

# INFORMATION SCIENCE AND TECHNOLOGY, PHD

## Contact

Ingrid Erikson  
Program Director  
315-443-2911  
igrad@syr.edu

## Website

<https://ischool.syr.edu/academics/ph-d-in-information-science-and-technology/>

## Overview

The iSchool's PhD program focuses on theories and methods for studying information-related issues with the goal of expanding human capabilities by connecting people, information, and technology. Our faculty and doctoral students conduct research on library and archive practice, IT and management, computational social science, human-centered computing, and network technologies. Rising from these intersecting areas are also our research strengths in new topics such as future of work, information justice, misinformation, and AI ethics. As an interdisciplinary program, we draw applicants from library and information science, computer science, linguistics, communication, rhetoric, sociology, psychology, economics, business, public administration, design, and others. The diversity of student backgrounds reflects the diversity of our faculty's interests, the breadth of information-related topics and the pervasive presence and issues of digital technologies relative to social, economic and behavioral phenomena.

Since the program began in 1969, over 160 students have earned their Ph.D degrees. They pursued a variety of career paths, including but not limited to:

- Academic and research institutions.
- Information-related industries as entrepreneurs, scientists, engineers, consultants and policy experts.
- Governmental organizations in policy, technology and organizational leadership roles.

## Admission

Admission requirements include a bachelor's degree from an accredited institution in a broadly relevant area; GRE is optional but will be reviewed if a student chooses to submit; TOEFL, IELTS, or Duolingo scores for students whose first language is not English, though most admitted students scored TOEFL 100, IELTS 7.0, Duolingo 130 or above; academic transcripts, three letters of recommendations from people who can evaluate the research potentials of the applicants; at least one writing sample; a current CV or resume; and a personal statement of research interests. Although not a requirement, most admitted students also have a master's degree. In making decisions about admission, the committee considers an applicant's career goals, motivation, research interests and potential fit to the faculty's expertise, prior education and work experiences, evidence of research preparation and experiences, and oral and written communication skills. Applications are considered for the fall semester only. The deadline for receipt of the completed application is December 15th.

The PhD in Information Science and Technology is a full-time, residential program. Students will need to commit to moving to Syracuse for at least four years (more typically five). The program of study is designed to maximize informal interaction and the apprentice-style of learning that is the hallmark of excellent PhD programs. The goal of the faculty of the School of Information Studies is to develop future peers through the PhD program, to advance knowledge for society through impactful research, to train the next generation of scholars, and to ensure that the graduates of this PhD program excel at what they choose to pursue.

## Student Learning Outcomes

Successful Ph.D. graduates will be able to:

1. Summarize and synthesize the body of knowledge and research methods of a defined scholarly field and its relation to the interdisciplinary study of information science and technology. Given the interdisciplinary nature of the PhD in Information Science and Technology, comprehensive mastery includes both an assessment of the depth of knowledge in the focal area of one's dissertation along with an assessment of a broader range of overlapping intellectual spaces. This combination of breadth and depth is the distinguishing characteristic of interdisciplinary PhD programs and reflects a set of analytic skills and command of a breadth of knowledge beyond what disciplinary PhD programs provide (or expect)
2. Conduct original information science and technology research with the ability to independently formulate information, science and technology problems, design and use appropriate research methods to collect, analyze, and synthesize data, and report a scholarly research project
3. Plan and teach a course and design engaging learning experiences at the post-secondary level
4. Demonstrate knowledge of the professional norms, practices, and ethical standards of a defined scholarly field
5. Demonstrate the ability to participate as an active contributor in the academic life as a faculty member or researcher

## Curriculum

The PhD program requires 78 credits post-baccalaureate. Up to 30 of these credits can be transferred in for PhD students with a relevant MS degree. Among the 78 credits, 18 are devoted to PhD thesis- the culminating and critical component of the PhD in Information Science and Technology.

| Code    | Title        | Credits |
|---------|--------------|---------|
| IST 999 | Dissertation | 1-15    |

## 12 Credits of Research and Teaching Practica

As such, the program is very flexible and can be constructed to meet individual student's unique needs. The only formal requirement is that PhD students must complete 12 credits of research and teaching practica (which typically takes four semesters). These practica are apprentice-like experiences working one-on-one with faculty - these serve as the foundation of the PhD in Information Science and Technology and are the common experience shared by all students in the program.

| Code    | Title                 | Credits |
|---------|-----------------------|---------|
| IST 810 | Practicum in Research | 2       |
| IST 840 | Practicum in Teaching | 1-2     |

## The Remaining Credits

The remaining credits are taken through a combination of research methods courses, research seminars, and topical courses so as to maximize the PhD student's ability to achieve mastery, advance their research skills, and develop as a faculty member.

The PhD program offers two doctoral level classes each semester.

Students can choose any course from the list below, any IST 800 Information Studies Seminar special topics classes, any doctoral-level courses outside of the iSchool, or any masters level courses, as well as an independent study. 12 of these credits must be at the 700-level or above.

| Code    | Title   | Credits |
|---------|---|---------|
| IST 776 | Research Methods in Information Science and Technology    | 3       |
| IST 777 | Statistical Methods in Information Science and Technology | 3       |
| IST 790 | Theories of Information                                   | 1-3     |
| IST 820 | Seminar in Research Methods                               | 3       |
| IST 830 | Theories of Digital Technologies                          | 3       |

## Additional Information

Given the nature of the PhD, the total number of credits accumulated (at Syracuse or elsewhere) is not a major consideration in a student's progress through the program. Instead, what matters is a student's mastery of the skills needed to become an independent, productive researcher. While coursework completed elsewhere may decrease the number of credits that must be earned at Syracuse, it may not necessarily decrease the length of a student's program.

To move from taking courses to pursuing dissertation research, PhD students must showcase their comprehensive mastery of their field of study and research skills in a process we call "end of coursework" or "EOC." The EOC requires both a written case to be made as to why the PhD student is prepared to move forward, followed by an oral defense of their case (typically in the third year of study). Students who successfully complete EOC are admitted to PhD candidacy. After that, a dissertation proposal and then a dissertation must be presented and defended. Students are expected to defend their dissertation in their fifth year of study.