

NOTICE OF INTENT TO CREATE A DEPARTMENT, SCHOOL OR COLLEGE

DEANS: Send this completed proposal in Word version electronically to the Office of the Provost (provost.deg.changes@wsu.edu).

Proposed Name:	School of Information (iSchool)
Proposed Campus:	All
College(s):	College of Arts and Sciences
Proposed location in the administrative structure: (Part of a larger unit? Who does it report to? Who reports to it? Attach proposed organizational chart.)	School Director will report to the CAS Dean

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Date of filing this NOI:	June 14, 2019	Proposed effective date	Fall 2020

Justification for the new unit:
<p>Earlier this year, the College of Arts and Sciences formed an <i>ad hoc</i> interdisciplinary committee to explore the opportunities for building stronger ties between our emerging Data Analytics (DA) program, our established program in Digital Technology and Culture (DTC), our quantitative social and natural sciences, and our design-oriented faculty in the Fine Arts. The committee was charged to explore existing synergies between these areas and to consider how we might best address the very real need for multi-dimensional, data-oriented, creative thinkers in the marketplace.</p> <p>The President of William & Mary, Katherine A. Rowe, recently suggested that the problem solvers of tomorrow’s workforce will have a solid grounding in data-oriented skills and will also be well-rounded creative thinkers with what Carol Dweck has called a “growth mindset.” In short, these individuals will be border crossers and translators. Rowe writes that “The ability to synthesize diverse kinds of evidence in dynamic and ambiguous environments—and communicate fluently to different audiences about what that evidence means and why it matters—is what distinguishes a business translator from a technician or coder.”</p> <p>A recent report on the U.S. workforce from the McKinsey Global Institute titled “Competing in a Data Driven World,” makes a similar point. The McKinsey study projects the need for at least 250,000 data scientists in the United States but then goes on to note that we will need as many as 4 million “business translators.” These translators are individuals who are data literate and who can quickly analyze, translate, and think creatively about how data align with organizational values and missions. As James Shulman, Vice President and Chief Operating Officer for the American Council of Learned Societies put it in an article for the Mellon Foundation, “These translators need to be like people who live on the borders of two countries and, by necessity, speak the language of both in order to go about their daily business.”</p> <p>In his 2017 book <i>Robot Proof: Higher Education in the Age of Artificial Intelligence</i>, Joseph Aoun (President of Northeastern University) makes the compelling case that the next generation of college students should be educated to invent, create, and discover and thereby “fill the needs that even the most sophisticated robot cannot.” According to Aoun, the literacies necessary for tomorrow are data</p>

literacy, technological literacy, and human literacy. “Students,” Aoun writes, “will need data literacy to manage the flow of big data, and technological literacy to know how their machines work, but human literacy—the humanities, communication, and design—to function as a human being.” These are things that robots—machines—cannot do, and these are things our ad hoc committee believes, like Aoun, to be the core ingredients of a robot-proof education.

Clearly the workforce of tomorrow needs more coders and data scientists, but without the translators, and without the polymaths, the reach of the hard core “techies” is limited. In its 2018 Emerging Jobs Report, LinkedIn identified 10 skills that are in most demand in the marketplace.

Coding/Programming and Data Science made the list at 3rd and 9th respectively, but the top ten also included oral communication (1), people management (2), social media (4), leadership (7), and graphic design (8). These essential skills are some of the hardest skills to impart, especially in an environment focused primarily on the development of technical proficiencies.

What many of these reports leave out, however, is a key element that WSU can bring to the table: our land grant mission and tradition of service and outreach across disciplines, industry, and communities not only in Washington state, but nationwide. WSU’s land grant history is deeply connected to the premiere industries of the state from the early 20th century: agriculture and industrial science. As a 21st century land grant institution, WSU needs to reimagine and expand its mission to provide a diverse, inclusive, and equitable education based in the growing industries of the state and the nation today. WSU is poised to bring together an innovative and interdisciplinary focus on data, technology, and human-centered design to answer some of our global society’s most pressing economic, ethical, and environmental problems.

Recognizing this moment of opportunity to unite integrative research, teaching and service oriented programs, personnel and pedagogical approaches, the ad hoc committee has recommended the formation of a new interdisciplinary School of Information (iSchool) in the College of Arts and Sciences as the best way to realize the goal of educating the next generation of data-savvy, culturally aware, creative thinkers. The development of such a school would mirror similar recent developments at universities including, among the most prominent, UC Berkeley, MIT, and Cornell. What these new interdisciplinary programs have in common is their commitment to the cross-pollination of ideas, diverse faculty, and interdisciplinary knowledge to fuel innovative and sustainable research driven by community engagement and industry need.

Inspired by these developing programs and grounded in WSU’s rich tradition of research driven by and through outreach and engagement, the iSchool will establish a collision-rich, silo-free educational and research environment that encourages deep thought and interaction between faculty, students, industry leaders, and community groups. WSU’s ongoing commitment to our land grant tradition and the university’s long-term engagement with state and regional industries, provides the necessary foundation to connect the skills that today’s industry leaders are looking for with the ideals of providing an inclusive, diverse and equitable educational structure that fosters creativity, collaboration, and curiosity to solve local problems with global solutions.

In addition to offering existing degree programs in Data Analytics (DA) and Digital Technology and Culture (DTC), the iSchool will be positioned to develop new interdisciplinary degree programs as well as minors and certificates that include an emphasis on data visualization, statistical learning, artificial intelligence, user experience, creative coding, and integrative design. Growing organically from the core offerings in DA and DTC, the iSchool will build a curriculum that values integrative approaches, collaborative frameworks, and practical skill building through innovative, critical, and creative outputs. Ultimately, the iSchool will become a hub for both affiliated faculty and students across degree programs to unite through research agendas, open lab settings, and classrooms all geared to generate new knowledge and durable learning with wide-reaching benefits.

Given the deeply interdisciplinary nature of this initiative, and its potential to provide positive impacts across the university, within the state, region and nationally, both President Schulz and Provost

Bernardo have already expressed enthusiasm for the intentions that motivate this NOI. The proposed iSchool will also intersect, both in terms of teaching and research, with existing efforts in other Colleges. For this reason, Deans Tomkowiak (EFCOM), Wright (CAHNRS), Hunter (CCOB), and Pinkleton (MCOB) have also already expressed support for the ideas and intentions behind this NOI. These Deans see its potential to provide both research collaborations as well as course offerings that would benefit students in their Colleges and across campus. (The committee also envisions opportunities for synergy with Veterinary Medicine and the College of Education. Conversations with those Colleges will be initiated if this NOI is approved.) And, of course, through the existing Data Analytics program, CAS and VCEA are already partnering to offer a data-oriented curriculum that would be continued within the iSchool consistent with the existing MOUs.

The iSchool also has the support of the Office of Research and in particular the office of Innovation and Research Engagement. The Office of Research views the school as an ideal incubator for external engagement and is especially interested in the potential to intersect with projects—such as the Urbanova initiative in Spokane—to help empower communities to solve local problems through collaboration and innovation around data analysis, design, and human centered technology development.

The Chancellors in Everett, Spokane, Tri-Cities, and Vancouver have also all expressed enthusiasm for the iSchool and believe it will provide a useful foundation for growing programs on their campuses and for inter-college collaborations across the system.

Alex Peitsch of WSU Corporate Relations as well as the industry members of the Data Analytics Advisory Board have also offered encouragement around this initiative, especially in terms of bringing a wider range of disciplines into conversations around data and the human dimensions of data.

And finally, Colleen Kerr, Vice President for External Affairs and Government Relations has recognized the obvious benefits of this proposed iSchool to the people of the state and has expressed her strong support.

List of existing units, if any, that are eliminated by creating the new unit. Please justify why they should be eliminated.

No units will be eliminated. The College's existing programs in Data Analytics and Digital Technology and Culture would be repositioned in the new iSchool.

List of faculty who will be housed in the unit (department or school), and/or a list of the departments that will be housed in the unit in the case of a school or college).

At inception, the iSchool would be staffed by existing faculty from the Program in Data Analytics (DA), the Program in Digital Technology and Culture (DTC), the Vancouver based Program in Creative Media and Digital Culture (CMDC), and other faculty from across the college of Arts and Sciences who would participate via joint or affiliate appointments as they already do in support of DA, DTC, and CMDC. At the start, the school's curriculum would consist of the existing majors and be offered through existing faculty and courses. Once approved, the program would immediately seek to expand its offerings through cross listing courses from across the university (similar to the way that Data Analytics exists today with cross listed courses from Math/Stats and CS). Existing faculty from DA, DTC, and CMDC would form the initial foundation of the school, but in keeping with the

interdisciplinary mission of the iSchool, faculty from around the college would be invited to participate at a level of engagement to be determined on an ad hoc basis. In addition to leveraging our existing faculty resources, the CAS is committed to searching for an external Director and has begun laying the foundation for a series of industry sponsored professorships. Our target is to establish five industry-endowed professors by the end of the current fundraising campaign. Such a goal is not without recent precedent: four industry entities just gave a combined \$12.75M to help jump start a new center for science and innovation at Seattle University (<https://www.geekwire.com/2019/seattle-u-breaking-ground-new-heart-campus-100m-center-science-innovation/>).

Description of the effect that creation of the unit will have on the faculty inside and outside of the unit.

As noted above, in the start-up phase of the iSchool, faculty will be drawn from DA, DTC and CMDC within the CAS. These programs have strong and growing numbers of majors, faculty with interdisciplinary and applied research agendas, and deep ties to industry and community organizations. It is worth noting that these programs currently support 512 majors (276 Pullman, 236 Vancouver) and another 27 minors (May 2019), so the iSchool would launch with existing faculty and 539 engaged undergraduate students. Despite this vibrancy, these programs have not been able to achieve their full potential within the existing structures of more traditional departments. The creation of the iSchool will provide the catalyst to not only build new programs that complement existing strengths, but also to expand and deepen DA, DTC, and CMDC through updated curricular offerings and expanded faculty research and engagement.

Outside of the new unit, faculty across the university will be able to be involved in many capacities. The iSchool will be organized around a core faculty hub with 100% teaching, research, and service assignments in the iSchool complimented by a set of affiliate, associate, or joint faculty whose courses in, for example, math, computer science, business, economics, etc. may be cross-listed and/or co-taught. The iSchool would seek to engage faculty across the entire university system and promote shared lab spaces, shared research initiatives, engagement in collaborative grants, and expansion of industry partnerships across disciplinary boundaries.

Description of the effect of the creation of the unit on other administrative units across the WSU system.

The iSchool will reduce administrative overhead for both the English and Math departments and result in a more effective administrative alignment around the core needs of DA and DTC faculty in relation to managing grants, industry partnerships, and advancing capital fund raising. Student advising and internship coordination will be more effectively shared and streamlined between these two units within the new iSchool, thereby reducing the need for added and specialized advising currently in Math and English.

Description of the process used to consult the affected faculty and other affected administrative units across the system.

The ad hoc committee spent the Spring of 2019 semester consulting in person and with faculty across CAS and from other closely affiliated colleges. If granted the opportunity to move beyond this NOI, the committee would look to expand the number of engaged stakeholders to include all of those faculty currently teaching in either Data Analytics or Digital Technology and Culture, as well as other faculty across the entire university system who work in, or have expressed interest in, related areas. This list would include, for example, those faculty engaged with the Kamiak compute cluster, those working in bioinformatics, big data social science, precision Agriculture, and so on.

Do the affected faculty and other administrative units agree to the creation of this college or department? If not, please explain why the unit should be created over their objections.

Faculty in other units are not directly affected by the creation of the iSchool. Initially only a handful of faculty, noted above, would have their administrative homes shifted to the new iSchool. Faculty with appointments in other units who are currently engaged with DA or DTC—e.g., Math, English, and computer science, etc.—would continue to teach in their departments and be invited to have an affiliation with the iSchool.

If the unit is a department or school, will it serve as a tenure unit? If so, explain why. How many tenured faculty will be in the unit at inception?

The iSchool will serve as a tenure unit. At inception, the iSchool would be staffed by existing faculty who are already appointed to teach in Data Analytics and/or Digital Technology and Culture. Other faculty within the CAS would be invited to express interest in joining the iSchool. An Interim Director would be appointed at the initiation of the iSchool. The school would seek to expand the core faculty by leveraging existing resources already earmarked for DA and DTC. To this core faculty, the school would add many more affiliate and associate faculty whose existing courses and research clearly intersect with the larger mission of the school. Going forward, the school would seek to hire a permanent director using funds within the College of Arts and Sciences. Preliminary discussions with the CAS Development team are focusing on identifying industry partners to sponsor an initial set of distinguished professorships in the iSchool.

Proposed budget—please attached the budget form for New Programs.

Description of the effect on the library at proposed location:

No impact

Timeline:

Faculty recruitment and program development 2019 - 2021.
School opens 2021-2022.

SIGNATURES: The names typed below certify that the relevant academic and campus officials have reviewed and approved this proposal:


Chair Signature:		Date:	
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Everett Chancellor:		Date:	
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Spokane Chancellor		Date:	
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Tri-Cities VCAA		Date:	
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Vancouver VCAA		Date:	
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Dean Signature:		Date:	May 7, 2019
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VP Global Campus:		Date:	
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Provost Office:		Date:	
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Comments:

For Registrar's Office Use Only:			
Current CIP Code:		New CIP Code:	
		Date:	

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