Appointment (SAA) must be enrolled in a minimum of 6 credit hours each semester.

Enrollment in G901 is limited to a maximum of six semesters and is not offered during summer sessions. A candidate who has enrolled in the maximum of six semesters of G901 but has not yet defended the dissertation must request permission from the Ph.D. Recorder to enroll in Z799 to maintain continuous enrollment.

**Doctoral Minor in Information Science**

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The Department of Information and Library Science also offers the Doctoral Minor in Information Science. ILS is one of the top-ranked graduate programs in IS and supports the exploration of social, cognitive, and technical forces that shape the ways in which information is created, managed, and used in contemporary life. Areas of concentration for the doctoral minor in IS include human-computer interaction, information visualization, information retrieval, scholarly communication, knowledge representation and organization, and computer-mediated communication.

The doctoral minor in IS is offered in accordance with the regulations of the University Graduate School. Students who elect a minor in IS will identify an ILS faculty member who will serve as the minor advisor and as a member of the student's doctoral advisory committee. In consultation, the student and her advisor will identify a minimum of 12 hours of graduate coursework in IS for the minor. Typically, a written qualifying exam is not required for the doctoral minor in IS.

Information about faculty research and the research interests of doctoral students is available online, as are syllabi for courses offered in ILS. Inquiries regarding the doctoral minor in IS should be addressed to the director of the ILS doctoral program.

**Transfer of Coursework**

After approval by the advisory committee, a student must work with the ILS Ph.D. Recorder to arrange for transfer of up to 30 credit hours of previous graduate-level coursework from another graduate program or institution. Coursework must be both current (see Currency requirement and the seven-year rule) and relevant to the student's concentration in ILS. Coursework that does not meet the currency requirement must be validated (see Validation of Doctoral Coursework, below). For all transferred coursework, the student must have earned individual course grades of B or better.

For graduates of ILS master's programs, 36 credit hours of coursework may be transferred from the Master of Library Science (MLS) program or 42 credits from the Master of Information Science (MIS) program. However, internship credits earned in completion of a master's degree cannot be applied toward the 90 credit hours required for the Ph.D.

**Validation of Doctoral Coursework**

The student should identify all coursework that will be more than seven years old at the time of the qualifying exam and make plans to validate those courses. This should be done before the first meeting of the advisory committee. The student should provide the committee with the syllabus or a detailed description of the content of each course requiring validation and discuss with the committee the appropriate faculty member to supervise the work for each course validation. The student must then meet with the faculty member to negotiate procedures and expectations for the validation process. The original grade received in the course is validated and no change of grade will be recorded.

UGS has identified several methods for validating coursework, and the ILS faculty has agreed on the following options:

- Completing Z765 Doctoral Research in Information Science or a higher-level ILS course in the area to be validated. A faculty member teaching in this area should be responsible for validation;

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• Teaching one or more classes in the course to be validated, either in ILS or in another graduate program;
• Preparing a research paper or project in the area to be validated. The paper will cover developments in the area since the original course was taken.

For each course to be validated, the student must complete a Validation of Doctoral Coursework form and have it signed by the faculty member supervising the validation. The signed validation form must be submitted to the ILS Ph.D. Recorder for review and approval by the director of the doctoral program. The form will then be submitted to UGS, who must give final approval for validation. Completed validation forms are retained in the student's file.

**Teaching Requirement**

As part of the doctoral program, the student must complete a teaching requirement before graduation. Options include team teaching with a faculty member, teaching one ILS course as an adjunct instructor, or guest lecturing in classes to the point where the student has accumulated 18 hours of teaching time (i.e., has taught the equivalent of six 3 credit hour class sessions). Fulfillment of the teaching requirement may be spread over any of the years preceding defense of the dissertation.

A doctoral student interested in teaching an ILS course should talk with her committee chair, the director of the doctoral program, and the departmental chair. Doctoral students teaching an ILS course are paid a salary comparable to adjunct faculty.

**Qualifying examination**

*Purpose*

The ILS qualifying examination requires the student to conduct research on a problem area in sufficient depth to identify critical theoretical and methodological issues that pertain to the problem area, to write an extended review that summarizes the research literature pertinent to the problem area, and to defend this paper in an oral presentation to faculty and doctoral students.

This format is intended to develop the student's research skills and to test a student's ability to produce work of methodological and theoretical rigor. After successful completion of the qualifying examination, the student will advance to candidacy.

*Written output*

In consultation with the members of the advisory committee, the student will identify an area of relevance to information science that will be the focus of the qualifying paper; the final product should establish this relevance for the audience.

The qualifying paper should be of publishable quality and must be more than a simple literature review, although it is not unreasonable to assume that the final output may be the basis for several chapters in the dissertation. It should include a comparative analysis of research conducted in the problem area and identification of gaps in the research literature.

In the qualifying paper, the student is expected to address explicitly and in depth the theoretical and methodological issues pertaining to the problem area under investigation:
Theoretical rigor: The student is expected to demonstrate competence in analyzing the theoretical state of the art in the chosen research area. This will require the student to synthesize and extend empirical analysis of a problem area to embrace theoretical issues. The paper should also include recommendations for advancing theory in the problem area.

Methodological rigor: The student is expected to evaluate critically the research methods used in the problem area and to provide clear evidence of the breadth and depth of the methods review. The relative advantages and disadvantages of these research methods must be considered; and any previous or current methodological debates in this area should be addressed.

The student should expect to spend two semesters of work preparing the qualifying examination paper. The exam itself carries no course credit; however, a student may register for up to six credit hours of Z765: Independent Research in Information Science with the qualifying paper as the final product (see Z765: Independent Research in Information Science, p. 16). Z765 coursework should be undertaken with the most appropriate faculty member to ensure adequate treatment of issues. A deferred grade (R) will be assigned for any credit hours of Z765 for which the course product is the qualifying examination paper. It is the student's responsibility to see that a final grade is assigned by the Z765 instructor following successful completion of the qualifying examination.

Faculty involvement

Selection of a problem area is crucial to the success of the qualifying exam process. Faculty members serving on the student's advisory committee are expected to discuss potential research areas and to provide advice on relevant readings. The chair of the advisory committee should obtain agreement in advance from all committee members on the general problem area to be studied and should arrange regular review sessions with the student to assess progress.

The student's performance on the qualifying examination is considered a reflection of the advisory committee's ability to encourage and nurture the intellectual development of the next generation of scholars. By agreeing to serve on a student's committee, faculty members accept responsibility for providing the necessary support to ensure successful progress. However, no faculty member is obliged to serve on any student's committee.

Student involvement

The student is responsible for all work carried out in the qualifying examination process. Decisions on the problem area to research, content of the review, style of presentation, etc. rest ultimately with the student but should be made with input from the advisory committee. In preparation for researching and writing the qualifying paper, the student should consider faculty expertise and support necessary to complete the paper and should make adjustments to the makeup of the advisory committee, if necessary.

The student is responsible for the final write-up and for making sure that copies are circulated in advance to all appropriate recipients, including making an electronic copy available for faculty and doctoral students.

Defense of the qualifying examination

The student will present her work to faculty and doctoral students. It is the student's responsibility to arrange a date and time for the defense that is agreeable for all the members of the qualifying examination evaluation committee. Under no circumstances can the defense be scheduled for a date
that prevents attendance of all faculty members who will be evaluating the qualifying paper, including the outside minor member.

The student is responsible for reserving a room for the defense and for arranging for any equipment that may be required. A public announcement of the time and location of the defense must be provided to faculty and to other doctoral students at least two weeks in advance of the defense. Such notice is generally distributed by the chair of the student's advisory committee via the ILS faculty and Ph.D. listservs and should include the exact title of the qualifying paper, an abstract, and the URL where an electronic copy of the qualifying paper can be found. It is the responsibility of the student to provide the Ph.D. Recorder with a copy of the announcement that must be posted to the Ph.D. bulletin board at least two weeks before the scheduled defense.

The public defense will last for approximately 90 minutes, with the time divided between a presentation by the student (no more than 45 minutes) and open questioning and discussion (no less than 45 minutes). However, because faculty questioning may extend the length of the defense, timing should be flexible to allow sufficient time to explore all questions and issues raised by the faculty. The chair of the student's advisory committee is expected to ensure that time keeping and protocols for adequate questioning are followed.

The qualifying examination defense is open to faculty and currently registered doctoral students. Faculty unable to attend the presentation may submit comments or questions to the chair of the student's advisory committee in advance of the presentation, where they will be read aloud and the student expected to respond appropriately.

Grading

The qualifying examination operates on a Pass/Pass With Changes/Fail grading system. The outcome is determined by an ad hoc evaluation committee of five faculty members consisting of the members of the student's advisory committee supplemented, if necessary, by other ILS faculty members whom the student has selected in consultation with the members of her advisory committee.

Members of the evaluation committee raising objections or requesting changes to the qualifying paper must make explicit the requirements to be met by the student. The decision on how the student should respond to objections will be determined by discussion among the faculty members evaluating the student's paper, with the final decision based on a simple majority vote of those participating in the discussion. In the unlikely event that participating faculty members are not able to reach a resolution, the final arbiter will be the departmental chair. If changes to the paper are required, the student will be expected to respond within three months in a manner deemed appropriate by the faculty members evaluating the paper, who may request a further public defense wherein decision making will proceed as before.

A failing grade will generally occur only in the very rare case where the student has maintained little or no involvement with the advisory committee or when the student insists on submission and defense of the qualifying examination paper against the advice of her committee. In the case of a failure, the student must restart study for the qualifying exam pending negotiation with the advisory committee. Two failures will render the student ineligible to continue in the doctoral program.

The student will be assessed on her ability to produce competent written work in line with the purposes of the qualifying exam outlined above. Although defended orally in a public venue, final determination of the outcome will rest on the quality of the written paper, not the presentation skills of the student.

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The qualifying examination must be successfully defended at least eight months before the date on which the doctoral degree is awarded.

**Nomination to Candidacy**

Upon successful completion of the qualifying examination, the student's advisory committee will sign the Nomination to Candidacy for the Ph.D. Degree form, which is to be submitted to the Ph.D. Recorder, who will then forward it to the Dean of the University Graduate School. After approval by UGS, the student will receive a Candidate in Philosophy certificate in the mail.

**Failure to Register**

In order to graduate, a student who fails to register each semester after successful completion of the qualifying examination must back-enroll for all semesters missed prior to defense of the dissertation. In addition to tuition fees, there is a charge of $275 per semester (subject to change) for back-enrollment.

**The Dissertation**

_Dissertation Research Committee_

After admission to candidacy, the student must assemble a dissertation research committee whose members will assume responsibility for guiding her through the dissertation process and for conducting the oral defense of the dissertation. The research committee must have at least four members, three of whom must be from ILS and one from the minor area. At least one member of the committee should have particular expertise in the research method(s) the student plans to use in the dissertation research.

All members of the doctoral research committee must be members of the University Graduate School faculty and at least half of the research committee must be full members of the graduate faculty who are endorsed to direct doctoral dissertations. A listing is provided by the University Graduate School.

The chair of the dissertation research committee must be a full-time member of the ILS faculty. It is usual for the chair of the research committee to serve as the dissertation director; however, it is acceptable for another committee member with particular expertise in the student's research area to direct the dissertation. The committee chair and the dissertation director (if other than the chair) must be full members of the graduate faculty. If an associate or affiliate member of the graduate faculty has special expertise in the student's area of research, the research committee chair and the director of the doctoral program can petition UGS to allow that faculty member to direct the student's dissertation.

In some cases, it is possible to include a committee member who is not a member of the Indiana University faculty. To receive approval for including an external member on the research committee, two conditions must be met: The external member must have special expertise, either in the major area of study or in the research methodology, that is not available among the members of
the graduate faculty; and the external member must have a strong and well documented history of research.

The members of the candidate's Research Committee must be approved by the University Graduate School at least six months before the final defense of the dissertation. The signed Nomination of Research Committee for the Ph.D. form must be submitted to the Ph.D. Recorder for approval by UGS along with a prospectus (see Dissertation Prospectus, below) describing the scope of the research and IRB approval, if appropriate.

Selection of research committee

The procedure for selecting the members of the Research Committee will vary from student to student. Experiences in Z702, Z703 and Z710 can give insight into shared interests and the research expertise of ILS faculty members; but the choice of a chair will involve a combination of compatible research interests and compatible personalities and should be done prior to the selection of the other members of the research committee.

During the years preceding advancement to candidacy, a student should have formed a mentoring relationship with one or more ILS faculty members. Frequently, the student's strongest mentor will have been the chair of her advisory committee; and she may already have discussed tentative areas of dissertation research with her chair prior to admission to candidacy. In such a case, the chair may be the most likely selection to serve as chair of the dissertation research committee. However, the student is not required to ask her advisory committee chair to serve as chair of the research committee; and no faculty member is obligated to chair the research committee of any doctoral student.

Dissertation prospectus

A one or two page dissertation prospectus must be submitted with the Nomination of Research Committee for the Ph.D. form. The prospectus should include a clear statement of the question(s) to be addressed in the dissertation research, an outline of the design of the research, the research methods to be used and a discussion of the contributions of the research to the advancement of scholarship in the field.

The prospectus is an important tool in putting together the research committee because it allows prospective members to determine whether they will be comfortable serving on the student's committee. A candidate should not ask a faculty member to be on her research committee without first providing him/her with a copy of the prospectus.

Research involving human subjects

The Office of Research Administration's Compliance Services is responsible for ensuring that all educational, research and clinical activities on University campuses are consistent with regulatory, statutory and organizational requirements and adhere to federal and state laws as well as University policies. On the Bloomington campus, the Human Research Protection Program (HRPP) is charged with protecting the rights and welfare of human research participants who are recruited to participate in research conducted under the auspices of Indiana University.

All research on the IUB campus that involves human subjects must have been approved by the Institutional Review Board (IRB) before recruitment of subjects or data collection can begin. If dissertation research involves the use of human subjects, the student must request review and approval of her research protocol from the IRB. The IRB provides a checklist for determining when research activity requires IRB review, as well as definitions of relevant terms. All forms required for an IRB application are available online.

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When you apply for review and approval of your research protocol, the candidate must provide documentation that she has successfully completed the appropriate modules of the Collaborative Institutional Training Initiative (CITI), which is administered on the IUB campus by Research Ethics, Education, & Policy (REEP), a university-wide research support function of IU’s Office of Research Administration. As of October 1, 2010, all principal investigators, co-investigators, and anyone involved in the design, conduct or reporting of research or having significant interaction with subjects, including personnel obtaining informed consent from subjects, must complete CITI training.

**Dissertation proposal**

The candidate is required to develop, submit and defend a dissertation proposal. The dissertation proposal will be more detailed than the prospectus and must contain sufficient detail to allow a reader to ascertain research intentions unambiguously. The dissertation proposal will normally contain the following elements: statement of purpose; supporting rationale for the proposed research; literature review and theoretical framework; research questions; proposed procedures, sources of data and methods of data collection; methods of data analysis; and a statement regarding the significance of the research.

The candidate must provide a copy of the dissertation proposal to each member of her research committee for comment and guidance. It may also be helpful to hold a meeting with the research committee at this time. After reviewing the proposal and the comments of other members of the committee, the chair of the student's research committee will determine if the proposal is sufficiently developed to schedule the defense.

**Dissertation proposal defense**

The dissertation proposal is one of the most important milestones in the candidate's course of studies. Because it is a detailed statement of the candidate's dissertation research, its successful defense is an indication that the proposed research will meet the standards of the field. It is also a contract between the candidate and her research committee regarding the work to be submitted in the dissertation. To this end, the proposal defense is more critical than the dissertation defense.

The candidate must defend the dissertation proposal to her research committee and any other faculty members and doctoral students who elect to attend. The outcome of the proposal defense will be determined by the members of the candidate's research committee.

It is the candidate's responsibility to arrange a date and time for the proposal defense that is agreeable for all members of the research committee. The candidate is also responsible for reserving a room for the defense and arranging for any technological equipment that may be required.

An announcement of the time and location of the proposal defense must be provided to faculty and to other doctoral students at least two weeks in advance of the defense. Notice is generally distributed by the chair of the candidate's research committee via the ILS faculty and Ph.D. listservs and should include the exact title of the qualifying paper, an abstract and the URL where an electronic copy of the proposal can be found. It is the responsibility of the student to provide the Ph.D. Recorder with a copy of the announcement, which must be posted to the Ph.D. bulletin board at least two weeks before the scheduled defense.
Dissertation manuscript

Formatting of the dissertation manuscript is specified in Preparing Theses and Dissertations, published by UGS. The guide contains detailed instructions for the preparation and submission of the dissertation manuscript in both traditional and electronic format. You should also provide the chair of your Research Committee with a bound copy of the completed dissertation. Although it is not required, recipients often present the other members of the Research Committee with a bound copy of the dissertation as a courtesy.

All students entering the ILS Doctoral Program in Fall 2005 or thereafter are required to submit the dissertation electronically. There are advantages to submitting the dissertation electronically, including savings on binding costs, remote submission, and the ability to use color, manipulate the structure and include images and/or audio-video files. UGS provides instructions for electronic submission and can help with the process if revisions of margins, etc., are needed to meet standards. Once submitted, it will take about a month for the library to make it available online.

Dissertation defense

After completion of the dissertation manuscript, a public oral examination will be scheduled for defense of the dissertation. The dissertation defense can be scheduled no less than eight months after successful completion of the qualifying examination and no less than six months after the date on which the student's research committee was approved by UGS.

It is the candidate's responsibility to arrange a date and time for the dissertation defense that is agreeable for all members of the research committee. The candidate is also responsible for reserving a room for the defense, for arranging for any equipment that may be required, and for providing each committee member with a clean copy of the dissertation manuscript no less than four weeks prior to the defense.

A dissertation defense announcement must be made no less than one month (30 days) before the scheduled date of the defense. In addition to the date, time and location of the defense, the announcement must include the exact title of the dissertation, the URL where an electronic copy of the dissertation can be found, and an abstract of the dissertation that has been approved by the chair of the research committee. At least one month (30 days) before the date of the final defense, the student must submit the announcement to the University Graduate School.

The University Graduate School awards Ph.D. degrees on the last day of each month. Final copies of the dissertation must be submitted 30 days prior to degree conferral. Because there are often editing changes after the final defense, degree conferral is typically more than 30 days after the dissertation defense.

Annual Student Progress Report

After completion of the first academic year in the program and on an annual basis thereafter until successful defense of the dissertation proposal, the student must provide the members of her advisory committee and the Doctoral Steering Committee (DSC) with a self-evaluation of her progress in the doctoral program. It is to be completed according to the guidelines prescribed in the Annual Student Progress Report, signed by all members of the advisory committee, and submitted to the ILS Ph.D. Recorder by the first Monday in June. Failure to submit a completed progress report and supporting documentation by the date due will result in an automatic "continue with warning" caution from the DSC.
The Annual Student Progress Report summarizes the student's accomplishments and goals reached over the past academic year. The report provides the advisory committee and the DSC with detailed information about the student's coursework, teaching, research and service accomplishments that will help them to assess her progress in the Ph.D. Program.

The Annual Student Progress Report will include the following sections:

- **Statement of research interests.** The statement of research interests will describe the student's primary area(s) of research interest; summarize experiences in research over the past year; identify competencies yet to be acquired and plans for acquiring them; and outline plans and goals for the upcoming year. It will also address the student's progress toward key milestones in the doctoral program (e.g., completion of required courses, work toward the qualifying exam, or plans for the dissertation proposal).

- **Coursework.** The progress report will include a list of courses the student completed over the past year and the grades received as well as any courses for which an outstanding grade of I (Incomplete) and her plans for completing them.

- **Teaching activities.** The student will provide information about courses the student taught during the past year and guest lectures given.

- **Research activities.** The student will provide complete references for all research that has been published, accepted for publication, or submitted to journals, as well as information about unpublished manuscripts, software, demos, and any other creative activities; the name, date, and location of each professional conference, seminar and/or workshop in which she participated; and information about funding received, whether from ILS, IU, or another source.

- **Service activities.** List any national, regional, University, and ILS professional service activities (e.g., reviewing papers for conferences, journals or edited volumes; participation in the Doctoral Student Association or local chapters of national organizations), as well as community service activities during the past year.

- **Program of Doctoral Studies.** A current Program of Doctoral Studies must be included as an attachment to the progress report. It should include courses the student has completed, courses the student plans to take to satisfy requirements, courses that have been transferred and/or validated, courses the student plans to transfer and/or validate, and courses for which the student has an incomplete (I) or deferred (R) grade.

- **Writing sample.** A current writing sample must also be attached: for example, research paper completed during the past year or a journal article or book review for which the student is sole author.

The Annual Student Progress Report also contains a section for additional comments, allowing the student to expand on any achievement not sufficiently covered in the preceding sections or to address comments to the members of her advisory committee, to the DSC, or to the program director. The progress report itself should be submitted in print format, but supporting documentation may be in print, digital, audio-video or other format.

At least one week before the Annual Student Progress Report is due, the student should meet with her advisory committee to review and approve the progress report. The student is responsible for scheduling the meeting, reserving a room, and providing each committee members with an advance copy of the report. After obtaining the signatures of the Advisory Committee members, the student should submit the Annual Student Progress Report to the ILS Ph.D. Recorder for review and inclusion in her official file.
Academic Integrity

Academic integrity is required of all students at Indiana University and the Department of Information and Library Science.

Code of Academic Ethics (from the Preamble of the IU Schedule of Classes):

The central functions of an academic community are learning, teaching, and scholarship. They must be characterized by reasoned discourse, intellectual honesty, mutual respect, and openness to constructive change. By accepting membership in this community, an individual neither surrenders rights nor escapes fundamental responsibilities to the entire University community.

Code of Student Rights, Responsibilities, and Conduct

Preamble: Individual rights are best protected by a collective commitment to mutual respect. A student who accepts admission to Indiana University agrees to:

- be ethical in his or her participation in the academic community,
- take responsibility for what he or she says and does,
- behave in a manner that is respectful of the dignity of others, treating others with civility and understanding, and
- use university resources and facilities in appropriate ways consistent with their purpose and in accordance with applicable policies.

Academic Misconduct: The faculty member must report all cases of academic misconduct to the dean of students, or appropriate official.

Plagiarism: Plagiarism is defined as presenting someone else’s work, including the work of other students, as one’s own. Any ideas or materials taken from another source for either written or oral use must be fully acknowledged, unless the information is common knowledge. What is considered “common knowledge” may differ from course to course.

a. A student must not adopt or reproduce ideas, opinions, theories, formulas, graphics, or pictures of another person without acknowledgment.

b. A student must give credit to the originality of others and acknowledge indebtedness whenever:

1. directly quoting another person’s actual words, whether oral or written;
2. using another person’s ideas, opinions, or theories;
3. paraphrasing the words, ideas, opinions, or theories of others, whether oral or written;
4. borrowing facts, statistics, or illustrative material; or
5. offering materials assembled or collected by others in the form of projects or collections without acknowledgment

Student Ethics and Anti-Harassment Programs

If you have any questions or want more information about student responsibilities and campus codes of conduct, contact the Student Ethics and Anti-Harassment Programs, Alice McDonald Nelson Bldg. 801 N. Jordan Avenue (812.855.5419) or the Student Advocates Office, Eigenmann Hall West 229 (812.855.0761).

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**Tuition**

Although a doctoral student must be enrolled for 6 credit hours per semester to be considered full-time and to be eligible for a Student Academic Appointment (SAA), ILS doctoral students generally take 9 credit hours per semester. The tuition rates for ILS doctoral students follow the University Graduate School rates, which are available at the [Office of the Bursar](https://www.iub.edu/bursar). For information about qualifying for Indiana resident tuition rates, contact IUB's [Office of the Registrar](https://www.iub.edu/registrar).

International students admitted to the doctoral program are required to submit evidence of financial resources before the Office of International Admissions will issue documents necessary to apply for a visa to enter the United States as a student. Evidence of financial support should demonstrate the ability to cover costs of tuition and living expenses for the first year of study at Indiana University.

**Student fees**

Students should also plan on approximately $500 per semester to cover the "mandatory" student health, technology, transportation and activity fees charged by the university (see below). Benefits of these student fees are outlined below. For more information about fees and tuition billing, contact IUB's [Office of the Bursar](https://www.iub.edu/bursar).

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<table>
<thead>
<tr>
<th>University Fee</th>
<th>Student Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student Activity Fee</strong></td>
<td>All athletic events (except football and men’s basketball) are free during the regular season with a valid IU student ID. Reduced student rates are available for Jacobs School of Music School performances (including concerts, ballet, and opera), Department of Theatre and Drama productions, and most events at the IU Auditorium. Contact the performance venue for more information. The student activity fee also provides unlimited access to recreational sports facilities, including those at the School of Public Health Building and the Student Recreational Sports Center (SRSC).</td>
</tr>
<tr>
<td><strong>Student Health Fee</strong></td>
<td>Free and discounted services are available at the Indiana University Health Center. Benefits include a reduced charge of $18 for routine medical clinic visits; two free visits per semester (excluding psychiatry) to Counseling and Psychological Services (CAPS); free prescheduled appointments at the women’s clinic; and free or discounted services, such as fitness assessments, that are available through the Health and Wellness clinic. More information can be found at <a href="http://healthcenter.indiana.edu/about/fees-payments.shtml">http://healthcenter.indiana.edu/about/fees-payments.shtml</a>.</td>
</tr>
<tr>
<td><strong>Technology Fee</strong></td>
<td>The technology fee provides free technology workshops <a href="http://ittraining.iu.edu/?CampusId=1">http://ittraining.iu.edu/?CampusId=1</a> and free online tutorials <a href="http://ittraining.iu.edu/training/elearning_compare.aspx">http://ittraining.iu.edu/training/elearning_compare.aspx</a>. Free or reduced cost software is available through IU Ware, either online <a href="http://iware.indiana.edu/">iware.indiana.edu</a> or at the IU Bookstores <a href="http://iub.bncollege.com">http://iub.bncollege.com</a>. The fee also funds STC computing labs <a href="http://stcweb.stc.indiana.edu/Framework/apps/public/">http://stcweb.stc.indiana.edu/Framework/apps/public/</a>, including 24 hour access at the Wells Library Information Commons <a href="http://www.libraries.iub.edu/index.php?pageId=310">http://www.libraries.iub.edu/index.php?pageId=310</a>.</td>
</tr>
<tr>
<td><strong>Transportation Fee</strong></td>
<td>Both Bloomington Transit services <a href="http://www.bloomingtontransit.com/">http://www.bloomingtontransit.com/</a> and Campus Bus services <a href="http://www.iubus.indiana.edu/campus_bus/index.html">http://www.iubus.indiana.edu/campus_bus/index.html</a> are free with a valid IU student ID. Service from campus includes routes to College Mall, downtown, several apartment complexes, and the stadium parking lots. You can park at the stadium with a valid E parking permit and ride free to campus. See websites for complete route information and schedules.</td>
</tr>
</tbody>
</table>
**Financial Aid**

Financial support for doctoral study is limited and varies from year to year. It is restricted to full-time students (i.e., students enrolled in a minimum of 6 credit hours per semester) and may be in the form of a fellowship, fee remission and/or a graduate or research assistantship. Although financial support may be in the form of a multiple-year fellowship, most aid is awarded annually.

Fellowships are awarded each spring by the Doctoral Steering Committee on the basis of academic merit and financial need. For most fellowships, academic merit is the primary criterion for awarding aid, with financial need a secondary consideration. However, consideration for the Sarah Reed Fellowship is based on financial need.

All students who submitted application materials by January will be considered for financial support. Once financial aid has been awarded, renewal of the award will be contingent on successful academic achievement, demonstration of satisfactory progress toward the doctorate and availability of funding.

Student loans are a separate process handled by IUB's Office of Student Financial Assistance. Students are encouraged to keep loans to a minimum.

**Dean's Fellowship**

The Dean's Fellowship is awarded annually by the Department of Information and Library Science to an entering doctoral student. It consists of a four-year financial aid package that includes an annual stipend, tuition for 24 credit hours for each of the first three years and health insurance. To be considered for the Dean's Fellowship, an applicant must submit an Indiana University Application Form for Admission and Financial Aid by January 15.

**Other fellowships**

Fellowships usually consist of a stipend or cash award and may cover tuition costs for a specified number of credit hours per semester. Fellowships are open to all ILS doctoral students (including international students) who are not already receiving significant financial support.

**Rob Kling Social Informatics Fellowship.** This fellowship honors the many accomplishments of Dr. Rob Kling to social informatics research and education. In consultation with Dr. Mitzi Lewison, widow of Dr. Kling, the Kling Fellowship is awarded annually to an outstanding doctoral student studying social informatics.

**Sarah Reed Fellowship.** Sarah Reed expressed the desire that her estate would be used to assist ILS doctoral students at Indiana University Bloomington. The fellowship established in her name provides financial assistance to qualified students who would be unable to pursue their doctoral studies without financial support. Sarah Reed Fellowships are awarded annually to one or more doctoral students based on financial need. The amount of each award is determined by the funds available for that year.

**Margaret Griffin Coffin Fellowship.** Margaret Griffin Coffin Fellowships are awarded annually to one or more doctoral students who are preparing for a career in Library and Information Science and have demonstrated academic excellence. The amount of the award is determined by the funds available for that year.

**Cynthia Duncan Fellowship.** The Cynthia Duncan Fellowship is awarded annually to one or more doctoral students who have demonstrated academic excellence. The amount of each award is determined by the funds available for that year.

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**Margaret Rufsvold Fellowship.** The Margaret Rufsvold Fellowship is a $2000.00 award presented annually to a doctoral student who has demonstrated academic excellence.

**Clayton Shepherd Fellowship.** The Clayton Shepherd Fellowship is awarded annually to a doctoral student who has demonstrated academic excellence and has expressed an interest in research emphasizing information science and technology.

**Bernbom Fellowship.** The Gerald Bernbom Fellowship is awarded to a doctoral student at Indiana University Bloomington who is currently enrolled in the School of Informatics and Computing and who has an interest in information as an ecosystem. Applications for the Gerald Bernbom Fellowship are to be submitted by June 1 of the award year. Applications must include three letters of reference and an original essay of 600-800 words describing how the applicant's research relates to the study of knowledge and information (rather than technology) in one of Gerald Bernbom's primary areas of interest: 1) knowledge management of scientific and scholarly communication; 2) interdisciplinary research on the life-cycle of the information ecosystem, which could include: the study of information and knowledge as a commons; an institutional analysis of knowledge as a resource; the social, ethical, and political impacts of knowledge and scholarly communication; information policy creation, implementation, and/or evaluation; the study of research collaboration and partnerships; or information equity and the digital divide; and 3) the creation and safeguarding of information, which could include: information’s uses and users; the value of information and how that value is affected by timeliness, accuracy, and accessibility; the sustainability of the scholarly record; and the preservation of digital objects.

**Research and graduate assistantships**

Doctoral students will be considered for research or graduate assistantships when these positions are available. An assistantship is a Student Academic Appointment (SAA) requiring the recipient to work between 12 and 20 hours per week helping individual faculty or staff with research or administrative responsibilities. Research assistantships are awarded on the basis of an applicant's academic background and research interests; graduate assistantships are generally awarded on the basis of academic merit and financial need.

Research and graduate assistantships include payment of an hourly wage and up to 9 credit hours of tuition fees per semester; and no health insurance is provided. Fellowships with the defined amount provided by Human Resources Department are eligible for health insurance. Students who are making satisfactory progress toward the degree will generally continue in an assistantship position held during the previous year.

**Other funding resources**

Student loans and other financial aid opportunities are available to graduate students in Bloomington through the Office of Student Financial Assistance. Applicants should also review How to Finance Graduate School for information about financial aid available for graduate students at Indiana University.

**Travel awards**

ILS has a limited amount of money for travel awards to doctoral students in support of attendance at professional conferences. The maximum reimbursement awarded to each student will be $350 per academic year. These awards can be used to cover travel and lodging expenses as well as conference registration fees. The time period covered by the ILS Travel Reimbursement Award follows the academic year (July 1 to June 30). Travel reimbursement will only be awarded during the academic
year in which travel takes place. A student may submit an application for reimbursement prior to the actual travel by submitting a request for the estimated costs of travel funding.

To apply for an ILS travel award, a student must complete the Application for Travel Reimbursement Award form, including the full name of the conference (i.e., using no abbreviations or acronyms). The form must be signed by the student’s faculty advisor and submitted to the Ph.D. Recorder. Requests will be handled on a case-by-case basis until the final deadline has passed or funds have been exhausted.

Travel and research grants are also available through various IU programs. The Graduate and Professional Student Organization (GPSO) also provides financial support for travel.

**Doctoral Student Association (DSA)**

The Doctoral Student Association in ILS was organized to support the needs of the doctoral students. All ILS doctoral students are automatically members of the DSA. The DSA meets as needed to gather student opinions on issues of interest or to make proposals or suggestions to the faculty. DSA meetings also serve an important social function by fostering communication among doctoral students.

The doctoral students elect students to positions including the DSA chair, the listserv moderator, the Doctoral Research Forum coordinator, and student representatives appointed to the ILS Doctoral Steering Committee, the ILS Curriculum Committee, and the IU Graduate and Professional Student Organization.

**ILS_PHD_L**

The ILS_PHD_L is a moderated listserv that is open only to doctoral students, who use it to share news, ask questions, or collaborate on matters of interest to all doctoral students.

**Professional Doctoral Forum**

The Professional Doctoral Forum is a half-day session held in the spring semester that focuses on student orientation to the ILS doctoral program, support for scholarly publications and public presentations, and other topics relevant for the student’s long-term success in academia. The Professional Doctoral Forum will be coordinated by the officers of the DSA in consultation with the Doctoral Steering Committee (DSC) and the director of the doctoral program.

Student-centered discussions will emphasize preparation of doctoral students for entry into the scholarly community and will focus on issues relevant to their professional development. Topics covered will include requirements for the Ph.D. in information science (IS), introduction to faculty research, resources within the IS community, conference and job presentations, creation of posters and preparation for job hunting (e.g., cover letters, interview questions, practice interviews, teaching and research statements and job talks).

**Doctoral Student Research Forum**

As members of a meta-discipline with dynamic boundaries, information scientists develop and strengthen theories from within the discipline and draw upon theoretical frameworks from related disciplines such as computer science, business, sociology, linguistics, and cognitive science. The ILS Doctoral Student Research Forum is an annual mini-conference organized by the DSA to give students additional experience in making conference presentations. It provides a venue for students
to present their own research, to gather feedback on their work, and to increase their awareness of
the breadth of research of other doctoral students in ILS.

The Doctoral Student Research Forum welcomes presentations from doctoral students working in
all areas of research within information science. Submissions should demonstrate student research
conducted over the past year, including early reflections on or exploration and development of
research questions and problems. Submissions may be for full presentations or for posters and may
have been previously published.

**Technology resources**

The ILS technology staff is dedicated to providing students, faculty and staff with reliable access
to advanced research computing systems and software. In addition to providing access to Indiana
University's central computing systems, ILS maintains its own Unix (Sun Solaris, Debian Linux,
Apple Mac OS X) and Windows servers. The technology staff maintains the [ILS Technology Help]
service to handle difficulties and answer common questions.

**Computer Labs**

There are two labs in the ILS Information Commons (Room 002) for the use of all members
of the ILS community. The Shepherd Lab has 17 Windows PCs and 6 machines running Apple's OS
X; and the Mac OS X lab, which is used for lab courses, has 28 stations that can be used by ILS
students when a class is not in session.

In the Ph.D. Commons and the Ph.D. Lab, there are PCs, Macs and hook-ups for laptops that are
reserved for exclusive use of doctoral students. However, because the space and the equipment are
limited, doctoral students must share access: Each computer is to be treated as a lab machine, with
computer access on a first-come, first-served basis.

**Printing Quotas**

Doctoral students are allocated 2000 pages per semester for printing in the ILS labs (campus self-
service copy rate per page billed for printing that exceeds the allocated 2000 pages). Doctoral
students are also eligible for the standard IU student printing quota of 1000 pages that can be used
in any IU lab outside of ILS ($0.04 per page billed for printing that exceeds the IU lab quota). These
different print quotas cannot be transferred from one type of lab to another. The status of both
allotments can be checked at the STC Printing Services page. For additional information about
printing and print quotas, see the [ILS Technology Overview].

**University Information Technology Services (UTIS)**

UTIS provides comprehensive information about [University computing and technology policies].
The [UTIS Knowledge Base] is also a helpful resource.

**Computer Users’ Privileges and Responsibilities**

Computing resources and network capacity are to be used in accordance with the ethical standards
of the Indiana University community established in the Code of Student Ethics.

Following are examples of unethical use of university computing resources:

- Violations of computer system security;
- Unauthorized use of computer accounts, access codes, or network identification
  numbers assigned to others;

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• Intentional use of computer telecommunication facilities in ways that unnecessarily impede the computing activities of others (e.g., randomly initiating interactive electronic communications or e-mail exchanges, overuse of interactive network utilities, etc.);
• Use of computer facilities for private business purposes unrelated to the mission of the University or to University life;
• Academic dishonesty (e.g., plagiarism, cheating, etc.);
• Violation of software license agreements, network usage policies and regulations, or the privacy of another user.

Administrative Entities

Doctoral Steering Committee

The Doctoral Steering Committee (DSC) consists of five members of the ILS faculty, appointed by the departmental chair, and one representative selected by the doctoral students. The main function of the DSC is to monitor the quality of the program by periodically reviewing its goals, requirements and procedures and by making recommendations to the full faculty as needed. Decisions on the rules and procedures of the doctoral program are determined by vote of the full faculty.

The DSC screens applications for admission and forwards applications that meet ILS minimum requirements to the full faculty for consideration. The faculty members on the DSC have two additional responsibilities: (1) reviewing student progress and (2) awarding financial support for doctoral students when such funding is available.

Director of the ILS doctoral program

The Director of the ILS doctoral program is appointed by the Chair of ILS and serves as chair of the Doctoral Steering Committee. The Director is responsible for overseeing day-to-day administration of the doctoral program, for maintaining close contact with UGS and for assuring that doctoral procedures are followed consistently and equitably. The Director is also responsible for monitoring student progress toward the degree and for making recommendations to the University Graduate School regarding nomination to candidacy, appointment of research committees and conferral of the doctoral degree.

ILS Ph.D. Recorder

The Ph.D. Recorder handles all administrative tasks necessary for maintaining the academic records of doctoral students. The Recorder works closely with the University Graduate School, responds to inquiries regarding student status and degree requirements, and is an important resource person for both doctoral students and faculty.
Appendix A

Optional Timeline(s) for Doctorate in Information Science

Timeline assumes no transfer of previous graduate coursework.
* = Required course.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester (1st Fall)</strong></td>
<td>Z701 (6)*</td>
<td>[52-72]</td>
</tr>
<tr>
<td></td>
<td>Z706 (3)</td>
<td></td>
</tr>
<tr>
<td><strong>Second Semester (1st Spring)</strong></td>
<td>Z702 (3)*</td>
<td>[52-72]</td>
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<tr>
<td></td>
<td>Z765 (1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statistics (3)*</td>
<td>[52-72]</td>
</tr>
<tr>
<td></td>
<td>Z764 (3)*</td>
<td>[52-72]</td>
</tr>
<tr>
<td><strong>1st Summer (Optional)</strong></td>
<td>Z702/Z703 (3)*</td>
<td>[52-72]</td>
</tr>
<tr>
<td></td>
<td>Z765 0-4 credit hours</td>
<td></td>
</tr>
<tr>
<td><strong>Third Semester (2nd Fall)</strong></td>
<td>Z702/Z703 (3)*</td>
<td>[52-72]</td>
</tr>
<tr>
<td></td>
<td>Z765 (1)</td>
<td></td>
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<tr>
<td></td>
<td>Z764 (3)*</td>
<td>[52-72]</td>
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<tr>
<td></td>
<td>Outside minor (3)* --or-- Methods (3)*</td>
<td>[52-72]</td>
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<tr>
<td><strong>Fourth Semester (2nd Spring)</strong></td>
<td>Z764 (3)</td>
<td>[52-72]</td>
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<tr>
<td></td>
<td>Z710 (3)</td>
<td></td>
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<td></td>
<td>Outside minor (3)* --or-- Methods (3)*</td>
<td>[52-72]</td>
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<tr>
<td><strong>2nd Summer</strong></td>
<td>Optional 0-6 credit hours</td>
<td>[52-72]</td>
</tr>
<tr>
<td><strong>Fifth Semester (3rd Fall)</strong></td>
<td>Z764 (3)*</td>
<td>[52-72]</td>
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<td></td>
<td>Z765 (3-6)</td>
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<td></td>
<td>Outside minor (3)* --or-- Methods (3)*</td>
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<td><strong>Sixth Semester (3rd Spring)</strong></td>
<td>Z764 (3)*</td>
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<td>Z765 (3-6)</td>
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<td></td>
<td>Outside minor (3)* --or-- Methods (3)*</td>
<td>[52-72]</td>
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<tr>
<td><strong>3rd Summer</strong></td>
<td>Optional 0-6 credit hours</td>
<td>[52-72]</td>
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<td></td>
<td>Z764 (3)*</td>
<td>[52-72]</td>
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<td>Z765 (3-6)</td>
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<td></td>
<td>Outside minor (3)* --or-- Methods (3)*</td>
<td>[52-72]</td>
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<tr>
<td><strong>Seventh Semester (4th Fall)</strong></td>
<td>Z764 (3)*</td>
<td>[52-72]</td>
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<td></td>
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<td></td>
<td>Outside minor (3)* -- or --</td>
<td>[52-72]</td>
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<tr>
<td><strong>Eighth Semester (4th Spring)</strong></td>
<td>Z764 (3)*</td>
<td>[52-72]</td>
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<td></td>
<td>Outside minor (3)* -- or --</td>
<td>[52-72]</td>
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<tr>
<td></td>
<td>Z765 (3-6)</td>
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<tr>
<td><strong>Ninth Semester (5th Fall)</strong></td>
<td>Z764 (3)*</td>
<td>[52-72]</td>
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<td></td>
<td>Z765 (3-9)</td>
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<td>Z790 (3)</td>
<td>[52-72]</td>
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<td>Outside minor (3)* --or-- Methods (3)*</td>
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<tr>
<td><strong>Tenth Semester (5th Spring)</strong></td>
<td>Z764 (3)*</td>
<td>[52-72]</td>
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<tr>
<td></td>
<td>Z765 (3-9)</td>
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<td></td>
<td>Z790 (3)</td>
<td>[52-72]</td>
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<td></td>
<td>Outside minor (3)* --or-- Methods (3)*</td>
<td>[52-72]</td>
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</tbody>
</table>

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Appendix B

Z702/Z703 Research Practicum Guidelines

Purpose

Because the Doctor of Philosophy in Information Science is a research degree, it is incumbent upon the prospective student to begin the process of learning to conduct independent research as early as possible in his or her doctoral studies. Some of this learning will come through classroom study; however, research is a process that must be learned through experience as well as coursework. The purpose of the doctoral research practica is to provide this experience in a structured, supervised setting.

Requirements

All ILS doctoral students must satisfactorily complete Z702 and Z703 before taking Z710. These courses are open only to students enrolled in the ILS doctoral program and are graded by the faculty member supervising the practicum.

When and with whom practica are conducted

All ILS doctoral students will take two research practica which must begin within two semesters after completing Z701. During each practicum, the student will assist an ILS faculty member in some ongoing aspect of his or her research. The two semesters must be taken during the first three consecutive semesters during which the student is enrolled following Z701. Consecutive in this context refers to consecutive Spring and Fall semesters. Students may elect to take one practicum during the summer provided they have received written permission from the practicum coordinator; however, only one research practicum may be taken in the summer.

Practicums are to be taken with ILS faculty. In order to gain a broad background in research practices, doctoral students will normally conduct research with different faculty members during each practicum semester. Exceptions will not normally be granted, although students may continue a research project as an independent study. An independent study may not be substituted for the research practicum.

Students are not normally allowed to work independently on research topics for either Z702 or Z703. Students work on independent research during the Z710 course.

Practicum selection

ILS faculty members will present a brief written synopsis of current research projects on which they are willing to work with and supervise doctoral students. The practicum coordinator will distribute these synopses to the doctoral students toward the end of each semester; the students will then be responsible for contacting the faculty member and agreeing on a program of research.

The objective of the research practicum is to expose the doctoral student to the experience of research in LIS. This may mean that an individual will work on a project that is not directly concerned with his or her individual research interests. Specific practica will be available according to the individual faculty who are willing to work on them. Students have the option of suggesting research topics to faculty; however, the students are obligated to
The practicum contract

Once a student and a faculty member have agreed upon a practicum experience, they are responsible for drafting a practicum contract. A practicum contract for Z702 or Z703 should be submitted to the practicum coordinator by the end of the first month of the semester in which the practicum is to be conducted. A written plan for the Z710 practicum must be approved and signed by the student's sponsoring faculty member, the chair of the student's advisory committee and the director of the doctoral program before registration for Z710 can be authorized by the Ph. D. Recorder. The contract is intended to specify the rights and responsibilities of both the student and the faculty member.

The contract must contain the following information:

- Student and faculty names;
- Project name;
- One paragraph description of the research;
- Specifications of the student's work on the research project to include specific outcomes or products (e.g., a written report) together with dates of completion;
- Signature and date of the student, the faculty member and the practicum coordinator;
- Statement of the supervising faculty member that the practicum has been completed successfully.

The contract will be reviewed by the practicum coordinator to ensure that the terms of the practicum conform to the specifications listed under faculty responsibilities.

Faculty responsibilities

The practicum should be a structured learning experience for the doctoral student. Students in the course are participants in the research experience, not graduate assistants. As part of the process of having students assist in research, faculty members are obliged to provide experiences for doctoral students that meet the following criteria:

The research must provide the doctoral student with complex, practical research experience. Students may perform some clerical and repetitive tasks as part of the experience, but these cannot constitute the majority of the practicum work. It is understood that the sophistication and depth of a student's involvement may be limited initially by his or her inexperience, but it is the responsibility of the faculty sponsor to structure the practicum in a way that allows the student to increase his or her expertise. This can include additional reading for the student provided it fits within the normal weekly workload specified below.

The research duties must be assigned with a reasonable expectation that they can be completed within one semester. This assumes a workload on the part of the student of approximately ten hours per week. Research that extends beyond the semester is not
encouraged but may be negotiated on a case by case basis. A practicum that extends beyond
one semester still counts as only one practicum.

The research practicum must be constructed such that the normal range of ILS doctoral
students could engage in it. While it is expected that not all practica will be within the
capabilities of all students, faculty members who propose research projects will do so with
the expectation that students will fill them. Projects will not normally be accepted by the
practicum coordinator if they require research skills that ILS doctoral students do not
possess in their first two years of study. (Exceptions may be made by the practicum
coordinator to take advantage of the skills of exceptional students.)

If a faculty member rejects a practicum student, the faculty member has the responsibility
for demonstrating specifically why the student has been rejected.

Student responsibilities

Students are enrolled in practica to expose them to the experience of research under the
guidance of a faculty member. This may require additional study to become familiar with a
research topic, technique or research in an area that is not connected with the student's
personal research interests. If a doctoral student fails to be accepted for a research project in
a semester in which he or she must participate in the practicum course, then the student
must inform the practicum coordinator who will take steps to have the student assigned to a
practicum project.

Students are expected to conduct their practica responsibilities in a professional manner.
This assumes that the student performs his or her research duties with a reasonable level of
effort and initiative. Faculty members have the responsibility to provide guidance, but it is
also expected that doctoral students will work with a minimum of direct supervision.

Practicum coordinator responsibilities

The practicum course will be supervised by a faculty member. The course is an overload
in the same manner as other doctoral courses. The coordinator's duties include the
following:

- Insuring that all doctoral students are placed in a practicum for the semesters in which
  they are required to participate. The coordinator is responsible for negotiating placement in
  a practicum according to the rules specified below if a placement cannot be found under
  normal placement procedures.

- Reviewing practicum contracts to ensure that they are equitable to both parties (i.e., that
  the workload, time constraints and quality of the experience are within the guidelines for
  practicum research projects).

- Initially reviewing the practica submitted by faculty members to insure that the practica are
  within the capabilities of ILS doctoral students.

- The coordinator is also responsible for mediating disputes between students and their
  sponsoring faculty members. The faculty member makes the final determination concerning
  the successful completion of a practicum. There may be instances in which the student has a
  grievance concerning the resolution of the practicum (e.g., continuing beyond the specified
  ending period, excessive workload, insufficient exposure to research, etc.). In these cases the
  coordinator will act to resolve the differences and protect the interests of both the student
  and faculty member.
The coordinator schedules and supervises practicum meetings (see below) throughout the semester. The coordinator solicits new practica from faculty each semester and maintains a file of practica currently available for students.

If a doctoral student fails to obtain a practicum placement in the semester in which he or she must participate, the practicum coordinator will meet with the student to elicit areas of research interest and attempt to set up a practicum with an appropriate faculty member in that area. Faculty members who have not submitted a practicum and who have not committed to work with the student as part of the admissions process are not required to create a practicum research project for the student.

If this effort is unsuccessful, the practicum coordinator will contact any faculty member who has rejected the student to review the basis for rejection. If there are intellectual reasons for the rejection, the coordinator will attempt to negotiate a practicum that is within the capabilities of the student. If there are too few practica or the reasons for rejecting a student are otherwise justified, the coordinator will request one of the faculty members who agreed to work with the student as part of the admissions process to set up a practicum.

Practicum meetings

The practicum course has no lectures or scheduled class time. Students meet as a group throughout the semester on no fewer than two occasions to discuss their experiences. Meetings will be scheduled and supervised by the practicum coordinator. Meetings are a mandatory part of the practicum course.