THE UNIVERSITY OF ARIZONA

NEW ACADEMIC UNIT – APPROVAL REQUEST

See Guidelines for Requesting Academic Unit Changes for Renaming, Mergers, Transferring or Disestablishment of an Existing Academic Unit

I. Campus and Location Offering – indicate by highlighting in yellow the campus(es) and location(s) where this academic unit will reside.
Tucson-Main

II. Academic College—Provide the name of the academic college where this unit will be housed.

Arizona's iSchool - a new stand-alone unit

III. Purpose and Activities of the Unit

A. Identify the basic goals and objectives of the new unit.

The state of Arizona's economy relies heavily on information-based industries, and Arizona's only iSchool (i.e., formally part of the international consortium of information schools https://ischools.org/) can help address some of those economic needs in the region. According to the Arizona Commerce Authority (Arizona Business Know How), the core of Arizona's competitiveness plan includes Aerospace & Defense as well as Technology & Innovation. Arizona seeks to foster deep partnerships with major electronics (Intel, Motorola, IBM, Raytheon, etc.) and biotechnology industries (Ventana, Medtronic, Flinn Foundation, etc.). At the same time, no community in the southwest goes without a library - academic, business, law, health, and community libraries are everywhere. To support these industries and related endeavors, this region needs a workforce that is educated in information sciences, broadly conceived. Managing 9-degree programs while continuing to engage in cutting-edge research is the most fundamental goal in order to meet the iSchool's mission provided here:

1. Lead the global iSchool community catalyzing society's capacity to tackle complex problems ensuring diverse, equitable, and inclusive futures for all.
2. Advance state-of-the-art sociotechnical convergence science - across the University of Arizona and beyond - equipping students to succeed in addressing our collective grand challenges.
3. Build core strengths in data science and machine learning, extended reality, digital collections, and culture into world-class centers of excellence.
4. Generate actualizing resources that foster robust engagement and life-long learning, empowered by compelling partnerships across academic networks, diverse communities, and public and private enterprise.

B Describe the activities, projects, and programs that will be conducted by the new unit.

The iSchool degree programs provide education focusing on services and technologies for information and data creation, organization, management, preservation, access, and use in various settings and environments. Faculty will conduct original scholarly inquiry and research in a multitude of environments and cultural communities. Through the dissemination of their research, the faculty foster learning and dialogue about professional and societal issues (e.g., data management, misinformation) important in the age of information. The iSchool strives to foster diverse perspectives in its curriculum, research, and outreach and to provide inclusive opportunities for students, faculty, and staff. The iSchool also acts as a catalyst for enhancing knowledge and information resources, technologies and services in Arizona, the Southwest, the nation, and internationally through connections and interactions with communities, employers, and other constituencies interested in and information issues in a changing society.

As a convergence engine, the iSchool produces diverse graduates pushing forward the boundaries of traditional disciplines. As an example, our state-of-the-art Experiential Supercomputing "Holodeck" breaks all traditional notions of disciplinary boundaries, forming a nexus for *convergence* partnership and collaboration that makes possible new projects that can work across the iSchool and Colleges like Art, Science, or Architecture, Planning, and Landscape Architecture, among others. Together and as a campus, an iSchool can help to bring about new ways to simulate, train, advance science, engineer the future (or the past), provide services, and engage in artistic experiences.

Student training relevant to address today's grand challenges needs to be interdisciplinary and collaborative (Brooks, 2017). Take for example monitoring climate, a process that relies on experts from across the physical sciences, requires a variety of methodologists, as well as data experts capable of capturing, housing, managing, and utilizing terabytes of data per second. These data and information experts create the tools and control what is measured, having an impact on the interpretation, narrative, policy, and outcomes. As tomorrow's data-driven climate monitoring activates community engagement, increases access, and promotes diverse forms of expertise, we will broaden capacity to profoundly understand and collaboratively address this and the full array of other grand challenges we face as a University, region, and society. The iSchool will train many data experts for tomorrow via a variety of certificates, minors, and academic programs.

- BA Information Science and eSociety
- BA Information Science and Art
- BS Information Science
    - subplan: Data Science
    - subplan: Interactive and Immersive Technologies
- BA Games and Behavior
- BS Game Design and Development
- MS Information Science
    - subplan: Machine Learning
    - subplan: Human-Centered Computing
- MS Data Science
- MA Library and Information Science
- PhD Information

C. Describe demonstrable partnerships and partnership support that arise from the creation of the unit.

New synergies will result from this change in organizational structure for the iSchool. Large grant efforts alongside interdisciplinary degree programs are the goals given that, typically, curricular programs in an iSchool cut across Journalism, Law, Engineering, Math, Computer Science, Art, Humanities, Education, Health/Medicine, and other disciplines. Though the iSchool houses an internationally ranked Library and Information Science program, and even though it brings more than fifty years of alumni who've brought impact to the field, new partnerships with other programs across campus (e.g., Journalism, medical librarianship, and health informatics) can be nurtured for students and for the campus. So, put simply, with the iSchool as a new stand-alone unit, we will have broadened capacity to reach further and to collaborate with others to expand interdisciplinary research, aligning with the University's strategic goals.

D. How does formal creation of this unit directly promote the fostering of collaborative and synergistic research and outreach beyond what is already happening on campus with existing entities?

As the world continues to need savvy scholars and innovative research in the field of information sciences, iSchools are growing and called upon to manage interdisciplinary programs. User experience (UX) is a strong example of a program that would require, to do it right, involvement from Engineering (product development), Art, Social Science, and other colleges. iSchools across the globe help manage such efforts and allow for streamlined collaboration across disciplines, units, and colleges.

The iSchool leverages its deep transdisciplinary, socio-technical expertise to pioneer *convergence science* as an actualizing paradigm empowering diverse stakeholders across UAZ and society. Like the iSchool, c*onvergence science* catalyzes diverse strengths across a broad community, in ways that no single traditional discipline is capable of activating. In the academy, computer scientists typically focus on programming and technologies, business schools attend to issues of monetization and maximizing value, etc. In contrast,

the iSchool is unique in its capacity to collaboratively unite the strengths of these diverse disciplines and the full array of UAZ strengths to forge new research partnerships and to continue working toward an ever more diverse, equitable, and inclusive society.

The new stand-alone iSchool aims to engage in expanded development efforts around a building and infrastructure to support not only the State of Arizona's iSchool but other units on campus. For example, with the newly formed eSports varsity teams on campus, and an eSports program that exists with the Dean of Students and requires high-end computing, a new building might even be imagined to house an eSport stadium in its basement – floor plans are partially drafted and industry partners like Verizon and Cox could be tapped for such an effort. Such a capital project would ideally involve multiple academic units in order to help address current constraints around bringing people, students, faculty, and staff, from across campus together.

E. Alignment of the proposed unit's purpose and the University's strategic goals.

The new stand-alone iSchool aligns well with the University's strategic goals. The iSchool will work to *expand student experiential learning on campus* as part of the *Wildcat Journey, UAZ Strategic Plan Pillar 1*, and in particular *Pillar 1.3B* with the goal to *dramatically scale innovative learning spaces.* The iSchool will expand across fields and methodologies to address the University's *Grand Challenges* identified with faculty and students working toward *tackling crucial problems at the edges of human endeavor.*

To empower UAZ Strategic 4IR Plan as an *Arizona Advantage*, and to engage in student training as described here, grand challenge sandboxes with advanced and transdisciplinary capabilities are needed. These sandboxes should include artificial intelligence, supercomputers, drones, collaborative social robots and virtual assistants, autonomous vehicles, 3D printing, DNA sequencing, synthetic life, Holodecks, wearable/ ingestible sensors, smart environments, smart-grids, micro-satellites, and interplanetary networks. Next generation sandboxes must provide collocated access to tools that span across fields, ranging from mechanical, electrical, and computer engineering; to biology, chemistry, physics, and astronomy; to design, architecture, informatics, digital and fine arts; and the liberal arts. They should also provide pathways to UAZ's world-class instruments and facilities (Biosphere2, telescopes, etc.).

Access to world-class tools, however, is not enough. The tools must have ambassadors that are adept at interacting with and transferring expert knowledge to both novices and peers, alike – as they teach the next generation of innovators. UAZ's campus designee for the Public Interest Technologies University Network is the iSchool's Director Catherine Brooks, a position filled at most Universities by an iSchool Dean, given that iSchools have given attention to user experience, responsible technologies,

and public impacts since their origins. Thus, iSchools are built to bring conversations across fields and disciplines together in ways that are human-centered and sociotechnical, approaches that are optimal for addressing today's 'wicked' problems while keeping people and their lived experiences at the center.

To achieve the full impact of UAZ's Strategic Plan, capitalizing on the iSchool's unique convergence capacities is essential. Only if UAZ champions deep transdisciplinary socio-technical capacities will it assist in deciding whether or not the power of this revolution results in global technological change (e.g.., a quantum society, data-driven industry, mixed reality empowerment) that is socially responsible and transformative. The iSchool is interdisciplinary in nature as it connects through people, technology, and information. As such, existing as a stand-alone unit rather than within a College will allow for further reach across the university as well as more efficiency in the iSchool's academic and scholarly endeavors.

Finally, the iSchool aims to be a leader on campus relative to global programming as part of *Arizona Global*. The iSchool has forged a new relationship with Kozybayev University in Kazakhstan in order to bring undergraduate students in the B.S. Information Science to the main campus in their third and fourth year for degree completion. Also, the MS in Data Science is offered to learners around the world with more than 200 learners enrolled in the one year since it's launch in the global campus. The MS in Information Science, Machine Learning subplan is now being launched globally with an incoming cohort beginning their work with us in October, 2022. Our goals are to reach the following enrollment levels by the summer of 2023:

MS Data Science: 500 global learners
MS Information Science, Machine Learning subplan: 200 global learners

F. Documented support from affiliated faculty, department heads, and deans. At the college level, alignment of the proposed unit's goals and objectives to the college's recruitment plan and programmatic priorities.

G. Clear statement of the evaluative criteria to be used in the comprehensive review. How will the proposed unit demonstrate success?

The iSchool will engage in a strategic planning process at the time of inception as a stand-alone school. Goals of that process will emphasize current and projected metrics in order to make data-driven decisions and to develop a formalized strategic plan that is in-line with that of the University.

One way to evaluate success is to utilize the dean review as

indication of unit performance. While the dean review focuses on an individual's qualities (e.g., ability to build trust among employees), the review also takes into account things like 'maximizing resources' and 'achieving results' which to some degree indicate the performance of the unit itself.

Evaluative review will include the following metrics:

- Research dollars
- Student enrollment numbers
- High marks on curricular assessment reviews
- Strong and smart budgeting efficiencies
- Staff wellness and life/work support
- Faculty and staff retention
- Student retention rates in courses and programs
- High rankings on national and international lists (e.g., U.S. News and World Report)
- Excellence documented in accreditation review processes for relevant programs

III. Resources

A. Faculty and Staff

1. Provide the name and employee ID of the unit head.

   Dr. Catherine F. Brooks (cfbrooks@arizona.edu)

2. List the name, rank, highest degree, primary department and estimate of the level of involvement of all current faculty and professional staff who will participate in the new unit. Also, indicate the position each person will hold in the new unit.

Name	Rank	Highest Degree	Primary Department	Involvement
Bethard, Steven	Associate Professor	PhD	iSchool	100% involvement, faculty
Bozgeyikli, Ren	Assistant Professor	PhD	iSchool	100% involvement, faculty
Bozgeyikli, Lila	Assistant Professor	PhD	iSchool	100% involvement, faculty
Bratt, Sarah	Assistant Professor	PhD	iSchool	100% involvement, faculty
Burleson, Winslow	Professor	PhD	iSchool	100% involvement, faculty
Charbonneau, Daniel	Assistant Professor of Practice	PhD	iSchool	100% involvement, faculty
Cui, Hong	Professor	PhD	iSchool	100% involvement, faculty
Daly, Diana	Associate Professor	PhD	iSchool	100% involvement, faculty

Fricke, Martin	Professor	PhD	iSchool	100% involvement, faculty
Heidorn, Bryan	Professor	PhD	iSchool	100% involvement, faculty
Jansen, Peter	Assistant Professor	PhD	iSchool	100% involvement, faculty
Kemp-Wilcox, Andrew	Assistant Professor of Practice	PhD	iSchool	100% involvement, faculty
Knott, Cheryl	Professor	PhD	iSchool	100% involvement, faculty
Lee, Jamie	Associate Professor	PhD	iSchool	100% involvement, faculty
Lenhart, Laura Ruth	Associate Professor	PhD	iSchool	100% involvement, faculty
Lischer-Katz, Zack	Assistant Professor	PhD	iSchool	100% involvement, faculty
Loa, Berlin	Assistant Professor of Practice	M.A. LIS	iSchool	100% involvement, faculty
Maccabe, Barney	Professor	PhD	iSchool	100% involvement, faculty
Morrison, Clayton	Associate Professor	PhD	iSchool	100% involvement, faculty
Pyarelal, Adarsh	Assistant Research Professor	PhD	iSchool	100% involvement, faculty
Rochelle, Jennifer	Assistant Professor of Practice	J.D and M.A. LIS	iSchool	100% involvement, faculty
Roman Palacios, Cristian	Assistant Professor of Practice	PhD	iSchool	100% involvement, faculty
Stoffle, Carla	Professor	M.L.S. LIS	iSchool	100% involvement, faculty
Thomer, Andrea	Assistant Professor	PhD	iSchool	100% involvement, faculty
Wetherell, Meaghan	Assistant Professor of Practice	PhD	iSchool	100% involvement, faculty

3. List the clerical and support staff positions that will be included in the new unit.

Name	Current Position	New Position
Acuna, Manuel	Program Coordinator	**Program Coordinator Senior**
Beshaw, Ben	Senior Research Administrator	**Director of Research (Admin. Operations Manager, 3)**
Boisseau, Tristan	Program Coordinator, Senior	**Manager, Recruiting and Admissions**
Brown, Holly	Manager, Graduate Programs	**Graduate Program Manager, 9**
de la Rosa, Audrey	Undergraduate Academic Advisor	Undergraduate Academic Advisor

Vacant	Assistant Director, Operations	Assistant Director, Operations
Downes, Danny	Undergraduate Academic Advisor	Undergraduate Academic Advisor
Gonzales, Eric	Manager, Administration	**Director, Admissions**
Gordon, Amy	Business Administrator, Senior	**Director, of Business and Finance 10**
Owen, Laura	Undergraduate Academic Advisor	**Director, Academic and Support Services, academic prog manager 3**
Parker, Meredith	Information Science, eSociety Online Program Advisor	**Undergraduate Academic Advisor**
Phillips, Jana	Program Coordinator	**Conference and Event Planner, 6**

4. Project the number and type of new faculty and staff positions that will be needed by the unit during each of the next three years.

   In addition to the staff position adjustments noted above in bold, the iSchool will need, to start, a *program coordinator* to aid the finance team and an *Assistant Dean of Business and Finance* – these are the roles most urgent for day-to-day operations (e.g., payroll). In addition, the iSchool will eventually need an *Associate Dean of Faculty affairs* (an internal faculty role), an *Associate Dean of Academic Affairs*, a *Director of Marketing, Development, and Alumni Relations*, a *Director of accreditation and assessment*, as well as a new *Director of Global and Strategic Initiatives*.
   On the faculty side, the iSchool will need a few faculty hires, as budgeting permits.

B. Physical Facilities and Equipment

1. Provide the Unit address for the new department. Include the following:
   Mailing address - P.O. Box 210076 Tucson, AZ 85721
   Building Name - Richard A. Harvill Building, 4th Floor
   Street Address - 1103 E. 2nd Street Tucson, AZ 85721
   Unit phone number - (520) 621 - 3565

2. Identify the physical facilities that will be required for the new unit and indicate whether those facilities are currently available.
   For addressing space needs for faculty, office space will be needed by the fall of 2023 for the unit. The school's current location does not have adequate space for any additional faculty or doctoral students. Ideally a small classroom on the 4th floor for doctoral student desks, and a set of offices in Harvill can be acquired.
2. List all additional equipment that will be needed during the next five years and the estimated cost.

Equipment needs will be in line with current equipment use in the iSchool. No special equipment investments are requested at this time.

C. Library Resources, Materials, and Supplies

Library acquisitions, materials, and other supply needs will be in line with current use in the iSchool. No special investments in these areas are requested at this time.

D. Other Information

1. Identify any implications of the proposed change for regional or programmatic accreditation.
Support from the accrediting body, the American Library Association, that reviews the MA LIS degree program regularly can be assumed. The accreditation body will be supportive of the stronger communication line between the iSchool and the central leadership team at the University of Arizona. From the October 2019 accreditation review, external evaluators said, “the ERP recognizes a few of the program’s many strengths including a history of engaging with various constituent groups for feedback on the achievement of program goals and the use of assessment data to adjust courses and core and distribution requirements.” About the faculty they reported, “they seek grants and bring in external funds…”. They went on to say that, “students confirm that they receive academic and career advice as well as access to support services that are available to other graduate students on campus. The Knowledge River initiative has given opportunities to Native American and Hispanic students to become information professionals."

2. Provide any relevant information, not requested above, that will assist reviewers in evaluating this proposed addition.
All of our peer campuses in North America with iSchools (e.g., Pitt, Michigan, Univ. of WA, Illinois, Univ. of Texas) are independent units with an Information Dean. iSchools exist as stand-alone units given the interdisciplinarity of the work happening in iSchools. iSchool faculty work across areas like art, humanities, social sciences, math, computer science, and engineering. New opportunities can emerge for both research and teaching needs here at University of Arizona by situating it’s iSchool – the only iSchool in the state of Arizona – as it’s own stand-alone School.

DI. Financing

1. Explain the university’s plan for providing adequate financing for the unit.

iSchool expenditures will be in line with current use in the iSchool. The new stand-alone school is projected to be financially sound. That is, modeling finances under Activity Informed Budgeting, the iSchool is earning more than it would spend even after setting up a dean's office and administrative team. The iSchool's revenue generated is driven, most primarily by enrollments across main campus, AZOnline, and global campuses.

2. Identify potential sources for external funding for the unit.
   Early development efforts will aim to generate partnerships with industry leaders in the region. Some examples include Cox Communications, Caterpillar which is new to the area, and a number of health insurance companies who are often interested in today's grand challenges tied to data and information science.

3. If state funds will be used, indicate whether new appropriations will be requested or existing appropriations will be reallocated. If reallocating existing appropriations, indicate where these will be drawn from.
   New state funds are not requested, existing appropriations will not be reallocated.

4. Complete the Budget Projection Form, projecting the operating budget for the proposed unit for the next three years.
   See attached

5. Estimate the amount of external funds that may be received by the unit during each of the first three years.
   N/A

6. Provide the unit account number (if previously assigned).

   School of Information (0481)

IV. **Additional Information** --provide any other information not requested above that may be useful in evaluating this proposal.

V. **Required Signatures**

Managing Unit Administrator: Catherine F. Brooks, iSchool Director, Professor

Managing Administrator's Signature: Catherine F. Brooks Date: October 10, 2022

Lori Poloni-Staudinger, Dean, College Social and Behavioral Sciences

Signature: Lori M Poloni-Staudinger Date: Nov. 18, 2022

All programs that will be offered through online or distance learning must include the following signature. The signature of approval does not indicate a commitment to invest in this program. Any potential investment agreement is a separate process.

Craig Wilson – Vice Provost, Online and Distance Education

Signature: _____ Date: 10/23/22

References

Catherine Francis Brooks (2017) Disciplinary convergence and interdisciplinary curricula for students in an information society, Innovations in Education and Teaching International, 54:3, 206-213, DOI: 10.1080/14703297.2016.1155470