

## **Proposal for a PhD Program**

Department of Media and Information

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### **Overarching vision**

The core of research in our department is the study of technology and society, human-technology interaction, and technology-technology interaction. We examine these phenomena at the sub-micro (neuroscientific), micro- (psychological, individual), meso- (organizational, community), and macro (societal, global) levels. Across our department's faculty we use multiple ways of exploring these processes and their effects. In these endeavors, we use a range of approaches: inductive, deductive, data-driven, theoretical, computational, as well as intuition and imagination in designing systems and applications. We also work on the design of artefacts, organizations, and institutions to examine the consequences of different architectures and designs. Many of us use a lens whereby information and communication technology and communication processes are examined from a socio-technical systems perspective. This implies an interest in understanding how sub-micro, micro, meso and macro scales interact in bottom-up (emergent) and top-down (control, governance) relations. It also implies a strong interest in how these processes unfold in different countries and regions, as this offers a real-world laboratory to deepen theoretical and empirical research. Thus, in the broadest sense we are passionate about the study and design of media and information socio-technical systems. This is one of our department's unique niches that also adds desirable diversity to the College.

### **Trans- and cross-disciplinarity**

Our department's faculty was deliberately recruited from a range of disciplines, including communication, computer science, human computer interaction, psychology, sociology, political science, economics, STS, and design, to complement each and to create a unique intellectual energy directed to understanding media and information systems, services, and effects. This environment allows taking the best and most useful insights from various disciplines (which are often examining the same phenomenon with different concepts and terms) to create novel insights. It also would allow creating a climate for students that demonstrates how related disciplines study phenomena that are transforming our lives in fundamental ways. Our work is cross-disciplinary and trans-disciplinary as much as it is inter-disciplinary. We believe that such endeavors are promising ways of expanding our knowledge in new and innovative ways. The approach also implies a deep appreciation for methodological and theoretical pluralism, which should be reflected in how the curriculum is organized.

### **What capabilities should graduates have?**

Our graduates should be empowered to pursue original research programs that do not just replicate and continue the research programs of their mentors but that move beyond them, deviate in novel ways, and have the courage to address difficult questions that have no obvious answers. Students should be

able to pose relevant research questions, use methods in sophisticated ways, and have a deep understanding of the existing body of knowledge and an even greater curiosity to explore areas we do not know (presumably much larger than what we think we know). This implies that students should learn about emerging methods and approaches in ways that instill lifelong curiosity and help them resist the relentless pressure toward median research questions and interests (which can be published and funded easier). This probably can best be achieved with a program in which students get immersed in course work (which is probably a better framework to teach them what we know and learn from them what they know) combined with a program of research immersion (which can probably best be achieved by working with a mentor and in original research projects that allow exploring the unknown in hands-on ways). These modes are complementary and students should have some flexibility to pursue a program more weighed toward one or the other.

### **Synergies and differentiation**

To realize this vision, it would be most desirable to create synergies among all faculty in CAS and beyond CAS. Ideally, many if not most of our graduate-level courses would be open to students from across the college. At the same time, our college would benefit from differentiation between programs. We would be better off to have PhD programs that are complementary to each other than to have multiple programs that are alike. This can be achieved by giving students flexibility to customize their programs within a common framework. Not all matters relevant to a successful career in or outside the academy need to be taught in courses and a parallel process of learning can be facilitated through student/faculty research collaborations and complementary types of events (panel discussions on methods/theory/current issues; workshops on finding jobs/teaching/funding; lecture series; and a robust culture of being mutually interested in the research of others).

### **Curriculum**

We propose a minimum of 42 credits (with the option to complete up to 48) plus dissertation. The curriculum would consist of a 6 credit proseminar, 15 credits in research methods, 9 credits in theory, and 12 credits in an area of specialization. A model timeline is presented in Figure 1.

The curriculum would include a common core (15 credits) to be completed by all students in the program. The core would consist of an introductory course in research methods (3 credits), the proseminar (6 credits), and two courses in theory (3 credits each).

Students would have two options to complete each of the theory requirements (Theory I & Theory II). Theory I would consist of the option of a course in “Theory Building/Epistemology” (offered by APR or JRN) or a course in “Ways of Knowing” (offered by MI). Theory II would consist of the option of a course in “Persuasion” (offered by APR or JRN) or a course in “Theories of Media and Information” (offered by MI).

In addition to an introductory course in methods, the method requirement would consist of one course in a quantitative method (3 credits), one course in a qualitative method (3 credits), one course in statistics (3 credit), and three credits in advanced methods (taken as one 3-credit course or as three 1-

credit courses). The remaining theory requirement would be met through the completion of one course in the student’s area of specialization (a course within or outside the College).

The remaining 12 credits in an area of specialization could be met through a combination of courses offered in and outside of the College, independent studies, and no more than two research practicum.

*Figure 1: Model timeline.*

	Fall	Spring	Summer (optional)
Year 1 (18 cr)	<ul style="list-style-type: none"> <li>• Proseminar*</li> <li>• Intro Methods*</li> <li>• Specialty, methods or practicum</li> </ul>	<ul style="list-style-type: none"> <li>• Proseminar*</li> <li>• Theory I*</li> <li>• Specialty, methods or practicum</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced methods (1-3 credits)</li> </ul>
Year 2 (18 cr)	<ul style="list-style-type: none"> <li>• Theory II*</li> <li>• Specialty, methods or practicum</li> <li>• Specialty, methods or practicum</li> </ul>	<ul style="list-style-type: none"> <li>• Specialty, methods or practicum</li> <li>• Specialty, methods or practicum</li> <li>• Specialty, methods or practicum</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced methods (1-3 credits)</li> </ul>
Year 3 (12-18 cr)	<ul style="list-style-type: none"> <li>• Specialty, methods or practicum</li> <li>• Thesis</li> </ul>	<ul style="list-style-type: none"> <li>• Specialty, methods or practicum</li> <li>• Thesis</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced methods (1-3 credits)</li> </ul>
Year 4	<ul style="list-style-type: none"> <li>• Thesis</li> </ul>	<ul style="list-style-type: none"> <li>• Thesis</li> </ul>	

**Proseminar** (6 credits): This course would blend a speaker series and professional socialization/development. The speaker series will focus on introducing students to faculty in the program, and a small number of invited speakers from outside. Faculty presentations would be equally divided between departments and represent a variety of approaches and methods. Outside speakers will be equally selected by department. It is expected that invited talks by outside faculty will be open to all faculty and students in the College. Topics related to professional development might include how to participate in a research team, publishing norms, organizing a guidance committee, and finding funding for research.

**Introductory Methods** (3 credits): This course would include a survey of qualitative and quantitative research design. Students will form a critical perspective on a range of methods, develop skills to evaluate existing empirical studies, and learn to select appropriate methods for use in their own research. Topic covered include validity and reliability; hypothesis formation; sampling; ethical issues in conducting research on human subjects; and survey, experimental, observational and mixed-methods. This course will not include statistics.

**Quantitative Method** (3 credits): A course in one, or a subset of closely related quantitative methods (e.g., a course focused on experiments, or focused on surveys).

**Qualitative Method** (3 credits): A course in one, or a subset of closely related qualitative methods (e.g., a course focused on ethnography, or focused interviews).

**Statistics** (3 credits): Introduction to statistics through regression. With approval from the department PhD Coordinator (see below), or the student's Guidance Committee, a student with comparable prior coursework can substitute this course with one in advanced statistics.

**Advanced Methods** (1-3 credits): Courses/workshops in statistics, quantitative, or qualitative methods (including summer methods courses) (e.g., methods for computational social scientists).

**Theory I** (3 credits): One course with two sections, one in "Theory Building/Epistemology" (offered by APR or JRN) and one in "Ways of Knowing" (offered by MI). Students may repeat this course for credit by enrolling in an alternate section.

**Theory II** (3 credits): One course with two sections, one in "Persuasion" (offered by APR or JRN) and one in "Theories of Media and Information" (offered by MI). Students may repeat this course for credit by enrolling in an alternate section.

**Research Practicum** (3 credits): Directed research collaboration with a faculty member or a team of students/faculty. Course may be retaken for credit and up to two practicums can be applied towards satisfying program requirements.

**Specializations:** Students will work with their guidance committee to identify courses within a specialization tailored to the student. This does not prevent faculty from pre-identifying and marketing topical areas of specialization (e.g., health, media psychology, social computing, etc.), but allows for flexibility and entrepreneurial opportunities.

**Course offerings:** Whenever possible, courses currently designated at Master's level should be redesigned to allow for dual PhD/Master's enrollment. This should help increase the diversity of course offerings, maintain sustainable course enrolment, and more predictable (recurring) course offerings. Course offerings will be decided at the department level (see below), in consultation with a PhD committee (see below) that will help ensure standardized timing of core and methods offerings and limit conflicting course scheduling. Departments should be encouraged to design courses (one time and regular offerings) that can attract students across areas and may be team-taught across departments/areas (while not restricting the creation of specialized course offerings within departments). The College should establish a fund/procedure to encourage departments to assign faculty to teach such cross-cutting courses.

### **Second Year Project and Comprehensive Examination:**

By the time the student completes 36 credits (normally the end of the second year) the student will have completed a second year project. The second year project consists of a paper suitable for publication, as approved by the Chair of the guidance committee. The paper must be based on research where the student participated in a leadership role (the paper need not be sole authored or first authored by the student, and may represent early work that can be included in the dissertation). The results of the research shall be presented as part of an internal forum to the PhD community as a whole (e.g., seminar or poster, ideally timed with a prospective student day).

Students must compete a comprehensive exam no later than one semester following the completion of their coursework (usually no earlier than the completion of 80% of the program's coursework). Comprehensive exams will be offered twice a year on a fixed schedule (e.g., the start of the fall and spring semesters). In advance of the exam (usually the semester before the exam), students will prepare a reading list that is negotiated between the student and their guidance committee. The reading list will typically include the major works in an area of specialization and the field as agreed by the student and their guidance committee (reading list must conform to a minimum expectations for length). The exam will be of a standard duration (e.g., one week) and format (e.g., the student selects two out of three questions prepared by the guidance committee). Exam questions should be formulated and the student evaluated in relation to the primary objective of the exam, which is not merely to restate the existing literature, but to demonstrate the ability to combine methods, theory and a specialized area to formulate an appropriate research question(s), and an appropriate way(s) of contributing new research to address that question(s).

**Governance:** A doctoral faculty will consist of all persons in the department who have been appointed under the rules of tenure and who hold the rank of professor, associate professor, or assistant professor as well as faculty members approved by the Graduate School to serve on doctoral committees. The doctoral program will be administered by a PhD Committee that consists of a PhD Director, a PhD Coordinator from each department, and one additional representative from each department (the committee will have no role in faculty hiring or promotion). The PhD Director will be elected by the doctoral faculty to a fixed (renewable) term. Departmental coordinators and representatives will be decided based on a process internal to each department. It is expected that the PhD director will be appropriately compensated for their substantive administrative role as well as have access to necessary resources and staff. The PhD Committee will be organized to give equal voice to all departments (e.g., two departments will not be able to overrule another department in curricular decisions).

Given that units rely on a range of sources to support graduate students (general fund revenues for TAs, grant funding for RAs) it is important to align the admission process with the funding model. Grant funding obliges PIs to deliver a promised output and therefore may require recruiting students with a specific set of interests and skills. General fund dollars allow somewhat more flexibility (but even there constraints are in place). The most flexible graduate funding would be fellowships that do not carry a corresponding work obligation. We have been working on creating such fellowships but currently do not have any sustainable funding to support them. For grant funding, PI input is highly relevant for acceptance decisions. For general fund supported TA positions, chairperson input should be sought. If we eventually should succeed in creating fellowships, we could select qualifying applicants on a program-wide basis. This differentiated approach can best be implemented if each department will separately decide on admissions and course offerings, in consultation with the other departments. The doctoral committee will oversee recruiting, administration, and annual student evaluations. The committee will play a substantive role in deciding the speakers and content of the proseminar as well as summer methods offerings. Admissions will be decided at the department level. However, the College should establish a fund for a small number of program-wide spots (1-2 per year) for students that are strong but cross departmental boundaries.