Informatics Programs Graduate Student Handbook AY 22-23 informatics.ischool.illinois.edu

Informatics PhD Program Overview2
Admission to the Informatics PhD Program
Application Deadline
Application Procedures
Application Fees
Proposed Program of Study
Academics
Test Scores
CV/ Resume
Personal Statement Research Statement
References
Admission decisions
Financial aid
English proficiency for International students
Employment at Illinois7
Form I-9 and E-Verify Compliance
Assistantship types
TCN/ SSN for International Students
Graduate hourly employment
Academic Administrative Information9
Registration
Course loads
Academic standing
Holds
Academic deadlines
Enrollment Verification
Grading system
Leave of absence policy
Requesting exceptions to Graduate college policy
Annual review of academic progress
Problem Solving Procedures for Disputes and Conflicts
Informatics PhD Milestones and Procedures12
Required courses
Advisory and Dissertation Committees
Area qualifying exam
Preliminary exam
Preparing the dissertation
Dissertation defense
Dissertation deposit
Appendices- Sample Course Plans20

Informatics PhD Program Overview

The Illinois Informatics PhD program is a unique research degree defined by innovative application and invention of computational methods to advance existing or newly created fields of inquiry.

Highlights of the PhD program include:

- Individually tailored, student-centric study
- Renowned faculty from the entire campus and wide disciplinary spectrum, representing more than seven Schools and Colleges across the Urbana-Champaign campus
- World-class computing resources
- Fellowships and Assistantships for the most qualified applicants

Initial Program Areas:

- Bioinformatics
- Health and Medical Informatics
- Spatial Informatics
- Art and Cultural Informatics
- Design, Technology, and Society
- Data Analytics and Information Visualization
- Cognitive Science and Language Processing

Research and education in informatics has a strong interdisciplinary flavor as it involves experts in the information and computation foundations together with experts in the application areas. The Informatics PhD program at the University of Illinois will support such interdisciplinary research and promote the creation of new fields of research enabled by the development and application of new technologies. The Informatics PhD program at Illinois brings together faculty working in various application areas, faculty working in information and computation foundations, and interdisciplinary faculty conjoining the two. With the help of an advisory committee, each student will craft his or her own program of study.

Note: Though Informatics Programs is administratively housed in the School of Information Science (iSchool), the Informatics PhD program is not a program within the iSchool and Informatics PhD students are not considered graduates of the iSchool. The iSchool has their own <u>PhD program in Information Science</u> that is separate and distinct from the Informatics PhD program.

Admission to the Informatics PhD Program

If you are currently in a different PhD program at the University of Illinois Urbana-Champaign and you are interested in changing curriculum, please send an email to <u>info-phd@illinois.edu</u> to discuss your situation. All other applicants should follow the process below.

Application Deadline

December 15 for the following Fall admission. We only accept new students in fall semesters.

We strongly recommend that you and your recommenders do not wait until the deadline to submit your application or letters of recommendation, as server traffic may cause technical difficulties. It is highly recommended to have all application materials in one month prior to deadline to expedite admissions decisions.

Application Procedures

Applicants to the PhD program must have been awarded (or are about to be awarded) a 4-year bachelors degree equivalent to that granted by the University of Illinois. To apply, use the university's <u>Online Application</u> system, called Slate . All parts of the application, including application fee, must be received by the application deadline. Late applications will NOT be accepted. In addition, incomplete applications will be subject to denial.

Notes

- When entering in your previous degree history, the name of the institution must be entered as it appears on the official transcript. You may upload unofficial transcripts for your application. The Graduate College will require you to have official transcripts sent if you are admitted to the program.
- Informatics does not require international applicants to submit the financial documents or passport information at the time of application. However if you are admitted to the program, this material is essential in order to process your application through the Graduate College.
- Please do not send additional materials (e.g. publications, photographs, videos, CDs, or portfolios). These items are not reviewed during the admissions process.
- Please note that all admissions decisions will be communicated via email to the email address provided in your application. If your email address changes between the time you submit your application and March 15, email your updated email address to **info-phd@illinois.edu**. Include your old email address, your new email address, and your first and last name, in the email message.

Application Fees

The university's application fee is \$70 for US citizens and permanent residents and \$90 for all other applicants. The fee must accompany the application by credit card payment with a web application. Application fees are non-refundable.

Please do not send the application fee to the department. This will delay the payment process. If processed past the application deadline, this will cause the review of your application to be postponed until the next admission period.

Proposed Program of Study

Under the Proposed Program Information, you need to specify which of the program areas is your first choice of field of Specialization. In the last box in this section, please also include up to 3 faculty members with whom you are interested in working.

Academics

Please list all universities and colleges you have attended, including the University of Illinois at Urbana-Champaign (if applicable).

Applicants **must send official transcripts** for all completed university course work and certification of degree (for international students only) for all completed degree programs directly to the department and they **must be received by the application deadline.** Official transcripts may be sent by the applicant and be considered as official if received in a sealed/signed envelope and does not say "issued to student." Please note that submitting scanned transcripts with the application **does not replace the requirement to submit official transcripts directly to Informatics.** Applicants will not have a **"complete"** file until official transcripts are received. For International mail, we suggest you send through a delivery service that can track your shipment.

Test Scores

Enter test scores as appropriate. Please note the Informatics does not require GRE scores for admission. However, if you include them with your application, faculty may consider them as they evaluate your application.

CV/Resume

Your CV/resume should address your education, job and research experience, remarkable achievements, publications, organizations, awards, and leadership experiences. This information helps the admissions committee understand your

background. In addition, it helps when identifying applicants for RA and TA assistantships.

Personal Statement

The Personal Statement should include your goals and background as it relates to the field of informatics. It is good to include any past work history, your interests, reasons for pursuing a graduate degree in informatics and anything else you want us to consider about your background. Your statement will be evaluated for your conciseness, research interests, leadership skills, and eloquence. Generally, the Personal Statement is between one to two pages.

Research Statement

The Research Statement is designed to give you the opportunity of exploring a problem, question or issue that interests you, and that you might like to pursue in your doctoral work. Of course, we realize that your interests may change once you are in the doctoral program, but you should discuss a problem that is of sufficient importance to be considered suitable for doctoral level work. You should specifically address the question of why you have chosen the Informatics PhD program at Illinois in which to pursue your doctoral research.

As you discuss the problem, question or issue, clearly describe it and why it is of interest to you. Why is it important? What fields, departments, or disciplines have contributed or might contribute to work in this area of research? Why do you think it has not been addressed sufficiently beforehand? Why should others be interested in it? How might you go about investigating it in order to come up with results that would further our understanding it? In evaluating your Research Statement, the committee will look for how well you have conceptualized the question or problem and explained its implications. They will also consider the appropriateness, rigor, and creativity associated with how you propose to go about finding answers or solutions. The Research Statement should be no more than two pages (about 800 words).

References

Applicants are required to have **three letters** of recommendation submitted. It is recommended that letters of recommendation be from academics. They can either be your faculty, advisors, supervisors, or colleagues. If you have been away from academics for a significant amount of time, you may substitute non-academic references of your choice (e.g. immediate supervisors, colleagues, etc.). The letters should address your academic and research abilities and your potential to be successful at graduate level academic performance. Individuals writing letters of recommendation on your behalf should submit their letters through our online application system. Any recommendations that do not follow this process may impact timely application processing.

Admissions Decisions

Admissions and financial aid decisions are coordinated by the Informatics.

- Applications are carefully evaluated by Informatics staff and faculty affiliates.
- Please note that applications lacking required credentials may not be reviewed.
- All admission decisions will be communicated via email to the email address provided in your application.
- Applicants who are recommended for admission may need to submit an official final transcript (which shows completion of all course and degree awarded) upon final review by the Graduate Admissions Office.
- Please do not call or email the department or Graduate College. No information concerning an applicant's file or admissions decision can be given to telephone or email inquiries.

Admission decisions are typically announced by March 15 for fall admissions. In some cases, however, decisions may be reached much earlier.

Financial Aid

Most PhD students will receive financial assistance at the time of admission in the following forms: fellowship, research assistantship, teaching assistantship, or a standalone tuition waiver. The number of financial aid offers depends on the available financial resources of both Informatics and the faculty affiliates, and are competitive. The majority of the assistantships in Informatics are grant funded, through a student's advisor. The renewal of an assistantship or fellowship is based on the academic progress of the student, the work performance of the student and obligation of the program as determined by the original letter of admission recommendation. If students change degree programs or transfer to another department, the original funding in the letter of admission recommendation is no longer in effect. Funding under the new program is not a guarantee.

English Proficiency for International Students

For TA eligibility, a passing score on the TOEFL iBT (spoken portion of the exam only) is 24/30, and a passing score on the IELTS (on the spoken portion of the exam only) is 8. SPEAK scores taken on a US campus other than Illinois are not eligible to fulfill the requirement at Illinois. The department has no authority to waive this requirement. A passing score does not guarantee an assistantship offer.

Employment at Illinois

Form I-9 and E-Verify Compliance

Graduate students may seek various employment opportunities at the University of Illinois at Urbana-Champaign. Departments must comply with all federal and state laws regarding employment eligibility verification that includes completion of the for Form I-9 and, in relevant cases, the E-Verify process.

There are no exceptions to these processes. Students must also contact the HR office *prior* to working to complete the Form I-9. Per University policy, employees are also required to present their Social Security Number (SSN) Card to the HR official for name verification and IRS purposes. The name entered into the system must match that which is printed on the SSN card.

Both students and hiring managers who fail to contact HR to complete these procedures may cause delays in start dates and paychecks, as well as risk fines and penalties against the University.

Assistantship Types

There are four types of graduate assistantship opportunities per the Academic Human Resources (AHR) website.

- 1. *Research Assistant (RA):* These positions primarily involve applying and mastering research concepts, practices, or methods of scholarship. Examples of typical responsibilities include: conducting experiments, organizing and analyzing data, presenting findings in a publication or dissertation, collaborating with faculty in preparation of publications, overseeing work of other RA's, other research activities.
- 2. *Pre-Professional Graduate Assistant (PGA)*: These positions are appointed to non-TA/non-RA assistantship positions, in which they primarily gain experience, practice or guidance that is significantly connected to their field of study and career preparation.
- 3. *Teaching Assistant (TA):* These positions primarily involve the support of instruction and include responsibilities such as: teaching classes, grading student assignments, leading lab or discussion groups in a course setting, developing academic instructional materials, accompanying/coaching musical or vocal performances, providing artistic instructions, proctoring exams, overseeing/coordinating the work of other TA's, holding office hours, tutoring students.

4. *Graduate Assistant (Administrative) (GA):* These positions are primarily in support of administrative functions and include such general functions and typical duties as providing technical/support services, advising students etc.

GA's are covered by a collective bargaining agreement with the Graduate Employees Organization (GEO). These positions are considered non-exempt per the Fair Labor Standards Act (FLSA) and must keep a record of actual hours worked via timesheets.

Graduate students in Informatics are most commonly offered Research Assistantships through their advisors. Some students have also been supported on Teaching Assistantships through Informatics, Computer Science, Cell and Molecular Biology, the School of Information Science (iSchool), or other departments. These appointments are typically awarded on a semester-by-semester basis with standard appointment dates of August 16 – December 31 (for fall semester) and January 1 – May 15 (for spring semester). Contingent on the degree program in which a student is enrolled, students eligible for tuition waivers must be appointed between 25% and 67% full-time equivalent (FTE) for at least 91 days during the semester. All graduate students must have an accepted offer letter on file.

The acceptance of an appointment requires students to be present and available to their supervisor during the appointment dates outlined in the accepted offer letter. If students must be away from their responsibilities, they must receive prior approval from their supervisors and their home department. Failure to report to work may result in disciplinary action, termination and/or non-reappointment of an assistantship. Applicable University benefits for graduate assistants are outlined on the IHR website (<u>https://humanresources.illinois.edu/employees/current-employees/graduate-employees/graduate-assistant/payroll&benefits.html</u>). Additional information regarding the Graduate College and University Guidelines on graduate assistantships is available in the Graduate College Handbook (<u>https://grad.illinois.edu/handbooks-policies</u>).

TCN/ SSN for International Students

Prior to international students securing a Social Security Number (SSN) the university issue Temporary Control Number (TCN) will be needed to process the assistantship or hourly appointments. International students who are on a fellowship will just need the TCN number to process their paperwork. They can secure their TCN number at the ID Production office at the Illini Union Bookstore.

Graduate Hourly Employment

Graduate students may also seek Graduate Hourly appointments. These positions are appointed on an hourly basis for temporary, special projects. The positions do not carry tuition waivers and may not be used as substitutions for waiver-generating assistantships. The hours are typically sporadic in nature and less than ten hours/week.

Academic Administrative Information

Registration

Students are responsible for their own registration and for ensuring the accuracy of their schedules. All students control their registration using the Enterprise Self-Service system at https://apps.uillinois.edu/selfservice/index.html. Information and tutorials on how to register can be found at https://apps.uillinois.edu/registration/registration-process/how-to-register/. Graduate college policies governing registration can be found in Chapter 2 of the Graduate College Handbook (https://grad.illinois.edu/sites/grad.illinois.edu/files/pdfs/handbook.pdf).

Course Loads

Informatics requirements for full -time enrollment are the same as the Graduate College policy, available in Chapter 2 of the Graduate College Handbook (https://grad.illinois.edu/sites/grad.illinois.edu/files/pdfs/handbook.pdf) There are several circumstances that can impact a student's requirements, so it is essential to become familiar with the policy particularly for international students who are required to be enrolled full time by the 10th day of classes.

In general, full-time enrollment in fall or spring semesters requires 12 credit hours for students <u>without an assistantship</u>, or <u>with a fellowship</u>, and 8 credit hours for students <u>with a waiver generating assistantship</u>. Students with a fellowship that is paid during the summer must be enrolled for at least 6 credit hours during the eight -week portion of the summer term.

Academic Standing

All Informatics students must maintain a minimum grade point average (GPA) of 2.75 in order to have the degree certified and to graduate. The Graduate College monitors minimum program cumulative GPA, and failure to meet this requirement in any term can result in the student being placed on probation or dismissed from the Graduate College. Other factors that determine satisfactory academic progress include identifying a research advisor, completion of required coursework and program milestones (Area Qualifying Exam and Preliminary Exam) in a timely manner and satisfactory progress on research (as determined by advisor). These are monitored by Informatics and can result in either departmental probation or the recommendation to the Graduate College that the student be placed on probation or be dismissed. See the Graduate College Handbook

(<u>https://grad.illinois.edu/sites/grad.illinois.edu/files/pdfs/handbook.pdf</u>) for full details on academic standing, probation, limited status admission and dismissal.

Holds

Holds can be placed on a student's record for several reasons. Most commonly these include departmental deficiencies, immunization requirements, disciplinary reasons, financial encumbrance to the University, lack of academic progress, low GPA or failure to submit official transcripts. Holds will appear in the registration eligibility section of a student's profile in Self Service.

Academic Deadlines

There are a variety of deadlines governing student registration activity. See <u>https://calendars.illinois.edu/list/3284/</u> for a complete list of Graduate College deadlines. In particular, the last day for students to add a full semester course is the 10th day of classes. After that they will need to obtain permission and complete a Late Course change form. The end of the 8th week of classes is the last day students can drop a course without permission.

Enrollment Verification

Students requiring enrollment verification for any reason (such as student loan deferment, employer reimbursement, insurance etc.) must use the National Student Clearinghouse, accessed at <u>https://registrar.illinois.edu/academic-records/enrollment-degree-verification/student-enrollment-degree-verification/</u>

Grading System

The explanation of grades, grade symbols and grade point average calculation is available at <u>https://registrar.illinois.edu/courses-grades/explanation-of-grades/</u>

Leave of Absence Policy

Informatics follows the Graduate School policy on academic leaves of absence (full details are in section 2.5 of the Graduate College Handbook (<u>https://grad.illinois.edu/handbooks-policies</u>).

Graduate Students in degree-seeking programs are entitled to a total of two terms (fall and/or spring semesters) of academic leave in the course of a single degree program. However, students must document their request for a leave and meet the eligibility requirements. Students who anticipate not being enrolled for one or more terms, (fall or spring semesters, not summer), for whatever reason must meet with their program adviser before the first day of classes of their period of non-enrollment to apply for and receive approval for an Academic Leave of Absence.

Requesting Exceptions to Graduate College Policy

If, for any reason, a graduate students needs to ask for an exception to a policy of the Graduate College, the request must be made using the Graduate College Petition portal at https://grad.illinois.edu/academic-support

Typical reasons student might need to petition include adding or dropping a course after the deadline, transferring courses from one program to another, or requesting an extension to time of degree. Please contact the Informatics Education Coordinator before you submit a petition online.

Annual Review of Academic Progress

In the spring semester of each year Informatics students are required to complete an annual progress review. The annual review is designed to assist students in maintaining progress towards degree requirements. The information will also be used to report on departmental activities and as a resource to identify students for scholarships, awards, etc. A key component of the review process involves the communication between the student and their advisor. The Informatics Education Coordinator will send instructions on how to complete the review approximately 4 weeks prior to the deadline. Students need to schedule a meeting with their advisor to discuss their progress over the prior year. Advisors may request that the student provide additional material to supplement the departmental forms. Advisors need to provide feedback on the student's progress, strengths and weaknesses. This feedback should be discussed in a face to face meeting between the student and the advisor. Students will receive a formal annual progress letter indicating their status and any items they need to address in the coming year. Both the progress report and the letter will be placed in the student's academic file.

Problem Solving Procedures for Disputes and Conflicts

Most conflicts and problems that arise can be solved without invoking a formal grievance process; such informal resolution, where possible, is generally best for all concerned. There are several sources of assistance for pursuing an informal resolution of the dispute. Students may seek advice about how to address their situation from their faculty advisor, the Informatics Education Coordinator, The Informatics Director, the Graduate college Academic Services office, the Office of the Dean of Students and the Office of International Student Affairs.

At times, however, disputes may not be resolved through informal efforts and employment of the Graduate college Grievance Procedure may be necessary. This policy is found in Chapter 9 of the Graduate College Handbook (<u>https://grad.illinois.edu/sites/grad.illinois.edu/files/pdfs/handbook.pdf</u>). Informatics follows all problem solving/ grievance procedures established and approved by the Graduate College and University. Prior to initiating formal procedures, please contact the Informatics Education Coordinator for consultation. All conversations will be held in the strictest of confidence.

Informatics PhD Milestones and Procedures

With MS degree With BS degree **Required Courses and Exams** INFO 500 Orientation Seminar (1 hr, 2 0 then 1 0 then 1 semesters) INFO 510 Research Practicum (4 hrs, 2 8 8 semesters) Foundations courses (2 5xx level courses 8 8 from approved lists) Applications courses (2 5xx level courses 8 8 from approved lists) 7 7 Electives 32* Masters degree 0 Thesis hours required 32 32 Total hours 64 96 Qualifying exam required Yes Yes Preliminary exam required Yes Yes Final Dissertation Defense required Yes Yes **Dissertation Deposit required** Yes Yes

Curriculum requirements and associated credit hours are listed below.

The doctoral degree is commonly thought of in three phases or stages of progress, with each stage having unique components and milestones. These are described in chapter 6 of the Graduate College Handbook

(https://grad.illinois.edu/sites/grad.illinois.edu/files/pdfs/handbook.pdf).

The majority of Informatics PhD students have already earned a master's degree and enter the program in Stage II. The student advances to stage III after passing the Preliminary Exam. Students entering without an approved master's degree enter in Stage I and will be required to take 32 additional credit hours in 4xx and 5xx level courses. These courses should be chosen in consultation with the student's advisor.

Application and Foundation Coursework:

The signature for interdisciplinary informatics is to require courses in both Applications (the subject matter courses for a particular Area) and Foundations (the particular information technology methods, such as programming, databases, etc., that are appropriate for a particular Area.) Courses below the 500 level cannot be used to fulfill these basic requirements, although they can be counted as part of the total course load required. There are some exceptions to this rule, primarily for students in the Arts & Cultural program area. Please contact the Informatics Education Coordinator if you have questions.

Each student can choose the standard Applications and Foundations of an established Area, or with approval of their advisor and the Informatics Education Coordinator, choose custom Applications and Foundations courses across Areas. There are pre-approved classes listed in the Academic Catalog at http://catalog.illinois.edu/graduate/informatics-programs/informatics-phd/#courseliststext but these lists are not all-inclusive. There are many newer courses on campus that are not included in these lists.

Since these four courses will form the heart of the student's studies and are intended to provide the basic discipline knowledge, it is important that the student carefully choose them. Informatics recommends that students think about the informatics knowledge they need to do the research they want to do. Then students should look for 5xx level courses from across campus that will provide that informatics knowledge and determine whether they have the prerequisite knowledge to register for them. If the chosen classes are not on the pre-approved lists (linked above), the student should discuss them with the Informatics Education Coordinator to see if they are appropriate and whether they will fulfill the Applications or Foundations categories. These discussions should happen prior to registering for the class.

Advisory and Dissertation Committees

The student will work with their advisor, the Informatics Education Coordinator and the Informatics Director to establish an appropriate Advisory committee (first half of studies including qualifying exams) and Dissertation committee (second half of studies including preliminary exams and final defense). The committee should consist of a minimum of 4 faculty members, all of whom must be affiliated with Informatics. Informatics generally follows the guidelines established by the Graduate college for committee composition (see the Graduate College Handbook (https://grad.illinois.edu/sites/grad.illinois.edu/files/pdfs/handbook.pdf) for more details). Both the Advisory and Dissertation committee are expected to have faculty that represent the broad areas encompassed in a student's application and foundation coursework, and their area of research. Committees must be interdisciplinary, and the members must come from a variety of departments and/or colleges.

Policy on Remote participation for all exams:

Synchronous remote participation of the student or committee member(s) is permitted on qualifying, preliminary and final examination committees under the following conditions:

- Technology must allow all participants to communicate throughout the examination and to access all materials presented. Video technology (ie. Zoom) is encouraged for remote committee members and required for a student participating remotely.
- The chair (or co-chair) is responsible for coordinating the use of any technology, for recessing the examination if technical problems prevent full participation, and for making arrangements to resume the examination promptly.

Area Qualifying Exam

The Area Qualifying Exam must be completed by the end of the 9th semester if a student enters the Informatics PhD program in Stage I, and by the end of the 7th semester if a student enters the Informatics PhD program in Stage II.

The purpose of the Informatics Area Qualifying Exam is to test the student on the foundation and application coursework that they have taken, to make sure that they are adequately prepared to move on to the dissertation stage. If the student's principal advisor thinks he or she is ready for a Qualifying Exam and their advisory committee is satisfied with their course work, then they may take the Qualifying Exam, **provided they have completed the following:**

- INFO 500 Orientation Seminar (both for 0 and 1 credit)
- Two 500-level Foundations courses
- Two 500-level Applications courses
- Two semesters of INFO 510 Research Practicum
- And 32 hours of additional coursework for those students entering in Stage I

The Qualifying Exam has two portions: an open-book/computer written exam, and an oral exam with the full Advisory Committee approximately one week later. The questions for the written exam will be devised by the student's Advisory Committee. The questions will likely be drawn from a set of readings or other material that is assigned by the committee and advisor in advance of the exam. These questions will test knowledge and understanding of the student's Applications and Foundations areas. Committee members will provide their questions to the advisor, who will assemble them into one document, and then provide them to the student at the pre-arranged time. The time length for the written exam is flexible and should be negotiated between the student and their committee but must be agreed to prior to the start of the exam. For example, the student might be given a 4-hour block of time, or a 24-hour block of time, or a weekend (i.e. Friday 5 pm to Monday 8 am) to complete the written portion of the exam. At the end of the allotted time the student sends the written answers back to the entire committee.

This is followed approximately one week later by an oral exam lasting up to two hours. During this oral exam, the full Advisory Committee, including the chair, ask follow-up questions and questions from related areas. At the end of this session the committee needs to decide whether the results are Pass, Pass with conditions, Fail, or Deferred. A result of pass with conditions means that the committee does not wish to re-examine the student, but that there are specific tasks the student needs to accomplish, such as taking additional courses in a particular area or writing a mini research proposal. A result of deferred means student will be given additional readings/courses and is required to retake the exam within six months. Student may receive a deferred exam only once; thereafter options are either pass or fail.

Responsibilities of Student:

It is the student's responsibility to schedule both the written and oral portion of the qualifying exams, based on when the advisor and committee members are available. The committee must consist of 4 Informatics faculty affiliates that adequately cover the application and foundation areas of interest. The student must also notify the Informatics Education Coordinator at least two weeks in advance of the qualifying exam, and provide the dates/times/locations of the exam.

Responsibilities of Advisor:

It is the advisor's responsibility to collect the questions from the committee members, and to get those to the student at the appropriate time. They also will chair the oral follow-up meeting and report the exam results to the Informatics Education Coordinator.

Preliminary Exam

The Preliminary Exam must be completed by the end of year 5 (10th semester) if a student enters the Informatics PhD program in Stage I, and by the end of year 4 (8th semester) if a student enters the Informatics PhD program in Stage II.

The Preliminary Examination is an oral defense of the student's dissertation proposal. Writing a good proposal is an important part of being a successful researcher, and the preliminary exam is an important milestone that helps students develop the skill of writing a good proposal. Students write a proposal that is submitted to their committee at least 2 weeks (14 days) ahead of the exam. During the exam the student presents the proposed research and the committee evaluates the research goals and progress of the student. Thus, the two main purposes of the preliminary exam are to develop proposal writing skills and to obtain feedback on the research plan from the committee. The proposal must be approved by the student's Dissertation Committee PRIOR to the bulk of the dissertation research being performed, and therefore most students will probably schedule their Preliminary Exams one or two semesters after passing the qualifying exam. The format of the dissertation proposal is flexible due to the breadth of research areas encompassed in the Informatics PhD program. At a minimum it should include a definition or statement of the problem to be addressed, a comprehensive review of the literature, an outline of the methodology to be used, and a discussion of any preliminary results to date. Though there are no explicit page limits, the proposal *should* be between 15 and 25 pages in length, excluding bibliographic references. The dissertation proposal should NOT be:

- a preliminary draft (or select chapters) of the dissertation
- an existing publication
- a survey of the student's research field.

Since the Dissertation Committee must be convened and approved by the Graduate College in advance of the Preliminary Examination, it is imperative that the student contact the Informatics Education Coordinator 3-6 weeks ahead of the proposed exam date. The student is responsible for submitting the request to convene the Preliminary Exam committee to the Graduate College thorugh filling out the PER request form in the Petition portal (<u>https://grad.illinois.edu/academic-support</u>). Once the Dissertation Committee is approved by the Graduate College, the exam must be taken within 180 days. It is the student's responsibility to schedule the Preliminary exam (including reserving a room and/or scheduling a zoom session) based on the availability of the committee members. The dissertation proposal must be distributed to the Dissertation Committee members and the Informatics Education Coordinator at least 2 weeks (14 days) in advance of the exam date. The Advisor will chair the Exam and is responsible for reporting the results to the Informatics Education Coordinator at the end of the exam. The results are either Pass, Fail, or Deferred (in which a student must retake the exam within 180 days, with the same committee members).

As per the Graduate College rules, students must be registered during the semester that they take the Preliminary exam. Please also note that the Preliminary exam and final Dissertation Defense may not be taken during the same semester.

Preparing the Dissertation

Students should refer to the Thesis Checklist for Doctoral Students for guidance on the dissertation and preparing for graduation. Well in advance of the final oral exam, a draft of the dissertation is to be submitted to the student's advisor. Informatics adheres to the Graduate College format guidelines and the draft should comply with these requirements.

Dissertation Defense

Dissertations vary in methodology, length and presentation according to the problem to be investigated. These details are decided in consultation with the Dissertation Committee members. However, the content of the dissertation is expected to follow the proposal defended and approved during the Preliminary Exam. The proposal can be thought of as a contract for the work of the dissertations. Exceptions to this (i.e., a significant change in research topic, area or method) must be discussed and approved by the Dissertation Committee.

When both a student and his or her Dissertation Committee believe that the dissertation is ready to be defended, a formal request to convene the Final Dissertation Defense Committee must be made to the Graduate College by the student via the petition portal (<u>https://grad.illinois.edu/academic-support</u>). The student must make this request <u>no less than 3 weeks</u> prior to the date of the final defense.

Two weeks prior to the defense date, the student should distribute copies of the dissertation to the dissertation committee and to the Informatics Education Coordinator. The student also needs to provide the Informatics Education Coordinator with the time, place/ zoom link, title and abstract of the dissertation at least two weeks prior to the defense, so that it may be announced to the public.

All committee members must participate in the entire exam (ie. no one can join late or leave early).

The dissertation defense consists of the following components:

- A public oral presentation (approximately 40-45 minutes) by the student, summarizing the problem, methodology, and major findings of the research
- Questions and comments from any committee members, and other attendees (where time permits)
- A private discussion session between the committee and the student
- Outcome decided and announced by the committee

The result of the Final Exam Committee are either "Pass with no revisions of the dissertation", "Pass with revisions of the dissertation" or "Fail the examination". If the result is "fail" the committee has two options. They can:

- 1. Grant the student another opportunity to take the exam after completing additional research or writing
- 2. Consider the failure to be final

At the conclusion of the exam the student's advisor should report the results of the exam to the Informatics Education Coordinator, who will then submit the results to the Graduate College.

Dissertation Deposit

All dissertations must pass a departmental dissertation format review by the Informatics Education Coordinator (contact the coordinator for the deadline by which to submit the dissertation for review each semester). Once the review is completed, the Education Coordinator will submit the Thesis Dissertation Approval (TDA) form to the Graduate College and the student should then submit the dissertation electronically to the Graduate College Thesis Office.

It is highly recommended that students begin the electronic deposit process at least 5 days prior to the Thesis Office deadline. Students who wait until the last minute may not make the deadline. A thesis submitted electronically is placed in a queue once uploaded to the Thesis Office Database and will be processed in the order in which it is received. Any theses that are still in the queue at 4:45 pm on the day of the deadline, or need additional changes at that time will not be accepted for deposit and the student will not be able to confer their degree until the next conferral term. For more information on the Graduate College Thesis Office process and deadlines see http://www.grad.illinois.edu/thesis

Students are responsible for being aware of the deadlines for adding their name to the graduation list, completing departmental format check and thesis deposit in the Graduate College.

Appendix A: Sample course plan for student entering in Stage I

Year 1 Fall – 8 credits of 4xx or 5xx level courses + INFO 500 for 0 credits Year 1 Spring - 8 credits of 4xx or 5xx level courses

Year 2 Fall - 8 credits of 4xx or 5xx level courses Year 2 Spring - 8 credits of 4xx or 5xx level courses

- Stage 1 complete-

Year 3 Fall – 1 App or Found courses + INFO 510 #1 Year 3 Spring – 1 App or Found course + INFO 510 #2

Year 4 Fall – 1 App or Found course + 1 elective + INFO 500 for 1 credit Year 4 Spring - 1 App or Found courses + 1 elective

- Qualifying Exam –

Year 5 Fall – 8 credits INFO 599 Year 5 Spring - 8 credits INFO 599 and **Preliminary Exam**

Year 6 Fall - 8 credits INFO 599 Year 6 Spring - 8 credits INFO 599

- Final Dissertation Defense -

Appendix B: Sample course plan for student entering in Stage II

Year 1 Fall – 1 App or Found courses + 1 elective + INFO 500 for 0 credits Year 1 Spring – 1 App or Found course + INFO 510 #1

Year 2 Fall – 1 App or Found course + INFO 510 #2 Year 2 Spring - 1 App or Found courses + 1 elective+ INFO 500 for 1 credit

- Qualifying Exam -

Year 3 Fall – 8 credits INFO 599 Year 3 Spring - 8 credits INFO 599 and **Preliminary Exam**

Year 4 Fall - 8 credits INFO 599 Year 4 Spring - 8 credits INFO 599

- Final Dissertation Defense -