Architecture Program Report

Institution: Iowa State University

Date: Sept 7, 2021
Institution | Iowa State University  
---|---
Name of Academic Unit | Department of Architecture  
Degree(s) (check all that apply) | ☒ Bachelor of Architecture  
Track: 168 CH  
☐ Master of Architecture  
Track: Full Three-year program 102 CH  
Track: Advanced Standing program 62 CH  
☐ Doctor of Architecture  
Track:  
Track:  
Track:  
Track(s) (Please include all tracks offered by the program under the respective degree, including total number of credits. Examples:  
150 semester undergraduate credit hours  
Undergraduate degree with architecture major + 60 graduate semester credit hours  
Undergraduate degree with non-architecture major + 90 graduate semester credit hours)  
Application for Accreditation | Select...  
Continuing Accreditation  
Year of Previous Visit | 2013  
Current Term of Accreditation (refer to most recent decision letter) | Select...  
Program Administrator | Chair Deborah Hauptmann  
Chief Administrator for the academic unit in which the program is located (e.g., dean or department chair) | Dean: Luis Rico-Gutierrez  
Chief Academic Officer of the Institution | Jonathan Wickert, Ph.D  
Sr. Vice-President & Provost  
President of the Institution | Wendy Wintersteen  
Individual submitting the APR | Deborah Hauptmann  
Name and email address of individual to whom questions should be directed | Deborah Hauptmann  
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Submission Requirements:  
- The APR must be submitted as one PDF document, with supporting materials  
- The APR must not exceed 20 MB and 150 pages  
- The APR template document shall not be reformatted
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INTRODUCTION: Progress since the Previous Visit

Key documents & dates:
- Previous APR Fall 2012; VTR - Spring 2013; Visiting Team Report August 5, 2013
- 2014 Conditions July 18, 2014 / 1st Draft August 2013
- APR Fall 2021 (due to COVID-19 extension)

Conditions not met:
There were four “SPCs Conditions Not Met” in the 2013 VTR:

i) A.9 Historical Traditions and Global Culture:
Understanding of parallel and divergent cannons and traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national settings from Eastern, Western, Northern, and Southern hemispheres in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.

2013 Team Assessment:
“For the B.Arch., the team determined that this requirement was not met to the necessary degree withing the required history/theory sequence, Arch 221 History of Architecture I and Arch 222 History of Architecture II. The program also strives to meet this requirement through the required electives component, particularly Arch 597, did not sufficiently cover non-Western tradition. The course syllabus also did not identify as fulfilling this SAC required elective, even though students were advised that it would meet this requirement.”

“For the M.Arch., the same condition was found in the terms on non-SPC fulfilling SAC required electives.”

Summary of Activity Since:
The 2014 Conditions SPC A.7 read similarly: History and Global Culture:
Understanding of the parallel and divergent histories of architecture and the cultural norms of a variety of indigenous, vernacular, local, and regional settings in terms of their political, economic, social, ecological, and technological factors.

Early responses to the 2013 VTR (2009 Conditions) comments on SPC A.9 included:
The B.Arch Program made changes in content to the required Arch 221 History of Architecture I, which included new texts and content addressing broader historical and non-Western traditions. The undergraduate curriculum had been revised to include an additional third required course, Arch 323 Theories of Architecture. In combination, Arch 221, Arch 222 and Arch 323 enhanced the coverage of non-Western Traditions.

The M.Arch Program altered the content of Arch 595 to incorporate a broader palette of global settings in both course material and student research. The course added, as a primary learning objective, ‘Historical Traditions and Global Culture’, and the syllabus expanded with more globally focused readings. Student research on global topics is particularly encouraged, and this brought topics to the class in presentations from such regions and places as the Middle East, India, Turkey, Africa, South Africa, Russia, Japan, etc. More recently, with new hires the socialist architecture of Eastern Europe and the Balkans have been incorporated in Arch 597.

Statement of where changes fall with respect to the 2020 Conditions:
2020 History/Theory PC.4:
How the program ensures that students understand the histories and theories of architecture and urbanism, framed by diverse social, cultural, economic, and political forces, nationally and globally.

In 2018, prior to the 2020 Conditions, the History, Theory, and Culture (HTC) Substantive Area committee took steps to ensure a more comprehensive set of courses in the undergraduate program that would, ultimately align more directly with the 2020 Conditions. Further, a new Director of Graduate Education (DoGE) arrived and began revisioning and improving the History, Theory,
and Culture sequence in the graduate program. Further information can be found under PC.4 Highlighted Ongoing Enhancements. The changes we implemented represent a substantial shift in the way we teach HTC courses and the impact they have on students throughout their education.

**ii) B.2 Accessibility:**  
Ability to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.

**2013 Team Assessment:**  
“Although there is ample evidence that Accessibility is thoroughly covered in the elective course ARCH 571 “Design for All People,” the team could not find evidence of ability demonstrated in work of design studios or other required courses, both in the B. Arch and M. Arch programs.”

**Summary of Activity Since:**  
2014 Conditions merged 2009 B.2 & B.5 into B.3 Codes and Regulations:  
Ability to design sites facilities, and systems that are responsive to relevant codes and regulations and includes the principles of life-safety and accessibility standards.

By the Fall of 2015, the B.Arch Program responded by working to integrate this as a learning outcome not only in Arch 343 Technology 4 but across the entire suite of five courses, each of which is team taught with three fundamental areas: Environmental Forces, Structures, and Materials/Assemblies & Construction Systems. Codes and accessibility are covered primarily within the Construction Systems element of the courses. Design Substantive Area faculty reviewed the learning objectives for all required studios and their expected integration of material from across the curriculum. This review applies to B.5 and B.6 as well.

The M. Arch Program adjusted the curriculum by adding a specific Accessibility topic to its required Sci-Tech seminar sequence, and this module has been transposed into the new lecture-based curriculum. Guest lectures from Prof. Osterberg, a specialist in accessibility issues with forty years of teaching and practice experience, were also added. The Arch 603 comprehensive/integrated studio strengthened the emphasis on circulation, including Accessibility and Life Safety, requiring students to produce designs that are responsive to accessibility codes and regulations.

**Statement of where changes fall with respect to the 2020 Conditions:** As B.2 and B.5 merged in 2014 and then were incorporated in Sc.1 in 2020, see our comments under the next entry.

**iii) B.5 Life Safety:**  
Ability to apply the basic principles of life-safety systems with an emphasis on egress.

**2013 Team Assessment:**  
“No evidence of this SPC was found in the course work. Although the Arch 245 Building Science and Technology Module 2: Assemblies and Materials Syllabus indicates it will be addressed, there was no further documentation of this. The second round of projects in the later submission addressed certain life safety applications; however, there were a considerable number of errors and code oversights, particularly in high pass projects.” Similarly, the integration of life safety requirements in studio designs was not evident, with particular neglect of egress considerations.”

**Summary of Activity Since:**  
2014 Conditions merged 2009 B.2 & B.5 into B.3 Codes and Regulations:  
Ability to design sites facilities, and systems that are responsive to relevant codes and regulations and includes the principles of life-safety and accessibility standards.

In the B.Arch curriculum we introduced Life safety codes in the 2nd year Fall semester Arch Building Science and Technology I (Sci-Tech) course and reinforced this in third year Arch 343 Technology IV. Fourth- and fifth-year studios, specifically Arch 401 (and, at that time, Arch 403) covers learning outcomes for life safety, accessibility, and egress. The Design Substantive Area of the curriculum
advanced increased expectations that life safety and accessibility studies in the Sci-Tech sequence are integrated in design projects for these two studios.

In the M.Arch program, Life Safety has been covered as a specific topic in the Sci-Tech seminar sequence and this module has been transposed into the new lecture based curriculum. Additionally, we have strengthened the emphasis on Life Safety in the Integrated Design Studio (Arch 603), requiring students to produce designs that are responsive to life safety codes/regulations while integrating principles of life safety standards.

In addition to the above-mentioned changes to the building technology content, as well as renewed focus on studio integration of Life Safety content ascending from Arch 202, to 302, and 401, summary activity prior to 2020 conditions included a reworking of Arch 482 Professional Practice (B.Arch) and Arch 582 (M.Arch) to include greater focus on 2014 SPC B.3, i.e. relevant codes and regulations addressing life-safety. These courses were re-invented by award-winning architect and educator Tom Leslie (FAIA) and award-winning architect Ann Sobiech Munson (AIA and currently City of Des Moines Architect).

**Statement of where changes fall with respect to the 2020 Conditions:** The change in focus summarized above align well with the 2020 Conditions change to SC.1 Health Safety and Welfare in the Built Environment:

> How the program ensures that students understand the impact of the built environment on human health, safety, and welfare at multiple scales, from buildings to cities.

**iv) SPC B.6 Comprehensive Design:**

> Ability to produce a comprehensive architectural project that demonstrates each student’s capacity to make design decisions across scales while integrating the following SPC: A.2 Design Thinking Skills; A.4 Technical Documentation; A.5 Investigative Skills; A.8 Ordering Systems; A.9 Historical Traditions and Global Culture; B2 Accessibility; B.3 Sustainability; B.4 Site Design; B.5 Life Safety; B.7 Environmental Systems; B.9 Structural Systems.

**2013 Team Assessment:**

> "The B.Arch and M.Arch programs have two comprehensive design studios (Arch 401 and 403; Arch 601 & 603). Although both documented multiple source research, the analysis of facts, the development of rhetorical argument, bibliographic information, and the proper citation of sources in papers, there was no evidence found in the work shown that any students had developed the ability to integrate B.2 Accessibility & B.5 Life Safety into their project solutions."

**Summary of Activity Since:**

2014 Conditions revised SPC B.6, placing it under “Realm C: Integrated Architectural Solutions.” C.3: Integrative Design: Ability to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

During the years of the initial response, the B.Arch Program had two required studios, Arch 401 (Fall of 4th year) and Arch 403 (Fall of 5th year) during which multiple aspects of integrative design are required in learning outcomes. Arch 401 began to rely heavier on teaching in parallel with Arch 445, the capstone Technology 5 Sci-Tech course that reinforces the technical aspects of integrative design. That said, around 2015 the focus began to shift in Arch 403 away from integrated design and we began placing more emphasis on Arch 302 and Arch 401 studios to provide this comprehensive focus for two primary reasons: one, the latter two aligned more fully with the appropriate building technology courses as well as held more closely to a similar set of programmatic and project scopes and scales. And two, the fifth-year Arch 403 studio instructors had taken on a broader perspective with respect to the range of projects and the five studio sections were consequently less able to expose all students to the same level of integrated design learning outcomes.
The M.Arch Program responded to the 2014 Student Performance Criteria for ‘Integrative Design’, more closely reflecting our longstanding approach to ‘Comprehensive Design’ in its emphasis on principles and broad integration instead of a reductive, ‘checklist’ approach. We increased our focus on circulation issues (summarized above) to address concerns about accessibility and life safety while continuing to emphasize site conditions, program analysis, structural systems, building envelope systems and assemblies, and environmental systems within a framework of environmental, social, and cultural stewardship, and with an emphasis on clear technical and experiential documentation.

**Statement of where changes fall with respect to the 2020 Conditions:**
2020 Conditions have replaced 2014 Conditions with SC.5 Design Synthesis & SC.6 Building Integration:

- **SC5:** How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions.
- **SC6:** How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance.

After the shift away from integrated design in Arch 403 and toward Arch 302 and Arch 401 studios in 2015, we pivoted toward the updated 2020 conditions by bringing SC.5 in alignment with Arch 302 and Arch 601 (M.Arch), and SC.6 with Arch 401 and Arch 603 of our B.Arch and M.Arch respectively.

Reviewers will also see from the report below that, continuing with the focus of NAAB’s 2020 Conditions, our programs’ strengths and the narrative that supports them, also allowed us to have the fifth year of the B.Arch program develop more broadly towards supporting a diverse student body with a wide range of ideas about the architecture they would like to practice, and therefore the architects they would like to become.

**Causes of Concern in the 2013 VTR**

1) **Physical Resources:**

**A) 2013 Team Assessment:** “Physical resources have been identified as a concern to both faculty and students. Currently, the physical resources of the architecture department seem barely adequate for students’ educational needs, supplemented by the innovative faculty solutions (such as Design on Main). However, support spaces such as the woodshop, lab, and other resources do not fully address the needs of the entire student body. Faculty offices are also becoming an increasing issue.”

**B) Response:** Due to a variety of factors, space, in the College of Design is becoming increasingly constrained. Faculty offices (either private or shared) remain just adequate for tenured and tenure track faculty as well as some full-time term faculty. Over the past eight years, however, office culture has changed and as professors are retiring and vacating offices held for decades, we have noticed that fewer faculty occupy their offices based on the previous model of inhabitation. Most faculty have a study or creative workspaces in their homes or other environments, and they use their faculty office primarily for meetings and day-to-day tasks such as the increased service load work. We have also discussed the possibility of open plan offices if building renovation became possible.

Due to budget reductions Design on Main has closed, while this space was only utilized in a few isolated cases by architecture department faculty and students, other departments occupying that space have returned to the CoD and put further pressure on the facilities. At the same time, spaces for other purposes are now being inhabited by the Department of Architecture in support of
students’ educational needs. For instance, we have created a new Architecture Fabrication Shop, and a Computation and Construction Lab. Moreover, there is a plan in place that projects an expansion of the CoD that would address many of these concerns (see 5.7).

ii) Required Sets of Elective Options:
A) 2013 Team Assessment: “While the “required sets of elective options” allow for a deeper exploration of specific knowledge for both students and faculty, the existing structure of these courses still does not guarantee equal exposure to the entire NAAB Student Performance Criteria (SPC) for all students.”

B) Response: Both the M.Arch and B.Arch programs have retained required electives in the area of History, Theory, and Culture (HTC) to facilitate the depth of “exploration of specific knowledge,” a particular strength of the program given the diverse range of faculty scholarship available to our students. However, while both programs have modified required HTC course content to address the principal “Not Met” SPC A.9 as noted above, we also believe that our understanding of professional education since 2012 has evolved, and we now require a more robust and diverse set of principles, perspectives, and trajectories that address the professional paths possible for the Architect of today and the future. At this juncture in history, we feel the quality of our electives does, indeed, guarantee all students’ exposure to crucial aspects of their architectural education, even if the diversity of which cannot be summed up in a single SC.

Also, with respect to elective studios, while interdisciplinary studios are of great value to students, at the time of the previous visit two of the second-to-fifth-year architecture studios were taught outside the curricular content and quality control of the department. In 2018 the department chair and faculty corrected this issue by bringing one studio back into the undergraduate program (Arch 402) and another back into the graduate program (Arch 602). The benefit of this is discussed below under PC.2 “Strategies for Continuous Improvement”.

iii) Core Studies:
A) 2013 Team Assessment: “Students and faculty have questioned whether the College of Design core courses in the freshman year (pre-architecture) prepare students for the B.Arch program, both in terms of rigor and relevant academic advisement.”

B) Response: Since the Fall of 2013 the department has considered every opportunity to find a way to have a greater impact on the Core program. It is necessary to note that the Dean’s vision for the College of Design includes the requirement that every program participate in the Core program (apart from the Community & Regional Planning). As such, the Core program falls under the purview of the college and changes require cross-departmental discussion, debate, and approval. At this time, while we do certainly believe that certain aspects of the Core curriculum have improved and benefit our students, we have also found it necessary to offset a deficiency in the Core drawing course by adding a second, digital-content focused course to our Arch Communications area of the curriculum: Arch 230 (second year) is now followed by Arch 231 (third year). This recent change is crucial to the B.Arch program as it fulfills the most fundamental contemporary need in our discipline for computational literacy.

Finally, while there are mixed opinions from our faculty about the continued requirement to belong to the Core program, from the perspective of the department chair, in the broader consideration of the well-being of the college, our involvement remains essential for the good of the whole. We believe, as this report will bear out, that our continued participation in the Core does not in any way compromise our ability to deliver a high-quality professionally accredited education in architecture.
Program Changes

The timeline for our program sharing the same accreditation cycle is relevant because, while we last reported based on the 2009 Conditions and are now reporting on the 2020 Conditions, it is the 2014 Conditions that guided our progress between the two. In fact, the August 29 draft of the 2014 Conditions dates less than one month after our August 5 VTR. Had COVID not perpetrated an extension to our eight-year accreditation cycle, we would have been presenting our APR only seven months after the 2020 Conditions were made final in April of that same year.

In the above section we summarize not only responses and changes since the previous report. These were primarily responses occurring under 2014 Conditions and include, as well, several responses to the 2020 Conditions. Several program changes were identified above. Among these are:

**With 2014 Conditions in place and prior to 2020 Conditions:**
- A reworking of the HTC areas of the curriculum in our B.Arch program in order to bring it into alignment with more contemporary issues. As mentioned, while this took place prior to the 2020 Conditions, we believe it aligns well with the revised description of PC.4 contained therein. [Arch 220, 221, 322]
- Curriculum changes to the M.Arch Sci-Tech course delivery and content included cross listing a portion of the required courses with the undergraduate building science and technology lectures. This move was initiated so that graduate students would have access to the exceptional teachers and materials delivered in the undergraduate sequence. The Sci-Tech labs were then taught as a separate pedagogical component, enriching the graduate technology education even further. [Arch 545, 546, 547, 548 Lectures & Labs]

At the time of this report, however, you will note below that due to changes in the university's Graduate School regulations, we will no longer be able to support this change and will be required to return to a model resembling the previous.

- Communications courses in the B.Arch curriculum extended by a second computational literacy course. [now Arch 230 & 231]. In the M.Arch curriculum, advancements were added to the computational requirements for the 'Net-Zero studio' [Arch 601]

**Currently in progress and in alignment with the 2020 conditions:**
- While not curricular, programmatic changes in the BArch program include tightening the relation between science and technology and the studios Arch 302 and Arch 401 for similar reasons. This is in line with the 2020 conditions which are already asking us to tighten the connections between our key programmatic areas so that they can be more clearly and consequentially assessed on an on-going basis.

- The Graduate Committee is developing M.Arch program revisions intended to improve the program's effectiveness in SC.5 & SC.6, as well as to better fulfill the new History, Theory, and Culture description in PC.4 which addresses students' understanding the histories and theories of architecture and urbanism in relation to “diverse social, cultural, economic, and political forces, nationally and globally”.

- The Undergraduate Committee and the respective Substantive Area Committees are discussing changes to the Practice-based area of the curriculum which includes Professional Practice & Human Behavior and Environmental Theory courses (Arch 482/582 & 371 respectively). While this was motivated by recognized shifts in societal and professional environments, the intention is to benefit from and align with the 2020 Conditions.
Concluding Remarks

In the “Guidance for schools and teams” to this section of the report, comments included the following: “It is not expected that a program revise its entire program to meet the new Conditions the first year that the 2020 Conditions are in effect”. To this we would like to offer a brief response.

In the coming years, we do not expect to revise our ‘entire program’ as a result of 2020 Conditions. Program changes are initiated in response to many complex forces and factors. Whether internal — institutional at the level of the university or college and even extending to the Board of Regents; or external — related to collateral organizations and bodies (such as NAAB) or political, social, economic, cultural or professional demands to remain responsive to the pressing issues of our times. Naturally, these issues do not always follow the same timelines. Some are sudden, for instance the Iowa House Bill 802 recently put into law in Iowa (with similar bills in other states), which has caused us to rethink multiple aspects of our curriculum through content filters that do not align with knowledge built upon decades and decades of advances in disciplinary discourse and program developments.

Of course, reviewers and members of the NAAB Visiting Team understand this from their own positions and perspectives in the academy as well. This is not new; but in the past several years external demands and their impact on our program have accelerated. The comment we would like to add to this report is that we believe that the 2020 Conditions are logical and well considered in addressing the shifting demands of society, culture, and practice. They represent a major improvement to the previous conditions in that they are prepared in such a way as to support professional degree programs in departments of architecture by permitting greater agility with respect to their ability to respond tactically to the variety of forces and factors we all face. In other words, the changes brought on by the 2020 Conditions, with respect to the acknowledgment of a program’s uniqueness and the manner in which the criteria can be responded to and subsequently assessed, could not be more timely.

Another primary difference between the past and the current Conditions seems to hinge on the issue of ‘continuous self-assessment’ and ‘continuous improvement’. At this time our program has not had time to adjust fully to the weighted focus NAAB has placed on assessment. To this end, we are looking forward to the Spring 2022 team visit and the insights, critique, and advice that will be provided by our learned colleagues, as well as the eventual Visiting Team Report that we anticipate by the start of the Fall 2022 semester.
Part 1: Context & Mission

1.1 Context
Based in Ames, Iowa (pop. 66,000), Iowa State University (ISU) is a Carnegie Research 1 University — the highest ranking for research and doctoral granting institutions. We are one of 131 Universities to hold this ranking out of over 4700 institutions, and one of only 94 public Universities holding this distinction. We are also one of the 32 public universities holding membership in the American Association of Universities. Our campus is 40 minutes from the state’s capital of Des Moines, a vibrant city with a rich architectural heritage. From our home in the heartland, the Architecture Department at ISU attracts close to half its students from across the country and around the globe.

A) ISU General Description
ISU was one of the first institutions to adopt a philosophy based on the idea of ‘people’s colleges’. Abraham Lincoln signed the law that gave birth to these land-grant universities that were founded on principles of higher education for all, practical teaching, and sharing of knowledge beyond the campus. Iowa was the first state to adopt the 1862 Morrill Land-Grant Act. Today, ISU is composed of the Colleges of Agriculture and Life Sciences, Business, Design, Engineering, Human Sciences, Liberal Arts and Sciences, Veterinary Medicine, and the Graduate College. The extension experiment — transferring research and expertise to every corner of every state — was immensely successful. Today, more than a million Iowans benefit annually from ISU Extension and Outreach programs. Our Mission & Vision statements highlight these values:

Mission: Create, share, and apply knowledge to make Iowa and the world a better place. Iowa State’s focus has always been its students. The university emphasizes learning by doing. ISU students take advantage of many opportunities to engage in real-world class experiences and cutting-edge research, to study in other countries, and to test their leadership skills in 800-plus campus organizations. They are tomorrow’s leaders and problem solvers and they’re ready to get started. In addition to educating students, Iowa State faculty and staff are conducting basic and applied research to improve lives and sustain the planet. They are boosting crop production, protecting natural resources, perfecting biobased fuels, refining wind turbines, designing human and animal vaccines, improving firefighting gear, fighting Parkinson’s disease, fostering economic growth and development, strengthening forensic science techniques, assessing the effects of media violence, devising defenses against cyber-attacks, enhancing the quality of life through the arts and humanities, and educating the leaders of tomorrow. As a member of the Association of American Universities, and the Association of Public and Land-grant Universities, Iowa State is dedicated to conducting research and scholarship with local, national, and international impact.

Vision: lead the world in advancing the land-grant ideals of putting science, technology, and human creativity to work. ISU is a hub of creative and entrepreneurial activity. The campus and the city of Ames are home to a national laboratory; five federal research labs; renowned institutes in virtual reality, plant sciences and the bioeconomy. The ISU Research Park, which helps move discoveries to market, has launched numerous start-up companies, including some that are recognized worldwide for ingenuity and major contributions. Major investments in new research and educational facilities and an outstanding tradition of cross-disciplinary research bring all of ISU’s colleges and departments together with global partners.

Iowa State University is focused on developing the talent and the facilities to lead the urgent, global quest for solutions. This requires efforts from across campus. It is the combination of all of our academic colleges, units, and departments that create the community of scholars necessary for this work. This university is and always has been a community of practical, hard-working problem-solvers. Iowa State is dedicated to the belief that with hard work and innovation, future generations will have ample food and fuel, good health, and a safe, bountiful planet.
B) Student Body
Fall 2020 saw ISU enrollment of 31,825 students: 26,846 in Undergraduate Programs and 4,352 in Graduate Studies (https://www.registrar.iastate.edu/resources/enrollment-statistics): Of note:

- Freshman class of 5,071 students included 3,053 Iowans, average ACT score of 25, 3.71 GPA
- U.S. multicultural enrollment at a record 4,924 (15.5% of total enrollment).
- 7,911 Iowans (56.3% of the student body).
- 2,592 international students (8.1% of the total enrollment).
- 14,543 (44%) women and 18,848 (56%) men.
- Students from every county in Iowa, every state in the country, and from 109 countries.

C) Teaching Modality
In 2020 ISU temporarily delivered student education in hybrid form. As of Fall 2021 instruction is again face-to-face, with the exception of some courses that have preserved aspects of hybrid teaching due to pedagogical advantages.

1.2 Program Context
A) College Context Overview/Mission
The College of Design (CoD) is one of eight colleges at ISU. The original CoD departments (1978) included Architecture, (originally housed within the College of Engineering) Art & Design (originally housed within College of Home Economics), Landscape Architecture (originally within the College of Agriculture) and Community & Regional Planning (originally within the Department of Landscape Arch.). In 2012, the Iowa Board of Regents approved a college restructuring, resulting in seven departments: Architecture, Art & Visual Culture, Community & Regional Planning, Graphic Design, Industrial Design, Interior Design, and Landscape Architecture. Concurrent with this restructuring, ‘Design Studies’ became home to three interdisciplinary degree programs. All seven departments share a belief in the value of interdisciplinarity and the power of design to profoundly and ethically impact citizens, communities, and societies. In tune with this, the College Mission, Values and Vision statement, reads as follows:

- **Mission**: Our mission is to educate students to become successful designers, planners, artists, scholars and citizens who improve the quality of life, enhance human experience and advance environmental sustainability; and to serve as a resource for Iowa and beyond through research, creative endeavors, extension and outreach.
- **Values**: We value innovation, curiosity, collaboration, open exchange of ideas, diverse perspectives, and environmental and social responsibility.
- **Vision**: Our vision is for College of Design faculty, staff, students and alumni to increasingly be known for their ability to lead interdisciplinary processes and draw upon their disciplinary expertise to generate informed, innovative responses to challenges and opportunities.

B) Program Relationship to College Context/Mission
Our 5-year B.Arch degree follows a 1 + 4 structure with substantial elective and option opportunities. The first year, or ‘Core’, provides an interdisciplinary curriculum within the College, serving as the gateway to a number of degrees. Enrollment is open — respecting ISU’s land-grant history of wide access to the university that enables students to become acclimated to the broader scope of design disciplines before program admission. The organizational structure of the 3-year Master of Architecture degree program dates back to 2002, when, the curriculum was completely overhauled, with a greater emphasis on socio-cultural, environmental, and technical integration.

The Architecture Department’s Mission is as follows:

*The Dept. of Architecture is a comprehensive center for teaching, research & public service in architecture. The department is an element of the College of Design and, together with the departments of Graphic Design, Industrial Design, Interior Design, Art and Visual Culture, Landscape Architecture, and Community and Regional Planning, forms a unique and innovative interdisciplinary environment.*
Although all academic programs are grounded in the requisites of the profession, each is distinctly different. The five-year undergraduate program positions architectural design as an armature within a broad-based field of studies. The graduate program is research-based and allows the student to explore special areas of interest in addition to the core curriculum in architectural design. The post-professional graduate program facilitates advanced studies in architecture.

At all levels, the department is committed to the study of architecture as a cultural discipline in which issues of practice, of the multiplicity of social formations in which buildings exist, and of environmental effect are enfolded with the subject matter of building design -- construction, space, material, form, and use. The complexity of architectural production is mirrored in an intentionally diverse student body and faculty.

1.3 Student & Faculty Opportunities:

A) Pedagogical Resources

As part of a Carnegie Research 1 university, students benefit from the architecture department’s interdisciplinary setting and research resources - with access to CoD lectures & symposia, workshops & exhibits, and its diverse faculty who provide a wealth of courses and opportunities.

Undergraduates participate in interdisciplinary studios in their fifth year (final semester), attend the Core Program (first year), and choose professional electives offered by other departments. They can also take advantage of opportunities to pursue Minors in areas drawing from broader College resources. Key minors within the CoD are: Critical Studies in Design, Digital Media, GIS Minor, Illustration Minor, Textile Design, Preservation and Cultural Heritage, and Urban Studies. Students also benefit from the larger ISU context in being able to pursue Minors in areas outside the College, including Entrepreneurial Studies, Sustainability, Environmental Studies, Gerontology, International Studies, and Women’s and Native American Studies. Reciprocally, Students outside the College of Design are able to broaden their knowledge of Design by pursuing a Minor in ‘Design Studies’. Graduate students have opportunities to pursue Double Degrees within the CoD in conjunction with Community & Regional Planning, Sustainable Environments & Urban Design. They may also pursue a double degree in Architecture & Business Administration.

B) Research Resources

Faculty benefit from the broader college setting by taking advantage of resources, such as:

- CoD Internal research grants, including the BNIM grant funding interdisciplinary research.
- Grant and Research support staff via IDRO (Institute for Design Research and Outreach)
- College of Design Research Clusters

Learning and Logistical Resources

CoD facilities, available to all students, include the Design Reading Room, Computer Labs, Community Design Lab, Model shops, Exhibition Gallery, Computation & Construction Lab, Center for Building Energy Research, and the Kies Research Lab. Students benefit from an array of clubs, student groups, and Iowa State Learning communities. Additional resources from the Dean’s Office include the Administrative Services Office, GIS Support & Research Facility, Extension Offices, Student Services & Programs Office, and the Institute for Design Research & Outreach (IDRO).

Summary Statement

We are an Architecture department housed within an Interdisciplinary College of Design, located in a midwestern college town at a Research 1 University. We have a strong outreach/land grant mission and are dedicated to providing students with opportunities to engage with their immediate context, while also gaining insights into contemporary and global issues. Our program fosters student success through a synthesis of technical, theoretical, and design knowledge.
Part 2: Shared Values of the Discipline and Profession

Departmental Philosophy: We are committed to the study of architecture as a cultural discipline in which issues of practice, of the multiplicity of social formations in which buildings exist, and of environmental effects are integrated with building design through construction, space, material, form, and use. Architecture arises from the aspirations that diverse individuals and groups have for their physical environment, and from the social enterprise of designing and fabricating the landscape we inhabit. It involves individual and multiple buildings, the spaces within them, and the exterior landscape. We prepare students for careers in architecture and related disciplines, emphasizing a diverse and holistic approach whereby graduates obtain:

- Rigorous, research-driven, and creative design skills;
- A broad, inclusive, and nuanced appreciation for the historical and theoretical frameworks that inform practice today;
- An array of graphic, computational and presentation skills needed to both design and to convey design intent;
- An understanding of contemporary technical and performance criteria used to model, analyze, and construct projects so as to responsibly evaluate the technical and environmental impact of design decisions;
- A grounding in the critical, aesthetic, and ethical role of the profession and its relationship to public health, safety, well-being, and environmental stewardship.

2.1 Design:
Our department seeks innovative ways to interpret elements of architectural practice in the academic milieu. Integrated design studios, collaborative interdisciplinary studios, hands-on lab course components (part of our science & technology sequence), and ongoing refinements in professional practice courses support design excellence across the entire curriculum.

We view design as a continuous and iterative process in which research, testing, representation and presentation are all essential skills to be learned and practiced. In the undergraduate program this is evident in our upper-level studios (fourth and fifth year) in which preparatory work—completed by students during the first three years of the BArch—leads to integrated design work (covering SC6) in our fall semester fourth-year studio. Here, students incorporate content from our science and technology course sequence directly within studio design proposals. A second-semester third-year studio takes on the bulk of integrated work for SC5. In the graduate program three semesters of studio and Sci-Tech courses, in combination with other classes, prepare students to join those already with a BArch for advanced studio work during the last two years of the MArch degree.

From a professional perspective, students benefit from our special relationship with the AIA Iowa Chapter and its registered architects. Both current Vice Presidents are ISU Architecture Program alumni, four of the institution’s directors have degrees from our program, and many of its members are graduates from our BArch and MArch programs. Architecture faculty members have served for many years on the editorial board of Iowa Architect magazine, and on the Iowa Board of Architectural Examiners. As a reciprocal effort, the department collaborates with the chapter in developing continuing professional development programs and providing practice-related seminars to the profession, faculty, and students through the annual meetings. The department regularly sponsors keynote speakers at the AIA Iowa Annual Convention and Spring Meeting. In turn, faculty and students can attend keynote sessions at no cost. Our student work is regularly exhibited at the convention—giving students a venue for professional feedback about their work.

Beyond the AIA, many of our faculty members hold active registrations in the US or in international jurisdictions, and or maintain practices or consultancies. Through their example (and intern hiring), the faculty provide models of diverse design practices and professionalism.
Since 1994, the Architecture Advisory Council (AAC) has engaged a highly committed group of twenty alumni from around the country with the department on a regular basis. Members of the group serve staggered three-year terms, with participants representing various stages of the varied career opportunities available to our graduates. AAC members meet with the department chair and faculty two to three times each year. They serve in an advisory function on internship development, as well as planning and departmental mission. Professionals on the council regularly serve on student juries at the end of the fall semester and participate in desk crits during the spring semester.

2.2 Environmental Stewardship and Professional Responsibility:
Our faculty are directly engaged in environmental stewardship, and their impact is visible in our integrated design studios at the third- and fourth-year level, as well as the second year of the MArch program. For several years our net-zero studio has placed as one of the top ten winners in the AIA Committee on the Environment Student Design Competition. The competition typically draws about 500 participants from around 35 national and international schools of architecture. Student teams from our program were prize winners in 2015, 2016, 2017, 2020, and 2021.

The architecture curricula are responsive to the range of programmatic requirements implicit in a professional degree and explicitly stated in the NAAB performance criteria. The revised integrated design studios in both the graduate and undergraduate programs, interdisciplinary option studio collaborations in preservation and cultural heritage, community design, health care, hospitality, and other topics are opportunities that serve as precursors to practice. The traditional professional-practice courses are continuously updated and use relevant case studies to examine both practice and regulation. As a department offering professional degrees, we position our graduating students so that, together with the experience of internship, they are prepared to assume the responsibilities of licensure. As evidence of this commitment, ISU graduates have historically outperformed the national average in successfully passing the diverse elements of the Architectural Registration Examination.

The commitment of the department extends beyond the accredited programs. The department participates with the AIA Iowa Chapter in the internship development program, and faculty members serve on the state registration board. Associate professor Rob Whitehead currently serves on this board, and is our Intern Development Program Education Coordinator in which role he is accessible to all our students. The architecture department and individual faculty collaborate with the AIA Iowa Chapter to offer seminars and workshops at the fall convention and periodically at other venues in subject areas directly related to the practice of architecture.

We also believe that strong internal topic-based competitions drive students to produce excellent designs. To that end the department has established a series of prizes students compete for as part of their design studio work, starting in the first semester of the third year and continuing through to the completion of the BArch degree. The first is the Richard F. Hansen Prize for excellent design work in ARCH 301. The second is the BWBR prize (ARCH 302) which is awarded as part of a “comprehensive and mature understanding of aesthetic, technical, regulatory, and human factors that shape the design of an architectural project. Evaluation criteria are organization/thoroughness, design, and presentation skills.” In fourth year, our students compete for the DLR Group Prize which is awarded to the student project “best exhibiting a rigorous examination of how buildings participate sustainably in socio-political and environmental systems.” Other prizes we award include the Nathan and Lisa Kalaher Award, the Central Iowa Chapter Construction Specifications Institute prize, the H. Kennard Bussard Award (fifth year), and the Substance Design Forum prize for which “one or two members of the professional architecture community are invited to judge the competition and share their work and experiences with students.” At the graduate level, students have competed in their second year of the MArch program in the Shive-Hattery Design Studio Competition which challenges students to “create a net zero/energy efficient building design through the adaptive reuse of existing buildings. The studio focuses on integration of advanced systems technology and sustainable design to reflect and explore in a critical manner the relationship between buildings and environmental forces.”
2.3 Equity, Diversity, and Inclusion:
Initiatives to address Diversity, Equity, and Inclusion (DEI) have been fully embedded in Iowa State University’s mandate since the early 2000s, including requirements for diversity training across all levels, from upper administration through colleges to departments, faculty, staff, and students. The university maintains a website outlining its expectations, offers advice, awards and funding, and collects data points that include a yearly Academic Affairs Diversity and Inclusion Report, a Board of Regents Annual Diversity Report, an Institutional Research Fact Book, enrollment statistics by the Office of the Registrar, and an Ombuds Office Annual Report.

To quote from the College of Design website, we consider diversity a “critical component of all creative processes, and in a college where creativity is essential, diversity is not just about being politically correct — it goes to the very core of our mission” in that with this “diverse array of disciplines, perspectives, expertise, and interests [we] embrace the opportunities this provides for innovation and collaboration.” Beyond those institutional approaches, architecture faculty have been working over the last few years to critically revise the curriculum in light of anti-racist and decolonial perspectives, and to integrate course materials offering students a global perspective on issues addressed by DEI. This has included the elimination of the binary Western/Non-Western division in required History, Theory, and Culture courses, and also adjustments of course content by individual instructors in response to DEI mandates.

We believe that visiting lecturers, foreign study, and urban field trips are especially important for expanding a student’s experience beyond normative positions (even as both foreign and domestic field trips have been put on hold due to the COVID pandemic during the 2020/2021 academic year), and the department has been in the forefront on campus in developing and executing such activities. ISU is a major research university with significant numbers of international students — and in that sense our ‘academic context’ is international. International studies have been centered in Rome for more than twenty years and more recently we have offered a studio in Berlin—the Summer Academy—where students collaborate with “leading Berlin professionals [...] on ideas and potentials” regarding the design of an “urban architectural environment for a low-carbon lifestyle.” Other programs include international studies in Peru and China, and an ongoing interdisciplinary collaboration with the US Department of State (since 2017) that has students document historic US properties abroad in Europe, Africa, and Asia.

We have numerous international study and exchange agreements with European universities, and typically a few students join our program through the Reciprocal Student Exchange Programs for a semester or two, enriching both our students’ experience and that of the students visiting us in the US. Studios at all levels include field trips to such urban centers as Minneapolis, Chicago, Kansas City, St. Louis, Boston, Seattle, Los Angeles, and New York. Our Ames, IA, location, nearby Des Moines, and proximity to numerous medium-sized cities (e.g. Cedar Rapids, Waterloo/Cedar Falls, Sioux City, Dubuque, Iowa City, and the Quad Cities) allows local community engagement projects as well as opportunities to engage with the agricultural landscape of the state.

2.4 Knowledge and Innovation:
The College of Design is among a few schools in the nation to have fully integrated across seven design disciplines (Architecture, Art and Visual Culture, Community and Regional Planning, Graphic Design, Industrial Design, Interior Design, and Landscape Architecture) and related degree programs within a single academic unit. Our entering undergraduates share the same foundation core program of study before selecting a major. In collaboration with faculty from other departments, architecture professors have been offering ten to twelve interdisciplinary option studios open to both undergraduate and graduate architecture students every spring semester. Architecture faculty were leaders in the establishment of three college-based minors – Critical Studies in Design (HTC), Design Media and Communication, and Preservation and Cultural Heritage. The College of Design collaborated successfully with the College of Engineering in the planning of the new Student Innovation Center in which architecture faculty are key participants.
In recent years faculty have collaborated within and outside of the department in teaching, creative activity, and the pursuit of research grants - subscribing to the idea that innovation happens when multiple stakeholders collaborate on projects. Our faculty take advantage of cultural arts venues regionally, nationally, and internationally, and participate in professional development as educators and grant recipients in programs offered by ISU’s Center for Excellence in Learning and Teaching (CELT) which is a resource center for enhancing teaching/learning performance, the Center for Excellence in Arts and Humanities (CEAH) which provides grants to support scholarship, Subvention Grants that underwrite publications, Miller Faculty Fellowships that support innovations in curriculum development, the Design Exchange and Design Collaborative learning communities for entering first-year students, and other funding opportunities offered by the Office of the Vice President for Research. In recent years our faculty have been successful in securing prestigious recognition such as the Rome Prize (two architecture faculty), and interdisciplinary research has been funded through the National Science Foundation, and through other on-campus opportunities, such as the Presidential Initiative for Interdisciplinary Research.

The university offers dozens of minors and second major programs which our students can access, such as Entrepreneurial, Women’s, and Classical Studies. The most heavily subscribed second major for our students is Environmental Studies, administered by LAS. Our faculty and students also have access to the “C6”, the “world’s highest resolution, fully immersive virtual environment”, housed in our neighboring College of Engineering through the Human Computer Interaction program in the Virtual Reality Application Center. The Honors program provides students with options for advanced topical studies and architecture faculty continue to offer several honors seminars and studios every semester; faculty are leaders across the campus in various areas such as Gerontology, Eastern European, and American Indian Studies, Preservation and Cultural Heritage, and Accessible Design. Currently, faculty are collaborating in the new Student Innovation Center across several disciplines, and an architecture faculty member directs the university Center for Building Energy Research. To support future work, the College of Design is in the process of hiring a new director of innovation & entrepreneurship. As a department we facilitate continuous improvement of the architecture curriculum through Substantive Area committees. To further advance our knowledge and innovation, all architecture faculty participate in two annual day-long faculty retreats.

2.5 Leadership, Collaboration, and Community Engagement:
Explicit in the department’s mission is the assertion that architecture is a cultural discipline and that the extension of this concept is a broad-based field of practice that is grounded in the necessities of cultural understanding. Students are continually challenged to engage with the complexity of the architectural experience and by the contingencies of architectural production. There is no single, governing methodology. Instead, we encourage students to understand and embrace design as an instrument of inquiry as well as invention from a range of intentionally diverse perspectives. The studio has a unique place in this pedagogy; we view it as an instrument for integration and synthesis at all levels of the curriculum that is modeled by faculty leading the design process. Advising and faculty support are practiced with student success as the driving value. Given the complexities of making one’s way through our degree programs, we strive to be open and accessible to students.

ISU has approximately 800 clubs and organizations that foster leadership, collaboration, and community engagement. Among them are sororities and fraternities, student government, intramural sports, marching band, academic and social organizations, and many community service groups. In the college, membership and leadership opportunities exist in the American Institute of Architecture Students (AIAS), the National Organization of Minority Architecture Students (NOMAS) and the College of Design Student Board. AIAS officers regularly attend faculty meetings and architecture faculty serve as student group advisors. The studio practices are addressed in all syllabi, and the Teaching and Learning Culture policy (previously studio Culture Policy) is specifically included in and referenced in most syllabi.
To support entering students, ISU has been a national leader in residential learning communities. The Design Exchange has spaces for about 1/3 of all entering first-year undergraduates who share dorm space, study centers, and classes, and have upper-class resident mentors from the college. The Design Collaborative provides advisory support and professional program information to all other entering students. Upper division students serve as mentors in first-year design core studios and drawing courses — offering leadership, assistance and service models.

Our students produce a journal, DATUM, published at least once a year. Student leaders plan annual Career Days that are held with the support of the college Career Services Office, and in concert with university career days. Activities are supported by departmental and college advisors, academics, career services, and the college's Multicultural Liaison Officer.

Each year the department organizes a Fall semester kick-off celebration, the Architecture Premiere, that acknowledges and celebrates leadership and excellence by awarding scholarships and prizes to students who are the best performers and leaders. The event is usually followed by a lecture given typically by an invited architect, and the opening of the Rome Program exhibition in which the work of students who studied in Italy during the spring semester, is celebrated.

2.6 Lifelong Learning:
The continuing construction of an active, engendering context for the education of the architect is a primary responsibility of the department and its faculty. Iowa State enjoys the virtues and opportunities of a land-grant university located in a small Midwestern city. It is dedicated to the concept of continuous education integrated with practice and, as an institution, is built upon the paradigms of discovery through research and creative work, sharing through teaching, and application of knowledge through extension and professional practice. The university is a distinctive and unique example of this type, in its commitment to the highest level of liberal undergraduate study. Its programs in the Liberal Arts and Sciences (LAS) are exceptional and students are well grounded in general studies as they progress through our program.

Architecture faculty instill in students a desire for lifelong learning by modeling the complexity of architectural practice through a diverse and inclusive academic curriculum. We consider education a catalyst for future architects who thrive on the challenges posed by projects, including those in difficult settings and with challenging circumstances. The range of our program’s faculty specializations and expertise helps students to realize that differences in approaches to design education are not only welcome but celebrated. Our program expectations grow from exposure and experimentation to responsibility and design synthesis. Ultimately, students produce a wide range of artifacts that demonstrate their achievement of our diverse learning objectives.

Our approach to architectural education is learner-centered: involving students in our process of teaching and formative assessment. This helps students learn how to solve problems, think critically, apply information, and synthesize knowledge. The participatory nature of our learning activities - be they studios, labs, lectures, seminars, or field trips - allow us multiple avenues to guide and assess students. This rarely involves judging right or wrong answers. Students are instead given formative feedback, with opportunities to reflect on their education at the end of each semester. Course evaluations ask students to consider what might have improved their learning. This feedback helps drives curricular change, in turn benefitting future students.

Faculty make use of social media and other formal/informal venues to stay connected with former students, and these more tentative links can become means for faculty and students to accompany each other on their learning journeys. More formally, members of the Architecture Advisory Council - consisting of alumni from our BArch and MArch programs - return to campus twice annually to participate in final reviews and contribute to discussions about curricular matters that feed into future pedagogical deliberations in the curriculum Substantive Areas.
Part 3. Program and Student Criteria

Undergraduate Program Matrix:

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<th>REGULARLY SCHEDULED ELECTIVES</th>
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Program Criteria:
- PC.1 Career Paths
- PC.2 Design
- PC.3 Ecological Know. & Resp.
- PC.4 History & Theory
- PC.5 Research & Innovation
- PC.6 Leadership & Collaboration
- PC.7 Learning & Teaching Cult.
- PC.8 Social Equity & Inclusion

Student Criteria:
- SC.1 HSW in the Built Environ.
- SC.2 Professional Practice
- SC.3 Regulatory Context
- SC.4 Technical Knowledge
- SC.5 Design Synthesis
- SC.6 Building Integration
3.1: PC.1 Career Paths

Our program ensures student preparedness for becoming licensed practitioners, while providing an orientation to other career opportunities provided by the degree. Both curricular and non-curricular aspects offer students the resources needed to understand future career options.

PC.1: Curricular Aspects:
Our Arch 482/582 Professional Practice (detailed in SC2) is central in providing students with the knowledge needed to enter the profession. Students are given opportunities to engage in interviews/discussions with a range of practitioners from the field. In addition, the studio sequence contributes to PC1 by virtue of firm visits — a regular part of the studio travel component. While not all students have equivalent experiences, all students will have been exposed to visiting different practices at some point over the course of their education. Further, DSNS 110/115, a course all our undergraduates take, is a general CoD orientation course for all majors that incorporates firm visits. Covid 19 suspended these, but travel has resumed for our students in Fall of 2021.

PC.1: Co-Curricular Aspects:
In addition to our curricular aspects, there are many mechanisms in place to support our students in their professional journey.

A) Career Service Resources: There are extensive College of Design resources devoted to helping students obtain jobs post-graduation. Students access annual job fairs, and our career service assists them to find internships while they study at ISU. Career Services highlights include:

- **CyHire:** ISU online system that enables employers to post positions and internships for students and alumni, schedule on-campus interviews, promote firm presentations, and register for career fairs. All students have accounts beginning the first semester they are enrolled at Iowa State. The College of Design typically approves 600+ design-related jobs and internships annually. A virtual career fair module was added to the system in Fall 2020.

- **GoinGlobal:** Students may browse location-specific career and employment information for 40 countries, 30 international cities, and 50 U.S. locations. This includes world-wide internship and job postings, work permit and visa information, top employers by location, local non-profits, cultural considerations related to job searching, helpful information when visiting or living in an area, and a database of U.S. employers that have provided sponsorship for H-1B visas.

- **Big Interview:** Big Interview includes on-demand video content related to all aspects of interviewing as well as job seeking, salary negotiation, and addressing challenges such as interviewing when English is a second language, or legal questions. Students may also practice with discipline-specific questions and a variety of interview/interviewer styles and view or share recordings. New Fall 2020/21 features include video playbooks for LGBTQIA+ and neurodiverse students, and AI feedback regarding answer or pitch delivery and alumni access.

- **Design Career Fair:** The CoD hosts this event featuring 180+ professionals representing 95+ employers each spring. Plans are to continue the on-campus fair and add small, virtual fall events beginning in 2021. The spring fair includes an on-campus interview day.

- **Big 12 Virtual Career Fair:** ISU Career Services and career services offices at other Big 12 schools collaborate to host an annual virtual career fair. Offices collaborate to invite employers, resulting in opportunities for students to connect with employers that may not routinely participate in Iowa State fairs. Spring 2021 marked the third year for this event.

- **Career services presentations & programming:** These typically cover elements of job seeking, including resumes, professional communication, job and internship seeking, resources available at ISU, interviewing, navigating career fairs, and more. The most recent academic year included specific content related to job seeking during the Covid-19 pandemic.

- **Employer presentations:** Design Career Services coordinates and promotes employer presentations. Often these are a collaboration with student organizations (AIAS, NOMAS, iaWia) to encourage participation.
• **One-on-one appointments**: Students are encouraged to meet directly with career services staff to discuss goals, job and internship seeking, challenges in application processes, professional application materials, offers, salary negotiation, and more.

• **ISU Career Exploration Services**: A central university office located in Student Counseling Services has offered a career library, career exploration resources and assessments, career counseling, and more. The career library and initial exploration services will transition to online for Fall 2021 but career counseling will remain one-on-one.

• **Additional online resources**: Design Career Services offers additional online/on-demand information related to job seeking and discipline-specific resources.

**B) Faculty Mentors**: Beginning in their fourth year, each undergraduate student is assigned a Faculty Mentor who they can approach with questions about their future trajectories in the field.

**C) Understanding Licensure**: Students are supported by the AXP (Architectural Experience Program) Advisor — currently Rob Whitehead — to help them understand the NCARB process.

**D) Student Groups**: Students are also able to join several groups that help provide them with exposure to licensing and career development. These include:

• **AIAS**: (Faculty Advisor: Shelby Doyle)
  o Pecha Kucha Night annual kickoff hosted by six firms from Des Moines;
  o The AIA Iowa Fall Conference held each October in Des Moines. This is an opportunity for students to connect with professionals and to learn more about the profession of architecture from world renowned speakers and workshops;
  o Lunch-and-Learn events with invited architects — the setting allows for a more casual environment to ask questions and learn about day-to-day life of the profession;
  o Firm Crawls allow students a chance to visit several firms in Iowa.

• **IAWIA**: (Faculty Advisor: Ulrike Passe)
  o monthly group discussions, a mentor program pairing students with business professionals, semester events including Portfolio Reviews and Firm Crawl.

• **NOMAS**: (Faculty Advisor: Mikesch Muecke)
  o NOMA events include portfolio preparation workshops

• **DATUM** (journal and ‘Discourse’ series): (Faculty Advisor: Firat Erdim)
  o Weekly meetings with student led discussions (‘Discourses’) around contemporary topics. In 2021 Datum organized a six-part series highlighting post-graduation professional options

During Covid 19, the work of these groups was limited, but this is expected to resume momentum in the Fall of 2021. A presentation of each of these groups was held in the required Arch 371 class (spring of 2021) to ensure all incoming undergrad students are familiar with the opportunities these groups provide.

**E) Diversity of Professional Opportunities/Career Trajectories**: Our Public Programs committee ensures we invite speakers who represent diverse and alternative practices. While not all students attend each lecture, attendance is often required by one of the mandatory theory courses. Students are thus similarly exposed to a range of voices. Architecture typically hosts at least ten speakers annually, and these offerings are enhanced by other CoD lecture series.

**F) The Interdisciplinary College Setting** ensures students see other kinds of work being produced in the college, showcasing various opportunities in the field of design. Students see other program work in lectures, in College displays, gallery exhibitions, and through encounters with other students in the interdisciplinary studios (DSN S 546). This provides students with an appreciation of the many career opportunities available – including urban and landscape practices, interiors, graphic and industrial design.
PC.1: Strategies for Continuous Improvement/Self-Assessment
This section should be read with reference to 5.2 & 5.3 which provide an overview of assessment strategies.

A) Chair’s Vision: The chair meets regularly with the AAC (Architectural Advisory Committee), to ensure students are prepared for the changing nature of the profession. Hauptmann’s hiring strategies have targeted staff better able to orient students to emerging digital aspects of the profession – not merely in terms of communication, but also in computational for design.

Under Hauptmann’s leadership, year-level prizes have been established that can result in awarded internships. Further, students are now invited to join visiting speakers in ‘post lecture’ gatherings. Prior to Hauptmann’s initiative, guests would have dinner with a small group of Faculty, with student contact limited to lecture Q & A. Hauptmann replaced this with post-lecture events, that students register to attend – fostering informal discussions between students and members of the field, that have on a variety of occasions led to future hiring.

B) Practice Substantive Area: The practice substantive area meets on a regular basis to ensure that coursework is being regularly updated and revised to reflect current issues in practices.

C) Public Programs Committee: The public programs committee meets regularly to develop the speaker series, and to review potential contributions to college-wide speaker initiatives. The committee also advises DATUM on programming opportunities.

D) Career Center Staff: While this office sits outside our department, they ensure that students’ employment opportunities continue to expand and be enriched. The office worked particularly hard during the pandemic to curate alternative venues and support for students.

PC.1: Highlighted Ongoing Enhancements

A) Post Lecture Events (including students): Students now attend post-lecture events with speakers/practitioners. We regularly see upwards of 20 students at these events.


C) Career Center Pandemic Response: Set up of virtual resources to curate job search.

D) Pro Practice: Addition of Firm interviews, showcasing diverse practices (see SC2).

E) Student Mentors: Faculty have had their academic advising role for undergraduate students largely replaced by Advisor Jeremy Miller. This has freed them to focus their energy on student mentoring as it pertains to longer-term goals and professional trajectories. Students are assigned this Faculty mentor in 4th year. All graduate students are mentored by the DoGE, Douglas Spencer.

F) Discourse Series: Datum, the student publication has taken a more pro-active role, by initiating a lecture series. In 2021, this focused on post-graduation career options.

G) New Hires: Recent hires have spearheaded new cutting-edge facilities (robotics lab), and a host of new elective and required courses offerings geared towards future career paths.

H) Clubs: Both NOMAS and IAWIA are new student groups.
3.1: PC.2 Design
The studio sequence anchors design education – consolidating the various components of the degree in an integrated manner that provides students the opportunity to synthesize their understanding of design through spatial explorations. Our studio sequence – both graduate and undergraduate, is exemplary in providing students with a rigorous synthesis of formal expression, structural knowledge, and theoretical integration. Our instructors are mindful of broaching themes of critical importance – with topics aligning with our values of diversity & inclusion, environmental responsibility, innovation, collaboration, and community engagement.

PC.2: Curricular Aspects:
Undergraduate Program:
The undergraduate studio stream is centered around six key studios: Arch 201 and 202 (2nd year), Arch 301 and 302 (3rd year) and Arch 401 and 402 (4th year).

Once students have completed this sequence, they have fulfilled all the SC 5/SC 6 criteria needed for them to enter the profession. Accordingly, our program’s fifth year allows students much greater flexibility. In the first semester (Arch 403), they choose from one of a series of speculative studio options, that explore diverse theoretical. In their second semester, (DSN S 546) they select from College of Design studio options, allowing them to benefit from the College’s interdisciplinary context by working with students from other departments. There is a wide array of these offerings, often co-taught by faculty from different departments. In some instances, students also elect to work with a faculty mentor on a final independent studio.

The following is a summary of the undergraduate studio structure:
- Students enter the department having first completed “DSN S 102” (Design Studio).
- Our first three Architecture (ARCH) studios follow a unified pedagogical approach, with common briefs and topics between sections. Studio groups are assigned.
  - Arch 201/202 focus on form finding, small scale interventions, detail, & human factors.
  - Arch 301 focuses on site, landscape and small to mid-scale projects.
- The next three Architecture studios follow a more flexible format: students choose from a variety of studio briefs, achieving similar education outcomes, but delivered according to instructor preference.
  - Arch 302 (third year) focuses on housing and integrates SC 5.
  - Arch 401 (fourth year) develops a larger-scale complex project and is the final integrative studio, addressing SC6.
  - Arch 402 (fourth year) addresses the Urban Scale – either for those opting for the travel abroad in the Rome Studio, or for those remaining in Iowa.
- The final two studios (Arch 403 and DES S 546) are truly flexible. With professional degree requirements fulfilled, the students in their final year are given leeway to delve into issues of form and theory (403) and interdisciplinarity (546).

This combination – a coordinated sequence followed by greater flexibility in later years – gives students a common foundation in Architectural design and the opportunity for them to pursue specific interests with professors of their choice in later years.

Beginning in 2nd year, we integrate extensive travel opportunities into Studio. Students typically travel to locations across North (and Central) America. This gives students direct exposure to exemplary works of Architecture and Design – in varied world-class cities. Our dedicated Rome Studio (4th year) normally attracts 2/3rds of our student body, who then have an opportunity to appreciate European Architecture, as well as some of the key design precedents of the Western Canon. Finally, Interdisciplinary studios often travel further afield – recent locations have included Peru, Paris, Morocco, and London.

Below is the Undergraduate Design Studio sequence with links to catalogue descriptions:
- Arch 201 (Architectural Design 1, 6 CH)
- Arch 202 (Architectural Design 2, 6 CH)
- Arch 301 (Architectural Design 3, 6 CH)
- Arch 302 (Architectural Design 4, 6 CH)
- Arch 401 (Architectural Design 5, 6 CH)
- Arch 402 (Architectural Design 6, 6 CH)
- Arch 403 (Architectural Design 7, 6 CH)
- DSN 546 (Interdisciplinary Design, 6 CH - see 2020 options).

**Graduate Program:**
The Graduate studio stream is centered around six key studios:
- Arch 505, 506, and 507 (1st year), Arch 601 and 602 (2nd year and advanced standing) and Arch 603 (3rd year and advanced standing).

On completion of this sequence, all students will have fulfilled the SC 5 and SC 6 requirements needed for them to enter the profession. In the first year of the three-year 102 credit program students are introduced to, and become skilled in, the foundations of architectural design, media, and representation. In the second year, the existing cohort are joined by students entering their studies with advanced standing status who are undertaking the 62-credit program. At this stage all students build upon and consolidate their skills in architectural design, media and representation, while expanding their knowledge to extra-disciplinary perspectives addressing the broader societal, environmental, political and economic contexts in which architecture operates. In the final architectural studio, Arch 603, the existing knowledge and skills of the students are further developed and refined in a rigorous project integrating all aspects of their previous study.

In their final third-year semester, students select from options offered by the College of Design Interdisciplinary Studios – DSN 546 – enabling them to benefit from the wider College of Design context by working with students in other departments. There is a range of offerings, often co-taught with faculty from different departments within the college. In some instances, students can work with a faculty mentor on a final independent studio.

The following is a summary of the undergraduate studio structure:
- The first year of the 102-credit program consists of three studios in architectural design, media, and representation:
  - Arch 505 introduces the students to essential skills in architectural design and representation, including the conventions of drawing plans, sections and elevations.
  - Arch 506 expands the students' range of design skills so as to include three-dimensional modelling, craft and digital means of design and representation.
  - Arch 507 is focused on architectural detail in drawing and construction.
- The second year of the 102-credit program, (first of the advanced standing 62 credit program), consists of two studios, each expanding the horizon of design and practice.
  - Arch 601 addresses site-based adaptive reuse for a sustainable and net-zero building
  - Arch 602 is concerned with the relationship of architecture to social, environmental, and community-based issues. This class allows for site visits and field work.
- The third year of the 102-credit program, (second of the advanced standing program), culminates in two studios that feature specialization and refinement of design skills.
  - Arch 603 integrates in one studio all previously taught design skills and knowledge. It includes a field trip to the city in which the design project is located.
  - DSN 546 is a college-wide interdisciplinary class comprising a variety of studio options from which the students can select.
- The final two studios (Arch 403 and DSN 546) are truly flexible. With professional degree requirements fulfilled, the students in final year are given leeway to delve into issues of form and theory (403) and interdisciplinarity (546).
Below is the **Graduate Sequence** with links to catalogue descriptions

- **Arch 505** (Architectural Design and Media I: Mapping, Programming, Building, 5 CH)
- **Arch 506** (Architectural Design and Media II: Materiality and Representation, 5 CH)
- **Arch 507** (Architectural Design and Media III: Design in Detail, 5 CH)
- **Arch 601** (Sustainable Building Design, 6 CH)
- **Arch 602** (Communities, Architecture and the Environment, 6 CH)
- **Arch 603** (Integrative Design, 6 CH)
- **DSN 546** (Interdisciplinary Design, 6 CH - see 2020 options)

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**PC.2: Co-Curricular Aspects:**

Students enrich their design education at ISU through various notable opportunities:

**A) Honors Studio Option (undergrad):** The Honors Program enriches the academic experience for high-ability undergraduates. Students supplement their curriculum with additional seminars, and by adding an Honors component to at least two classes. These can include studio (such as, “Arch 201H”), with students required to integrate a supplemental aspect to their regular studio study.

**B) Year-Level Prizes (graduate & undergrad):** Our Chair aims to ensure that students at each studio level can have their work recognized and rewarded. As of 2021, we now offer **studio prizes** at each year level from 301 onwards, as well as in the graduate program. Projects are selected from each studio level and section, and juries (composed of faculty and external practitioners) select winners. The Jury is often associated with a lecture by a jury member. Prizes below:

- **301:** Richard F Hansen Prize/Lecture (1 project from each studio group)
- **302:** BWBR Prize (2 projects from each studio group)
- **401:** Prize 1: DLR Prize (1 from each section)
- **401:** Prize 2: Nathan and Lisa Kalahar (1 from each section)
- **403/603:** Prize 1: H Kennard Bussard (1 – 2 projects from each section & final Grad work)
- **403/603:** Prize 2: Substance Design (1 – 2 projects from each section & final Grad work)

**C) Internships (graduate & undergrad):** Many students begin summer internships after their 3rd year. This supplements their design education, preparing them for future employment. Students can learn about internship through our AXP (Architectural Experience Program) Advisor, who orients students to the NCARB registration process or can help navigate procedures. Together with the Career Services Office, these resources help students seeking internships, both domestically and abroad. Practices hosting our interns have included: Pickard Chilton; SOM; Cannon Design (nationally); OPN Architects, Neumann Munson and BNIM (locally).

**D) Masters Class (graduate & undergrad):** The **OPN Masterclass** (see also SC4) is a yearly event inviting globally recognized educators or practitioners to hold intensive workshops with our graduate and senior students. While not all students participate, work is on display and all students have exposure to work in progress, final drawings, and reviews.

**E) Venice Biennale Sessions (graduate & undergrad):** Our students have now had opportunities to participate in three editions of the event – one of the most famous and prestigious cultural exhibitions in the world to feature Architecture and Design (see SC 4). While not all students participate, an exhibition of presented work is on display for all to see.

**F) Guest Critics/Super-Review (undergrad):** We often invite distinguished academics and professionals to attend final reviews. In Fall of 2019, the undergraduate 403 studio held a “Super Review” attended by five nationally acclaimed critics. With Covid, the option of hosting external reviewers expanded, and academics from around the world have been attending our reviews remotely. This process provides our students with outstanding feedback on their design work.
**G) Premiere (graduate & undergrad):** The premiere event opens each academic year. Attended by all 2nd and 3rd year undergraduate students, and graduate students, the event features a lecture by a leading practitioner or academic, as well as awards presented to 3rd year students based on the prior year’s performance. The event sets the stage for incoming students, celebrating the importance of design education, student achievements, and an inspiring lecture.

**H) Minors, Electives and More:** Design threads throughout the entire Architecture curriculum, with many electives having small design project components. Students wishing to focus on a particular aspect of design have opportunities to do so by pursuing a minor. The Urban Studies minor has a design focus, as does the newly established Historic Preservation minor.

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**PC.2: Strategies for Continuous Improvement/Self-Assessment** Refer also to 5.2 & 5.3

**A) Department Chair Vision:** Department Chair Deborah Hauptmann joined our program in 2013 and has helped steer our overarching approach to studio.

i) Amongst Hauptmann’s first significant initiative, was empowering instructors to hold greater autonomy over studio topics, aligning these with their own research. Accordingly, studio briefs in 301 and 302, are coordinated but not unified, while studio briefs in 401, 402 and 403 are independently developed by instructors whilst maintaining common learning outcomes. This has raised the bar in terms of quality – faculty are motivated to pursue a variety of innovative studio topics, and students, (starting in 302) have greater agency - selecting their studio topic/instructor from a lottery (with almost all students receiving their 1st or 2nd choices).

ii) A second initiative was to re-consider the number of undergraduate studio courses offered by the College. Prior to 2020, students in their 4th year not attending our Rome study abroad option (approximately 1/3 of the annual cohort) as well as all 5th year spring semester students would take an interdisciplinary studio offered by the College of Design (DSN S 546). Beginning in 2020, the 4th year DSN 546 studio was replaced by Arch 402: focused on urban design. This shift ensures students engage with design as it manifests across a range of scales.

iii) A third important initiative pertains to hiring. The Chair plays a key role in determining the department’s hiring needs. By determining the job calls, and descriptions, the chair sets a tone. New Tenured/Tenure Eligible Faculty hires have enhanced the quality of our studio offerings. In addition, as part of a university-wide initiative, term faculty are now offered enhanced titles and promotional recognitions, allowing the Chair to better attract and retain high-quality term faculty, offering competitive salaries and recognition. Recent hires have given students exposure to instructors who retain award-winning external practices. New position titles are as follows:

- **Teaching Faculty, Title and Ranks:** Lecturer, Assistant Teaching Professor, Associate Teaching Professor, and Teaching Professor.
- **Practice Faculty, Title and Ranks:** Assistant Professor of Practice, Associate Professor of Practice, Professor of Practice
- **Research Faculty, Title and Ranks:** Research Assistant Professor, Research Associate Professor, Research Professor.

iv) A fourth move to support the program’s exceptional design education was to improve the history/theory education - increasing and refining student’s research and critical thinking skills. This was achieved, in part, by holding an external search for the Director of Graduate Education (DoGE) - a position typically held by an internal faculty and the only such move in the living memory of the department. The resulting hire brought in a world-renowned theorist and academic. The new DoGE holds a PhD, which was a tactical move due to the Graduate College’s predisposition towards doctoral education. The vision was to bring three primary areas of graduate education - design, building technology, history and theory - into balance with respect to their standards of education.
B) Design Substantive Area: The initiatives above were vetted by the “Design Substantive Area”, prior to being reviewed and approved by Faculty. The design substantive area reviews various issues identified by committee members, based on their knowledge and expertise (outcomes described in the next section):

- Teaching studio in more speculative ways
- Ensuring students are not overloaded by toxic/non-sustainable studio requirements
- Empowering students in their final Arch Studio (403) to have opportunities to explore diverse topics of theoretical interest – having already completed accreditation/synthesis work
- Questioning “legacy modes” of studio education, and learning from shifts made due to Covid

C) Undergraduate Committee Recommendations: The Undergraduate Committee/Coordinator makes curricular suggestions to the substantive areas. During Covid, the Committee tabled any major curriculum modifications, as professors were already overloaded with the demands of remote teaching. Prior to Covid, the committee asked the design substantive area to review the option of moving to a 5 CH studio sequence. The proposal was assessed by the committee, over the course of a year’s meetings, but was rejected due to the following:

- Concern that this would result in a change in ‘value’ of credit hours, but not time spent
- The desire to preserve studio as the synthesis course where other material is integrated – there was a concern that a reduction of credit hours might erode the importance of studio, particularly as 5 credit hours would be equivalent to some courses in the Tech sequence
- Insufficient clarity regarding the benefits of the change

D) Final Reviews/Walk-through (Cycle: 2 x per year – suspended during covid): It is important for professors in the Architecture studio sequence to understand what is occurring in different years. Prior to the Covid year, this was supported in two direct ways:

- Attendance at reviews/final reviews: studio instructors typically have an assigned reviewer on their panel from the following year in the sequence, to better ensure continuity.
- Walk Throughs: All design studio instructors participate in a ‘Walk Through’ of final work, where instructors explain project and learning objectives, and faculty review student output. In cases where concerns or gaps are noted, the matter is brought up to a faculty meeting.

E) Covid (Cycle: unknown): Covid forced Faculty to test and assess alternatives to the standard studio teaching model. Meetings and retreats held in 2020 and 2021 revealed that certain benefits arose in remote teaching that could be maintained post-covid:

- Miro proved not only effective at coordinating remote work, but also as a means for students to organize and record their process
- A reduction in face-to-face studio hours did not appear problematic – students worked effectively remotely and could be critiqued remotely
- There were advantages of remote reviews, including the presence of numerous external critics who would not normally be available
- Hot desks were tested, but students were vehement about the desire to return to dedicated desk space once conditions returned to normal

F) Departmental Meetings (Cycle: 2x per month) Retreats (3 x per year): As design is core to our curriculum, the assessment of studio effectiveness and strategies are an ongoing topic in our faculty meetings. These discussions supplement those within the design substantive area but involve more faculty input. Issues of concern can then be vetted within the substantive area.
G) Student Feedback (Cycle: 1 x per year, undergrad): The Undergraduate committee had students complete a survey midway through the 2020/21 academic year. During the same period, the UG coordinator met with students from each of the student associations (AIAS, DATUM, and NOMAS). These efforts were intended to offer insights on student concerns, including the effectiveness of remote studio. Feedback was conveyed to Faculty prior to the spring semester.

H) External Recognition/Publications/Awards (Cycle: annual): Our student quality is attested to by their National and International competitions and awards (see SC2). While research is not a key component of their education, undergrad students participate in the National Congress in Undergraduate Research (NCUR). Involvement has steadily increased over the past 5 years.

I) Graduation Placement Rates: The quality of our design education is exhibited by our strong graduate placement rate. For those students who report back, we have the following statistics (figures below are within six months of graduation)

<table>
<thead>
<tr>
<th>Undergraduate (based on 85% reporting back)</th>
<th>Graduate: based on 91% reporting back</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015/16: 97%</td>
<td>2015/16: 100%</td>
</tr>
<tr>
<td>2016/17: 97%</td>
<td>2016/17: 94%</td>
</tr>
<tr>
<td>2017/18: 98%</td>
<td>2017/18: 100%</td>
</tr>
<tr>
<td>2018/19: 90%</td>
<td>2018/19: 100%</td>
</tr>
<tr>
<td>2019/20: 92.5%</td>
<td>2019/20: 92%</td>
</tr>
</tbody>
</table>

J) Department Cabinet (Cycle: weekly) The Department Cabinet (Dept. Chair, DOGE, UG Coordinator, Research Committee Chair), meets weekly to discuss departmental issues. While the cabinet is only indirectly responsible for Design Curriculum, the committee will, on occasion, discuss matters related to it – in particular, co-curricular or logistical aspects that need to be implemented. Recent topics have included the post-pandemic allocation of student studio space, reduction of in-person studio days and gaining from “lessons learnt” during the pandemic.

PC.2: Highlighted Ongoing Enhancements
Shifts in our design teaching come from a synthesis of the above mechanisms. When substantive changes are under consideration, these are discussed in Faculty meetings. Over and above these formal processes, individual instructors always have agency to modify their teaching in response to student feedback and ongoing self-assessment.

A) Studio Scheduling Following Covid (graduate & undergraduate): Following Covid, a shift is underway to reduce studio contact hours to two face-to-face days a week, with one day of remote contact. This will be piloted by some instructors in Fall of 2021. The intent is to provide students with more flexibility, reduce density, and reconsider the need for constant physical presence in studio – a legacy of when student equipment and drafting tables were fixed. It is intended to honor our commitment to our teaching and learning culture, by mitigating unhealthy work practices that place unnecessary financial and time burdens on our students.

B) Desks/Studio Working Arrangements to improve Pedagogy: Due to Covid, we vacated studio space in the “Communications Building” which had previously housed several studios. During Covid, the workspace was deemed undesirable due to an aging HVAC system (with poor air quality as well as temperature control). The workspace was re-envisioned to become a maker’s space, referred to as the Architectural Fabrication Shop (AFS), where dedicated equipment (previously distributed across studios in the college) could be more effectively managed and maintained. Moving forward, the intent is to maintain this area so all students can have a ‘Maker’s Space’ with reliable infrastructure in place.

This shift also means that more students will occupy studio spaces inside the College. To accommodate this, we are modifying desk sizes, and placing studio sections from our 5th year
graduating cohort into our 3rd year, 4th year and Grad studio spaces. This intermingling of students is aimed at giving students greater exposure and inspiration from their peers - seeing work they can expect to complete in their final year. This also addresses concerns relayed by student feedback indicating that they felt inadequately exposed to other work due to Covid.

C) Curricular Enhancements (undergraduate) The following initiatives have occurred:

- **Sequence**: the studio sequence was modified by replacing one of two required ‘DSN S 546’ interdisciplinary studios with Arch 402. Students gain a better appreciation of working at the urban scale, and one interdisciplinary studio is retained in the sequence.
- **Studio Instructors**: New hires have enriched the research quality of topics offered in studio.
- **Autonomy**: Instructors have been granted greater autonomy in developing project briefs, providing students with greater diversity of experimental, theoretical & conceptual offerings.
- **Studio Selection**: Students have more agency in selecting instructors and studio topics.
- **Rome Curriculum/Semester abroad**: the most notable change resulted from the Department Chair’s decision to hire a team of Italian/Roman practitioners and theorist to develop and offer the Rome curriculum. This was a move away from sending faculty from Ames to teach in Rome. Over the past five year we have modified how the 4th year Rome semester is coordinated. To the studio course Arch 402 IT (previously DSN S 546 IT), History course Arch 429, and Drawing course Arch 431, a Theory course Arch 428 has been added and they are taught as an integrated suite. This allows students to experience an integrated and intensive pedagogically designed semester. Course-work now emphasizes the integration of architecture, landscape, and urban scales. The program also now hosts a lecture series produced in collaboration with Rome’s National Museum of 21st Century Art (MAXXI). During the virtual semester Spring 21, it hosted a three-part seminar featuring architects from across Europe.
- **Vertical Studio Experience**: With two new hires this Fall, we initiated a vertical studio experience between third and fifth year: offering added peer-to-peer learning and exposure.
- **STRATTAA Publication**: A new student publication/yearbook of undergraduate student work was initiated in 2020. This follows from results from surveyed students who reported a lack of exposure to peer work. The publication will continue in the years ahead.

D) Curricular Enhancements (graduate): Under the direction of the new DoGE, the following enhancements and changes to the curriculum have been undertaken, or are in progress:

- The contents of the summer semester studio (Arch 507), which are focused on computational and 1:1 scale drawing and modelling are to be incorporated within the classes for the Fall and Spring semesters (Arch 505 and Arch 506). We have found that many of our students use the summer semester for internships and other means of financially supporting themselves, and/or to return to be with their families (especially international students). Given the strained economic circumstances experienced by many students, we can no longer justify placing the double burden of making them unavailable for employment while charging them a further semester’s study fees. For these reasons, and because of the problematic nature of organizing and undertaking a meaningful design-build project over the summer, we also intend to drop Arch 581 from the curriculum. After lengthy discussion in the graduate committee, with all teaching faculty involved, we have agreed that Arch 505 and Arch 506 can, with small adjustments to the existing syllabi, accommodate the contents of Arch 507. The order of Arch 505 and 506 will also switch, so students begin their studies in the material realm of fabrication before progressing to representational methods and conventions.
- Up until the academic year 2019-20, the Spring semester of second year required study on one of the interdisciplinary/interdepartmental studios, DSN 546, run by the college. This meant that for advanced standing students, only 2 out of their 4 required studios were taught internally. Accordingly, the DoGE, in consultation with the Chair, reintroduced Arch 602, a class formerly taught and still on our catalog. This class, focusing on the relations between architecture and its urban context, was taught in the Spring of 2019 as the Green New Deal studio, and in 2020 as the Green New Deal Superstudio (an international coordination of such studios).
• From the academic year 2021-22 onward we intend that Arch 601 and Arch 602 switch places in the curriculum, so that the broader economic, political and environmental contexts of urbanism can be addressed before these are focused upon in the Arch 602 Net-Zero studio. Additionally, the greater knowledge of science and technology possessed by students, at this later stage in their education, will serve them in meeting the rigorous demands of Arch 602.

F) Co-Curricular Enhancements (graduate & undergraduate)

• Biennale Sessions (See SC 4)
• Masters class (See SC 4)
• Public Programs Enrichment: We are extremely proud of the quality and variety of speakers that our students have access to in our public program series - which features local, national and international speakers, showcasing a variety of research and practice trajectories. (See PC1). Many past lectures can be accessed on our youtube channel.
• Workshops/Symposia/Colloquium: A variety of design-related events attended by our students as part of required classes included the following:
  o Urban Design Colloquium: ‘Housing with Civility’ required for all Arch 302, 2019
  o Adaptive Facades Symposium (2018), required in technology sequence classes
  o CyBorg Sessions: Women in Robotics (associated lecture required) 2017
  o What is the Urban: Registers of a World Interior, 2015, required in HTC courses
  o Rome Round Tables: Design and the City (Spring 2021)
3.1: PC.3 Ecological Knowledge & Responsibility

Ecological responsibility is incorporated across the entirety of our graduate and undergraduate Tech Sequence, with the emphasis on fostering the technical skills needed to mitigate these issues. This sequence is described at length in SC1, 3, 4, 5, & 6. Thus, while PC3 is a recurrent aspect of our technology stream, we interpret PC 3 as pertaining less to technical aspects, and more to the general ethos we instill across other courses: emphasizing the power, responsibility and agency placed upon us as design professionals.

In the face of climate change, the need for designers to have an awareness of our responsibilities has become ever more urgent. This is emphasized in the Undergraduate program in Arch 220 (contemporary architecture) Arch 230 and 231 (communication) and Arch 301 (3rd year studio). In the Graduate program, Arch 601 hones in on the building performance aspects of environmental stewardship, while Arch 602 addresses the need to understand and address environmental issues as implicated in social, political and economic concerns. Over the past two years, for instance, Arch 602 has addressed this need by engaging with the role of design in the proposed Green New Deal, inviting one of its authors, Billy Fleming, to speak directly to the students of this class, and to the department as a whole about his work. An array of optional/non-curricular components - minors, double degrees, option studios, etc., also emphasize PC3.

PC.3: Curricular Aspects:

Undergraduate
- Arch 220 “Contemporary Architecture” - the role of designers in ensuring planetary welfare.
- Arch 230 & 231 “Communication I and II”: Each course incorporates parametric modeling to study daylighting conditions, in conjunction with studio work. The integration of this component emphasizes the need to consider climate responsiveness in the early stages of design.
- Arch 301 “3rd year Studio”: Emphasizes environmental awareness, ecological phenomena, and integration of site forces. Work involves study of a rural site, and its natural processes.

Graduate and Undergraduate
- Arch 582 “Professional Practice” includes a module titled “Context and Community” in which students are assigned reading associated with sustainability in design. It has also featured guest presentations by a licensed architect with a successful sustainability consulting practice.

Graduate
- Arch 596 “Landscape & Society” attends to and engages with environmental history in relation to context and conditions of capitalism, colonialism, trade, and resource extraction. Students gain an understanding of and critical reflection upon landscape as medium of governance, and of how landscape is implicated in processes of ideological naturalization and legitimation.
- Arch 601 “Sustainable Building Design Studio” instills in students a holistic understanding of the dynamic between built and natural environments, enabling future architects to mitigate climate change responsibly by leveraging ecological, advanced building performance, adaptation, and resilience principles in their work and advocacy activities.
- Arch 602 “Communities, Architecture and the Environment Studio” addresses the relations between infrastructure, communities, environmental design, and environmental justice. It explores the societal and historical forces shaping land ownership and development. Students consult with communities and their representatives in the development of community design projects.

Electives (Graduate and Undergraduate)
While not all students take all electives, we interpret PC3 as pertaining to developing within students a sense of their responsibility and agency in this area. Accordingly, the roster of course offerings that students see each year (in posters, work in the college, exhibitions), helps to emphasize the value we place on ecological responsibility. Several of our recent permanent catalogue additions relate explicitly to these concerns (see catalogue links):
• Arch 451/551x: Whole Building Energy Performance
• Arch 558: Sustainability and Green Architecture
• Arch 522: Complex Adaptive Systems for Resilient Cities and Architecture
• Arch 576: Berlin Study Abroad (description below):
  o Cradle to Cradle Infrastructure Transformation towards Carbon Neutrality by 2030. The course takes students for study abroad where they develop an environmental performance-based workflow to create a design. Work is exhibited upon return to Ames in the College Atrium.

PC.3: Co-Curricular Aspects
A) Minors (undergrads): We offer minors in Environmental Studies, and Sustainability. Students can pursue these during their degree without requiring an additional credit hour load.

B) Double Degrees (graduates): M Arch students can pursue a double degree in Architecture (MArch) / Sustainable Environments (MDesSE)

C) Option Studios (graduate & undergrads) Our 546 DES S option studios, often engage in topics related to PC3. In Spring of 2021, related topics included (see links):
  - Design for Sustainable Development - Focus on Africa
  - Ecologies of Repair: A Green New Deal Superstudio
  - Farmscape: Parametric Design of Agriculture
  - Kite Choir: Art and Environmental Awareness/Activism

D) Seminars/Symposia: In 2018, the department hosted an ‘Adaptive Facades’ Symposia, attended by 140 of our students. Speakers provided inputs on topics below (followed by a panel):
  - Façade Roadmap
  - Transparency and Innovation
  - Climate Responsive Building Facades
  - Taming Smart Materials to Behave
  - Filtering the Environment

E) Research Clusters: In 2015, the department began to consolidate faculty research interests through the creation of several Research Clusters. Primarily aimed at Graduate research, one of these, ‘Theories & Practices for Sustainable Architecture’, emphasizes PC3 concerns.

PC.3: Strategies for Continuous Improvement/Self-Assessment (see 5.2 & 5.3)
A) Chair’s Vision: In recognition of the importance of sustainable building performance, the Chair put out a job call in 2020 for a new position asking for expertise in Environmental & Adaptive Systems Performance. The call reads in part, “The successful candidates will support the department through teaching and research that consolidates and expands upon our robust research portfolio and our nationally recognized and award-winning building-technology curriculum”. Chengde Wu joins us Fall 2021 to help provide leadership in this area.

B) Substantive Areas/Studio and Tech Coordination (ongoing): There are ongoing efforts to better integrate course material between classes – ensuring that sustainability is being integrated at the onset of design, rather than siloed into other courses. Instructors have initiated many new topical integrations straddling between technology, communications, and studio. In 2019, studio deliverables were updated to include performance-based design (ARCH 302/401), and instructional videos were developed to help studio faculty integrate performance-based metrics.

C) HTC Substantive Area (typically meets 4 – 6 times annually): The HTC substantive area underwent significant restructuring of the curriculum so as to update elements of the required
sequence. As part of that effort, instructors in the History/Theory sequence integrated more emphasis on sustainability concerns into their curriculum, particularly in Arch 220.

**D) Faculty Meetings/Graduate Department Meetings** (monthly): The introduction of the Research Clusters was a significant discussion item in these meetings, in efforts to identify synergies between individual faculty interests and consolidate these into focused groups. Clusters, including the Theories and Practices for Sustainable Environments cluster, are now highlighted on the department webpage, and help serve to attract students.

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**PC.3: Highlighted Ongoing Enhancements**

**A) Miller Grant:** In 2014, Faculty received a grant to support and develop enhanced tech integration and sustainability strategies in our required courses.

**B) Faculty/New Hire:** In 2021 Chengde Wu joined our department, adding expertise in the areas of sustainability and performance modeling. In addition, we have improved the TA cohort who supports the preliminary Tech Sequence, by employing graduate TAs who have already completed their foundation coursework.

**C) Software:** Software updates have continuously been integrated into the program, ensuring our students are up to date and have access to current programs. Faculty are supported in this area through ongoing professional development funding.

**D) New Electives:** Several new courses (outlined in Curricular aspects), have been permanently added to our Calendar. These place an emphasis on issues of Sustainability.

**E) Research Clusters:** Creation of the Sustainability Focus group.

**F) Masters of Design in Sustainable Environments:** This new program (2014) enables MARCH students to pursue a double degree in Architecture and Sustainability.

**G) Minors:** Greater visibility of related Minor options, with new courses added.
3.1: PC.4 History and Theory
We are deeply committed to ensuring that our students gain a solid grounding in the histories and theories that underpin and enable critical reflection upon architectural work. Our Graduate and Undergraduate theory sequences – which combine a common core of required courses supplemented by elective offerings – provide an outstanding basis for our students as future contributors to the profession.

PC.4: Curricular Aspects
Undergraduate
The History and Theory stream is supported by three core courses in the undergraduate sequence: Arch 220 (Contemporary Architecture), Arch 221 (Histories and Theories of Architecture to 1750) and Arch 322 (Histories and Theories of Architecture after 1750). In addition, the required “Arch 371” (Human Behavior and Environmental Theory) has topics situated at the interface between theory and practice, with portions of its content relating to both PC4 and SC2. In addition to the required sequence, undergraduate students applying to the department are required to take the preparatory course “DSN S 183” (Design in Context).

Upon completion of the required theory sequence, students fulfill an additional 9 credits of history and theory coursework, selecting from an array of HTC (History, Theory Culture) offerings. These are typically in the form of seminar classes that shift based on faculty interest and expertise.

The combination of the required sequence, as well as the selected elective, offer all students a solid foundation in the principles of theory (treated from both western and global perspectives), after which students are provided with opportunities to delve into an array of topics suited to their own curiosity and interests. This common foundation, alongside flexible specialization keeps our students deeply engaged in history and theory throughout their entire degree.

Finally, our Undergrads complete their education with a more theory-oriented studio, Arch 403, which gives them an opportunity to synthesize the theoretical knowledge they have gained within a capstone project. Arch 403 (Architectural Design VII 6 CH).

Required Undergraduate HTC Sequence (see links for catalogue descriptions):
Arch 220 (Contemporary Architecture, 3 CH)
Arch 371 (Human Behavior and Environmental Factors, 3CH)
Arch 221 (History of Pre-Modern Architecture, 3 CH)
Arch 322 (Histories and Theories of Modern Architecture, 3 CH)

In addition to the required sequence, students who have a deeper interest in topics falling under the umbrella of HTC have opportunities to enrich their knowledge by pursuing a minor in:
- Historic Preservation (as of Fall, 2021)
- Critical Studies in Design
- Urban Studies

Graduate Program
The required history and theory sequence comprises four seminars on the built environment: Arch 595 (History) and Arch 596 (Landscape and Society), taken in the first year of the 102-credit program, and Arch 597 (Theory) and Arch 598 (Topical), taken in the second year of the 102-credit program (also the first year of the advanced standing program).

This sequence is logically structured so as to enable a progressive and cumulative knowledge of history and theory in architecture, and the adjacent fields of landscape and urbanism. Arch 595 presents the students with an overview of architectural history in the form of a survey course, while introducing the students to methods of research. Arch 596 addresses more specific and focused histories concerning the relations between society and nature and the representation of these. Students are also introduced in this class to methods of reading, annotation and essay construction.
These skills and practices are further developed in the rigorous encounter with the history and perspectives of architectural theory in Arch 597. Arch 598 offers the students a perspective on architectural history, theory, and practice, beyond that of the Euro-American West, while consolidating the previously accumulated knowledge and skills in the process of this.

**Required Graduate HTC Sequence (see links for catalogue descriptions):**
ARCH 595: Seminar on the Built Environment I: History (5 CH)
ARCH 596: Seminar on the Built Environment II: Landscape and Society (5 CH)
ARCH 597: Seminar on the Built Environment III: Theory (3 CH)
ARCH 598: Seminar on the Built Environment IV: Topical Study (3 CH)

**Electives (Graduate & Undergraduate):**
*Undergrad* Students choose 9 credits (3 courses) from the following options. While there is no requirement that *Graduate* students take HTC classes other than those required, students may choose from the electives listed below in accordance with their own particular program of study.

Electives currently meeting HTC requirements (catalogue additions since 2015 listed in bold)
- Arch 321 History of the American City
- Arch 422 Byzantine Architecture
- Arch 429 Topics in Italian Architecture: History
- Arch 486 Design Made in Italy
- **Arch 417/517 Big and Tall: A History of Construction**
- Arch 518x Balkans to Baltics: Architecture and Innovation in Europe’s Middle
- Arch 521 The Cinematic Architecture of the City - Urbanism in Film
- Arch 522 Complex Adaptive Systems Theory for the Design of Built Environments
- Arch 525: Meaning and Form in Architecture
- Arch 567: Preservation, Restoration, Rehabilitation, Cultural Heritage & Technology
- Arch 575 Contemporary Urban Theory

In addition to the courses listed above (which are regularly offered), a range of courses (3-4 each semester) fall under a ‘topical HTC studies’ under course code Arch 528. This generic course codes offer instructors the opportunity to develop new material and topics. Specific offerings vary each semester and are therefore not included above.

**PC.4: Co-Curricular Aspects:**
Students may delve deeper into theory topics through a number of notable opportunities:

- **Public Program Lectures** (both departmental and collegiate offerings – in some cases attendance is mandatory for a theory class).
- **Masters Class** (an opportunity to supplement regular studio with a focused intensive seminar led by an external expert). While not all students participate, work is on display and all students have exposure to work in progress, final drawings, and reviews.
- **DATUM**: A student-led, faculty supported architectural publication, holding weekly discussion meetings, that highlights theoretical issues in thematic issues.
- **Biennale Session**: Students in the Architecture program have now participated in three editions of the event – one of the most famous and prestigious cultural exhibitions in the world to feature Architecture and Design. (see below for presented themes)
PC.4: Strategies for Continuous Improvement/Self-Assessment

A) Department Vision: With the 2013 hiring of Deborah Hauptman as Chair, the department committed to maintaining and enhancing an already rigorous theoretical dimension within its curriculum. Prior to joining ISU, Hauptmann was the director of the Delft School of Design (DSD), an internationally recognized part of TU Delft known for its contribution to cutting-edge theoretical discourse. Hauptmann guides the department to ensure students receive a theoretical grounding that is second to none. She is supported by the Chair’s Cabinet (see 5.2 & 5.3). While not directly intervening in curricular decisions, the Chair plays a key role through a combination of job call initiatives, hiring decisions, course staffing, and funding or support of non-curricular events.

To these ends, Hauptmann began her tenure as Chair by initiating several new hires intended to bolster the teaching faculty. Amongst these, Ross Exo Adams, Ivonne Santoyo-Orozco, Sharon Wohl, Vladimir Kulić, and Douglas Spencer (DoGE), Cruz Garcia, and Nathalie Frankowski, have helped infuse energy and vision, breadth and depth within our program’s theoretical discourse. This is reflected in modifications to the required HTC curriculum. Other shifts are broader in scope and involve how historical and theoretical concerns are woven throughout the department. All students share in being immersed in a setting steeped in the importance of theoretical discourse.

Hauptmann has also enriched our curriculum by providing faculty more opportunities to teach seminar courses in their areas of expertise. Courses run experimentally – using a generic course code appropriated for different topics. This allows faculty, both current and incoming, to test new ideas. Once a course has run successfully, it can be entered into the catalogue of regular offerings.

B) Substantive Areas: The HTC (History, Theory, Culture) Substantive area is currently chaired by Vladimir Kulić. Prior to Kulić, Sharon Wohl chaired the HTC substantive area, and a number of changes to the required undergraduate sequence were made. These addressed concerns identified by the substantive area members, based on their knowledge and expertise:

- A desire to teach history and theory in a more integrated manner
- A desire to expand the teaching of history and theory beyond the Western ‘canon’
- A desire to introduce students to contemporary theoretical concerns earlier in the curriculum – inspiring their curiosity and interest
- Addressing the questions of social justice and inclusion more explicitly
- Including environmental history

In pursuit of these objectives, a year-long discussion occurred, culminating in changes to the required HTC sequence and descriptions (approved by the faculty as a whole). There were also smaller changes made in the past two years to streamline the language and make it more geographically inclusive. Changes were concurrent with new hires taking ownership over aspects of the sequence.

C) Covid Impact: Following the 2020-2021 academic year (of hybrid instruction), instructors assessed which aspects of teaching improved due to the pandemic. These were reviewed during our mid-year retreat, during which several observations were made:

- Participation often increased via questions being posted in the ‘chat’ pane of Zoom and Teams meetings, and through the use of platforms such as Miro and Perusall
- Students appreciated recorded videos which they could access or replay, slow down, or review
- Instructors were able to make better use of discussion sessions – something difficult or impossible in large lecture halls, thereby promoting greater engagement.

Comments obtained from student course evaluations confirm many of these observations. Accordingly, several HTC courses will retain aspects of hybrid teaching. This will be tested in 2021/22 academic year and reviewed during subsequent faculty retreats.
PC.4: Highlighted Ongoing Enhancements

A) Undergraduate Course Enhancements:
   i) Arch 220 (Contemporary Architecture, 3 CH): is a new course (2018) highlighting current themes for students when they first enter the program. Features of the course include:
     - Taught by new faculty
     - Integrates more aspects of global curriculum
     - Develops a more holistic integration between history and theory
     - Includes greater student participation (discussion groups) and reflective assignments (as opposed to quizzes), to ascertain student learning outcomes in more varied ways
     - Initiates incoming architecture students directly into contemporary theoretical concerns – rather than waiting until later years to broach these topics (including sustainability, equity)
   
   ii) Arch 371 (Human Behavior and Environmental Theory) transitioned in the required course sequence from being a third year to second year (entry) offering. Course content was significantly modified with changes to the faculty teaching. These changes resulted in:
     - Highlighting contemporary behavioral aspects, to supplement classic behavioral approaches: including ‘the Right to the City’, Power and Inclusion, Nudge theory, bias and more
   
   iii) Arch 221 (History of Pre-Modern Architecture): shifted position in the HTC sequence in 2018 to be taught later in the sequence when students have the foundation with which to better appreciate the content. The shift also involved greater inclusion of global perspectives in the content.

   iv) Arch 322 (Histories and Theories of Modern Architecture, 3 CH): is a modified course (2018) that now integrates how history and theory are taught in a more holistic manner.

B) New Hires (Graduate and Undergraduate): The Graduate history and theory sequence has been enhanced by the introduction of two internationally recognized experts in architectural history and theory - Vladimir Kulić (Arch 598) and Douglas Spencer (Arch 596 and Arch 597) – with the respective knowledge and experience they have brought to this element of the curriculum. In 2021 Cruz Garcia and Nathalie Frankowski join our department, and alongside of Sharon Wohl (2014 hire) are contributing to the undergraduate theory stream.

C) Course Sequence (Graduate and Undergraduate): The graduate sequence is being refined on an ongoing basis, though discussion and feedback, so as to ensure that is logically developed, cumulatively progressive, and topical. In this respect we have decided to switch the order of Arch 596 (Landscape), taught in the Spring semester of the first year, and Arch 597 (Theory), taught in the Fall semester of the second year, so that all students of Arch 598 (Global), including those of advanced standing status, will have taken Arch 596. This decision was based on the recognition that Arch 596 provides material that can usefully be built on in Arch 598. The undergraduate course delivery was modified in 2018 so as to bring in contemporary insights at an earlier stage, and to integrate historical and theoretical content more holistically in course delivery.

D) New Permanent Elective Offerings (Graduate and undergraduate)
Since 2015, the following HTC electives have been added to the ISU Catalogue of courses:

   - Arch 417/517 Big and Tall: A History of Construction
   - Arch 518x Balkans to Baltics: Architecture and Innovation in Europe’s Middle
   - Arch 521 The Cinematic Architecture of the City - Urbanism in Film
   - Arch 522 Complex Adaptive Systems Theory for the Design of Built Environments
   - Arch 525 Meaning and Form in Architecture
   - Arch 567 Preservation, Restoration, Rehabilitation, Cultural Heritage & Technology
E) Co-Curricular Enhancements (Graduate and Undergraduate)

i) Biennale Sessions: Faculty have now led students in curating three Biennale exhibitions: each tied to the theoretical perspectives of the Biennale’s theme. Links to exhibits below:
- Caution: Wet Floor (2014)
- Disrupt/Displace (2016)
- Weather Permitting (2018)

ii) Research Clusters were developed to help focus attention in areas where faculty share areas of interest and expertise. These guide student research for those wishing to engage at the Masters’ level (MSc) while helping Faculty identify others for collaboration. Cluster themes are:
- Intersections of Architecture, Aesthetics & Technology
- Social Formations of Architecture and Urbanization: Histories and Theories
- Theories and Practices for Sustainable Architecture

iii) Masters Class: The first Masters Class occurred in 2015, and was led by Elia Zenghelis (co-founder of OMA). Zenghelis was so impressed by the experience that he returned for a second year, working with students (both graduate and senior undergraduate) to produce stunning projects that considered theoretical aspects of urban form and typology. Subsequent session include:
- Daniel Fernández Pascual & Alon Schwabe, Cooking Sections (2017)
- Neyran Turan (2018)
- Yoshiharu Tsukamoto, Atelier Bow-Wow (2019)
- David Gersten and Frida Foberg, Arts, Letter and Numbers (2020)
- Carole Levesque, in partnership with L’Université du Québec à Montréal (2021)

iv). Symposium/Colloquia/Round Tables:
- In 2016 the Department of Architecture hosted a two-day Symposium “What is the Urban? Registers of a World Interior”, featured 16 presenters from around the world, including our faculty and others from within ISU. The conference theme considered, “Can discourses on circulation, logistics and network theory be marshaled to confront the trans-scalar qualities that we observe in a spatial order visible at once at the planetary and the bodily scales? What kind of spatial theories can reconcile the geopolitical with the biopolitical?” Senior students were required to attend as part of the HTC sequence.

- In 2018 The Architecture program co-sponsored an Urban Design Colloquium organized by the Urban Design Program, that included four invited lectures/seminar sessions pertaining to urban theory. One of these, focused on housing, was mandatory for Arch 302 students (whose studio focused on housing). A companion exhibition of housing projects in the Netherlands was on display at the College as part of the event.

- In 2021 Faculty from the Rome Program organized a series of Round Table events on the theme of “Design and the City”. The three-part online series hosted lectures from European Urbanists and practitioners and was required for students in the Rome Studio, and available to all students.


v) Super Review: In 2020 the Arch 403 final speculative studios hosted five renowned guest reviewers in their final critique/review sessions.
3.1: PC.5 Research and Innovation

**PC.5: Curricular Aspects:**

**Graduate and Undergraduate**

Arch 482/582 plays a supportive role in meeting PC 5. Students research practice-related topics tied to contemporary discourse. Popular topics of this research in Fall of 2020 included sustainability in practice, business issues, studio/firm culture, universal design, adaptive reuse and context, technological change, and effects of the pandemic. Numerous other assignments include a topic proposal, a paper that includes a research summary, and a poster to present findings.

**HTC Electives:** Each semester we distribute a list of research-focused History, Theory, and Culture (HTC) seminars, offered by our departments, to all undergraduate and graduate students. Undergrad students are required to fulfill 9 credit hours of these electives.

**Professional Options:** In addition to the HTC electives, we have a variety of other professional electives that emphasize PC 5 (Arch 451, 433, 434, 436, 528B, 530, 531, 534, and 538). Undergrads must complete 9 credit hours of these professional options, taken from either our department or College of Design offerings.

**Undergraduate**

Arch 231 Advanced Design Representation, introduces processes and methods for material and building technology research. Topics include planning, implementing, and testing custom computer scripts, implementing and evaluating computer simulations, developing collaborative workflows and representations, and conducting collaborative digital fabrication research.

Arch 347L and Arch 445/445L (technology sequence) play supportive roles in this category, primarily by transferring building science and technology issues to the companion studio courses.

Arch 403 (studio) plays a supportive role in fulfilling SC5 The studio is focused on “innovative research that is academically rigorous, critically informed, speculative, and design-led”. Students are challenged to make visible what is invisible, and give voice to stories not heard.

**Graduate**

In addition to the teaching of science and technology detailed in SC5, the M Arch curriculum explores and develops other practices of research and innovation. Graduate Research consists of three core strands around which research and innovation are pursued:

- Social and Spatial Formation of Architecture and Urbanization: Histories and Theories
- Intersections of Architecture, Aesthetics and Technology
- Theories and Practices for Sustainable Architecture

Arch 506 (studio) cultivates an iterative design process informed by feedback from full-scale fabrication and/or large-scale models, used to assess tectonic, performative, or experiential design aspects.

Arch 596 and Arch 597 (theory sequence) explore and employ collective means of research in the fields of architectural history and theory. Collaborative annotation and the creation of marginalia are employed, using platforms such as Perusall and Miro.

Arch 602 (studio) extends the scope of architectural research to include geological, social, and environmental histories of site, and the ways these intersect. It provides innovative methods of research for architects, going beyond the tokenism of client consultation toward a deeper understanding of community needs facilitated by direct interaction with communities and grassroots organizations.
**PC.5: Co-Curricular Aspects:**
Many additional opportunities exist for students to engage with research and test ideas in the field.

**DATUM**, the student-led and faculty-mentored organization publishes one or more issues annually about work/research completed by students either in seminars or studios. Students typically reflect on their own work, or that of others, in written and visual form. In the past, student editors have included interviews with faculty about their research or transcribed dialogues with visiting lecturers.

**Public Programs** (with student representatives) plans the lecture series, special events such as the OPN Masterclass, and the Venice Biennale sessions - which require faculty to submit competitive proposals for pedagogical research in which students play a major role.

**Research Centers:** In addition to these venues, students can participate in one of the university research centers, such as the Center for Building Energy Research (CBER) whose director is an architecture faculty. Further, campus wide research options open to students and faculty are available at the Centers, Institutes, and Initiatives section of the ISU website.

**Independent Study:** In both undergraduate and graduate programs students have opportunities to work directly with faculty on applied/theoretical research through our ARCH 490/590 independent-study courses. For these courses, students identify faculty they wish to work with, define the scope of the research, outline deliverables and a schedule, and sign a contract with the faculty involved.

**MS Degree:** Applicants to the grad program with a prior professional degree are directed to the MS, research-oriented program of study.

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**PC.5: Strategies for Continuous Improvement/Self-Assessment**

**A) Substantive Areas:** The need for research and innovation is an integral part of each of the substantive areas and is often a topic of deliberation in ongoing meetings.

**B) CASTLE:** A student fee is applied to enhancing technology infrastructure. Our CASTLE committee, with student input, assesses where these fees can best be designated.

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**PC.5: Highlighted Ongoing Enhancements**

**A) New Hires and New Infrastructure:** Since our last accreditation we have hired a Presidential High-Impact faculty (with support for this position coming in equal parts from the university, the college, and the department) to engage students in the study and use of advanced tools in digital fabrication and design/build initiatives. The faculty, Shelby Doyle oversaw the ideation and implementation of the Computation and Construction Lab (CCL) which holds $800,000 worth of equipment for fabrication (3D printing and CNC machines) available to any student in the department.

Further investment in the CCL lead to the Architectural Robotics Lab (ARL), which is home to two KR 10 R1100 industrial robots, and is now housed in the recently opened Student Innovation Center (available to any student on campus). The ARL "explores the emergent field of research, design, and construction utilizing robotic technology." It is an "initiative of the ISU Department of Architecture that works to connect developments in computation to the challenges of construction through teaching, research, publication, and exhibition. A primary tenet of this work is the democratization of access to and knowledge about technology in architecture, specifically creating opportunities for our students to learn and create with technology." Part of the implementation process for the ARL involved a robot workshop that was funded by an ISU Inclusion Initiatives Grant ($5,000).
Other new hires feature those who work at the intersection of research and teaching. For example Douglas Spencer (2018), Vladimir Kulic (2019), Nathalie Frankowski, and Cruz Garcia (both 2021).

**B) Funding:** Faculty received a 2016 Miller Grant ($14,000) to study how digital methods could be applied in classrooms and studios, and a recent external Council on Tall Buildings and Urban Habitat (CTBUH) grant ($25,000) to fund student research on digital modeling for a faculty-led historic skyscraper project.

**C) Off Campus Initiatives:** Student-based/faculty led research and innovation includes participation in the Venice Biennale (2014, 2016, and 2018), as well as research undertaken at Black Contemporary - an experimental site for thinking, drawing and design.

**D) Student Research:** Undergraduate research is supported by ISU through the Undergraduate Research Assistantship (URA) program that is tied to financial aid. Students are encouraged to participate in the annual Symposium on Undergraduate Research and Creative Expression where faculty help students prepare and publicly present their research. A website dedicated to many resources for undergraduate students interested in research is available at the university level.

**E) Technology:** Other competitive grants that support innovative research using digital tools (available to any student on campus) are provided through the Committee on the Advancement of Student Technology for Learning Enhancement (CASTLE) which uses a student technology fee to improve access to technology on campus. Architecture faculty won two grants ($35,000 each) to bring 25 large LCD screens for collaborative teaching into architecture studios, and a CASTLE grant was also used to purchase a robotic arm ($50,000) for teaching and student-based research.
3.1: PC.6 Leadership and Collaboration

Students have multiple opportunities to cultivate leadership skills, and experience multidisciplinary teamwork. As a land grant university, we take seriously our responsibility to collaborate and consult with community organizations and representatives. We emphasize collaborative work in almost all studios: requiring students to negotiate to advance their designs. Students alternate between reflection and making, adjusting their own perspectives vis-à-vis the studio project and their collaborators’ positions. This helps them develop as leaders: comfortable with conflict and differences of opinion, and preparing them for the practice of architecture where collaboration, especially between disciplines, is the standard.

PC.6: Curricular Aspects

In the *undergrad curriculum*, PC6 is addressed in fourth and fifth-year studios (*ARCH 401, 402, 403*), while in the *graduate curriculum* *Arch 506 and Arch 602* studios contribute to this. Both graduate and undergraduate curriculums share Professional Practice (*ARCH 482/582*) and *DSNS 546* (interdisciplinary studio). In these courses students learn that problems they are asked to solve are too complex for a single individual and require collaboration – often across disciplines.

*Graduate and Undergraduate*

*Arch 482/582*: Professional Practice, plays a supportive role in relation to PC 6. This class uses writings from professional practitioners and academics to illustrate the range of stakeholders involved in architectural projects and asks students to reflect on the resulting challenges and implications. It also addresses effective methods for communicating with stakeholders, describing project management procedures, techniques, and methods.

*DSNS 546* is a college-wide interdisciplinary class comprising a variety of studio options from which the students select. Architecture students choose from one of these studios in the final semester of their studies. The common element to these studios is that architectural students work together with those from other departments in teams and address the kind of complex design problems best served through an interdisciplinary approach.

*Undergraduate*: Teamwork is emphasized in all upper-level studios (*Arch 401, 402 & 403*), with projects typically involving groups from 2 to 5 students depending on the scope. Students learn to be respectful of other viewpoints and become more mindful of their responsibilities to the group.

*Graduate*: Many studios and seminars provide opportunities for students to develop leadership skills, with teamwork often, if not always, involved. *Arch 506 and 602*, in particular, contribute to understanding leadership, multidisciplinary teamwork, collaboration, and collaborative practices:

*Arch 506*: Architectural Design and Media II studio, plays a supportive role in relation to PC5. Students engage in collaborative work through a variety of innovative exercises and methods, sometimes working in pairs, at other stages working in self-selected teams. These exercises are designed to explore how design practices can be narrated, communicated, and developed through multiple forms of writing, drawing and modeling. Students engage intensively with, and contribute to the development of each other’s work at this formative stage of their studies.

*Arch 602*: Community, Architecture & Environment, plays a primary role within the MArch program in its commitment to the development of skills in leadership and collaboration, to multidisciplinary teamwork, and to working with diverse stakeholders. Working in multidisciplinary teams inclusive of students from other departments in the College of Design - such as Landscape and Industrial Design - students address the historical, social, and environmental conditions of a specific site under prospect of development. They explore and propose means of informing wider publics of the environmental and social impact of land use and development, and alternative designs in which these may be more equitably undertaken. Students are informed of pertinent issues and concerns, and the community stakeholders to be taken into consideration, through the involvement of the Iowa Citizens for Community Action organization.
**PC.6: Non-Curricular Aspects (graduate and undergraduate)**

**A) Public Programs** offers multiple venues for students to experience leadership as modeled by faculty, lecturers, and practicing architects. This includes the **OPN Masterclass, Venice Biennale Sessions**, and public lectures given by leaders from both academia and practice.

**B) Student Organizations** (AIAS, IAWIA and NOMAS (see PC1): offer students opportunities to practice and develop team-building skills. Members of these organizations address how they may represent and act on behalf of the interests of the constituent study bodies that they represent.

**C) DATUM** The DATUM group organize the assignment of roles and responsibilities for the journal’s contents, the contributors invited, and the themes for discussion. Students may also participate in the weekly meetings of the DATUM group. The group also host themed discussions around topical concerns, including those of architectural education and practice.

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**PC.6: Strategies for Continuous Improvement/Self-Assessment**

We continuously assess the effectiveness of our cultivation of leadership and collaboration, both formally and informally. This includes such means as regular **graduate and undergraduate committee meetings**, or more ad hoc discussions between faculty around issues of concern. Also central is the **attendance of faculty at studio crits**. These, in particular, offer the DoGE and the undergraduate coordinator, opportunities to ascertain and assess how team-based work strategies may be working in particular studios, and subsequently discuss any issues arising within the group dynamics. Team-based study can often present challenges in assessment and grading, and these too may be resolved through discussions between faculty.

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**PC.6: Highlighted Ongoing Enhancements**

**A) Arch 602:** The reintroduction and rethinking of the Arch 602 **graduate studio** is perhaps the most significant enhancement of the graduate program related to PC 6. Open to students from other college departments, the studio considers multiple agents and constituents - human and other-than-human — implicated in and impacted by design, urban renewal and land development. The studio involves activist organizations around issues such as the Green New Deal.

**B) Arch 506:** Beginning in fall of 2021, the Arch 506 **graduate class** (now switched from the second to the first semester of the first year of the 102-credit program) will include students planning, organizing, resourcing, and designing their own studio space, thereby drawing the students into a collaborative mode of operation at the very outset of their studies.

**C) Miro:** During Covid we learned that Miro provides an excellent platform for team-based collaboration. Moving forward, we will continue to encourage the use of Miro as a collaborative tool.

**D) Design Build:** A variety of Design Build projects have required that our students collaborate both with one another, and with external partners to develop a successful project (see links).

- **ARCH 581** (M Arch required) *Dunlap Park Shelter Design-Build*, 2016
- **ARCH 581** (M Arch required) *Penumbra Design-Build, Des Moines Social Club Rooftop*, 2017
- **ARCH 202** (B Arch required) *Two by Two, College of Design Installation*, 2016
- **ARCH 202** (B Arch required) *Shift, Reliable Street Center/Cafe*, 2017
- **ARCH 202** (B Arch required) *Prisma, Reimann Gardens*, 2018
- **DSN S 546** *80/35 Pavilion* Interdisciplinary Option Studio, Des Moines Music Festival, 2016
- **DSN S 546** *Bluestem* Interdisciplinary Option Studio, Iowa Arboretum, 2018
- **ISU State Fair Pavilion Design, 2018 (elective)**
- **PPE Production** 2,000 **face shields** for Iowa Healthcare Workers, 2020

Two projects amongst these, *80/35 Pavilion* and *Two by Two*, received Arch Daily Awards for best Student Design Builds worldwide (2016)
3.1: PC.7 Learning and Teaching Culture

As designers educating designers on the means with which to transform our built environment, we cannot but be optimists who, nonetheless, embrace change where warranted. As expressed in our departmental Overview and Highlights page: "...we teach architecture as a socially inclusive and environmentally responsive practice...the study of architecture involves questioning assumptions, reflecting on history, and rethinking the future [...] so as to meaningfully contribute to the creation of just and equitable societies”

PC.7: Curricular Aspects

DSN S 546 Interdisciplinary Design Studio (graduate and undergraduate) plays a primary role by exposing students to work in teams with students from other disciplines within the College.

Arch 506 Materiality and Representation (graduate design studio) plays a supportive role in fostering a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation among students through:

- Emphasizing critical self-assessment, in dialogue with instructor, in determining final grades
- Determining some of the objectives and requirements of the design briefs individually for each student, depending on their interests and questions, and through dialogue with instructor
- Tying certain objectives class requirements to what can be achieved only if acting collectively
- Using disciplinary means to engage extra-disciplinary questions, methods, or perspectives

Topics are engaged through a combination of syllabus, design project brief(s), and self-assessment questionnaires.

Arch 403 Architectural Design Studio VII (undergraduate) plays a supportive role in meeting PC7:

- Discussions reliant on creating a shared environment that is positive and respectful, and that encourages respect, sharing, engagement, and experimentation
- Students participate in reviewer roles during review; whereby all students feel a sense of agency and involvement in all studio projects.
- Projects address theoretical topics, involving greater experimentation as well as team input.

PC.7: Co-Curricular Aspects

A) Teaching and Learning Culture Statement: In 2021, in cooperation with members of our student body, we developed a “Teaching and Learning Culture Statement”. This replaces the former Studio Culture statement (still found in Spring 2021 Syllabi). Students are provided with clear expectations regarding those who “differ from you in appearance, race, ethnicity, beliefs, gender, sexuality, style, politics or intellectual position.” In accordance with the student handbook, there is “a zero-tolerance policy for offensive behavior and harassment.” We emphasize that tolerance extends across and beyond the university, and by extension, any social behavior outside Campus. This holds true for any field trips students participate in as part of the studio. We remind them that they represent the university to the public during these excursions.

B) Departmental Diversity, Equity and Inclusion Statement: In 2021, in cooperation with members of our student body we developed a Departmental DEI statement. It states, in part - We create opportunities for faculty, staff, and students to question assumptions, reflect upon, understand, and critique the past, engage with the present, and imagine a more just future.

C) Shared Governance: Our Department, College and University are committed to a model of shared governance, ensuring faculty and staff feel empowered and respected in decisions affecting all. The College is now drafting an updated strategic plan, with input from all faculty and staff.
D) Travel: We believe that exposure to other cultures and settings through travel can be a transformative experience that opens minds to other ways of thinking, while raising understanding and tolerance of difference. Based in the mid-west, many of our students have not had the opportunities to experience cultures different from their own. Accordingly, we emphasize opportunities for travel, providing a range of both short-term and longer-term travel exposure. As a result, in the four years prior to Covid (2014 – 2020), we facilitated 430 individual travel experiences to locations outside the USA. These experiences are above and beyond travel internal to the US, which all students experience as part of their regular studio experience.

E) Dean’s Charette: In 2020, The College of Design hosted the Dean’s Charrette on the Future of Design Education. 36 students from all College departments considered what the future of design education will be like, and what changes might be needed in our college to accommodate these activities. Five out of six of the interdisciplinary teams included architecture students.

PC.7: Strategies for Continuous Improvement/Self-Assessment
A) Teaching Support is provided by ISU’s Center for Excellence in Learning and Teaching (CELT), which offers workshops, resources, and training that helps faculty develop more positive, respectful, and inclusive ways of teaching to that accommodate diverse learning styles. CELT promotes a learner-centered approach, which is shown to be effective in helping students solve problems, think critically, apply information, and effectively integrate/synthesize knowledge and skills. Formative feedback, positive and respectful learning, and multiple points of assessment throughout the learning process are emphasized.

B) Student Training: Upon entering the program, students are reminded of the importance of a positive and collegial learning environment, attending a session facilitated by our diversity officer.

C) Meetings: We constantly reflect upon how to improve our program’s teaching and learning culture. Toxic, non-sustainable work practices have been far too common in architectural education. We are working to reduce credit-hour requirements (by removing 3 credits from the current 21 general electives required), as well as being more mindful of the demands placed on students due to their studio load – which frequently exceeds the 6-credit hour of work time allocated.

PC.7: Highlighted Ongoing Enhancements
A) New Statements: The Learning & Teaching Culture and DEI statements referred to above.

B) College Strategic Plan: Currently being drafted with ongoing faculty, administrative, and staff input, the number one point in the draft plan is:

“Build trust and a sense of community among students, staff, faculty and administrators”

C) Enrichment through Travel: Travel Opportunities outside the USA: Fall 2016- Spring 2020

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<td>Delft- 4</td>
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<tr>
<td>Peru- 23</td>
<td><strong>Total- 189 Students</strong></td>
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<tr>
<td>Germany- 36</td>
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<td>Morocco- 17</td>
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<td>Venice Biennale- 60</td>
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<tr>
<td><strong>Total- 241 Students</strong></td>
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3.1: PC.8 Social Equity and Inclusion
Deepening our students’ understanding of diverse cultural and social contexts is a responsibility that extends beyond the confines of the classroom or the curriculum. This is achieved through both the culture of the department, and the College of Design within which it is situated.

PC.8: Curricular Aspects:
Graduate and Undergraduate
Arch 482-582 (Professional Practice) plays a key role in supporting this PC. Module 8, "Architecture as Business" addresses equity in firm operation, and Module 9, "Context and Community" considers the impact of practice on communities. A ‘Voices of Practice’ interview features architects from BNIM discussing their design of the Harkin Institute building, Des Moines, and how they developed a guide to expand notions of universal design and access for all.

Undergraduate Program:
Two additional courses in Undergrad, Arch 220, and Arch 371 play primary roles in meeting this PC, with Arch 402 and Arch 403 playing supportive roles.

Arch 220 (Contemporary Architecture): In 2020, the course focused on themes of Health, Race, Class, and Environment. It addressed both the historical roots and the contemporary effects of these questions through modules that combined lectures with in-depth reading discussions. Students studied how architecture has historically contributed to social inequalities by limiting access to healthy environments, decent housing, professional skills, and work.

Arch 371 (Human Behavior and Environmental Theory) has focused modules dealing with social equity & inclusion. Topics utilize lectures, external videos, readings, reflective exercises, and final project analysis. Themes include:

- physical accessibility and inclusive design/ design for marginalized or ‘other’ users
- systemic forms of spatial injustice and exclusion (including access to housing)
- the role of culture in determining spatial norms and behaviors
- participatory processes in design and implicit biases in decision-making

Arch 402 (studio) plays a supportive role for PC.8. As an urban studio, instructor(s) require students to engage with the city as a complex system inhabited by people of different backgrounds, resources, and abilities. Urban projects in Arch 402 integrate this diversity at the urban scale.

Arch 403 (studio) plays a supportive role for PC.8. As a more speculative studio covering a variety of topics, all sections consider aspects of diverse cultural and social contexts.

Graduate Program:
Arch 596 (Landscape and Society Seminar) plays a supporting role within the MArch program’s commitment to social equity and inclusion. The course addresses the historical and material circumstances through which the reigning asymmetrical and exploitative relations between social classes, racialized, gendered, and normative categories of being are constituted, and explores how this has been theorized. It addresses histories and representations of race, class and gender in landscape and architecture, decolonial perspectives on whiteness, decolonial perspectives on western and capitalist conceptions of nature, ownership, and entrepreneurialism.

Arch 602 (Studio) plays a supporting role within the MArch program’s commitment to social equity and inclusion, addressing the impact of urban development and architectural design on community, land, and environment. It explores how these are experienced by different social groups in terms of race, gender, income, and class, attending to existing social inequalities and injustices that may be either reproduced or ameliorated through design. It addresses the intersections of social, racial, and environmental justice, exploring how design may seek to rectify injustice.
PC.8: Co-Curricular Aspects:
A) **Travel:** Up until the introduction of Covid-related travel restrictions, both national and international field trips were important features of our programs. Rather than architectural tourism, these encourage students to experience unfamiliar cultural and social contexts critically and reflectively. Even in the case of US travel, students engage with and understand various communities and needs found in cities within and beyond the Mid-West.

B) **Student Body:** The diversity of the student body, with its high percentage of international students, provides an opportunity for students to engage with others coming from sometimes very different backgrounds and experiences to create a collaborative and respectful environment.

C) **Clubs:** Student clubs, especially NOMAS, provide a forum for BIPoC and international students to address the concerns and interests of under-represented groups in architecture.

D) **Staff Support:** The department is supported by the College’s Multicultural Liaison Officer, Jordan Brookes. Brookes introduces the importance of diversity, equity and inclusion to all incoming students, and is available to advise students and faculty on matters of concern.

E) **Public Programs:** The lecture series also underlines the importance of diverse cultural social contexts both implicitly, in the selection of speakers invited to contribute, and explicitly in the subjects and themes addressed.

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PC.8: Strategies for Continuous Improvement/Self-Assessment

Faculty retreats, especially in the wake of the 2020 murder of George Floyd and ensuing protests, have addressed issues of racism and prejudice and how we can best respond to these. The Chair, Undergraduate Coordinator, and DoGE continuously oversee what is being taught, to ensure that diverse cultural and social contexts are being addressed. We are also open to hearing from students, often through one-to-one meetings held in confidence, of their experiences in the classroom so as to address and take action in areas they may identify as matters of concern.

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PC.8: Highlighted Ongoing Enhancements

A) **Course Topics:** In addition to the recent intensification of concern with matters of race, those of colonialism, and decolonization have also come to the fore as topical matters of discourse and debate. While these topics are already addressed in the history and theory curriculum, these are now being revised to include some of the latest and most vital contributions. In the aftermath of the murder of George Floyd, one of our Faculty, Mitchell Squire, offered an interdisciplinary final studio course (DES S 546, Grad and Undergrad) entitled, “Breathing: On Language, Capital and Possibility”.

B) **New faculty hires:** Nathalie Frankowski and Cruz Garcia are explicitly focused in their practice, research and teaching on issues of social justice, racial equality, and the colonial context of Western architecture. Their presence substantially enriches and enhances our capacity to address these most urgent and current issues in the discipline.

C) **Workshops:** Faculty members Shelby Doyle and Nick Senske received a Women’s and Diversity grant for their workshop: Cyborg Sessions: Women in Robotics, offered to all student in the College. A lecture by Madeline Gannon and an exhibition in the College followed the event.
3.2 Student Criteria (SC): Student Learning Objectives & Outcomes

3.2: SC.1 Health, Safety and Welfare in the Built Environment

HSW permeates our curriculum in the broadest terms and at multiple scales, intertwined in history, theory, code requirements, environmental performance, and overall design quality.

**SC 1 Curricular Aspects:**
In both the undergraduate and graduate degrees, HSW is integrated throughout the technology sequence, where all courses, in different ways, highlight the relationship between the environments we create, their context, and human well-being. Arch 482/582, also highlights SC 1.

**Graduate and Undergraduate:**

**Building Technology sequence (ALL).** Knowledge of HSW issues, including regulatory context and integrative practices are found throughout the sequence, including Materials/Assembly, Structural Design, Environmental Forces and Systems. Students learn how to mitigate the relationship between our built environment and human interactions through design technology, analysis, assemblies, and proper application of principles. Our multi-semester sequence of coordinated and integrated building technology topics presents HSW in the broadest possible terms, with HSW factors explicitly discussed in nearly all our 160+ lectures and 130+ labs.

**Arch 482/582** (professional practice): This course plays a key role in meeting SC.1.
- Module 1, “Intro + Profession Defined” explores how HSW is fundamental to the understanding of what it means to be a professional and how this relates to state laws and licensure.
- This theme recurs in broad ways throughout the course, surfacing in most content modules.
- Students attend portions of the state AIA convention that illustrate the importance of HSW and providing first-hand experience of how HSW credit is connected to session content.

**Undergraduate:** All undergraduate studios feature components of SC1, but there is a greater focus in Arch 202, 302 and 401. Finally Arch 371 in the undergrad program also supports HSW themes.

**Arch 202 studio** emphasizes an understanding of human health, safety, and welfare, by focusing on how architectural spaces affect people’s physical and mental states and well-being. The studio challenges students to consider not just the visual sense but all senses. Students explore inclusive design that more equitably serves people. Projects include live/work units that involve analysis and responsiveness to human comfort, ergonomics, dimensions, health, and well-being.

**Arch 302 studio** helps enhance student understanding of human health, safety, and welfare via an urban housing project. The studio builds on the knowledge acquired in other courses to further the understanding of building egress, accessibility, and environmental comfort.

**Arch 401 studio** requires students to show how they protect user health (ensure the physical, emotional, and social well-being of occupants and users), safety (keep occupants and users from harm), and welfare (elevate the human experience, encourage social interaction, and benefit the environment). These goals are adapted from the AIA online pages about health, safety, & welfare.

**Arch 371** (human behavior and environmental theory) supports SC1 topics that include:
- Highlighting research into the role the physical environment has in healing/health metrics;
- the role of behavioral nudges in supporting well-being;
- issues of human and social welfare related to:
  o systemic forms of spatial injustice and exclusion (including access to housing)
  o physical accessibility and inclusive design-design for marginalized or ‘other’ users
**SC 1 Strategies for Continuous Improvement/Self-Assessment**

A) **Staffing:** Building technology and Professional Practice courses are taught by practitioners that complete requisite continuing education. They can regularly monitor and assess course content to ensure that it remains up to date with standards of evolving practice.

B) **Student Assessments:** Results of course assessment become part of the larger program assessment practices. In both Arch 371 and Arch 482/582 new modes of student assessment have been integrated that are able to address different forms of learning (more participation and variety of student deliverables). Arch 371, in particular, has shifted significantly from being assessed primarily through quizzes (true/false or multiple choice).

C) **Course Development:** On-going monitoring via the substantive areas and evolving expectations for learning outcomes. This occurs at the overall curricular level primarily in the practice, technology, and design substantive areas, but also occurs at the independent instructor level.

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**SC.1: Highlighted Ongoing Enhancements**

A) **Combined/co-listed technology courses** (Undergrad & grad): Co-listing the classes enhanced the ability to maintain consistency in how HSW topics are presented to students. Variance in the lab exercises allows for different applications of the same core material.

B) **Updated content (technology courses):** As a result of several updates to building code standards (IBC, ASHRAE, etc.) our technology lectures and labs have been updated and revised.

C) **Coordinated content Arch 302/Arch 348 & Arch 401/Arch 445:** To reinforce the idea that HSW concepts are essential qualities of design exploration, HSW topics are taught in technology classes (e.g., framing a structural system, calculating occupant load factors, measuring daylight, etc.) in support of the learning outcomes for studio - which seeks evidence of their integration.

D) **New Hires:** Shifts in Faculty who teach content have resulted in course revisions, particularly in Arch 371 and Arch 482/582, where content has been updated to reflect current concerns and practices. Both treat HSW issues in more holistic ways – expanding the scope of what we can expect of our graduates.
3.2: SC.2 Professional Practice

The training of future professionals is core to architectural education. We ensure our graduates enter the profession with a solid understanding of ethical, professional, and legal expectations.

SC.2: Curricular Aspects:

Graduate and Undergraduate

Arch 482/582 Professional Practice is taken by students in both the undergrad and graduate programs and is the primary course used to fulfill SC2. It highlights ethical elements as well as the regulatory and business aspects of the profession. Students gain "tools to navigate the established conventions and requirements of architectural practice, while encouraging students to find and develop their own individual paths through the profession". Inputs specific to SC 2 are:

a) Practice and professional ethics:
   - Profession defined; (Module 1)
   - Stakeholders (Module 2)
   - Communication and Decision Making (Module 3)
   - Ethics (Module 4)
   - Context and Community (Module 9)

b) Regulatory and business aspects:
   - Life of a Project (Module 5)
   - Contracts (Module 6)
   - Contract Documents (Module 7)
   - Architecture as Business (Module 8)
   - Your Path (Module 10)

In addition to the above, a portion of the course includes “Voices of Practice” videos (19 people from 17 firms/institutions/orgs.) and AIA attendance. Students' major assignments include a paper on 'issues in practice' and reflections on 'voices of practice'.

Undergraduate

Arch 371: This 2nd year course weaves issues of professional ethics throughout: including a module on inclusive design, community outreach, and engagement. Inputs related to SC2 include:

a) Professional Practice & ethics:
   - Research & methodologies (Module 3: week 10)
     - Research Methods & Biases
     - Community Engagement/Behavioral Post Occupancy Analysis
   - Access and Inclusive Design (Module 3: week 11)
     - design for all (Module 3: week 12)

Topics related to how systemic factors can lead to spatial injustices being played out within the built are woven throughout the course, with particular emphasis on:
   - Third Spaces and Spaces of Encounter (Module 2: week 7)
   - Hidden Systemic Factors (Module 2: week 8)

SC.2: Co-Curricular Aspects:

Students are encouraged to pursue internships in later years of their degree, and this is supported by career fairs, awarded internships, and firm visits (a feature of many fieldtrips). While not all students receive identical experiences and exposures to firms, there is a common culture of visiting offices that students are able to experience. Professional work is also highlighted via Public Programs. These opportunities supplement the required course material that all students engage in (for a detailed description see PC1 "Career Paths").
SC.2: Strategies for Continuous Improvement/Self-Assessment

A) Department Hiring: While not reflected in the catalogue course descriptions, two new Faculty, Ann Sobiech Munson (Arch 482/582) and Sharon Wohl (Arch 371), have significantly revamped these classes, reflecting their experience as practitioners. Syllabi, readings, assignments, and engagement strategies have undergone significant modification. Wohl emphasizes contemporary behavioral topics rather than a focus on 1960’s classic theories, while grounding material with a consciousness of the practical and ethical challenges of contemporary practice. Sobiech Munson incorporates contemporary topics, greater emphasis on diversity and inclusion, alternative practices, and the impact of the pandemic on practice.

B) Practice Substantive Areas: The group (chaired by Shelby Doyle, a tenured faculty and registered Architect), has, in recent years:
- Coordinated and enhanced course content to avoid overlaps between courses
- Held a 2-year discussion reviewing a proposal to modify this substantive area course offerings (at the request of the UG coordinator). While the conclusion was to leave the existing curricular structure in place, the discussion nonetheless generated a shift in mindset regarding the existing course emphasis and how contemporary issues might be better highlighted.

SC.2: Highlighted Ongoing Enhancements

A) Course Delivery/Content Arch 371: The content of Arch 371 was significantly modified to include more active learning. Following CELT best practices for creating remote delivery, the course was successfully transferred to an online platform, highlights of which are:
- A course website with pre-recorded lectures, readings, supplemental videos, etc.
- Enhancing ease of Course content navigation (previously poorly sorted/poor quality PDFs)
- Enabling opportunities to rewatch lectures/lecture portions
- Ability to choose lecture speed in Youtube (particularly helpful for non-native speakers)
- Weekly discussion groups (not provided in large lecture class format)
- Q & A via live webex chat during class, encouraging broader engagement for shy students.
- Shift from multiple choice tests to multiple assessments that cater to different learning styles
- Incorporation of more current topics, recent videos and readings

Course evaluations emphasized an appreciation for the website’s ease and the ability to review pre-recorded content. Moving forward, the course is slated for approval as a general elective, open to all ISU students. This will allow non-design majors to learn about the impact of the built environment.

B) Arch 482/582 Curricular Framework: While Sobiech Munson is leaving our faculty, she has set up a curricular framework which we anticipate will continue. Moving Forward, this includes:
- Greater emphasis on differential modes of student participation in the learning environment
- Opportunities to participate in virtual events/conferences related to the profession
- Recordings from practitioners pursuing different career opportunities
- Final paper assignment dealing with a wide range of contemporary topics, including:
  - Technology/Visual Communication, BIM
  - Historic Preservation/Adaptive Reuse
  - Mental Health/Firm & Studio Culture/Burnout
  - Pandemic and New Ways of Working
  - Social Justice, Accessibility and Universal Design
3.2 SC. 3 Regulatory Context
SC3 is examined primarily in the Technology sequence and in Arch 482/582, Professional Practice. These consider how buildings are used (by whom and when), where buildings can be built, what energy limitations exist, what is allowable regarding building materials/assemblies, the process for applying for approval for construction, the processes by which one becomes a practitioner, and how practice is regulated. Students gain exposure to this range of topics, to understand the overlapping contexts under which architecture operates.

SC3 Curricular Aspects: (graduate & undergraduate)
The Technology Sequence (Arch 345/545, 346/546, 347/547, 348/548, and 445): Our unique sequence of integrated topics (structures, materials/assemblies, and environmental systems and forces) presents regulatory contexts in broad terms. Regulations dictate structural performance and design, compliance of assemblies for life safety, mandatory operations of code compliance for HSW and accessibility, and required energy performance levels. All topics are covered, with current standards regularly updated - IBC, ADA, ASHRAE, UL assemblies. Regulatory factors are present in nearly all 160+ lectures and 130+ labs, and explicitly integrated into course exercises in more than 40+ labs. Students must demonstrate understanding of regulatory codes, structural design, and materials/assembly.

Arch 482/582 contributes to meeting SC.3 in the following modules:
- Several guests featured in VOP sessions discuss ways in which these principles affect their work and how they navigated compliance.

SC3 Strategies for Continuous Improvement/Self-Assessment
A) Staffing: Technology courses are taught by practitioners that complete requisite continuing education on these topics. The professional practice courses are taught by registered architects. This ensures course content remains up to date with current practices.

B) Student Performance: Explicit expectations for demonstrating regulatory compliance are included in rubrics and deliverables so learning outcomes can be understood and measured. This becomes part of the program assessment and can steer changes in course delivery.

C) Substantive Area: On-going monitoring of the coursework occurs in both the Technology and Practice substantive areas. This is based on factors such as assessment data, reviews, and evolving expectations for learning outcomes and regulatory standards.

SC3 Highlighted Ongoing Enhancements
Updates to course content, student activities, and coordination between courses have included:

A) Combined /co-listed technology courses (Undergrad & grad): Improving consistency in how SC3 topics are presented to all first-professional students in building technology courses.

B) Updated course content
- Building technology: As a result of updates to building code standards (IBC, ASHRAE, etc.) nearly every one of our building technology lectures and labs have been revised.
- Professional practice: The course was significantly revised by new faculty to be more current with today’s issues and standards (see also SC2).
3.2 SC. 4 Technical Knowledge

Building technology considerations continue to increase in complexity, scope, and overall importance — as does their reliance on collaborative and cross-disciplinary practice models. Despite a nationwide trend of diminishing or reallocating building technology credits, we have embraced the importance of these challenges by creating a robust, collaborative, and progressive course sequence. In 2010 our undergraduate curriculum implemented a curricular strategy used in our graduate program: integrating the three pillars of building technologies — structural design, materials/assemblies, and environmental forces and systems — into a coordinated sequence of courses that include lectures and design labs. Each semester is divided into three five-week modules that focus on either structures, materials, or environmental systems; labs and assignments integrate content across corresponding modules.

This first-in-the-nation course redesign was comprehensive; the curricular format, course content, delivery methods, and scope of student activities were all changed to help simulate the integrated, collaborative, and design-based exercises typical in practice. By removing the silos of traditional delivery formats, we built an integrated approach that gives students the knowledge, problem-solving strategies, analytical, and representational ability necessary to incorporate technologies into design. The planning and implementation of this sequence has been honored with awards from NCARB (2009) & ACSA Creative Achievement (2013) and used as a model for curricular changes at Cal-Poly (San Luis Obispo) and the University of Utah.

In 2017 we identified opportunities to offer the same core course content to both undergraduate and graduate students, which were co-listed (345/545, 346/546, 347/547, 348/548). The primary difference between the graduate and undergraduate sequence is the labs. The sequence is coordinated with an increasing level of complexity and scope (e.g., principles and behavior, building enclosure, performance parameters, etc.), leading to an integrated studio. Both graduates and undergrads engage in 160+ lectures and 130+ labs.

SC.4: Curricular Aspects

The 21-credit undergraduate building technology sequence consists of five separate sequential courses and their corresponding labs, which create opportunities of sustained learning and in-depth applications. The 18-credit graduate program sequence includes four courses: 545/545L (5 cr.), 546/546L (5 cr.), 547/547L (4 cr.), and 548/548L (4 cr.). Labs occur once a week and are designed to allow for in-depth exploration and application of design principles. Learning outcomes of graduate labs are coordinated with undergraduate lecture content but are specifically attuned to graduate level work.

Course Outcomes:

As an integrated suite, the technology courses demonstrate compliance with SC4 criteria:

- Arch 345/545: Topics include: “environmental forces and systems (solar orientation, climate, daylighting, natural ventilation, human comfort and occupancy patterns), materials and assemblies (drawing conventions, building codes, and physical properties of materials) and fundamental structural principles (forces/loads, equilibrium, and stability).”

- Arch 346/546: Topics include: “environmental systems (heat transfer in the building envelope, passive heating & cooling, daylighting, thermal comfort, analytical guidelines and energy calculations), materials & assemblies (building envelope systems, accessibility, egress, and material properties), structural systems (structural system selection/comparison and design / analysis of “form-active” compression & tension structures)”

- Arch 347/547: Topics include: “multistory building framing, assembly, & enclosure systems, sizing & selecting structural framing (foundations, columns, beams, etc.), environmental design process and ability to integrate climate into the control of thermal, luminous, ventilative & acoustic environments. Introduction to plumbing & rain-water collection”

- Arch 348/548: Topics include: “active environmental HVAC control systems design, use & design of mechanical, electrical, plumbing, fire safety, transportation, and conveying systems & subsystems, constructed building assemblies & details (building envelope details for waterproofing
and enclosure, advanced material properties, costs, & serviceability), structural design for multi-story structures (design & documenting framing patterns, building systems integration, and lateral stability strategies)."

- **Arch 445**: Topics include: "integration of active environmental control and service systems into the design of larger scale buildings, the development of construction details for building shell and interiors, and the design and analysis of various long-span structural systems."

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**SC.4: Co-curricular Aspects**

A) **Competitions**: Students participate in local, national, and international competitions:

- Students participate in a competition funded by Wells Concrete (Arch 445) and visit Wells’ pre-cast concrete plant. Representatives from Wells participate in the teaching, touring, and competition judging process.
- Students have been recognized with 4 international and national design awards by the International Masonry Institute (1st Prize, 2020) and the National Concrete Masonry Association (1st prize, 2020 & 2017, 3rd place, 2018).

B) **Field Trips** Students enjoy a day-long field trip sponsored by the Masonry Institute of Iowa, where they participate in a hands-on process of constructing full-scale masonry wall prototypes.

C) **Professional Development** Students are given opportunities to attend several important events – Fall AIA Iowa convention, Spring AIA Iowa convention, and guest lectures – as part of our public program series, and other symposia (e.g., the Adaptive Façade, etc.).

D) **External Reviewers**: Guest lectures/reviewers from Practice (Architecture and Engineering).

F) **Facilities**: Students have access to the Computation and Construction Lab (CCL) which holds $800,000 worth of equipment for fabrication (3D printing and CNC machines), as well as the Architectural Robotics Lab (ARL), home to two KR 10 R1100 industrial robots, housed in the recently opened Student Innovation Center (available to any student on campus).

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**SC.4: Continuous Improvement/Self-Assessment**

A) **Technology Substantive Area**: The integration of three building technology topics into one course sequence was initiated with the instructors and the substantive area to enhance course delivery. On-going monitoring of learning outcomes is via the Technology substantive area, and is based on assessment data, participation from external stakeholders (architectural and engineering practices), and evolving learning expectations based on emerging technologies. The group also identified the need for a new hire to better facilitate performance modeling.

B) **Teaching Cohort/Training**: All courses are typically taught by the same cohort of instructors, making assessment at a course level and curricular level nearly seamless. Teaching assignments are intentionally aligned to allow technology instructors to teach parallel studios as a way of facilitating cross-curricular coordination. Courses are taught by practitioners that complete continuing education on these topics, ensuring courses remain current. Instructors develop and participate in various modes of cutting-edge, peer-reviewed, and funded research related to building technology, including NSF grants, award-winning textbooks and awarded competition entries.

C) **Student Achievement**: Student learning is monitored through rubrics and deliverables so that their achievement can be understood and measured. Results steer changes in course delivery.
D) Pandemic: A formal self-assessment of the sequence was immediately undertaken during the pandemic (Sp.’20, F.’20, Sp.’21) as lectures moved asynchronously online and labs were no longer completed collaboratively in-person. Evaluation of the outcomes is ongoing.

E) Coordination Meetings: Pre- and post-semester coordination meetings between technology faculty and studio coordinators/faculty, resulting in coordinated learning activities.

SC: 4 Highlights of Enhancements:

A) Combined/co-listed technology courses (Undergrad & grad): Co-listing the classes improved consistency in how SC4 topics are presented to all students.

B) NAAB Criteria: Updated content of all building technology courses to align with 2014 and then 2020 NAAB criteria, specifically aligning with the changes from “understanding and ability” and integrated broad enhancements of measured building performance and integrated assemblies.

C) Software Updates: Including: Ecotect, Vasari (Autodesk), Sefaira (Sketch-up & Revit), DIVA (Rhino), MIT Coolvent, Climate Studio.

D) Faculty Hires: Chengde Wu joins us in 2021 and will significantly contribute to the technology stream. Two additional full-time faculty were hired as dedicated lab instructors, one for the undergraduate program and one for the graduate program.

E) Funding: A Miller Faculty Development Grant from ISU Center for Excellence in Learning and Teaching ($9000 funding). The proposal, “Active Collaboration for Sustainable Technical Integration”, reconfigured portions of the sequence to emphasize a more integrated content of labs.

F) New Facilities: CCL and Robotics Lab (see above).
3.2 SC. 5 Design Synthesis

SC.5: Curricular Aspects:
Undergraduate Program: Overview
As students progress through the program, they gain an increasing ability and responsibility to apply their learning into design. By the second semester of their third year (Arch 302) the disparate elements leading to SC5 (e.g., site conditions, user requirements, etc.) have been introduced in studios and technology classes, and students are expected to have the ability to synthesize their learning in a complex design project. Demonstrating this involves a coordinated effort between Arch 302 (studio) and select modules from Arch 348 L (technology lab), taken concurrently.

Arch 302 studio focuses on “…integrating formal design strategies with building technology and history/theory topics.” Instructors coordinate on general project scope (approximately 30,000 sf multi-unit, mid-rise, urban housing) and learning outcomes (including SC5 criteria). Each then craft a specific project for their section. All sections hold between 4-6 summative reviews during the term. Multiple reviewers provide feedback (instructors, peer reviewers, faculty members, external faculty, practitioners). Verbal and written feedback, based on rubrics, is provided.

Arch 348L requires, “…Integrating building technologies into architectural designs through experiments and exercises in laboratory format”. Based on a cross-curricular coordination efforts (Arch 348L instructors, Arch 302 coordinator, and Arch 302 instructors), three labs were identified and developed to correspond directly with Arch 302 content and SC5. These labs target regulatory codes, accessibility, user requirements, structural framing, and the ability to evaluate the environmental impacts of design options. Labs are team-based, with teams often from studio teams. Topics are:

- Module 1, Lab #4 (Conceptual Design, Environmental Systems)
- Module 2, Lab #4 (Accessible Restroom)
- Module 3, Lab #4 (Mass Timber framing)

Graduate Program: Overview
Arch 601 (Sustainable Building Design Studio): is the primary course used to fulfill SC5. It focuses on sustainable design for an architectural urban project. The syllabus situates the course as providing “Design projects that are developed through integrative design strategies that explore the relationship between buildings and environmental forces to maximize non-wasteful, efficient use of resources such as energy, water and building materials. Projects will include investigations of the impact of solar energy, airflow, building materials, passive and active systems and wall sections on spatial quality and form making. Design decisions will be quantitatively validated through energy modeling and performance simulation.”

Work includes the selection of urban sites and the requirement that students develop their own program – including housing, working and community components – in an urban context. Students develop the ability to make design decisions within architectural projects while demonstrating the synthesis of user requirements, regulatory requirements, site conditions, and accessible design. A strong focus is placed on the measurable environmental impacts of their design decisions.

Detailed Curricular aspects: Undergraduate
A) Site Conditions: Arch 302’s shared syllabus deliverables include a Site Plan, “Showing surroundings, pedestrian & vehicular access and/or parking, code-based zoning requirements/setbacks, & environmental conditions (water, sunlight, etc.).” Examples of more specific deliverables (which vary by section) include:

- Narrative and overall recommendation of site selection based on analysis
- Data / Quantifiable Mapping: site dimensions, buildable area, setbacks, allowable FAR, zoning
- Physical Conditions of Site: Topography, solar access, wind rose, floodplain risks, etc.
- Adjacencies: Programs, buildings, infrastructure, parking, massing, etc.
- Qualitative aspects of the site (elements not part of other categories): view, acoustics, etc.
B) User Requirements
i) Arch 302: Studio learning activities target an exploration of user requirements. These operate in conjunction with other SC5 criterion (e.g., regulatory, site conditions, environmental, etc.). For example, users in urban housing need a certain percentage of daylight in spaces based on code regulations but this determination isn’t enough: site conditions, specific user needs, design aesthetics, and environmental performance are all integrated to determining daylight levels. Examples of required work addressing user requirements includes:
  • A Project Narrative: Introduction to intended users and themes
    o Overall description of building functions and project scope
    o Detailed summary of individual functional spaces
  • Number of units, types of units, allotted area for each, etc.
    o Targeted Net / Gross Ratios for building area
    o Deliverables / Evidence for Programming
  • Narratives, sketches, research, programming diagrams, etc.

ii) Arch 348L: All three labs have specific users (e.g., shared classroom building and/or Arch 302 studio project). Students incorporate a broad interpretation of user requirements – which considers and integrates building technology. Thus, aspects such as adequate access to fresh air and daylight is considered a user requirement.

C) Regulatory Requirements & Accessible Design: While Regulatory requirements are comprehensive to all aspects of building design and construction, we interpret SC5 as engaging with those aspects most closely associated with design synthesis.

i) Arch 302: Across all 302 studios, we define the scope of regulatory requirements (based on IBC 2018 and/or 2021) primarily to include documentation of:
  • Identification of occupancy classification and use including occupant loading calculations
  • Design the means of egress including egress element design
  • Overall accessibility including accommodations for accessible units (Type A and B)

Other regulatory code factors: general building heights, determination of construction types, allowable areas, zoning, and local regulatory requirements (for site and housing) varied by section. In most cases, students were asked to document compliance with these factors (e.g., under maximum allowable height and area, structural materials, etc.). One Arch 302 studio invited code officials from Des Moines to review the work of a studio and discuss other code factors.

Each studio required compliance with accessibility for all public areas and a minimum of two accessible units, based on the IBC code. Accessible unit design was coordinated with Arch 348L, Module 2, which considered Type A, and Type B units, for accessibility and universal design standards. Accessible paths and clearances within these units are implicitly present in the studio deliverables but were not required to be explicitly diagrammed.

ii) Arch 348L: Regulatory requirements are engaged throughout the building technology sequence. In Arch 348, the focus turns towards the application of these regulations including accessibility, corresponding with the scope Arch 302 studio projects. All three labs have explicit elements of regulatory requirements integrated into a design exercise:
  • Module 1, Lab #4, Classroom: Complete a schematic code review for compliance of Ch. 3 (Occupancy / Use), Ch. 5 (Building Height and Area), and Ch. 10 (Egress)
  • Module 2, Lab #4, Accessible Bathrooms for Classroom Building:
    o Determine Occupancy and Occupant Loads (IBC 2018, Chapter 3)
    o Determine Restroom Fixture Requirements (IBC 2018, Chapter 29)
    o Design and Document an Accessible Restroom

D) Environmental Impacts: User needs, code regulations, site design, material selections, building massing, envelope design, environmental forces, structural efficiencies, construction
methods, and building operations all depend on an evaluation of environmental impacts. Upwards of 20+ design-oriented labs relate to this SC5 criteria and are included in the technology sequence – preparing students to synthesize critical environmental information in their design projects.

i) Arch 302: Building massing, site orientation, material selection, efficiency of structural framing, etc., are all considered as to their environmental impacts. The holistic nature of environmental impact in design often leaves many of the most important design choices less explicitly articulated, as “measuring” all factors within design synthesis is complicated – certain choices about environmental impact are made at the earliest project stages – often without numerically-based evidence to deliberate relative efficacy (examples would include orienting a building along an east/west axis, or selecting mass timber in lieu of the higher embodied carbon content of concrete. More explicit measurable factors (e.g., “enclosure, daylighting, and ventilation”) are achieved by students running software simulations of daylighting and ventilation.

ii) Arch 348L: associated activities are found in Module 1 (Environmental Forces and Systems - daylighting, ventilation, and passive thermal comfort) and Module 3 (Structures), where environmental factors of building materials were all developed explicitly to coordinate with the scope of Arch 302. The most explicit evidence for “measured” impact rests solely in Module 1, Lab #4. In addition to the overall design massing listed above, the lab required students to:

“...evaluate your design and quantification strategy... discuss the significance of each load component and potential strategies to reduce the cooling load for each scenario.”

Detailed Curricular aspects: Graduate Program
The Arch 601 graduate studio leads to architectural design projects for carbon neutral, adaptive and resilient mixed-use building projects. It is focused on inner-urban housing of manageable scale exploring the relationships between architecture, cultural landscapes, and biological issues. The reduction of carbon emissions agreed upon at the UN meeting in Paris can only be achieved while addressing and densifying inner-urban sites, thereby reducing community contributions to carbon emissions. Over the past 12 years, the studio was developed by Prof. Ulrike Passe into an interwoven structure of lectures, desk crits, workshops, case Study Project Assessment, Readings, Integrative Design Project, collaborative software learning and external guests.

Students begin by working individually on a case study analysis and site parti charette. The studio combines two distinct sets of students – those who have taken the first year MArch studios and those entering with advanced standing – thus a ‘speed dating’ event held three weeks into the semester is used to form teams (of two or three). Team performance is assessed using an anonymous peer-evaluation questionnaire after the final review.

A) Site Conditions: A different city is selected for the studio each year. Emphasis is placed on the site and its socio-economic conditions, taken as representative of similar situations within the wider regions in which it is located (typically those of the Midwest). Sites mirror the development of the US American city and society in its global context, with past sites including: Chicago, Illinois, Des Moines and Cedar Rapids, Iowa, Memphis, Tennessee, St. Louis, Missouri and Durham, North Carolina. Excepting 2020, site visits are conducted, and studio members meet with local stakeholders. The 2020 studio in Durham, NC collaborated with an ISU alum who is now a developer there, and was visited virtually. The 2021 site will be the 38 Ave neighborhood in South Minneapolis and meetings with local stakeholders are currently planned.

Projects stress interdisciplinary research, engagement with local stakeholders and contemporary phenomena. Intensive engagement with a wide range of issues and critical thinking are expected at every design stage. They also address responses to specific climatic conditions. Special focus is placed on the issues of sustainability, resources, water management and energy efficiency in architecture, urban planning and landscape. This is achieved through readings, case studies, and
the integration of measurable environmental impacts of students’ design decisions made possible by the inclusion of computational performance analysis tools.

**B) User Requirements:** While the outcome of the studio is a comprehensive and integrated design proposal for a specific site, individual assignments require that participants develop and refine a building program based on research of:

- **user requirements** for environmental conditions (thermal, illumination, spatial requirements)
- existing climatic and site conditions via a comprehensive site section and environmental context analysis (solar geometry, bioclimatic chart, site research regarding social, cultural, economic conditions, soil and water)

**C) Regulatory Requirements/Accessible Design:** The successful completion of this studio results in an ability to develop architectural responses to the challenge of sustainable, resilient and carbon-neutral building design. Environmental stewardship guides the development of an integrative project proposal. Further, while students are encouraged, but not required to submit their project to the top 10 COTE competition (see below), its 10 measures have become guiding principles of the studio. The competition requirements of design for integration and equitable communities requires that the students not only achieve basic ADA requirements, but exceed these so as to design for social equity and inclusivity (see also assignment for schematic design and circulation path etc.). Other regulatory deliverables include:

- a review of the relevant **laws and standards** (IBC, IRC, ASHRAE energy, comfort, IAQ; assessment of the implications of these for the project (Architecture 2030, EUI)
- an inventory of space and equipment requirements; an analysis of site conditions

**D) Environmental Impacts:** The studio focuses on stewardship of the environment as well as integrative design, community and social responsibility. Providing strategies to decarbonize the built environment is central to the agenda of the class. The last three weeks of the course focus on enhanced performance metrics, graphic visualization, research and design skills to develop the required boards for an ACSA/AIA top10 COTE competition entry. Other requirements include:

- The ability to make design decisions so as to achieve measurable environmental impact using state-of-the-art computational building performance tools
- The Detail Interlude: An assignment requiring students to integrate the design of environmental systems, structural systems, building materials, building envelope systems and comprehensive principles of materials and assembly selection, based on knowledge of the characteristics and performance of these materials, including their environmental impact and reuse
- Justification of site selection: building placement via solar and air flow access assessment

**SC.5: Non-Curricular Aspects**

**Undergrad** Students are encouraged to attend the AIA Iowa Spring conference (free registration) in lieu of studio—conference topics are regularly included in studio discussions. For more than 10 years, all Arch 302 students have submitted their projects to a sponsored design competition by BWBR Architects in Saint Paul. The evaluation happens in phases and cumulates with an office visit, tour, a presentation to BWBR representatives, and an awards presentation by the firm.

**Graduate** Arch 601 students are encouraged to register and attend portions of the AIA Iowa Annual Conference. Since the inaugural 2014/15 ACSA / AIA top10 COTE competition, they have also been encouraged to submit their final projects to this influential international student competition and have been extremely successful in doing so, placing consistently amongst the 10 winning teams. Students have received SIX ACSA/AIA Top 10 COTE awards.
SC.5: Strategies for Continuous Self-Assessment

A) Chair/Coordinators: The Chair coordinates instructor assignments to ensure at least one faculty teaches both undergrad classes meeting SC5, so as to ensure smooth content coordination.

B) Substantive Areas: Technology course content is assessed by the Technology Substantive Area, with specific module content and labs for Arch 348L developed by course instructors. Broader content is assessed by all technology faculty, based primarily on the overall trajectory of learning outcomes that has been incorporated across the five-semester sequence.

C) Semester-Level Studio and Tech Instructor Meetings (undergrad): Outcomes and achievements for both courses are assessed by the Arch 302 studio coordinator, alongside all studio instructors and technology instructors. Annual revisions to studio project scope and building tech labs are determined before the semester begins, based on feedback from prior years including assessment/evaluation meetings and changes compelled by current needs/ trends/ information (e.g., 2020 Conditions).

D) NAAB Revision Impact: Neither Arch 302 nor Arch 348L had significant changes in catalog descriptions and/or course content since our previous accreditation, but specific learning outcomes and learning activities have been modified to align more closely with current SC5 criteria. Beginning in Spring 2020, Arch 302 incorporated the draft language for the 2020 NAAB SC5 as the central learning outcomes for all studio sections. Several modules in Arch 348L shifted focus to include more specific information and exercises about regulatory requirements, accessibility, and measurable outcomes for environmental design strategies. Our ability to demonstrate continuous improvement is somewhat compromised by the shifting of NAAB Conditions from 2014 Conditions (Arch 302 criteria from 2014-2019) to 2020 Conditions—meaning that we have only one semester of direct and indirect data. The disruption caused by the pandemic further complicates the ability to learn from Spring 2020 Arch 302 learning outcomes.

F) Student Performance indicators: Direct data points include grade distribution of individual studio assignments and overall studio grades. While we do not have any mandatory assessment points for overall grade benchmarking, historical data suggests that we would expect the following outcomes as indicators of minimum effective student performance: Design studio: 85% pass rate, 70% B- or above, Tech Labs & Overall Modules: 80% pass rate, 70% B- or above. Because we typically surpass these benchmarks, and because our assessment process is typically through formative procedures, indirect information often being the catalyst for change. For example, after Spring 2020 studio was completed, instructors met to discuss the learning criteria and determined that measured environmental impacts needed more direct studio activity.

G) External/Peer Assessment: Reviews regularly involve external peers (e.g., other professors, graduate students, practitioners, visiting critics, etc.). Instructors participate in reviews, take notes for assessment purposes and regularly obtain summative feedback from guest reviewers about the quality of work. This feedback is used to make adjustments to course content as needed—either during the same semester or as part of a larger program assessment process. Other inputs include student feedback and end of semester walk-throughs from faculty. Particularly noteworthy is the external validation of our 601 Graduate studio as exhibited by the consistently recurring ACSA/AIA Top 10 COTE awards (six to date):

- 2016: https://www.acsa-arch.org/competitions/2016-cote-competition/winners/

In addition, for two years the Arch 601 studio was funded by a regional AEC firm, Shive Hattery, which allowed the development of workshops and lectures and the invitation of local and national experts in the field, external reviewers from academy and practice. This provided continuous reflection on student and teacher performance with respect to professional requirements.
**H) Instructor Self-Assessment:** Arch 302 instructors held a post-semester assessment meeting in May 2021 to discuss the work and make recommendations to studio instructors from the prior and subsequent semesters (Arch 301 and Arch 401). They also completed an anonymous survey to help answer the following questions:

- Were faculty and learners well prepared to deliver and meet SC5 outcomes?
- Did our learners achieve the outcomes we set for SC5? How do we know?
- Were our assessment points and data measurements a good reflection of their learning?
- What changes could be made to the course to improve student performance?
- What improvements could be made at a program, college, and/or university level to better support these outcomes?
- How can our evaluations be shared program-wide for proceeding and subsequent studios to support broader curricular coordination?

Overall findings were that studios and labs are well coordinated, and learning objectives are achieved by the vast majority of students. The main suggestions for improvement rest in further coordination with other courses in other year levels (details & analysis found in our evidence).

**I) Adverse Effects of COVID – graduate and undergraduate**

In Spring 2021, three of five sections of Arch 302 were solely or primarily online and all Arch348L course activities were fully online. The impact of the pandemic on the physical and mental health of faculty and students has not yet been directly measured, but indirect evidence points to disruptions caused being an undeniable obstacle for effective teaching and learning. Research shows that active-learning (including in-person, collaborative, and haptic exercises typically found in studio and labs) improves student engagement and retention; difficult concepts are easier to explore and understand through haptic exercises including model-making and drawing. Shifting this in-person learning environment to all online courses in which individuals are separated and isolated profoundly disrupts these benefits for hard skills and soft skills.

Despite this, Spring 2020 Arch 302 studios saw a 100% pass rate across all sections and over 85% of all students achieved a B- or above. Both levels surpass our benchmarks. An in-depth discussion about the adverse effects of the pandemic can be found in the post-semester summary assessment meeting of Spring 2021 302 instructors.

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**SC.5 Highlighted Ongoing Enhancements:**

**A) Software Enhancements:** The Arch 601 studio structure follows the active development of environmental performance metrics within the building science and architecture profession. This information is also taught in Arch 348L and tutorials are included in Arch 302 learning content. Work involves use of the latest environmental performance software (listed by year introduced):

- Vasari in 2013
- Sefaira for Sketchup and REVIT in 2013/14
- MIT Coolvent in 2016
- Solemma DIVA in 2019
- Solemma Climate Studio in 2020.

**B) New Hires:** The technology sequence and studios meeting SC 5 will be enhanced by recent hire Chengde Wu who was appointed, in part, to offer further expertise in performance modeling.

**C) Co-ordination:** Arch 348/L is now better coordinated with Arch 302 so that specific learning modules are enhanced by studio, and vice versa. This planning involved Arch 348L instructors, Arch 302 coordinator, and Arch 302 instructors (Hur taught both courses). Specifically, three labs were selected from Arch 348L to help meet SC5 criteria. Further coordination initiatives – and year level coordination, will be developed in the coming year by the undergraduate committee.
3.2 SC.6 Building Integration

We take a holistic approach to "Integrated Design," believing that fluency in the technical areas required by SC6 cannot be separated from a building's socio-cultural aspects. We have a long history of situating comprehensive and integrated design projects in rich, complex sites, requiring students to consider the range of contexts in which their solutions are developed.

SC.6: Curricular Aspects: Undergraduate

SC.6 is met through the coordination of our learning outcomes across all five sections of the fourth-year design studio (ARCH 401) alongside three design-oriented labs from technology courses ARCH 445/445L which run concurrent to studio. Prior to these, students are exposed to the fundamentals of SC.6 (building envelop, structural systems, etc.) in the tech sequence.

We coordinate exercises between these courses, explicitly tying lab work to studio. There are added benefits in terms of exposure, information, and design opportunities that occur when multiple classes are integrated. Exercises are more efficient when coordinated between courses, student enthusiasm and pass rates are high, and improvements in quality of work are evident. Continuous assessment ensures that activities achieve desired outcomes, and evaluations can go beyond “what did they learn in studio, or in tech class” to focus on what they learned as a whole.

Arch 401 is the key studio meeting SC6. It requires students to demonstrate fluency in all areas covered by the SCI-TECH sequence, and to integrate key aspects of building performance and construction in design. Instructors coordinate on general project scope and shared learning outcomes. Each then crafts specific project conditions, thereby avoiding a one-size-fits-all approach to studio and offering a better alignment with the pedagogical practices and expertise of each instructor. Programs typically encompass a small-scale urban public building (< 30,000sf) with a complex combination of long-span and short-span spaces, public and semi-public rooms, and a range of occupancies. Students are required to incrementally integrate building envelope systems - beginning with site analysis and massing models that demonstrate an understanding of climate/orientation. Structural models demonstrate an understanding of foundation, wall, and roof detailing, and evidence of environmental control systems, life safety systems, and the measurable outcomes of building performance are required during the latter half of the semester. Parallel to studio, learning is reinforced in the Technology and Lab sections. Instructional materials for labs (readings, videos, tutorials, etc.) are shared with all ARCH 401 sections.

ARCH 445/445L: Although nearly all labs from Module #2 (Environmental Forces and Systems) and Module #3 (Materials and Assemblies) were coordinated with ARCH 401 studio activities, certain labs were intentionally summative in the information they required. Three labs were selected from ARCH 445L in meeting SC.6 criteria. These are collaborative and team-based, and comprised of studio teams whenever possible:

- Module 1, Lab #4 “Long Span Design Project” for Structural Systems
- Module 2, Lab #5 “Comprehensive Environmental Control, Systems, and Modeling”
- Module 3, Lab #5 “Final Envelope Design” for Materials / Assemblies

Graduate

ARCH 603, taken by students in the final year of the MArch program, is the primary course used to fulfill SC6. It requires students to demonstrate fluency in all areas covered by the Sci-Tech sequence and integrate key aspects of building performance and construction in a design for a public building on an urban site within a rich social, cultural, and civic context. Site selection considers technical criteria and integration of concerns for the daily life of the selected city and neighborhood so as to emphasize socio-cultural impacts. Past projects include a Federal Courthouse on the Des Moines riverfront, performing arts centers in Chicago's West Loop and South Side, and a transit-related hotel above active passenger and freight rail lines in Seattle, WA.
Projects intentionally involve complex programmatic issues, typically involving long span and cellular spaces, a variety of occupancies, and a challenging mix of public and private functions. Desk crits, informal pinups, and graded reviews are organized to pace work and focus on five fundamental criteria: site and program analysis, circulation, structure, environmental response, and building cladding/detailing. Beginning in Fall, 2021, a parallel set of technical reports is required, detailing each of these five aspects and their integration with the design. Sci-Tech faculty run one-day seminars in simulation software (for lighting and solar gain modeling, and/or acoustics where appropriate), structural element calculation and layout, and cladding systems to supplement studio crits. Assessment is based on formal-juried presentations (60%) and the contents of the technical reports (40%), including evidence of daylighting and thermal performance from modeling, calculated sizes for significant structural members, and cladding details, as well as proof of exiting and accessibility compliance.

SC.6: Non-Curricular Aspects
A) Field Trips: Both Arch 401 and Arch 603 typically include optional field trips to experience firsthand the project’s site and contexts, as well as examples of local building practice, significant architecture, cultural events and landmarks. Chicago trips, for instance, have included walking tours of historic skyscrapers in the Loop, tours of IIT and/or Oak Park.

SC 6: Continuous Improvement/Self-Assessment
A) Arch 603: We assess Arch 603 in conjunction with reviews of Arch 401 to compare our undergraduate and graduate sequences in terms of technical ability and fluency. Faculty review of multiple studio’s work allows sharing of best practices and makes clear where individual instructors can better emphasize or support specific topics. This is particularly important for Arch 603, as the graduate curriculum does not include the capstone Sci-Tech class for undergraduates, Arch 445. That course’s subject matter is more readily covered in the Graduate Program’s smaller scale studio classes, but comparison between studios is critical to ensure that this is actually the case. The ongoing assessment and evolution of the studio is reflected by changes in the program; public buildings like museums or performance centers bring into consideration readily measurable circulation issues as well as complex structural and acoustic challenges that former programs such as hotels did not.

B) Arch 445/445L: Based on the need for more explicit cross-curricular coordination efforts necessitated by the change to 2020 Conditions, certain labs were developed to directly correspond to ARCH 401. This was undertaken in coordination with all teaching faculty.

C) NAAB: Because the ARCH 401 studio was not previously required to meet specific SC.6 conditions (they didn’t exist), we had no specific benchmarks, goals, or other data points upon which to base our planning. Beginning Fall of 2020, ARCH 401 incorporated the 2020 NAAB SC.6 Building Integration Conditions as the central learning outcomes for all studio sections. Simultaneously the Sci-Tech group shifted several modules in ARCH 445L to align the content to studio work. Through coordination meetings (Spring and Summer of 2020), we determined that an integrated effort between 401 and 445/445L would be used in ARCH 445/445L to meet SC.6 criteria.

SC.6 Highlighted Ongoing Enhancements:
A) External Recognition - Undergraduate: in 2021 a 401 studio project (entitled “The Step”) was, for the first time, awarded one of ten COTE design awards.

B) Technical Reports: The Graduate program has refined elements to better emphasize both technical aspects and their integration; reinstating a long-dormant requirement for technical reports. This explicit requirements at specific project stages assures that students will deal with, for example, life safety and exiting at an appropriate point in the design process.
PART 4: Curricular Framework

4.1. Institutional Accreditation

Iowa State University is accredited by The Higher Learning Commission (HLC) — an independent corporation founded in 1895 as one of six regional institutional accreditors in the United States. HLC accredits degree-granting post-secondary educational institutions in the North Central region, which includes Iowa. The last accreditation review was in 2015-16. ISU received a 10-year accreditation with no stipulations or interim reviews. Please see links for accreditation status/letter: HLC Site: https://www.hlcommission.org; Current Accreditation Letter

As a part of the normal Open Pathway accreditation process with the Higher Learning Commission (HLC), Iowa State University successfully navigated its “Year 4 Assurance Review” in February 2020. This review was conducted by peer reviewers who assessed an updated version of Iowa State University’s Assurance Argument prepared as a part of the Higher Learning Commission Comprehensive Review during 2015-2016. In Spring 2021, Iowa State commenced work on an 18-month Quality Improvement Initiative, approved by HLC on April 13, 2021.

4.2 Professional Degrees and Curriculum

We offer two accredited degrees: A Bachelor of Architecture and a Masters of Architecture.

Bachelor of Architecture:
Overview
The 168 CH professional curriculum is structured as a progressive and sequential immersion in the fundamentals of architecture: technology (construction and materials, structures, environmental systems); history and culture (history, theory, criticism and human behavior); communication (drawing, modeling, computation representation); practice; and design (the armature of the program, in which students explore design as a synthesizing practice). Each year is composed of integrated courses which draw upon one another in the student's learning experiences. Architectural electives in the principal areas provide opportunities for focused pursuit, and university electives provide a broadened liberal education base. All design studios integrate fundamental issues of culture, technology, communication, and research.

The curriculum's structure offers increasing flexibility the further along the degree one is. In the first years, there are limited elective options and much more curricular structure. In later years, most of the required sequence has been completed and students may then choose from an array of professional options, tailored to individual interests. Professional and HTC options are taken for the most part in the final two years, and students select their interdisciplinary studio option in their final semester. Offered by the College of Design, its topics shift annually but all give students a chance to participate in the broader college interdisciplinary context, while bringing their specific disciplinary 'voice' to the table. The Bachelor program also carries STEM designation. The complete undergraduate curriculum is found here.

Masters of Architecture:
Overview
The MArch is an accredited and STEM-designated program that provides students with the knowledge, skills and experience with which to professionally practice architecture. It also equips them with a critical and questioning awareness of the discipline’s wider social, political, economic, environmental and cultural implications. The MArch degree consists of a 102-credit 3-year curriculum designed for students without degrees in architecture, and a 62-credit, or 'advanced standing', 2-year curriculum for students already holding a non-professional education in architecture. International students with professional degrees from abroad are typically admitted with advanced standing, based upon a thorough review of prior coursework, transcripts, portfolio, letter of intent, references and test scores. The complete Masters’ curriculum can be viewed here.
4.2.1 Professional Studies: Undergraduate

The Core year provides the foundation for our degree program and is required by all students unless granted a transfer waiver. The following Courses are taken by all students in their core year and are considered pre-requisites to the professional degree:

Core/First Year:
- 4 CH DSN S 102: Design Studio 1
- 4 CH DSN S 131: Drawing 1
- 3 CH DSN S 183: Design in Context

11 CH: TOTAL Design Focused Education used to determine entry GPA

1 CH DSN S 110/115: Design Exchange Seminar 1/ Design Collaborative Seminar
(P/F Orientation course: Enrollment dependent on the Learning Community)

3 CH ENGL 150: Critical Thinking & Communication
1 CH LIB 160: Information Literacy
3 CH MATH 145: Applied Trigonometry
4 CH PHYS 131: General Physics
1 CH PHYS 131L: General Physics Lab
3 CH ENGL 250: (recommended in CORE, required prior to graduating)

16 CH: TOTAL Required Curriculum Core Year (Including English 250)

The following professional courses are required for all Undergraduate students:

Second Year:
- 6 CH Arch 201 (Fall): Architectural Design 1
- 3 CH Arch 220 (Fall): Contemporary Architecture
- 3 CH Arch 230 (Fall): Design Communications 1
- 2 CH Arch 345 (Fall): Building Science & Technology 1
- 1 CH Arch 345L (Fall): Building Science & Technology 1 Lab
- 6 CH Arch 202 (Spring): Architectural Design 2
- 3 CH Arch 231 (Spring): Advanced Design Representation
- 3 CH Arch 371 (Spring): Human Behavior and Environmental Theory
- 3 CH Arch 346 (Spring): Building Science & Technology 2
- 2 CH Arch 346L (Spring): Building Science & Technology 2 Lab

Third Year:
- 6 CH Arch 301 (Fall): Architectural Design 3
- 3 CH Arch 221 (Fall): History of Pre-Modern Architecture
- 3 CH Arch 347 (Fall): Building Science & Technology 3
- 2 CH Arch 347L (Fall): Building Science & Technology 3 Lab
- 6 CH Arch 302 (Spring): Architectural Design 4
- 3 CH Arch 322 (Spring): Histories and Theories of Modern Architecture
- 3 CH Arch 348 (Spring): Building Science & Technology 4
- 2 CH Arch 348L (Spring): Building Science & Technology 4 Lab

Fourth Year:
- 6 CH Arch 401 (Fall): Architectural Design 5
- 3 CH Arch 482 (Fall): Professional Practice
- 3 CH Arch 445 (Fall): Building Science & Technology 5
- 2 CH Arch 445L (Fall): Building Science & Technology 5 Lab
- 6 CH Arch 402 (Spring): Architectural Design 6: Urban Design

Fifth Year:
- 6 CH Arch 403 (Fall): Architectural Design 7
- 6 CH Dsn S 546 (Spring): Interdisciplinary Studio (from CoD options)

90 CH: TOTAL Arch Required Common Curriculum.

During the course of the degree program, all students are also required to complete:

9 credit hours of approved HTC electives (offered by Architecture)
9 credit hours of approved Professional Options (offered by Architecture or CoD)

18 CH TOTAL Required HTC and Professional Options (selected from options)
The total number of required **professional credit hours** is therefore as follows:

16 CH: Required Curriculum Core Year (Including English 250)
11 CH: Design Focus (DSN S) Core Year
90 CH: Arch Required Common Curriculum.
18 CH: Required HTC and Professional Options (selected from options)

135 CH Total

**4.2.1 Professional Studies: Graduate**

**STUDIO COURSES: 39 CR.**

- 5 CH ARCH 505: Architectural Design and Media I: Mapping, Programming, Building
- 5 CH ARCH 506: Architectural Design and Media II: Materiality and Representation
- 5 CH ARCH 507: Architectural Design and Media III: Design in Detail
- 6 CH ARCH 601: Sustainable Building Design
- 6 CH ARCH 602: Communities, Architecture and the Environment
- 6 CH ARCH 603: Integartive Design
- 6 CH DSN 546: Design Studio Options

**TECHNOLOGY AND PRACTICE: 26 CR.**

- 2 CH ARCH 545: Building Science and Technology I
- 3 CH ARCH 545L: Building Science and Technology I Lab
- 3 CH ARCH 546: Building Science and Technology II
- 2 CH ARCH 546L: Building Science and Technology II Lab
- 3 CH ARCH 547: Building Science and Technology III
- 1 CH ARCH 547L: Building Science and Technology III Lab
- 3 CH ARCH 548: Building Science and Technology IV
- 1 CH ARCH 548L: Building Science and Technology IV Lab
- 5 CH ARCH 581: Making and Material Practice
- 3 CH ARCH 582: Professional Practice

**HISTORY AND THEORY: 16 CR.**

- 5 CH ARCH 595: Seminar on the Built Environment I: History
- 5 CH ARCH 596: Seminar on the Built Environment II: Landscape and Society
- 3 CH ARCH 597: Seminar on the Built Environment III: Theory
- 3 CH ARCH 598: Seminar on the Built Environment IV: Topical Study

**TOTAL Professional Credits: 81** (not including 21 University Electives)

**4.2.2 General Studies:**

**Undergraduate students** take an additional **33 Credit hours** of elective/general studies coursework, including 12 CH of university approved general education courses, divided between those offered in the **Social Sciences** and the **Humanities** (students obtain 6 credit hours of each). These may not be taken from any course that has a College of Design course code. As the **General Education website** states, “Whereas the courses in a major are designed to develop mastery of a specific field or discipline, courses in general education are designed to establish a strong, intellectual foundation for all specializations.” Half of the General Education requirements are met by students in their Core year, and the remainder during the professional degree program. No minimum credits of General Education are required by the institution or regional accreditor, but the following requirements must be fulfilled for all undergraduate degrees: **see link.**

**Graduate students** are not required to fulfill general studies having already obtained a degree.
4.2.3 Optional Studies

A) Undergraduate

i) University Electives: In order to provide students with a well-rounded degree, students are required to complete 21 credit hours from any university elective, with the following restrictions:

- A minimum of 9 credits must carry non 'ARCH' course designations.
- Only 2 credits of Kinesiology (KIN) OR Athletics (ATH) can be applied.
- Only 4 credits of ROTC courses (AFAS, M S, N S) can be applied.
- Courses below minimum requirements of English 150, Math 145 & Physics 111 (i.e, ENG 10, 99, 101; Math 25, 30) are not applicable
- Up to nine credits of general electives offered by other departments may be taken as pass/not pass. NO Architecture courses may be taken as pass/not pass including those taken to fulfill general electives.

ii) Minors: Students have the option of pursuing a minor alongside their primary degree. The following Minors are offered through the College of Design:

- Urban Studies
- Sustainability
- Critical Studies
- Entrepreneurship
- Digital Media
- Preservation and Cultural Heritage (coming in Fall of 2021)

There are other, University-wide minors that students may pursue, but the above are most common as they include courses both offered and required in our College and Department.

iii) Honors: Our students have opportunities to pursue an Honors degree which includes an ‘Honors project’; an opportunity to synthesize student understanding in a research project or creative work that is uniquely their own. Honors students develop a Program of Study (POS) tailored to meet different educational, career and life goals. A 3.50 ISU cumulative GPA must be maintained to keep Honors status.

B) Graduate

i) University Electives: In order to provide graduate students with the opportunity to explore and develop their individual interests and skills in relation to their broader architectural education, graduate students complete 21 credit hours of elective credits. These are taken from within the range offered by architectural faculty, though students may also choose from those offered from other departments in the College of Design, or indeed by the university as a whole. The following conditions apply:

- Electives cannot be taken at below the 300-undergraduate level
- Only 3 credits of electives may be taken at the 300 level, on condition that this is outside of architecture
- Students may not take more than 9 credits in total at the undergraduate level.

4.2.4/4.2.5 Overview of Degrees

List of Degree Programs: The Department offers two professional degrees in Architecture: an accredited, Masters Degree, and an accredited 5-year Bachelor of Architecture Degree. We also have a one-year research-oriented Master of Science in Architecture.

4.2.4 Bachelor of Architecture Degree

The undergraduate program in architecture is a 168 CH accredited five-year curriculum leading to the Bachelor of Architecture degree. The program provides opportunities for general education as well as preparation for professional practice and/or graduate study. An optional one-semester foreign study program is offered to fourth-year students. Other study abroad opportunities are also available for short-term and semester-long duration. The undergraduate curriculum includes one year of the college's Core Design Program followed by a four-year professional program.
A chart of the 168 CH distribution is as follows:

### Bachelor of Architecture 168 CH:

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COLLEGE OF DESIGN CORE</strong></td>
<td>12</td>
</tr>
<tr>
<td>DSN S102 Design Studio 1</td>
<td>4</td>
</tr>
<tr>
<td>DSN S 115 or DSN S 110 Design Seminar</td>
<td>1</td>
</tr>
<tr>
<td>DSN S 131: Design Representation</td>
<td>4</td>
</tr>
<tr>
<td>DSN S 183: Design Culture</td>
<td>3</td>
</tr>
<tr>
<td><strong>MATHEMATICS, PHYSICAL &amp; BIOLOGICAL SCIENCE</strong></td>
<td>8 CH</td>
</tr>
<tr>
<td>PHYS 131</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 131L</td>
<td>1</td>
</tr>
<tr>
<td>MATH 145</td>
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<tr>
<td><strong>COMMUNICATIONS:</strong></td>
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<tr>
<td>ENGL 150 (C- or better)</td>
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<tr>
<td>Critical writing &amp; Communication</td>
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<tr>
<td>ENGL 250 (C- or better)</td>
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<tr>
<td>Written, Oral, Visual &amp; Electr. Communication</td>
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<tr>
<td>LIB 160</td>
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<tr>
<td><strong>HUMANITIES:</strong></td>
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<tr>
<td>See approved list (2 courses)</td>
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<tr>
<td><strong>SOCIAL SCIENCE:</strong></td>
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</tr>
<tr>
<td>See approved list (2 courses)</td>
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<td><strong>ADDITIONAL GENERAL ELECTIVES</strong></td>
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<td>See approved list/restrictions (7 classes req'd)</td>
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<td><strong>UNIVERSITY REQUIREMENTS:</strong></td>
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<td>International Perspectives</td>
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<tr>
<td>US Diversity</td>
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</tbody>
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*The International Perspectives & US Diversity requirements are normally fulfilled in the course of meeting other degree requirements. Accordingly, Credit Hours indicated here are not counted towards the 168 credits needed for the degree.*

### Degree Breakdown by Course Topic

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
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<tbody>
<tr>
<td><strong>ARCHITECTURE STUDIO SEQUENCE</strong></td>
<td>48 CH</td>
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<tr>
<td>ARCH 201: Architectural Design 1</td>
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<td>ARCH 202: Architectural Design 2</td>
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<td>ARCH 403: Architectural Design 7</td>
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<td>DSN S 546: Interdisciplinary Studio</td>
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<td><strong>SCIENCE/TECHNOLOGY SEQUENCE</strong></td>
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<td><strong>DESIGN COMMUNICATIONS</strong></td>
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<td>ARCH 231 Design Communications 2</td>
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<td>ARCH 220 Contemporary Architecture</td>
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<tr>
<td>ARCH 371 Human Behavior &amp; Env. Theory</td>
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<tr>
<td>ARCH 221 History of Pre-Modern Architecture</td>
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<tr>
<td>ARCH 322 Histories &amp; Theories of Modern Arch.</td>
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<td>HTC Elective Option # 1</td>
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<tr>
<td>HTC Elective Option # 2</td>
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</tr>
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<td>HTC Elective Option # 3</td>
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<td><strong>PROFESSIONAL ORIENTATION/OPTIONS</strong></td>
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<tr>
<td>ARCH 438 Professional Practice</td>
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<tr>
<td>Professional Option 1 (300-500 ARCH designation)</td>
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<tr>
<td>Professional Option 2 (300-500 ARCH designation)</td>
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<tr>
<td>Professional Option 3: ANY Course from CoD, including: Arch, Art, Art H, Art ID, Art GR, Art IS, CRP, DES, DSN S, or LA (3 cr.)</td>
<td>3</td>
</tr>
</tbody>
</table>

4.2.5 Master of Architecture.
The MArch degree consists of a minimum of 102 semester credit hours (over and above their undergraduate degrees, for a minimum of 168 credits). Students granted advanced standing complete the degree with 62 credit hours, commencing in year 2 of the sequence. The distribution and sequence of credits is indicated in the chart below:
4.3. Evaluation of Preparatory Education

4.3.1 Process of Evaluation

A) Undergraduate: There are two pathways to enter the Undergraduate Program. The first, and by far most common is completion of the Core year of preparatory studies. The second, much more limited, is provided for Transfer students who have prior post-secondary design education.

i) Core Admissions: The Core program is part of the preparation for the accredited degree and counted in the degree's total credit hours but is administered separately by the College of Design. Core students take a number of required design courses that serve as foundations for all of the College of Design majors. These hold ‘DSN S’ or ‘Design Studies’ designations. Students must achieve a minimum GPA of 3.2 in DSN S courses to be assured admission into their program of choice. In addition to the DSN S courses, Core students take required courses from university offerings, including courses from English, Library Science, Math, and Physics. They also complete 6 credits hours of General Education Social Science and Humanities electives from an approved list. Students must maintain an overall GPA of 2.0 to be eligible to apply to their program of choice.

The Core curriculum is as follows (29.5 credit hours):

- Inside the College of Design (DSN S designated)
  - DSN S 102: Design Studio I: 4.0 credit hours
  - DSN S 115: Design Seminar I: 0.5 credit hours
  - DSN S 131: Design Representation: 4.0 credit hours
  - DSN S 183: Design Cultures: 3.0 credit hours

- Outside the College of Design
  - Social Science and/or Humanities Electives: 6.0 credit hours
  - Math and/or Science Electives: 6.0 credit hours
  - General Education Electives: 6.0 credit hours
  - All students must take ENGL 150 or be placed directly into ENGL 250, which can be taken as a sophomore, prior to portfolio submission. Students who advance place into ENGL 250 (determined by ACT-E or SAT-V score) still must complete a total of 29.5 credit hours prior to applying to enrollment-managed programs. These credits may be counted as electives.

Prior to Fall of 2021, admission to the BArch following completion of the Core was granted based upon a combination of essay, portfolio review and GPA. Beginning in Fall of 2021 pre-majors who earned a B to B+ average (3.20) in graded Design Studies (DSN S) Core courses were admitted to their first choice of major/degree program. A passing grade was also required in DSN S 110/115 (graded Pass/Not Passed). Additional program vacancies (expected to be approximately 10 – 15 places based on prior year data) would then be filled by considering both GPA and a review of student-selected "exhibition" work. Students whose Core work was strong but whose GPA was lower could also be admitted to their first choice based on this work. This provides an opportunity to reward high-quality work that is not reflected in the DSN S Core GPA.

The first year this policy was instituted coincided with the pandemic. As a result, the data relied upon to initiate the 3.2 minimum GPA did not hold as accurate in 2021, with enrollment much higher than anticipated in the Architecture Program. Moving forward, the GPA threshold for guaranteed admission into Architecture is now 3.3.

ii) Transfer Admissions: Transfer students submit official transcripts of all academic work to the University Admissions Office. The Admissions Office determines the acceptance of credits to the University, and Architecture determines the application of such credits to our degree. Transfer students from community colleges or non-architectural programs are admitted to the pre-professional program. Students transferring from an accredited architecture program are considered for advanced placement after an evaluation of academic credentials, content of past courses and a portfolio review. Transfer students bypass the core program, if and only if:
• They have applied to and been admitted to ISU
• They have taken a minimum of 24 academic credits and maintained a minimum 2.25 GPA
• Prior to admission at ISU, they have been pursuing a related design degree with at least six studio art credits and three credits in art history completed
• They submit a 21- to 24-page PDF portfolio

B) Graduate: Students may be offered advanced standing if their undergraduate degrees in architecture include substantial studio, technical, and history or socio-cultural coursework. If this work is deficient, advanced standing may not be given for all course areas. Undergraduate GPAs, portfolios, letters of recommendation and statements of purpose are evaluated to determine mutual compatibility. Our acceptance rate is typically 90% depending on the number of applicants. Students' backgrounds are assessed in the application review process for possible remedial or prerequisite needs.

4.3.2: Accreditation Standards of Prior Education
A) Undergraduate: Final Admission to the Undergraduate professional program, and placement within the program is overseen by the department Chair in consultation with the Undergraduate Coordinator. Application of credits to the degree program is recommended by the Undergraduate Coordinator. Appeals are considered by the Department Chair. Student evaluation is as follows:
• Portfolio review is undertaken by the Chair of the Department and Undergrad Coordinator.
• Prior courses are assessed by using ISU course equivalency guides
• Where no equivalency is available, course descriptions are evaluated by the Undergraduate Coordinator who, in certain instances, may consult with faculty either within the department (or other departments) to assess equivalency of material.

B) Graduate: Candidates for admission to the MArch Professional and Post-Professional Degree programs are evaluated by both the Graduate committee and by the University’s Graduate College. The Director of Graduate Education, advised by the review process undertaken by the graduate committee as whole, and in consultation as necessary with the Department Chair, is responsible for assessing individual student’s backgrounds and determining both advanced standing and any remedial requirements. This includes a thorough review of prior coursework, transcripts, and portfolio.

4.3.3. Degree Evaluation: See also 6.5: Admissions and Advising
A) Undergraduate: Information about the transfer process as stated on our website:

“In certain instances, students who already have a background in Design related studies may have the Core year waived and enter as transfer students. In addition to satisfying entry requirements, this process involves a portfolio evaluation of prior student work. If you think you may be eligible for this option, please see the link for more information for Transfer Students.”

B) Graduate: As stated on our website:

“While students with undergraduate degrees in other disciplines must complete the full three years of the curriculum, students with undergraduate degrees in architecture or other related design fields may, on consideration, be given advanced standing in the program. Advanced standing students may waive up to the whole first year.”

Our recruitment team provides incoming students information related to advanced-standing options.
Part 5 Resources

5.1 Structure and Governance

5.1.1 Administrative Structure (See University organizational chart.)

A) University Administration: Iowa State University is one of three comprehensive universities and two schools overseen by the Iowa Board of Regents. Its chief executive officer is president Wendy Wintersteen. Jonathan Wickert serves as Senior Vice-President and Provost.

The President’s Council meets regularly throughout the academic year. These meetings bring together the university’s administrative officers (President, Provost, Vice Presidents, Vice Provosts, Associate/Assistant Provosts, Associate/Assistant Vice Presidents, Deans, Associate/Assistant Deans, Directors, and Department Chairs) for one-hour sessions. The President comments on items of importance to the university community and invites questions from the audience during the meeting’s first half hour. Typically, another university administrator is invited to present recent developments in his or her area during the second half hour.

B) College of Design Administration: The College of Design is one of seven academic colleges reporting to the Provost. Its chief executive officer is Dean Luis Rico-Gutierrez. Each department in the College has a chair reporting to the Dean, who is supported by an administrative team:

- Cameron Campbell: Senior Associate Dean, Design Administration
- Kevin Kane PhD-Associate Dean for Research & Outreach
- Seda McKilligan PhD-Associate Dean for Academic Programs
- Pam Boehm-Director of Administration
- Kim McDonough PhD-Senior Director of Development
- Michael Miller-Director of Operations
- Michelle Rasmussen: Student Services Director

Each department and program within the college share administrative and advising services provided by the College (the Reading Room is staffed by the university library). As a result, there is no departmental operations budget for hiring, or departmental responsibilities for college staffing.

Staff Roles within the College offices are outlined below, and can be found online here:

- Administrative Staff
  - Development coordinator
  - HR Coordinator
  - Events Coordinator/Alumni Relations
  - Rome Program Director
- Extension Office
- Career Services
- Student Services and Programs Staff
  - Recruitment
  - Advisors (1 assigned to Architecture)
  - DEI Director
  - International Programs
- Academic Support Staff
  - Gallery Coordinator
  - Communications Specialist
  - Graphic Design
- Technical Support Staff
  - Laptop/Systems Support
  - Model Shop Manager
- Office Support Staff – Administrative Specialists
**Departmental partners**
- Assistant to the Department Chairs
- Course and Room Scheduling
- Fiscal Budgets and Accounting
- Foreign Travel Grants
- Grade Change Forms (undergraduate/graduate)
- Post-Tenure Reviews
- Professional Advisory Groups
- Promotion and Tenure – Documentation
- Scholarship & Foundation Accounts
- Travel and Non-Travel Requests
- Voting Ballot

**Support Staff**
- Building Access/Maintenance Requests/
- Copying/Copy Machine/ Ordering/Maintaining Office Supplies
- Course Evaluations
- Employee/Student Reimbursements/EASE Forms
- Faculty Searches – travel/accommodations
- Hourly Payroll
- Key Requests/Mail/ Phone Coordinator
- Student Lockers

**C) Department of Architecture Administration** *(see also 5.3.2. Roles and Responsibilities)*

i) Chair & Department Cabinet: The department functions in the context of the College of Design and is directed by the Chair who is assisted by members of the Chair’s Cabinet. The role of the chairperson is that of the chief academic officer for the department. The chairperson reports to the dean and is responsible for leading the overall work of the department in areas of teaching, research and service, preparing and administering the departmental budget, and recommending personnel actions and merit salary for members of the department to the dean. The Chair has responsibility for the overall academic supervision of the students in the department. With input from faculty, the Chair holds a key leadership role in recruiting quality faculty and students, facilitating faculty development, developing, and implementing quality academic programs, and advancing departmental resources and program quality.

The chairperson serves as a member of the **College Cabinet**, composed of all department Chairs in the College as well as the College Dean and Associate Deans. The Chair has a five-year, renewable term. An extended appointment is made on the basis of a formal evaluation conducted by the dean, involving all departmental faculty. The appointment of the Chair is determined through a search process administered by the dean involving all departmental faculty and appropriate college and university administrators and other interested groups as determined by the dean.

The **Chair’s Departmental Cabinet** works as an advisory group to the Chair. The Cabinet assists with staff assignments, scheduling, general development of academic standards, planning, management of physical facilities, and any other matters of departmental importance that may be requested by the Chair. It may also serve as the search committee for Lecturers.

- The **Undergraduate Program Coordinator** (Sharon Wohl) serves on the Departmental Cabinet, chairs the Undergraduate Program Committee, leads the development and implementation of the B. Arch curriculum, and is responsible for assisting with second year admissions, new student orientation, and advising.
- The **Director of Graduate Education / DoGE** (Douglas Spencer) serves on the Departmental Cabinet, chairs the Graduate Program Committee, leads the development and implementation of the MArch and MS Arch curricula, and is responsible for assisting with graduate admissions, new student orientation, and advising.
• The Director of Research and Outreach Committee (Ulrike Passe) serves on the Departmental Cabinet and directs the committee in reviewing and developing research and outreach opportunities and facilities in coordination with college and university activities. She also serves as our representative to the College Research, Extension & Outreach Council.

• The college’s first-year CORE Director, regardless of departmental appointment may be invited as an ex officio member to address specific issues related to the first year.

ii) Faculty: All faculty participate in departmental decision-making by attending faculty meetings and serving on any of the numerous Operational Committees: e.g., student awards, faculty searches, lectures, ad hoc task forces (e.g., international exchange programs), etc.

Faculty may be appointed by the chairperson to serve in various administrative capacities in addition to their teaching, research, and service activities. They serve on a range of Departmental Committees responsible to the department and the Chair that play a key role in planning, recommending, and implementing policy related to specific areas of concern. These committees provide a mechanism whereby faculty, individually and collectively, participate in the shared governance of the department. Departmental committees consist of standing committees and ad hoc committees. Standing Committees have ongoing areas of responsibility. Ad hoc committees have temporary responsibilities for one-time tasks. Ad hoc Committees are organized and their responsibilities are defined by the Chair. Departmental committees may include faculty, staff and, where identified, student members. There are two standing committees, Promotion and Tenure and Curriculum, the members of which are elected by the faculty. Specific administrative and departmental committee descriptions are provided in our governance document.

iii) Students: In areas of student concern, leaders of one of the student groups (AIAS, NOMAS, DATUM, IAWAI) may attend faculty meetings to provide a liaison for the student body. The DoGE and Undergraduate Coordinator may also, from time to time, reach out directly to representative leaders from these groups to provide input on matters of student concern.

5.1.2 Governance
A) Shared Governance: The College of Design has established formal and informal procedures for policy-making, monitoring, protection, and collegiality. These are based on the principles of shared governance, recognizing the central role of cooperation in collegial decision-making.

College and Departmental Governance Information can be found here:
• College Governance Document (PDF), last revised spring 2021
• Councils and Committees (PDF), January 2020

Departmental Governance Information
• Architecture Governance Document (PDF), last revised March 7, 2019

B) Broader Committees: There are numerous College and University Level Committees holding representatives from each of the respective departments. Membership on all CoD councils can be found here. In many instances, student representatives are included on committees.

College Liaison Council: Nick Senske
Council Committees
• Budget Advisory Committee: Douglas Spencer
• Operations Committee: Firat Erdim
• Diversity Committee: Andrea Wheeler
• Lectures and Exhibitions Committee: Shelby Doyle

Academic Affairs Council: Vladimir Kulic
Council Committees
• International Programs Committee: Pete Goche
• Core Design Program Committee: Rome Chikerinets
• Interdisciplinary Programs Committee: Nick Senske

Student Affairs Council: membership applicable (see governance document)
• Students Honors & Awards Committee: Kevin Lair

Faculty Development Council: Kimberly Zarecor
Research Extension and Outreach Council: Ulrike Passe
Professional & Scientific Council: not applicable

College Cabinet (representing Architecture): Deborah Hauptmann.
College Promotion and Tenure Committee: Kimberly Zarecor

ACSA Councilor: Andrew Gleeson (elected)
Department Senator to the Faculty Senate (to the University): Mikesch Muecke

C) Departmental Committees
In addition to these representatives, there are a number of internal Architecture committees, details of which are found in our Governance Document.

i) Faculty Elected Committees:
Promotion and Tenure Committee (composition in accordance with Governance)

ii) Self-Selected Committees:
Substantive Areas (self-selected members: chair of committee voted in by members)
• Practice: Shelby Doyle
• Design: Firat Erdim
• Technology: Ulrike Passe
• Communications: Nick Senske
• History/Theory: Vladimir Kulic

Curriculum Committee: Substantive area Chairs, who elect Committee Chair: Vladimir Kulic

iii) Chair Appointed committees:
• Graduate Committee (chaired by DoGE: Doug Spencer)
• Undergraduate Committee (led by UG coordinator: Sharon Wohl)
• Research Committee: Ulrike Passe
• Public Programs Committee: Firat Erdim
• Student Scholarship and Awards Committee: Jelena Bodganovic
• Ad Hoc Faculty-Search Committees
• Studio Coordinators/Year Level Coordinators*
  *The current governance document includes the position of ‘Year Level’ Coordinators: In practice, over the past number of years coordination is done by the semester studio coordinator, and via the substantive areas.

D) Staff: concerns are addressed via the Professional and Scientific Council, the details of which are outlined in section 5.4.

E) Students
i) Coordination of student affairs occurs via the main student organizations, DATUM, AIAS, IAWIA and NOMAS, members of whom are self-selected. On matters of student concern, representatives of these bodies attend faculty meetings.

ii) The Student Affairs Council is the body charged with ensuring that student needs are being regularly evaluated and fully supported. The committee has the following responsibilities:
  o Coordinate, develop, and promote the college's involvement in student affairs and student multicultural affairs
  o Inform academic advisers of changes in the university and college’s advising system, including the production and distribution of updated materials
Recommend and initiate policies and faculty development programs that will improve the effectiveness and efficiency of advising programs.

Participate in the development, recommendation and implementation of college and university academic standard policies.

Review and act each semester on individual student cases in matters pertaining to academic progress.

Coordinate, develop and promote the college orientation program in conjunction with the university orientation program.

iii) The UG coordinator periodically meets with student leaders. As a result of 2021 meetings, a pilot initiative to have 'studio reps' was initiated. This will continue in the Fall of 2021.

D) Organizational Chart: The chart below shows the relationship between committees:
5.2 Planning and Assessment

As professional practice and educational modes evolve, we take an aspirational and inclusive approach to planning; one that is philosophically aligned with our shared values. Each and every one of our faculty is committed to developing and maintaining a program that is current, critical, rigorous, and relevant in light of contemporary challenges. While curriculum development resides in the purview of the faculty, the Chair works in conjunction with the faculty in aligning and steering the overall trajectory of our program through mechanisms such as hiring decisions, course assignments, approval of seminar topics, funding of initiatives, etc.

While the Chair’s planning is the most ‘top-down’, it is countered and complimented by ‘bottom-up’ visions. Our institution is a Research 1 university. We attract top Faculty who are committed and motivated. Pedagogically they work independently to ensure their courses are constantly revised, refined, or rethought. They are guided by their experience, professional and research expertise, and the day-to-day feedback reflected in Student Performance. That performance is not measured solely by grades but by broader, more holistic measures that are less easily quantified.

Situated between the Chair’s over-arching vision, and Faculty on-the-ground insights, sit our Substantive Areas (see 5.3). Faculty self-select areas of curricular interest to meet, share insights, and discuss how our program can be improved. We rely, in large part, on their commitment and passion to ensure the effectiveness of this work.

Using targeted learning outcomes gives us insights as to how and where learning occurs. We employ teaching strategies that enhance learner-centered, inquiry-based, and iterative qualities of our learning and teaching culture, coordinated across the curriculum based on planning goals and performance criteria (such as NAAB or our strategic plan). Key curricular questions we ask are:

- Course Sequencing: How/why is the course positioned where it is in the curriculum?
- Course Content: How/why is content developed? What are its goals and learning objectives?
- Course Activities: What activities help support student learning?
- Course Assessment: How is assessment done, how often, and what do the results say?

Deliberations regarding program modifications to the above occur using the following mechanisms:

- Faculty Retreat Agenda Items (Beginning and end of each semester)
- Faculty Meeting Discussions (normally monthly, twice monthly during covid)
- Substantive Area/Curriculum Meetings (typically four times annually; more if significant business needs to be addressed)
- Undergraduate or Graduate Committee (monthly)
- Year-level Coordinator and/or Studio Level Coordinator (start of Fall and Spring semester and during the semester, as needs arise for meetings)
- Informal Consultations with Colleagues/ Mentors/ Advisor (varies)
- Post-Semester Surveys (began 2021, anticipated twice annually moving forward)

Faculty deliberate and determine which changes are warranted and the appropriate means:

- changes at the course level that are easily modified and evaluated (e.g., changing assignments, module topics, instructors)
- changes related to sequencing and content that may require curricular adjustment: oversight by substantive area, curriculum committee, faculty, and Academic Affairs Council (AAC)

5.2.1 Multiyear Strategic Objectives

Changes to our program occur both due to immediate, responsive initiatives, and based on more formalized, long-range plans. These plans are framed within broader University, College, and Departmental objectives. General program accountability is maintained through the Department’s links with both College and University administrations (the College Cabinet, the Graduate College, and the Office of the Provost) and to College and University councils and committees that participate in the governance of the institution. We align with these broader priorities:
The University 2017-2022 strategic plan that consists of four main goals:

- Ensure students receive an exceptional education,
- Conduct high-impact research,
- Improve the quality of life for all Iowans, and
- Enhance the university climate for ISU community and visitors.

The College of Design 2017-2020 strategic plan (currently being revised) with four key goals:

- Demonstrate and communicate the power and value of our work
- Prepare students to become professionals who make a positive impact
- Promote a diverse, equitable, and inclusive college community
- Balance the college’s budget and space utilization

Finally, the desire to foster innovation has recently emerged as a College and University priority, and the CoD recently hired a Director for Innovation and Entrepreneurship to lead this initiative.

The Architecture Department 2016-2020 strategic plan identified four primary and inter-related objectives and tactics that speak to our mission, values, and vision:

I. COLLABORATION

- Cultivate mutually beneficial internal and external alliances that address contemporary challenges and opportunities. Produce trans-disciplinary ideas and knowledge that positively affects our students, the profession and the world
- Promote the creation, sharing, and application of architectural design and scholarship, by cultivating different scopes and scales of partnerships

II. DEPARTMENTAL CULTURE

- Enhance the global dimension within the department to increase awareness of local, regional, national, and international design issues and culture, and highlight the department’s contributions to international scholarship, research, and dialogue
- Cultivate a culture of academic rigor, critical analysis, and excellence in both teaching and research
- Incorporate approaches to architectural education and research that challenge normative definitions of architecture as a field of inquiry

III DIVERSITY AND ACCESS

- Increase the diversity of backgrounds and perspectives represented in the Department of Architecture, and thereby the discipline. This encompasses cultural, ethnic, and economic diversity, as well as diversity of discourses and intellectual positions
- Broaden access to architectural education and knowledge in order to enrich the discipline by engaging with individuals and groups that bring multiple perspectives, abilities and capacities
- Promote and value architectural design, production, and research that embrace traditional and alternative practices, relevant to increasingly broad and diverse spectrums of society

IV. EDUCATION-RESEARCH-IMPACT

- Maintain and enhance a current and critical disposition with respect to research, education, and creative practice, so as to engage with relevant architectural discourse on a global stage.
- Expand and develop departmental infrastructure that enables experimentation and innovation in design, research, and pedagogy.

Each objective is presented with supporting tactics that identify the leadership roles and players involved in achieving objectives, as well as metrics by which to discuss and calibrate progress. In addition to our strategic plan, several emerging factors have affected how we teach:

- Alignment with new 2020 NAAB accreditation standards
- Shifts in teaching modality due to Covid, resulting in lasting changes in some courses
5.2.2 Key Performance Indicators

NAAB has requested that we provide aggregate data regarding the efficacy of our teaching methods. This request, however, is poorly aligned with our teaching philosophy and values, given that one of the most self-evident ways to provide this — grade trends — are unreliable. Prior to delving into what we believe are more reliable indicators, we wish to first outline what we consider to be the key concerns regarding this particular metric.

Grade Indicators — some comments on problematics:
Extrapolating from assessment data at the course or assignment level into suggestions for broader program changes is problematic; it relies on indicators that must first imply an evidence trend. Accordingly, an anomalous drop in one assignment, lab, or review (even across a semester) may not indicate that a change in the teaching/learning process is warranted — particularly under pandemic circumstances. In fact, the use of data-driven direct assessments as performance indicators for an outcomes-based assessment model may be fundamentally misaligned with a learner-centered approach, which relies on nuanced formative assessments of higher-order skill development to indicate learning. For example, a student may receive an average grade, but report significant learning gains. Further, while some learning is straightforward to measure (e.g., right/wrong answers) we believe that design learning relies on more nuanced evaluative standards. Data sets alone are thus not seen as necessarily accurate indicators of learning, and therefore are not used in our program as the primary benchmark for success. As an example, years ago we noted an anomalous drop in pass rates on a building technology test. Upon investigation, we realized this was the result of a poorly administered test, rather than a lack of student learning. Alternatively, evidence of successful pass rates across multiple semesters may indicate grade inflation rather than learning success. To avoid grade inflation and corruption of assessment, we don’t have a minimum pass rate. Rather, our goal is to give all students the opportunity to meet objectives and maximize individual performance. That said, we do, on occasion use historical data to justify curricular changes. For example, an earlier low pass rate of structure courses led to the reconfiguration of our technology sequence in 2010.

Thus, we can, and do, look at pass rates for assignments but we primarily use other formative assessment standards to understand how results relate to learning. We aim to determine learning gains, considered formatively and summatively. This relies on the efforts of substantive area chairs, year-level coordinators, and individual instructors to develop learning objectives, assessment questions or activities, evidence of learning, rubrics, and other external and more nuanced metrics.

Useful Metrics:
Ultimately, an array of performance indicators is needed to make determinations regarding the necessity for program change. We have a myriad of options for self-assessment. These include:

A) Instructor/Peer Deliberation: Self-assessment of studio course work is coordinated during the semester (faculty sit in on each other’s studio reviews) and in post-semester meetings; student work across multiple sections is shared, with improvements suggested. We have begun to use post-semester instructor surveys to assist in this reflection.

B) Indirect data: Course assessments utilize indirect data collection such as:
• Students: Anecdotal input: see evaluations below
• External Stakeholder input: Internal faculty, Faculty from other institutions, and Practitioners
• Post Degree Evaluations: Graduation rates, Employment Rates, Licensure Pass Rates

C) Student Benchmarks: Student performance is translated into grades that can be aggregated into data sets: pass rates, average test score, mean grades across sections, etc. Instructors can then independently make comparisons between years to determine if outcomes are effectively met and monitor shifts as course content is modified.
D) Student evaluations: Student comments are indirect data points, but sample sizes are not always reliable. There are also various biases in reporting that have been noted (particularly gender disparities of male versus female instructors, as well as sampling errors). At the same time insights can be gleaned from recurring commentary, helping steer course improvements.

E) Annual Faculty Reviews: The chair meets each faculty member annually to discuss student performance evaluations. The chair assesses faculty teaching strengths and recommends areas needing improvement. Faculty may reach out to other resources (Faculty Mentors, CELT, etc.) in areas requiring attention. While not always reliable, by acknowledging recurrent trends in student evaluations, faculty can make adjustments to their teaching methods to improve their pedagogy.

F) Peer Institution Monitoring: Our faculty frequently visit external programs, monitor trends in academic discourse, participate in visiting fellowships, etc. Through this exposure to peer institutions, we are able to assess how our program standards compare to others in our cohort. These comparisons often form the basis for discussions regarding program enhancements.

G) External Recognition: External accolades provide a key measure of program and teaching success. Since faculty teaching and research are often related, we are able to verify this through recognition and dissemination of our own research and publications, particularly those that include student projects or research, and are recognized in peer venues. This aligns closely with the indicators or measures of progress described in our strategic plan, including:

- Student Competitions wins
- Student Research, Presentations, Papers
- Exhibitions of Student work
- Feedback and Accolades from visiting critics (often of international caliber)

H) NAAB: Since our last accreditation, several pillars of professional performance standards such as NAAB, NCARB/AXP, and ARE have shifted, prompting curricular change. In preparation for accreditation, we have spent time reflecting and reporting on the specific ways that our curriculum meets the PC and SC sections. NAAB reporting is therefore itself a form of self-assessment.

I) Focused Deliberations: The Department’s annual agenda contains many touchstones where self-assessment and deliberations about our curriculum occur. Forums for these include:

- **Faculty Retreats:** These take place at the beginning of each semester and highlight issues of concern. Subsequent to these meetings, various departmental committees and task forces work on outlined topics. During the Fall 2021 Faculty meeting we broke into groups to self-assess program enhancements that had been implemented in recent years. We intend to repeat this process biennially to ensure we continue to meet the objectives stated in our strategic plan.

- **Faculty Meetings:** Regular faculty meetings occur throughout the semester. These meetings include reports from all official committees (University, Collegiate, and Department) and deliberations on proposed program enhancements.

- **Curricular Substantive Areas:** Professional Practice, Design, Communication, Building Technology, and History, Theory, and Culture. These committees deliberate and make proposals to the Curriculum Committee and the Faculty on proposed changes (See 5.3).

- **Ad Hoc Task Forces:** To address unique issues of concern: e.g. a ‘Strategic Plan’ task force.

- **Studio level instructor groups:** These ad-hoc committees are comprising of faculty members (usually five professors) teaching at a particular studio level (201, 202, etc.), who deliberate on course improvements based on the metrics outlined above.

- **Informal curricular coordination:** Faculty may develop and coordinate a learning objective or course activity between one course and another.

- **Ongoing Instructor/Teaching Team Review:** Cross-curricular coordination of learning outcomes between courses regularly occurs through discussions among colleagues.
5.2.3 Progress Towards Objectives/Mission

The quality and reputation of our architecture program is dependent upon several factors:

- **Studio-centered** education focused on student success in small classes that maximize personal or small-group interaction with professors
- Outstanding **award-winning faculty** who, through their research grants, buildings, creative work, and publications enrich their teaching and increased national and international awareness and respect for our programs
- **Student success** upon graduation in traditional architectural practice, innovative creative careers in related fields, and graduate school

As part of the NAAB process we have ascertained significant achievements in almost all areas based on our Strategic Plan’s metrics. Included in the plan were the following metrics:

- Number/frequency of partnerships; grants; recognition; awards; publications; conferences; exhibitions;
- Number and diversity of international and domestic experiences available (the CoD Rome program is the largest and longest running foreign study program at ISU); private funding for study abroad and studios involving domestic travel; quality of international exchange; educational delivery awards; student achievements post-graduation, particularly engagement in alternative practice; diversity of first-year cohort of undergraduate and graduate students and new faculty hires; numbers of symposia/events/exhibitions that engage a broad spectrum of perspectives; reach of information across social media; new course development or research topics; student participation in public programs; quality of program applicants; program rankings; faculty fellowships; new equipment; facility upgrades.

Much of the above is addressed in the Highlighted Enhancements in the PC/SC sections. Other highlights related to specific staff or student achievements are worth noting (below). These attest to our program’s quality but cannot be tabulated as ‘aggregate data’. For example, the fact that one Faculty member’s video tutorials have more than one million YouTube views is a testament of educational delivery quality — but not in a way that can be aggregated. Moving forward, ongoing review of these metrics will occur on a **two-year cycle** as part of our Fall retreat.

**Highlighted Achievements:**

I **COLLABORATION:**

- See highlights, PC5, PC6

II **DIVERSITY AND ACCESS:**

- See highlights, PC7, PC8

III **DEPARTMENTAL CULTURE**

- See highlights, PC1, PC2, PC3, PC4 and Additional sample metrics below:

**Recent Faculty Achievements/Awards related to Departmental Culture:**

- Thomas Leslie: BTES Book Award from the Building Technology Educators’ Society for *Beauty’s Rigor: Patterns of Production in the Work of Pier Luigi Nervi*. The award recognizes an outstanding new book that **significantly contributes to building technology education in architecture**
- Rob Whitehead: Honorable mention for the 2021 BTES Book Award from the Building Technology Educators' Society for *Structures by Design: Thinking, Making, Breaking*. He earlier received a 2021 **Textbook Excellence Award** for the book
- Rob Whitehead: 2020 ISU Outstanding Achievement in Teaching Award, recognizing a faculty member for **outstanding teaching performance** over an extended period.
- Shelby Doyle: 2020 Creative Achievement Award from the Association of Collegiate Schools of Architecture (ACSA) for co-founding the Iowa State University Computation and Construction Lab (CCL). The award recognizes a specific **creative achievement in teaching, design, scholarship, research or service that advances architectural education**
Lynn Paxson: 2019 AIA Iowa Educator Award from the Iowa chapter of the American Institute of Architects. The award recognizes significant contributions to architectural education in Iowa.

Shelby Doyle: 2019 Emerging Faculty Award from the Building Technology Educators’ Society.

Ulrike Passe: 2017 Educator Award from the Iowa chapter of the American Institute of Architects. The award recognizes significant contributions to architectural education in Iowa.

Nick Senske: YouTube channel been named as one of 2017’s “10 Best YouTube Channels for Landscape Architecture Students.” Senske shares video tutorials and lectures on 3D modeling and rendering software skills. The Channel has surpassed 25,000 subscribers and 1.3 million views.

IV. EDUCATION-RESEARCH-IMPACT
See highlights, PC2, PC4, PC5 and Additional sample metrics below:

Recent Faculty Achievements/Research Recognition:
- National Science Foundation (NSF) Grant: Shrink-Smart Communities (Kimberly Zarecor)
- Presidential Research Initiative Award (Ulrike Passe)
- NSF Grant Sustainable Cities Research team (Ulrike Passe)
- NSF Grant: Sustainable Urban Systems Workshop: (Passe/Zarecor)
- CEAH Grant: State Socialism Symposia: (Kulic/Zarecor)

Recent Student Achievement/awards/recognitions
- Shelby Doyle: Published “Turning Challenge Into Opportunity: How one architect viewed the challenges of coronavirus as a chance to make an impact”. The article describes how she and her student employees produced face shields for Iowa medical facilities (2021).
- Reinaldo Correa: won a public art competition curated by Liz Lidgett Gallery & Design for the Johnston Town Center. Correa worked virtually over the summer with fourth-year architecture students Brenna Fransen and Dai Le and industrial design senior Joe Fentress.
- Bosuk Hur: Presented “Looplay,” with CoD alumni Youngsu Lee (BArch 2006) and Suk Lee (BArch 2018), in the Furniture Category of the Industart: International Industrial Design Awards 2019 competition. The piece was commissioned by and installed at the Portland Design Museum.
- Firat Erdim: Awarded Heima Art Residency in Seyðisfjörður, Iceland in 2019. He continues work on Kite Choir, a project developed, in part, with Architecture students for the 2018 Venice Biennale.
- Peter Goché and Mitchell Squire: Present Pairings, a collaborative exhibition with architecture students Colleen De Matta, Christopher Perez, Sirina Reed, Zheng Yang, Zihan Yu, Hancheng Zhang and Wentao Zhong at Maple St. Construct, Omaha, Nebraska. (2019)
- Reinaldo Correa: Leads an interdisciplinary group of students, faculty and alumni in eight proposals for outdoor games for Reiman Gardens’ “Nature of the Game” exhibit. The project team consists of 10 architecture and one industrial design undergraduate student, amongst others.
- Shelby Doyle and Nick Senske with Lab associate Erin Hunt (BArch 2017): winner of the International Masonry Institute’s inaugural Joan B. Calambokidis Innovation in Masonry Competition award in the young architects and engineer category.
- Sharon Wohl presented student work from her complexity class, in a dedicated poster session for at AESOP’s (Association of European Schools of Planning) Planning and Self Organization’s 15th annual meeting in Ghent, Belgium (2017). This is the second time course work has been exhibited.
• Sharon Wohl and Architecture student Jeff Givens presented a co-authored paper at the Public Spaces and Urban Cultures conference in Porto, Portugal. The paper builds upon Given’s final project work in the Complexity and Architecture course that Wohl teaches at ISU. (2015).

5.2.4 Strengths, Challenges, and Opportunities, Program Level

A) Strengths:

i. Personnel: We are housed within a Research 1 University and able to attract very high performing faculty who initiate many program improvements. This strength has been bolstered by the addition of non-tenure track position, or Term Faculty titles for senior lecturers, now given Professor of Practice/Teaching, etc. ranks. The organization of research clusters also helps faculty leverage their combined efforts to pursue external funding and attracting students. Hiring is targeted to address emerging professional trends — most recently in performance modeling.

ii. Physical Resources: Various improvements have been made, most notably the new CCL lab and Robotics Lab. These are discussed in depth in Section 3.1. The presence of these resources allows us to strengthen our program with respect to current technological innovations that continue to advance the profession.

iii. Interdisciplinarity: We are housed within an interdisciplinary college, giving students exposure to a broad range of educational opportunities. This includes an ever-expanding range of minors (most recently in Preservation, Cultural Heritage, and Technology) that strengthen the scope of their degrees.

iv. Theory: We place a strong emphasis on the theoretical component of architecture, both through our HTC sequence, and through capstone studio offerings with enriched theoretical content (Arch 403). The annual Masterclass gives students access to input from globally recognized theoreticians/practicing architects who bridge the gap between theoretical and formal inquiry.

v. Technology: We provide students with a rigorous technology sequence that synthesizes and integrates different aspects of building rather than a more traditional topical division.

vi. Travel: Despite our location in the Midwest, we ensure our students are granted exposure to the national global context via a rich array of travel opportunities.

B) Challenges:

i. Staffing: While our faculty are committed to excellence in education, they are increasingly overwhelmed by the demands being placed upon them. Covid, early retirements, and hiring delays have exacerbated these challenges. Architecture, as the largest program in the College of Design, has also very limited dedicated administrative support.

ii. Facility: The College of Design building has become increasingly dated and is in need of a refresh. Further, we have become increasingly crowded due to unexpected program expansion (a result of admission changes instigated at the College Level).

iii. Bureaucracy: Certain institutional requirements are causing us to make shifts in our program delivery that are the result of university policy rather than the needs of our specific learning environment. The graduate college has created particular challenges for us as we attempt to create synergies between graduate and undergraduate courses.

iv. Budget: As in most institutions, budget constraints are an ongoing challenge. This is made more problematic due to the studio and seminar teaching model which necessitates a low student/teacher ratio. We continue to strive to mitigate these challenges with differential student fees assisting somewhat in this regard. We continue to face challenges as the largest department in a college where there needs to be some parity between departments.

v. University Policy: The graduate college of the university has recently begun enforcing a limit of 15 credits per semester for students, requiring us to reorganize and rewrite the curriculum for the second year of the MArch. This will, in part, involve undoing the integration of undergraduate and graduate classes initiated in 2015. In preparation for this change we will require new faculty and have recently taken on Professor Chengde Wu as part of this effort.
vi. **State Law:** Two aspects of our strategic plan have been more challenging, to "**Increase the diversity of backgrounds and perspectives represented in the Department of Architecture**, and to "**broaden access to architectural education and knowledge in order to enrich the discipline by engaging with individuals and groups that bring multiple perspectives, abilities and capacities**"

While there have been enhancements in these areas, the State of Iowa has imposed restrictions on how topics related to diversity are taught and disseminated (see FAQ by the ISU Provost regarding Iowa House File 802 for more information). This, combined with our midwestern location, limits the amount of agency and efficacy we have in broadening the diversity of our curriculum and our student cohort. Our program is located in a predominantly white, Midwest context. Recent legislation has curtailed our ability to be proactive where diversity aspects are at play.

At the same time, we have worked to increase the diversity of perspectives highlighted in our curriculum (particularly in the HTC sequence). We also attract a large number of international students who contribute to the diversity of our student population, but there has not been a significant shift in this population since our last report. We do believe that the overarching departmental culture — with respect to diversity — has been enhanced through student trainings, the diversity officer, curriculum adjustments, and student group activities in these areas. Recent hires also have enhanced the diversity of our faculty representation, significant gains in terms of how content is presented, and through the efforts of our diversity officer to raise student awareness.

C): Opportunities:

i. **Self-Evaluation:** Moving forward, we intend to focus more on new ways of collecting assessments (surveys, meetings, trainings, etc.)

ii. **Innovation/Interdisciplinarity:** Innovation is an emerging College goal we are eager to engage with. The Student Innovation Center, which houses our Robotics Lab, is one such venue. Greater visibility for the interdisciplinary minors (a recent initiative) is another.

iii. **Degree Offerings:** We are exploring opportunities for an online Masters degree, a PhD of Design, and greater undergraduate awareness of the options to pursue a post-degree one-year Master of Science degree.

iv. **Covid** (positive disruption): While the switch to remote teaching was challenging, it did yield some insights. These positive 'lessons learned' will be integrated in our ongoing pedagogy.

v. **Survey Recommendations** (based on spring 2021 Instructor Survey Data). In 2021, for the first time we conducted a post semester studio survey, which we intend to continue moving forward.
   - Reinstate year level (or semester-level) coordinators (inactive due to staffing/Covid)
   - Mandatory end-of-semester meetings among studio groups (see survey) and distribution of these meeting notes
   - Clearer communication about what other classes are doing
   - More Faculty trainings
   - Peer-review process to help improve course delivery methods
   - More robust training of teaching assistants (TAs) in the grading/assessment process (and better link between their feedback and instructors)

5.2.5 **Ongoing Outside Input**

At a curricular level, **external stakeholders** are regularly included in course activities including Masterclasses, Sponsored Studios, Design Competition Jurors, Visiting Jurors, Public program lectures, etc. These practitioners, researchers, and instructors participate in course activities and are encouraged to give feedback. At a non-curricular level, the **Architecture Advisory Committee** (AAC) offers regular input to the Chair and faculty.
5.3 Curricular Development

There is a clear connection between assessment and curricular development in our program. The process of course assessment and program assessment outlined in Section 5.2 (and the PC and SC sections) describes processes whereby curricular changes are initiated. Our achievements of the NAAB PCs and SCs occurs through a variety of mechanisms that range from incremental shifts in delivery to larger scale revisioning. The primary players and processes are discussed below.

5.3.1 Course Assessment and Curricular Development

A) Chair/Department Cabinet: Departmental oversight from the Chair, coupled with their vision, are integral to ensuring the program remains contemporary, healthy, and vibrant. Working closely with the Chair, the Department Cabinet ensures that Graduate, Undergraduate, and Faculty Research needs are addressed. Meeting weekly, the Cabinet focuses on program monitoring with the Chair taking action or deploying personnel where needed. The Chair also receives input from the Architectural Advisory committee (AAC). The AAC can advise the Chair in understanding areas of weakness within the graduate and undergraduate programs. Equipped with this information, the Chair can identify under-represented areas in the curriculum and rectify shortcomings.

Since the last NAAB report, the Chair has recruited faculty immersed in contemporary issues. These new voices add energetic, contemporary, and innovative teaching to our program. As faculty join the department, opportunities emerge to re-envision older material and teaching methods. Many curricular enhancements arise by virtue of incoming faculty who reconsider course content and delivery.

B) Chair/Instructor initiatives (Course Assignments/New Courses): The curriculum maintains a series of ‘open’ course numbers (Arch 528 and Arch 490/590) in our catalog that align with our substantive areas; faculty can teach these electives with approval from the chair, providing a testbed for new, provisional content. Doing so provides opportunities to align teaching with faculty research and expertise. Curriculum change can then occur incrementally as new content is phased into the catalogue. Proposing and approving new courses occurs through a formalized process, involving the curriculum committee, the department faculty, and the College’s Academic Affairs Committee.

C) Changes within Existing Courses: Not all changes need to be formalized through committees. Our program’s formative assessment embraces the inherent flexibility, feedback, and autonomy of instructors. Catalog descriptions for all our major non-elective courses are written to allow for a certain degree of latitude in course delivery. While core learning outcomes must be maintained, these outcomes can be met through various types of projects and activities.

D) Catalogue updates: Curriculum review and development takes place on an ongoing basis. The university catalog cycle provides an armature for review, revision, approval, and implementation. Review and development procedures are outlined in governance documents at the University, College, and Departmental levels. All departmental changes are vetted by the Curriculum Committee, presented to the entire Department Faculty for commentary and approval, before going to the College’s Academic Affairs Committee (AAC) for final approval.

E) CELT/Faculty Mentors: Faculty wishing to modify/enhance their teaching strategies are supported by Faculty Mentors who help guide faculty directly (by offering feedback), or indirectly, by directing them to University Support services for Teaching. ISU’s Center for Excellence in Learning and Teaching (CELT) offers workshops and resources throughout the year to aid faculty who wish to improve their teaching and engagement strategies.
5.3.2 Roles and Responsibilities: (See also Organization Chart - Section 5.1.2)

A) Chair & Department Cabinet (see also 5.1.1C): The chairperson holds a key leadership role in recruiting quality faculty and students, facilitating faculty development, developing and implementing quality academic programs, and advancing departmental resources and program quality. She is assisted by the Department Cabinet.

B) Program Committees: The Director of Graduate Education (DoGE) chairs the Graduate Program Committee, and the Undergraduate Coordinator chairs the Undergraduate Program Committee. Both committees meet to review curriculum design and developments. Proposals they generate are forwarded to the Curriculum Committee for vetting before proceeding to faculty

   i) Graduate Committee (Cycle: once or twice per month): The Graduate Committee is appointed by the Department Chair, in consultation with the Director of Graduate Education (DoGE). It is comprised of faculty representing the three core areas of study: studio, technology, and history and theory. The committee addresses pressing issues and matters through meetings, recruitment, publicity, marketing strategies, and curriculum development

   ii) Undergraduate Committee (Cycle: once per month): The Undergraduate Committee is composed of the Undergraduate Coordinator and representatives from the department (typically year-level coordinators). Due to staffing issues (retirements and a delay in new hires due to Covid), there were no year-level coordinators in 2020. Instead, the Undergraduate committee was composed of faculty selected by the chair from instructors from different year levels, and substantive areas.

C) Architectural Advisory Committee (AAC) (cycle – two to three times annually): The Chair meets with the AAC to discuss the program and the profession’s needs. This input provides valuable insights into the state of the profession and thus into the department’s pedagogical trajectory, including informing the type of job calls for the department that greatly impact studio teaching. Meetings were suspended during the pandemic but will resume in Fall of 2021.

D) Substantive Areas and Curriculum Committee (cycle – as needed): Faculty self-select into Substantive areas of curricular interest: Practice, Design, Communications, Technology, and History, Theory & Culture (HTC). Faculty may be members of more than one Substantive Area. As instructors look to modify or enhance course topics and learning objectives, they are supported by the ‘substantive area’ overseeing that course. The substantive group provides a venue whereby continuous self-assessment occurs through ongoing discussions between faculty teaching courses within a sequence. Each substantive area provides a focused platform for reflection and serves as the formal venue whereby substantial curricular modifications are initiated and developed, prior to being presented to the department’s Curriculum Committee, and eventually the whole architecture faculty during a faculty meeting. Chairs of the Substantive Areas are elected by the committee members, and then comprise the Curriculum Committee.

The Curriculum Committee elects a chair and this chair serves on the collegiate-level Academic Advisory Committee (AAC – cycle, monthly) along with chairs of curriculum committees from other College of Design programs (and ex-officio members and student representatives). The Curriculum Committee reviews and generates proposals for consideration by the full faculty; it receives and reviews proposals from the Substantive Areas, Graduate Committee, and Undergraduate Program Committees.
5.4 Human Resources and Human Resource Development

Overview: Academic Tenure/Tenure Track and Term Professors

Entering into Fall of 2021, the Architecture faculty consists of the individuals listed below. Their recent teaching assignments and biographic information is found in the CV section. Faculty hold a wide range of interests, abilities, and accomplishments, and include a substantial balance of senior and incoming professors, as well as more academically oriented (PhD granted) and professionally oriented (licensed) professors. Faculty interests complement student aspirations for careers in the practice of architecture with emphasis on the improvement and redefinition of conventional practice. Amongst the 30+ Full Faculty and Term Faculty, almost all have terminal degrees at the Masters level and 11 hold doctorates - many from highly-recognized institutions across the country and around the world. Moving into Fall of 2021 we welcome three incoming Associate Professors.

Tenured Full Professors
- Hauptmann, Deborah, PhD (Dept. Chair)
- Leslie, Tom, FAIA
- Passe, Ulrike
- Squire, Mitchell
- Zarecor, Kimberly, PhD

Tenured Associate Professors
- Bogdanović, Jelena, PhD
- Campbell, Cameron, AIA
- Doyle, Shelby AIA
- Frankowski, Nathalie
- Garcia, Cruz
- Kulić, Vladimir, PhD
- Muecke, Mikesch, PhD
- Spencer, Doug, PhD (DoGE)
- Whitehead, Robert, AIA
- Wheeler, Andrea, PhD
- Wohl, Sharon, PhD (UGC)
- Wu, Chengde, PhD

Tenure-Track Assistant Professors
- Erdim, Firat
- Goché, Peter, AIA
- Senske, Nick

Part-time or phased retirement
- Osterberg, Arvid, PhD (0.5)
- Shao, Paul, PhD (0.5)

To help attract and retain high-quality Term faculty, the university (as of 2021) now offers new ranked titles for these positions. Teaching titles are used where the primary qualification is academic. Practice titles are used where the primary qualification for the position is professional experience that is not academic in nature. These titles and rankings are specifically designed to recognize and retain high-quality faculty at the university. The College of Design establishes the following minimum qualifications for term faculty (ISU Faculty Handbook Section 3.1.3).

Teaching Faculty:
- Lecturer: master’s degree
- Assistant Teaching Professor: master’s degree
- Associate Teaching Professor: master’s degree
- Teaching Professor: master’s degree

Practice Faculty:
- Assistant Professor of Practice: bachelor’s degree plus 5 years relevant industry experience
- Associate Professor of Practice: bachelor’s degree plus 10 years relevant industry experience or five years of academic experience beyond requirements for assistant professor of practice
- Professor of Practice: bachelor’s degree plus 15 years of relevant industry experience or five years of academic experience beyond the requirements for associate professor of practice
In addition to the minimum degree or professional experience requirements listed above, for an initial hire of a term faculty member at the associate professor or professor rank, the following minimum requirements are defined for titles of term faculty:

- **Associate Professor**: a record of successfully contributing to the mission of the university as defined by the PRS or a record of contributions in the professional field and promise of further academic and professional development.
- **Professor**: a record of proven excellence in the primary responsibilities identified in the PRS and effectiveness in other areas of the PRS, or a record of demonstrated substantial contributions to their professional field.

Term faculty participate in annual performance reviews, are able to apply for advancement in ranking, in accordance with the College’s Governance Document. The primary responsibility of **teaching faculty** is to contribute to the teaching mission of the university. These positions must include a significant element of instruction; additional responsibilities may include advising, curriculum coordination, leadership of multi-section classes, and other responsibilities related to the teaching mission. **Practice faculty** must have significant relevant professional experience outside of academia that qualify them to contribute to instruction and/or advising. Their primary responsibility is teaching in their area of professional expertise and related institutional and professional service. Term Faculty engage in a range of activities beyond teaching, including committee service. Practice faculty may also have significant service responsibilities unrelated to teaching or advising but related to their field of professional expertise. Below is a current listing:

### Full-time Term Faculty:
- **Associate Professor of Practice**: Aversing, Anna
- **Associate Professor of Practice**: Hur, Bosuk (licensed in Korea)
- **Assistant Teaching Professor**: Iyanalu, Ayo
- **Assistant Teaching Professor**: Chikerinets, Roman, AIA
- **Assistant Teaching Professor**: Gleeson, Andrew
- **Assistant Teaching Professor**: Lair, Kevin
- **Assistant Teaching Professor**: Mannan, Rami
- **Assistant Teaching Professor**: Correa, Reinaldo (part-time in Architecture)

*We include in the CVs that of Ann Sobiech Munson, Associate Professor of Practice as her 2020 Arch 482/582 course is being used for accreditation purposes.*

### Part-time Term Faculty
*We do not include CVs of the Part Time Faculty or the Part time Rome Faculty.*
- **Professor of Practice**: Kruse, Rod (0.2 - AIA)
- **Associate Professor of Practice**: Ballard, Andrew (0.4 AIA)
- **Associate Professor of Practice**: Griffith, Nathan (0.1 AIA)
- **Associate Professor of Practice**: Lindsley, Nick (0.1 AIA)
- **Assistant Professor of Practice**: David Reid, AIA (.20)
- **Associate Professor of Practice**: Leila Ammar, AIA (.10)
- **Assistant Teaching Professor**: Badding, Eric (0.5)

**ROME Faculty**: Capra, Simone, PhD (licensed in Italy), Nunez Ciuffa, Consuelo, Schneider, Pia

Lecturers are short term teaching faculty appointments and shall have a contract length of one year or less. Such contracts are renewable for up to three years of total service. After three years of continuous service, lecturers become assistant teaching professors upon renewal and shall have three-year contracts. The change in title and contract length is not an advancement. Renewal reviews are a peer review process as specified by departmental governance documents. Renewal of term appointments for lecturers and other non-tenure-eligible faculty are at the discretion of the chair based upon need and resources.
5.4.1. Work-load balance/achievement

A) Teaching Load: Distribution of effort between teaching and other responsibilities varies by individual faculty member interests and initiatives. A Position Responsibility Statement (PRS), signed by the faculty member and the Chair, outlines expectations for teaching, advising, research & creative activity, and institutional service. Full-time faculty typically teach two courses a semester (6-9 credits), serve on department, college, and university committees, advise students, and supervise independent study projects.

B) Seminars/Studio offerings: While faculty have a relatively heavy teaching load (compared with other university departments) — typically two studios and two 3 credit hour courses annually — this is mitigated by the nature of both the studio and the seminar offerings. Almost all Tenured/Tenure eligible faculty connect their research with their teaching which may involve teaching an upper-level studio or seminar course related to the faculty member’s research. This is a win-win for both faculty and students: students gain access to a faculty member’s research strengths and choose from that which best aligns with their own interests. It also means that we have an unusually rich array of elective offerings that students complete as part of their required degree. New topics can be ‘tested’ by faculty under an Arch 490/590 or Arch 528 course number. Successful courses then enter our catalogue under permanent course codes. Faculty use these electives and topical studios as vehicles for research, while engaging with motivated students.

C) Research leaves: Faculty may take advantage of periodic research leaves offered by the University in order to spend dedicated time on their research interests (described below).

D) Course Releases: Tenure track faculty are normally granted a reduced teaching load at some point during their probationary period. Periodically faculty may have additional responsibilities, such as funded research or administrative duties, that alter the normal teaching load.

E) Tenure-Clock Extensions: To accommodate personal issues that affect work/life balance (birth of a child, family illness, etc.), the university grants tenure-clock extensions to faculty in need. Faculty made use of this extension due to the research impact caused by Covid.

5.4.2. Licensing Advisor

Currently Rob Whitehead serves as the AXP advisor. He participates in all duties and trainings associated with the position. See: PC.1: Co-Curricular Aspects

5.4.3 Professional Development: Faculty

A) Research Support

i) Start-up Research Funds: ISU provides modest start-up funds for incoming faculty for research in their initial years. These grants are typically between $35,000 and $45,000 (includes the value of GA funding/assignments in the first years) On occasion, larger start-up packages are available. Recently, Shelby Doyle joined the department as a university/college-supported ‘High-Impact’ hire, with start-up funds of $200,000 from the department that were matched by both the University and the College, bringing the total $600,000. These funds were used to help develop the new CCL Lab and the Robotics Lab (housed in the University’s new Student Innovation Center). Further ongoing faculty research support is provided by the Chair through graduate assistantships (in collaboration with the DoGE), professional development funds, and other monies donated by alumni.

ii) University Funds: The University’s Center for the Excellence of Arts and Humanities (CEAH) specifically promotes and support the unique scholarly efforts within those disciplines. The Department’s faculty regularly receive CEAH grants, including Miller Faculty Fellowships (up to $25,000) to promote the development of innovative new courses and Publication Subvention Grants to assist in book publications (up to $10,000). The department supports projects and events as funds are available, typically supplementing external funding.
iii) **Travel Funds**: The department puts a high priority on funding for faculty travel for conferences and meetings to deliver refereed papers on their academic achievements. During this accreditation period this funding has been approximately $50,000 per year.

iv) **Professional Development Assignments** (FPDA): Iowa State University awards faculty leaves for one semester at full pay or two semesters at half pay. Modest funding from the college compensates for term contract faculty to cover the courses of those on leave. Eight faculty have taken advantage of this opportunity since the last report — to work on research grants, fellowships, book development, etc:

- **Ulrike Passe (2013):**
  *Book Development: Designing Spaces for Natural Ventilation: An Architect’s Guide*
- **Dan Naegle (2014):**
  *Book Development: Naegle’s Guide to the Only Good Architecture in Iowa*
- **Chiu-Shui Chan (2014):**
- **Jelena Bogdanovic (2017):**
  *Book Development: Perceptions of the Body and Sacred Space in Late antiquity and Byzantium*
- **Sharon Wohl (2019):**
  *Website Development (Fellowship at the Institute for Advanced Studies, Netherlands)*
- **Tom Leslie (2020):**
  *Book Development: Chicago Skyscrapers, 1934-1986*
- **Mitchell Squire (2021):**
  *Creative activity/visiting Professorship: CCNY CUNY: Bernard and Anne Spitzer School of Architecture*
- **Kimberly Zarecor (2022):**
  *Research Development: Shrink Smart Communities NSF project*

Leave without pay for research, fellowships or visiting assignments may also be granted.

v) **Institute for Design Research (IDRO):** IDRO is a unit within the College of Design that supports faculty applying for internal and external grants. Faculty have successfully obtained several prestigious grants. These include:

- **Shrink-Smart Communities NSF Grant (Kimberly Zarecor):** A three-year, $1.5 million NSF grant that builds upon a pilot study examining whether there are towns in Iowa that have lost population but where perception of quality of life has remained stable or improved.
- **Presidential Research Initiative Award (Ulrike Passe):** A three-year, $375,000 award, to research data-driven decision making for sustainable cities,
- **Sustainable Cities Research team NSF Grant (Ulrike Passe):** A $2.5 million grant to create a framework for the analysis of food, energy and water systems for Des Moines (and the surrounding six-county area), and formulate scenarios that can result in a more sustainable city.
- **Getty Foundation Grant (Tom Leslie):** For a yearlong project to preserve Rome’s Flaminio Stadium (with Sapienza University of Rome, Pier Luigi Nervi Project Association and DOCOMOMO Italia)

vi) **Research Clusters:** The Graduate Department has developed a number of research clusters, intended to help focus faculty effort in areas of overlapping/common interests:

- *Intersections of Architecture, Aesthetics & Technology*
- *Social Formations of Architecture and Urbanization: Histories and Theories*
- *Theories and Practices for Sustainable Architecture*
- *Computation and Construction Lab (CCL)*

vii) **Internal Fellowships:** Faculty may also receive support in the form of internal fellowships:

- **Pickard Chilton Professorship in Architecture**
- **Stan G. Thurston Professorship in Design Build**
- **Daniel J. Huberty Faculty Fellowship in Architecture**
- **FRK Faculty Fellowship in Architecture**
- **David Lingle Faculty Fellowship in Architecture**
B) Other Academic Support

i) Mentoring: New faculty members are, in consultation with the chair, assigned a faculty mentor. The mentor’s responsibilities include introducing the new faculty member to the university and its operations, an annual meeting with the candidate to review and discuss professional activities and growth, and assistance in preparing documentation for renewal, promotion, and/or tenure.

ii) Teaching Support: ISU’s Center for Excellence in Learning and Teaching (CELT) is a resource center for enhancing teaching/learning performance.

C) Appointments, Performance & Advancement

i) Faculty Appointment: New faculty tenure-track appointments are based upon a selection of candidates identified by a faculty search committee appointed by the department Chair. Search committees are composed of tenured and tenure-track faculty with an appropriate representation of academic ranks and areas of specialization. When appropriate, persons from outside the department and outside the university may be added to the committee. With approval by the Dean, the Chair and committee develop a notice of vacancy, guidelines, and job advertisement. The committee conducts a search, reviews applicant credentials, and recommends a list of three to five unranked final candidates to be considered for campus interviews. The committee and other faculty may also assist the chair, as requested, in campus visitations. A department recommendation for a new faculty appointment is initiated by the chairperson and must be approved by the dean of the college and the provost before becoming effective.

ii) Annual reviews: Reviews for all faculty (including Term faculty) are prepared by the Chairperson. They entail performance assessment and preparation for future promotion and tenure actions. Criteria for assessment include course development, student and peer review of teaching records, scholarly and creative achievement, and service.

iii) Compensation evaluations: Evaluations are conducted annually by the chair. Salary adjustments are finalized by the chair with advice and approval by the dean and following university guidelines.

iv) Promotion, Tenure and Advancement: The department has developed standards and procedures for the awarding of promotion and tenure that are consistent with college and university promotion and tenure policies, with set standards and procedures within the context of the faculty and the mission of the department.

A reappointment review is conducted at year three at the departmental level by the chairperson and the Promotion and Tenure Committee. The recommendation, supported by documentation including annual evaluations, dossier, and vitae, is reviewed by the dean in consultation with the chairperson. The chair provides the faculty member with a written evaluation. Renewals require a new Letter of Intent. Notice of non-renewal is made at least one calendar year prior to the appointment end-date.

Application for Tenure is generally made at year five. Evaluation of candidate dossiers (includes teaching/advising, research/creative work, extension/professional practice, and institutional service records, peer and external references, and teaching evaluations), begins with the elected departmental Promotion and Tenure committee. Committee recommendations are submitted to the chairperson who submits a separate parallel recommendation to the college after review with the faculty member. The College Faculty Development Council reviews departmental recommendations and makes its recommendation to the dean. College recommendations are then forwarded for the university provost recommendation and submittal to the president and State Board of Regents. A similar process occurs in the advancement of Term Faculty titles.
v) Post-Tenure Review: Post-Tenure Review (PTR) is mandated for all faculty (not less frequently than every seven years). The department includes processes and procedures in its Governance and P&T Document that conform to university processes.

vi) Department Chair Evaluation: The Chair is appointed by the dean, in consultation with the departmental faculty, for a term of three to five years. At the beginning of the final year of the appointment, the Dean will meet with him/her to determine their willingness to be considered for reappointment. After the response is received, the dean will solicit input from department faculty. The faculty makes a recommendation to the dean in the manner designated by the departmental governance document. The dean also solicits input from students and other appropriate college personnel such as staff, associate deans, and others knowledgeable about the Chair’s performance. The dean may also solicit input from other interested groups, such as department alumni, professional associations, state agencies and other organizations and advisory groups aligned with departmental interests.

5.4.3 Professional Development: Staff
The supervision of professional development opportunities for college staff is, in large part, managed by the Dean’s office. Staff may pursue professional development contributing to program improvement from central funds. In addition, each supervisor can support staff attending conferences or trainings, where staff occasionally present or lead training. Both the college and the university also provide internal professional development and training.

The Professional and Scientific Council, through the work of the Professional Development Committee and the Professional Development Conference Sub-Committee, host monthly Seminar Series Events on topics relevant to P&S Employees, and hold an annual full day Professional Development Conference for P&S employees. The goals of these personal and professional development activities are to create opportunities for P&S Employees to learn new skills and strengthen old ones, gather resources and information, to engage and network with others, and to ask questions about topics and activities. Staff also receive annual performance evaluations, intended to foster performance improvement. Links to key ISU policies regarding evaluation are provided here:

- P&S Performance Management Program Guidelines for Supervisors
- P&S Performance Management Program
- Performance Appraisal Forms
  - Sample 1 / Sample 2
- Outline for Conducting an Effective Performance Review
- Template of Performance Improvement Plan

Supervisors follow University policy and the P&S Performance Management Program that:
- Strengthens participation of management in the operation and mission of Iowa State University
- Sets a foundation for building greater trust between supervisors and their employees
- Provides a reasonable and accessible communication system for setting, discussing and evaluating job expectations
- Strengthens communication between supervisors and their employees as they work to accomplish the mission of Iowa State University, which is to create, share and apply knowledge
- Fosters teamwork

Mechanisms are also in place to address any staff concerns, and advocate for opportunities on their behalf. The Iowa State University Professional and Scientific Council serves as a resource and an advocate for P&S employees. The Council is a representative body elected by, and responsible to, P&S employees at ISU. The council identifies the needs of its constituents, provides information and advice in response to those needs, and recommends policies and procedures to the administration that benefit P&S employees and assist in fulfilling ISU’s mission. The College’s Professional and Scientific Council has the following responsibilities:
• Serve as a resource and as an advocate for Professional and Scientific employees in the College of Design
• Identify and communicate the needs of college staff members and provide information and advice in response to those needs
• Recommend to the administration and the Liaison Council policies and procedures that benefit College of Design P&S employees and assist in fulfilling the mission of the college
• Review and recommend criteria, policies and procedures for the college's staff awards
• Review nominations and make recommendations to the dean for the college’s staff awards
• Promote and nominate college staff for university awards

5.4.4 Student Support (See 5.1.2 for details of the role of the Student Affairs Council)

A) Onboarding (undergraduate)

i) Learning Communities: Upon entering the college, students are enrolled in a 'learning community' that offers peer support. Students enroll in a one credit seminar each semester (DSN S 110 in fall & DSN S 111 in spring) that encourages their personal, social, and intellectual development. Students participate in academic and social activities arranged by a peer mentor.

ii) Living Options: The Design Exchange is a residential learning community housed in Friley and Helser halls on campus. It is a full-year living and learning experience open to direct-from-high-school first-year students enrolled in any major in the College of Design. The residential component allows students to build a support network as they transition to ISU and the College of Design.

B) Professional Advising: The college’s professional advising staff work with pre-professional undergraduate students and coordinates the faculty advising system. Since our last report, we have gained a dedicated staff person who serves as an advisor to our Architecture undergrads in the more procedural aspects of their degree. All fourth-year undergraduate students are appointed a Faculty Mentor to assist in career advising.

The Undergraduate Program coordinator is also actively involved in student advising including grievance resolution, monitoring student progress, and consulting with students about specific needs. The Director of Graduate Education (DoGE) serves as the advisor for all graduate students and is actively involved in graduate student affairs.

i) Undergraduate Progress Evaluation & Advising: Undergraduate student progress is monitored by faculty and staff advisors and is based on a regular audit of academic progress, through the grading system. Mid-term notices are sent to students receiving grades of C- and lower. Academic Advisors meet with students who may be having difficulty.

ii) Graduate Program Progress and Advising: Graduate student progress is managed by both the Director of Graduate Education and the Graduate College. Iowa State maintains strict GPA requirements for continued progress toward graduation and does not allow credit for required courses in which the grade is less than a ‘B’. The Graduate Program works with established Graduate College procedures, including a Program of Study requirement for each student that is monitored both within the Department and the Graduate College. The department’s Director of Graduate Education assumes responsibility for monitoring student progress and advising on course selection and the Program of Study in conjunction with the Graduate College.

C) Mentoring/Co-Teaching (undergraduate)

i) Core peer-mentors are students who work alongside professors with students in their first-year design studios, as well as participate in a seminar about design teaching. Students with junior, senior, or graduate standing may apply.

ii) Design Exchange peer mentors provide information and advice as well as plan, promote and facilitate programs in areas of personal and academic development for first-year students in this year-long, residential learning community. They link residents to appropriate academic support
resources and conducting monthly interviews with design students. They help develop a community conducive to student success, encouraging positive behaviors, and address behaviors detrimental to the individual and/or community. Other peer mentors provide information and advice as well as plan, promote and facilitate programs in areas of personal and academic development for first-year students who are not members of a residential learning community.

iii) Student buddy mentors: Incoming 2nd year students are assigned a second year ‘buddy’ to offer them advice, friendship, and support.

D) Learning Accommodations: Students Accessibility Services provides accommodation to students who may require additional support for academic success. At the start of each semester instructors are advised of any students who have registered for accommodations.

E) Mental Well-Being: Theisen Student Health Center offers a variety of resources for students in need of additional mental health and wellness resources. Faculty and advisors are proactive at directing students to these resources in instances where students appear to be at risk. CELT also offers trainings for faculty and staff to assist them in recognizing risk signs. During the pandemic, many additional resources were deployed to ensure that students had access to the support and accommodations needed during this difficult time. Advisors and Instructors offered many additional accommodations due to covid-related disruptions.

F) Career Guidance, Internship and Job Placement (See PC 1 for additional details)
Our Career Services Office has an excellent track record of helping students find internships. They sponsor workshops and distribute information concerning the job search process, receive and distributes notices of employment opportunities, and maintains detailed records of post-graduation employment statistics. The annual Career Day, developed by our department, is now held for all College of Design students and coordinated with university career day programs. Employers spend two days interviewing students for internships and advising them on their job search process.

G) Student Organizations: See Section PC1 (b)

5.5 Social Equity, Diversity, and Inclusion
5.5.1 Human, physical, & financial resources
The program is committed to diversity and inclusion among current and prospective faculty, staff and students in its provision of human, physical and financial resources.

First, and foremost, of the resources committed to this provision are those offered by the institution’s Office of Equal Opportunity which serves ISU faculty, staff, and students in ensuring equal access to employment and educational opportunities. The Office advances diversity, equity, inclusion, and fairness. It does so through outreach, education, training, and complaint resolution, as well as through the advancement of ISU’s anti-discrimination/harassment and affirmative action policies. The Office of Equal Opportunity provide resources for individuals who have experienced discrimination or harassment based on identity and protected class, and for those who have experienced power-based interpersonal violence. The Office provides individuals a safe environment for consultation and advice prior to choosing any next steps in their situation. Interactions with The Office of Equal Opportunity are low-risk and private.

The Office provides the university with a Non-discrimination Statement that must be included in all departmental publications such as brochures, pamphlets, manuals, and guidebooks, describing or inviting participation in programs at Iowa State University:

“Iowa State University does not discriminate on the basis of race, color, age, ethnicity, religion, national origin, pregnancy, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. Veteran.”
The institution also provides a Campus Climate Reporting System (CCRS), which comprises members of the ISU community — faculty and staff — who meet regularly throughout the year to plan and implement strategies for developing and facilitating the implementation of appropriate responses to campus climate incidents — such as bias, harassment, and discrimination — impacting the Iowa State University community.

The team meets quarterly to discuss the broader campus climate and can communicate in real-time as necessary. Alongside determining the appropriate outreach and action steps needed to take after an incident occurs on campus, the team also notifies the community when appropriate. Aid to those who have been affected is offered through outreaches conducted by members of the CCRS. Students, staff, and faculty are able to contact members of the team if they feel that they have been the target of a bias incident, harassment, hate crime, or discrimination. Incidents can be reported directly via a dedicated Incident Reporting Form.

The CCRS identifies for this community a directory of further resources including the following:

- Campus Life Diversity
- Center for LGBTQIA+ Student Success
- Dean of Students Office
- Department of Public Safety
- Deputy Title IX Coordinators
- Directors of Multicultural Student Success - Colleges
- Federal Relations
- Margaret Sloss Center for Women and Gender Equity
- Office of Diversity, Equity and Inclusion
- Office of Equal Opportunity
- Office of Multicultural Student Affairs
- Office of the Senior Vice President and Provost
- Ombuds Office
- Student Counseling Services
- Thielen Student Health Center
- University Human Resources
- ISU Police
- Student Counseling Services
- Student Assistance
- Thielen Student Health Center
- Crisis Text Line

The program’s commitment to diversity and inclusion is also served and supported on behalf of its students through the university’s Office of Multicultural Student Affairs. This office envisions itself as a national leader in effectively supporting and empowering multicultural students in their personal, community and academic development. Its mission is to support and empower Iowa State University's students who self-identify as African American, Asian American, Native Hawaiian or other Pacific Islander, Latinx, Native American/Alaskan Native and/or Multiracial, and to advocate for their holistic development across the University.

The goals of the Office of Multicultural Student Affairs are to:

- Provide support services that facilitate the transition, retention, persistence, and graduation of Iowa State University's multicultural students
- Offer leadership development opportunities for students to build community, contribute to their academic experiences and become change agents
- Encourage students to explore their personal and professional development
- Promote an inclusive campus environment where Iowa State University multicultural students have a sense of belonging and connection
National Architectural Accrediting Board
Architecture Program Report

• Develop and maintain relationships with campus partners in order to advocate and support Iowa State University's multicultural students; and utilize those relationships to serve as a resource regarding multicultural student success
• Create innovative approaches to promoting multicultural student success that are recognized nationally, regionally and/or locally

The Office of Multicultural Student Affairs supports students through the following scholarship programs:
• Academic Program for Excellence: an opportunity for first-year, direct-from-high school ISU Multicultural students to begin their ISU adventure early over the summer
• George Washington Carver Scholarship Program: The GWC program is a four-year scholarship and academic support program for high-achieving multicultural students
• Multicultural Vision Program: The MVP program is a four-year scholarship and academic support program for multicultural students demonstrating academic and leadership potential
• An additional source of funding is the McNair Scholarship, which particularly targets minority students

Our commitment to diversity and inclusion is served and supported by the university’s Office for Diversity, Equity and Inclusion. This office provides educational resources on, for example, anti-racism, for the ISU community as a whole. It also offers awards/funding for projects that support diversity, and data and demographic reports on diversity and affirmative action within the institution. The Office is also involved in the following initiatives related to gender and sexual diversity:

• Administering the Big 12 Violence and Discrimination Awareness and Prevention fund (VDAPF at ISU)
• Coordinating GSD @ ISU, an online course for gender and sexual diversity education - launching Summer 2021
• Advancing relationships within the ISU LGBTQ+ community
• Improving healthcare in Ames for people who are transgender through a partnership with McFarland Clinic and Mary Greeley Medical Center
• Pronoun Project and common language in gender and sexual diversity topics
• Consulting on more robust campus information systems and processes
• Connecting with future Cyclones annually at the Iowa Safe Schools Conference on LGBTQ Youth
• Working with ISU Extension and Outreach / 4-H Youth Development Champions Groups and coaching the LGBTQ+ Champions Group
• Collaborating with Ames Pride non-profit organization
• Consulting with and presenting at events sponsored by statewide LGBTQ+ agencies

Within the department of architecture, the student organizations National Organization of Minority Architecture Students, and Iowa Women in Architecture Students provide a platform through which issues related to diversity and inclusion specifically related to architectural education and practice can be addressed, and the interests and agendas of these groups promoted. These groups liaise with dedicated members of faculty so as to bring their interests, agendas, and concerns to the attention of the department as a whole.

5.5.2. Maintaining / Increasing the diversity of Faculty & Staff
In matters of employment the department of architecture is bound by the policies and agendas of the university. This includes an institutional plan of affirmative action. Equally, the department is bound by the statement of the Office of Equal Opportunity not to “discriminate on the basis of race, color, age, ethnicity, religion, national origin, pregnancy, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. Veteran.”

While working within this wider institutional framework we nonetheless recognize the need to increase the diversity of staff and faculty as a specific concern of the department. Our current and future ambitions to increase the diversity of faculty are motivated not only by the need to achieve demographic benchmarks, but by the educational agenda we seek to cultivate in response and
relation to contemporary agendas in the discipline and profession of architecture – such those relating to gender equity, race and architecture, coloniality – and to challenging the prejudices and privileges embedded in the existing canons of architecture and its history. We believe that the relationship between diversity and inclusion in the department’s body of students and facility is integral to the development and delivery of a curriculum dedicated to addressing disciplinary and professional diversity, equity and inclusion. Our department currently features a diverse array of nationalities, including German, Slovenian, Chinese, Turkish, Canadian, British, Korean, Puerto Rican, French, Nigerian, Indian and Mexican.

5.5.3. Maintaining / Increasing the diversity of Students
As is the case in matters of faculty and staff employment, our student selections and admissions policies are set by the university and these are, in turn, bound by state legislation. Within this framework, we recruit from those who apply according to the sole criteria of academic ability: assessed through grade scores, portfolio content, letter of application and of recommendation.

Within these overarching conditions departmental efforts are made to maintain or increase the diversity of our students. Our active recruitment of international students, for example affords us the opportunity to achieve a more nationally and culturally diverse cohort of students, especially, though not only, in the MArch program, where this year the incoming advanced standing students are majority international. Furthermore, in the promotional and recruitment materials for our programs, we seek to represent the diversity of our student body through the students whose stories and design work is featured in this. Existing international students (at their own discretion) also take on an ambassadorial and advisory role in communicating directly with prospective international students in relation to their experience of living and studying in Iowa.

5.5.4 Policies to further Equal Employment Opportunity/Affirmative Action
Through the Office of Equal Opportunities Iowa State University has committed itself to develop and implement affirmative action programs with respect to employment and to comply with all applicable federal, state, and Board of Regents’ rules, regulations and policies relative to nondiscrimination.

The Graduate College offers the George A. Jackson Award which provides financial assistance for masters and doctoral students who identify as African American, American Indian, Hispanic/Latinx, Alaska Native, and Native Hawaiian or Pacific Islander. In 2020 the department of architecture produced the following land acknowledgement, which is announced at the commencement of all public events hosted by the department:

“[Iowa State University] is located on the ancestral lands and territory of the Baxoje (bah-kho-dzhe), or Ioway Nation. The United States obtained the land from the Meskwaki and Sauk nations in the Treaty of 1842. We wish to recognize our obligations to this land and to the people who took care of it, as well as to the 17,000 Native people who live in Iowa today, on diversity.”

Additionally, in the same year, the department produced the following statement on diversity, which is displayed on its institutional webpage, accompanied by links to further resources.

ISU Architecture Diversity, Equity, and Inclusion Statement
Through teaching, research, service, and outreach the ISU Department of Architecture pledges to maintain an intentional, active, and ongoing commitment to issues of diversity, equity & inclusion.

Architecture is imbued with values and ideas that both reflect and exert tremendous influence over our built environment, our communities, and our daily lives. Therefore, diversity, equity, and inclusion are subjects essential to an architectural education at Iowa State University. The following values are central to our pursuit of design innovation, excellence, and leadership in a multifaceted and changing profession:
• We affirm that diversity, equity, and inclusion are a shared responsibility and must be actively fostered, frequently reflected upon, and centered in our teaching, research, and outreach.
• We commit to education as a space in which conceptual, practical, and theoretical thinking is integrated with the everyday, the material, the technological, and the humane.
• We create opportunities for faculty, staff, and students to question assumptions, reflect upon, understand, and critique the past, engage with the present, and imagine a more just future.
• We aspire to create a community where individuals are supported regardless of race, ethnicity, gender and gender identity, sexual orientation, socio-economic status, language, culture, national origin, religious commitments, age, and (dis)ability status.
• We acknowledge that these goals require authentic, committed, and iterative work and require the collective talents, skills, and voices of students, staff, and faculty.
• We recognize that progress toward diversity, equity, and inclusion is ongoing, and continue to enact policies and practices in pursuit of the above stated values. These include practices including (but not limited) to those below:
  o Actively promote diverse speakers and presenters in Public Program
  o Actively promote a broader diversity in invited studio jurors
  o Require Faculty to participate in diversity training each year
  o Encourage Faculty to incorporate more diverse range of precedents/designers in their course content
  o Offer CoD students course specific resources, including mentors, financial resources, support staff and supplies, through the Office of Multicultural Student Services.

5.5.5 Strategies to support faculty, staff, and students with different abilities
Iowa State University supports faculty staff and students with different abilities through its office of Student Accessibility Services (SAS).

SAS believes that equity, social justice, and diversity are essential to creating/maintaining an environment of equal access and opportunity for all. We believe that disability is a naturally occurring aspect of the diversity of life and that it is an integral part of society and to the ISU campus community. The SAS office provides the following statement to be included in all syllabi:

"Iowa State University is committed to assuring that all educational activities are free from discrimination and harassment based on disability status. Students requesting accommodations for a documented disability are required to work directly with staff in Student Accessibility Services (SAS) to establish eligibility and learn about related processes before accommodations will be identified. After eligibility is established, SAS staff will create and issue a Notification Letter for each course listing approved reasonable accommodations. This document will be made available to the student and instructor either electronically or in hard-copy every semester. Students and instructors are encouraged to review contents of the Notification Letters as early in the semester as possible to identify a specific, timely plan to deliver/receive the indicated accommodations. Reasonable accommodations are not retroactive in nature and are not intended to be an unfair advantage. Additional information or assistance is available online at www.sas.dso.iastate.edu, by contacting SAS staff by email at accessibility@iastate.edu, or by calling 515-294-7220. Student Accessibility Services is a unit in the Dean of Students Office located at 1076 Student Services Building."

The office works to assist those in need with accommodation arrangements and resources for disability and illness, information on assistive technology resources, and multiple forms of guidance and information.

The College of Design and KP Pavilion are ADA compliant.
5.6 Physical Resources
In addition to the specific information provided below, links to floor plans and other facility information can be found here:

- College of Design/King Pavilion (KP)
- Architecture Space Allocation

Since our last accreditation, the Department has been allocated workspace in the Communications Building where a dedicated fabrication and maker space, along with studio hot desks, are provided. We also have a new Robotics Lab housed in ISU’s Student Innovation Center (detailed below).

5.6.1 Studio-Based Learning Spaces

A) Primary Studio Space: The primary physical resources dedicated to studio-based learning are located within the College of Design and King Pavilion addition. The 23,735 sq. ft. King Pavilion, built in 2009, was the first LEED Platinum-certified higher education building in Iowa. Cold Desk studio space in the CoD/KP includes the following:

- First year/Core (hot desks): King Pavilion, lower level (88 student capacity)
- Second year: King Pavilion, upper level (85 - 102 student capacity)
- Third Year: ‘Super Studio’ third floor (330/334/340/346/352) 100 student capacity
- Fourth Year: ‘Super Studio’ fifth floor (540/546/552/558) 100 student capacity
- ‘Grad Studio’ fifth floor (503/507/511/516) 80 student capacity (advanced and grad studios) with dedicated seminar space adjacent (516A)

As of 2021, Fifth-Year students will be dispersed between the third, fourth, and Grad Studio spaces. Prior to Covid-19, 3rd and 4th year students were housed in the Communications Building.

B) Supplemental Studio Space: We have the following supplementary studio resources:

- One studio within the new Student Innovation Center (part of the Robotics Lab).
- Access to ‘Black Contemporary’, a rural field station founded and operated by Assistant Professor Pete Goche, that is dedicated to the study of “atmospheric logic” and perception. Students have an opportunity to conduct studio work at this station during their senior year of study.
- Dedicated studio space in Rome: Palazzo Cenci-Bolognetti is located in the historic city center. The space includes tables, chairs, easels and lamps, and a lecture space holding 60 students. A small library is also located on site.

C) Studio reviews and exhibit spaces: Held in the many public spaces throughout the College and King Pavilion. All have recently been enhanced with added pin-up and monitor space.

D) Remote/Social Distance COVID mitigation: During 2020/21, we vacated studio space located in the Communication building, due to Covid concerns regarding the area’s poor ventilation. Similarly, Covid-19 budget concerns led the College of Design to vacate ‘Design on Main’ where Architecture students participated in interdisciplinary studios. These changes resulted in less studio space per student than before. This space reduction was offset by the following:

- 100% online studios for some students and instructors (typically one section per year)
- Shared studio space between sections (with less face-to-face for each section)
- A move to ‘hot-desks’ for some year levels
- Additional studio space in the newly completed Student Innovation Center
- During Covid, we provided a dedicated ‘maker-space’ for digital fabrication, model-making and printing, located in the Communications Building. Moving forward, this will be retained, and students will be redistributed within the existing studio spaces (see PC2 Design)
5.6.2 Interactive Learning Space

A) Seminars/Lecture: There are several classroom and seminar spaces located in CoD/KP, including Kocimski Auditorium, a large lecture hall hosting lectures and public events. Large events are also regularly held in the College’s Atrium Space or Forum, and in the Gallery Space which can be converted for lecture use. For large courses not held in Kocimski, the department has access to a number of spaces across campus and in nearby buildings. The College of Design and King Pavilion are the only spaces on campus accessible 24 hours per day by students and faculty.

B) Casual and Retail Spaces: The atrium space in the college has recently been enhanced to include more casual seating and study spaces. The atrium is also the location of The Design Café and Cyber Café. On the second floor, just off the atrium is the ISU Bookstore Outlet.

C) Making Spaces & Equipment:
   i) The Architectural Fabrication Shop (AFS – Communication Bldg): The AFS provides model making and project areas, photography lights and backgrounds, 3D printers, and a sheet cut printer.

   ii) The ISU Computation + Construction Lab (CCL – Communication Bldg): Since its founding in 2016 the lab has grown to house a variety of architectural hardware, software, and workflows: CNC fabrication equipment, plastic and clay 3D printers, hand tools, power tools, and robotics. The CCL pursues not only the ‘how’ (skills & techniques) of computational design but also the ‘why’ (processes and impacts).

   iii) The Architectural Robotics Lab (ARL – Student Innovation Center): The ARL explores the emergent field of research, design, and construction utilizing robotic technology. It is an initiative of the ISU Department of Architecture that connects developments in computation to the challenges of construction through teaching, research, publication, and exhibition. A primary tenet of this work is the democratization of access to and knowledge about technology in architecture.

   iv) The CoD Model Shop (College of Design): Gives students access to tools, time, the scraps room, and computer-aided cutting. Orientation/safety classes (held each semester) are required prior to use.

   v) Equipment: There is a wide array of equipment available for student use through the College of Design Model Shop, the Architecture fabrication shop/maker-space, the Architecture Computation and Construction Lab and the Architecture Robotics lab (student innovation lab). In addition, a large supply of power and hand tools are available for design build. Specifics found here.

D) Support Spaces: In addition to these teaching space, we have several other support spaces:

   • Computer/Output (see 5.6.4 learning resources below)
     o Printing/Output Center in the College of Design
     o Computer Labs
   • Visual/Information Literacy (detailed in section):
     o The Design Reading room
   • Display/Exhibition
     o Gallery 181
     o Atrium Exhibition/Review Space (CoD)
   • Review Spaces
     o King Pavilion
   • Surpemart Ingenuity Lab:
     o Virtual Reality Applications for building modeling (3rd floor CoD)

5.6.3 Faculty and Advising Spaces

• All Tenured and Tenure Track faculty have access to private office space within the CoD. Some have elected to share office space.
• All Term faculty have access to shared office space.
• Student advising services are located on the second floor, recently enhanced with the addition of a break-out meeting area for students.
• The Department Chair’s office and administrative offices — accessed from the Atrium Space.
• Facilities in use by the department meet requirements for accessibility as required by the American with Disabilities Act.
• Additional Research space is now housed in the Student Innovation Lab.
• Ground Floor Research Space – Student Materials and Storage.

5.6.4 Learning Resources

A) Computation/Support: We continue a tradition of implementing experimental technology. Via VMware, the college can offer remote access to our equipment. Azure Virtual Desktop is now providing remote computing options to all Students in the College of Design. This means that students who don’t have the proper software or an incompatible operating system can easily connect and run the software from anywhere. In addition, we also offer (see also this link):
- Public labs (three) with 80 machines
- Output Center
- High-end visualization lab
- State-of-the-art GIS facility
- Several satellite studios around the building and in the Armory
- Ambitious laptop program serving 500 students.

B) Output Center: The Output Center, adjacent to the computer labs, offers printing and laser cutting services, with:
- Three 3D printers, Three laser cutters
- A range of traditional color and black and white format printers/large and small jobs
- 36” wide scanner (room 446 Design)
- Motion Capture Equipment
- Items available for check-out, including:
  - Cameras
  - Microphones
  - Tablets
  - Video Cameras
  - Audio Recorders
  - Tripods
  - Projectors
  - Laptops

C) Lab Equipment

Teaching Labs

Output
- 3D Scanner workstation, and High-end Video Workstation
- 3 Epson Scanners – 8.5×11
- 1 Wide-format Scanner (roll fed), network accessed
- 1 18×24 inch Flatbed Scanner

40 Dell Precision 5820 (20 ordered and on their way)
  - 3.9 GHz Intel Xeon W-2245 (8Core)
  - 32G RAM
  - Quadro RTX4000 8G VRAM

40 – iMac Pro Intel (Retina 5k, 27-inch, Late 2017)
  - 3.20 GHz Intel Xeon W (8 cores)
  - 32.0 GB RAM
  - Radeon Pro Vega 64
D) Software: A wide array of software programs are available in the teaching labs. Highlights include:

i) Windows – ‘In person’ Labs (Precision 5820 w/ RTX Quadro 4000)
- Adobe: 2021 versions
  Acrobat Pro; After Effects; Animate; Bridge; Character Animator; Dreamweaver;
  Illustrator; InCopy; InDesign; Lightroom; Media Encoder; Photoshop;
  Prelude
  Premiere Pro
  Premiere Rush
  XD
- Autodesk: 2022 versions
  3DS Max
  AutoCAD
  Revit
  Cinema 4D R24
  Enscape
  Office Suite
  Keyshot 10
  Rhino 6 (upgrading to 7)
  SketchUp 2021
  SOLIDWORKS 2021
  VRay

ii) Windows- AVD (Azure Virtual Desktop, variable hardware)
- Adobe: 2021 versions
  Acrobat; After Effects; Illustrator; InDesign; Media Encoder; Photoshop; Premiere Pro
- Autodesk: 2022 versions
  3DS Max
  AutoCAD
  Revit
- Enscape
- Keyshot 10
- Rhino 7 (to be added)
- SOLIDWORKS 2021

iii) Mac – In Person Lab (iMac Pro 2018/9)
- Adobe: 2021 versions
  Acrobat; After Effects; Illustrator; InDesign; Lightroom; Media Encoder;
  Photoshop; Premiere Pro; XD
- Cinema 4D R24
- Microsoft Remote Desktop (for accessing AVD)
- SketchUp
5.7 Financial Resources

A) Budgeting Dynamics at the University Level
Financial resources are allocated to the colleges through a RMM Resource Management Model process. This model was adopted prior to the previous NAAB visit and remains in effect. This university formula uses the graduate and undergraduate enrollment forecast as well as the allocated expenses determined by the university to distribute funds to the colleges and is evaluated annually. Resources are distributed and central expenses are charged to the collegiate units. State funding, tuition and captured research overhead are distributed based upon enrollment numbers and the student credit hours taught by the faculty in each college. Distributions also support strategic initiatives, and to some degree differential salary, start-up packages, and teaching expense that may pertain to the various university wide initiative. Central expenses for IT, the Library, Facilities, and Student Services are charged based upon the number of majors and faculty as a proportionate share of the total students on campus.

Despite the efforts of the Iowa Board of Regents (BOR), over the past eight years the Iowa Legislature has exacted substantial reductions to State budget allocations to Iowa’s three regents’ universities. The most recent of which was FY21 where we saw a loss of over $40 million from the previous year. Over these years the BOR has worked to offset these losses with tuition increases. Averaging 3 to 4% (varying based on undergrad/grad/resident/non-resident status) in 2021, 2019 and 2016. During the period covered by the previous NAAB report, the university grew by 43% between 2010 (23,000) and 2013(33,000). After reaching a peak of 36,000 in 2017, enrollment slightly and steadily waned, with 2020 enrollment at just under 32,000 - a remarkable number considering the decisions being taken by prospective students in the summer of 2020. At the time of writing this report, 2021 enrollment has not yet been confirmed. The enrollment numbers are commented on here only to point out that, naturally, the relation between State Allocations, Base Tuition, and Student Enrollment provide the baseline for university budget impact at the college and department levels.

At the same time, however, it is worth noting that the University’s capital campaign has raised 1.5 billion dollars over the past 9 years: successfully and positively impacting many collegiate units, as well as further supporting non-collegiate departments throughout the university.

B) College Context
The college follows the RMM model as identified above, enrollment being generally even due to enrollment management at the undergraduate level and a relatively consistent graduate enrollment. Department budgets reflect changes in faculty appointments, graduate enrollment, and supplies and service needs. This is evaluated annually. Unused funds result in carry-forward.

Department revenue is based primarily on the share of enrollment and credit hours generated, with central expenses based on proportional use of shared resources. These resources include all facilities expenses and college staffing, the college and departments also incur a proportional share of the University’s centralized cost. The college also manages and distributes resources to support various initiatives deemed relevant to the University and College strategic plans. The college will capture and distribute indirect cost recovery (IDC) revenue from externally funded research.

While the College delivers one budget to the Provost, the Chairs are responsible for managing Departmental budgets. Thus, while there are many department level autonomies with respect to program operations, in matters that impact the College budget, Department Chairs work closely with the Dean, the Associate Dean and the Financial office.

Challenges: During the years noted above, with State allocation reductions and decreased enrollment (notwithstanding tuition increases), the College of Design has seen no less than three budget reversions applied during mid-fiscal year and, recently, another being applied after FY
planning had been strategically allocated but just prior to the start of the FY. With respect to faculty salary increases, FY 2017 was the last year that there was an adequate pool of funds for meaningful salary increases. FY 2018 & 21 saw 0%, 2019 1% and 2020 2%.

University and the College have been firm in their commitment to the Department of Architecture and the standards of our professional program. For instance, FY 21 came with challenges due to COVID-19, yet despite all the setbacks we managed to secure FY22 salary increases ranging from 3.5% and above for exceptional cases.

Enrollment is generally stable due to enrollment management at the undergraduate level and a relatively consistent graduate enrollment. Even when College enrollment wanes, enrollment in the Department of Architecture remains stable as our applicant pool always exceeds our cohort size. Thus, base revenue - generated from tuition and student credit hours - remains stable. This year's enrollment marks an exception because changes in the college enrollment management methods resulted in an extra section of students being added to the Architecture cohort. So, while we normally accept 85, this year our 2nd year class reached 102. While we do not intend to continue this as a growth trend, this larger cohort will matriculate through the following three years of the program.

Our Graduate enrollment also remained stable between 2013 and 2019 but has seen decreases, in 2020 and 2021 due to the difficulty for International Students in obtaining visas. No doubt this effects every program in the country that has a strong international pool of candidates. Nevertheless, our applicant and acceptance numbers remain stable.

With respect to student credit hour-based revenue, over the past several years we have been successfully working to bring students from outside the Department and the College into our large lecture classes. One such class, Arch 321 (The American City elective), is now offered in the Fall and the Spring, where previously it was offered in only one semester. This has proven an effective way to increase revenue in the RMM under which we operate.

At the same time, our Foundation accounts have increased and are buoyant, student scholarships have increased, as have new fellowships and research funding provided by the public sector. As presented in other areas of the report: our students are thriving and being given expectational opportunities for scholarships, awards, travel and more. All of this is possible due to foundation funds that are protected and reside in the distribution authority of either the Department Chairs or the College Dean. The use of Faculty support directed funds has also been strategically deployed towards recruitment and retention of exceptional Faculty.

Growth plans: The College of Design contracted Cannon Design to prepare a “Space Needs Analysis” which was delivered in June, 2020. The proposals included three versions with Gross Square Footage ranging from 38,000 to 113,000sq. ft. (NSF 24,000 -70,000). The versions include expansions in the form of infill and extensions, as well as a plan for demolition and new construction. While this is a long-term project and decisions about which plan to pursue have not yet been undertaken, the University has placed the College on the list of approved capital projects for building improvements.

C. Department Level budget dynamics and funds:

Department of Architecture Budget (See: Table #1)  
As our yearly NAAB reports will have recorded and as can be extrapolated from the salary fluctuations in our annual budget table below, our Faculty numbers rise and fall slightly as retirements, resignations, hires, and dismissals take place. Such changes often occur at the end of an academic year and often do not align with the FY budget projections at the point of budget submission to the Provost. This is no doubt typical at many institutions.
In our case, the Department maintains a lean but balanced tenure/tenure eligible Faculty in all academic ranks and supplements teaching with non-tenure eligible (term) Faculty hires. The new Faculty position titles that include “Professor of Practice” positions have allowed the Department to bring in exceptional practitioners from the area. This has a qualitative impact on our professional courses, including studio.

Explanatory Notes: Table #1
FY 21: As COVID-19 emerged in Spring of 2020, by April the university had initiated a hiring freeze. At that time, we had two positions open, interviews were almost completed and offers were being prepared (no doubt a common situation for many universities at this time.) However, the freeze also included term hires, so the typical supplemental hires were frozen as well. Thus, the drop in budget or FY21 was ben recovered in FY22. The increase in budget between FY21 & FY 22 reflects hiring taking place after the freeze was lifted, as well as an increase in Graduate funding that was allocated in order to offset diminishing enrollment numbers due to COVID-19. We have no current plans to increase faculty FTE in FY23. We may see one (perhaps two) senior faculty retirements, but neither vacancy will require replacements.

<table>
<thead>
<tr>
<th>Budget Table #1:</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty Salaries</td>
<td>2,075,511</td>
<td>2,132,559</td>
<td>2,476,777</td>
<td>2,647,087</td>
<td>2,200,850</td>
<td>2,084,883</td>
<td>2,248,458</td>
<td>2,054,650</td>
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<td>Graduate Assistantship</td>
<td>207,000</td>
<td>236,000</td>
<td>246,713</td>
<td>186,808</td>
<td>290,588</td>
<td>282,195</td>
<td>230,000</td>
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<tr>
<td>P&amp;S</td>
<td>35,000</td>
<td>36,653</td>
<td>36,653</td>
<td>36,653</td>
<td>36,653</td>
<td>36,653</td>
<td>36,653</td>
<td>36,653</td>
</tr>
<tr>
<td>Fac &amp; GA Benefits</td>
<td>687,100</td>
<td>708,840</td>
<td>815,460</td>
<td>746,256</td>
<td>645,787</td>
<td>673,873</td>
<td>650,097</td>
<td>580,803</td>
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<td>Grad Assist Scholarships</td>
<td>130,496</td>
<td>164,155</td>
<td>138,871</td>
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<td>155,382</td>
<td>141,590</td>
<td>141,590</td>
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<td>Supplies &amp; Services</td>
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<td>76,175</td>
<td>76,175</td>
<td>76,175</td>
<td>76,175</td>
<td>76,175</td>
<td>76,175</td>
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<tr>
<td>Year End Funds from College</td>
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<td>30,323</td>
<td>74,787</td>
<td>84,323</td>
<td>84,323</td>
<td>84,323</td>
<td>84,323</td>
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<tr>
<td>Other Miscellaneous Income</td>
<td>159,242</td>
<td>139,288</td>
<td>68,213</td>
<td>26,678</td>
<td>4,554</td>
<td>9,902</td>
<td>89,015</td>
<td>77,146</td>
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<tr>
<td>Expenditures</td>
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<td>3,885,277</td>
<td>3,852,532</td>
<td>3,786,829</td>
<td>3,483,213</td>
<td>3,389,594</td>
<td>3,345,643</td>
<td>2,940,343</td>
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**FY 22 projected budget:**

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<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Faculty Salaries</td>
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<td>Graduate Assistantships</td>
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<td>P&amp;S</td>
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<td>Fac &amp; GA Benefits</td>
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<td>Grad Assist Scholarships</td>
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<tr>
<td>Supplies &amp; Services</td>
<td>7,615</td>
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<tr>
<td><strong>UNIVERSITY BUDGET</strong></td>
<td><strong>3,469,116</strong></td>
</tr>
</tbody>
</table>
D) **Foundation Funds: Gifts, Scholarships and Grants**

**i) Fundraising**
Development responsibility is primarily held by the College Dean’s Office and the **College Development Director**, who cultivate alumni relations and steward donors that support students, faculty, programs and capital projects. The Department Chair also engages in fundraising and supports the Dean and the Foundation in their efforts. More importantly, the Chair works with the Director of Development to identify the types of funds needed to support the strategic vision of the Department.

**Annual fundraising** production for the College averages between $2 and $3 million, including annual gifts, pledge commitments and documented estate plans. The Department of Architecture holds endowed funds of over $3.5 million: a doubling of the endowed funds since the time of the previous NAAB visit. Contributions in the form of expendable funds average $350,000 annually, with contributions typically based on five-year commitments.

Members of the **Architecture Advisory Committee** (AAC) have long offered financial support in the form of lecture and workshop funds, as well as studio competition prizes. Deferred gifts currently total just under $4,825,000. With approximately $1,250,000 in Scholarships; 500,000 in Public Programs; 2,700,000 in general support and $375,000 in Faculty support.

**ii) Scholarships and Awards:**
At the time of our last visit, the department would distribute approximately $20,000 in scholarships annually to (primarily) undergraduate students. Over the past several years this has increased to a distribution of more than $50,000 in scholarships and $30,000 in awards to students each year.

**E) Differential Tuition & Technology Fees** (See Table # 2)

Both Differential Tuition and a Technology Fee are assessed under the category of Experiential Learning Based Fees. At the time of the previous NAAB visit, differential tuitions had just gone into effect using a phased increase method, which matured in FY20. Beginning FY19 a new Technology Fee has been assessed on all College of Design students. The **undergraduate** fee is $253 per semester, while the **graduate** fee is $230 per semester whether resident or non-resident status. The Technology Fee (TF), as with Differential Tuition (DT) required approval from the Board of Regents, so the process took several years.

Both the Technology Fee and Differential Tuition come directly to the College and are distributed to the Department’s budgets. DT is applied in whole, while the TF is applied in part. A portion of the technology fee supports centralized shops and equipment and is thus held in the College budget, while the remainder is directly utilized by the department, for instance to support equipment in our Computation and Construction Lab (CCL) and our newly established (F21) Architecture Fabrication Shop (AFS).

The intended purpose of Differential Tuition has proven successful. While it directly supports student/teacher ratios, or “studio centered small class teaching quality” (2012 APR), it also indirectly supports recruitment and retention, visiting lecture and exhibition support, etc. This addition to our revenue base helps the department maintain a balanced budget and allows us to deploy any carry-forward funds we may have to strategic ends. The Technology Fee emerged concurrent to our computational and fabrication-based needs. While we were late to this at ISU College of Design, within the first year of the arrival of the current Chair of the Department this changed. This is evidenced in the faculty positions posted and subsequent hires.
Table #2: Differential Tuition

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Undergraduate Differential Tuition</th>
<th>Graduate Differential Tuition</th>
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</thead>
<tbody>
<tr>
<td>FY13</td>
<td>100,898</td>
<td>21,011</td>
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<tr>
<td>FY14</td>
<td>219,594</td>
<td>44,789</td>
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<tr>
<td>FY15</td>
<td>330,472</td>
<td>73,704</td>
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<tr>
<td>FY16</td>
<td>326,143</td>
<td>68,194</td>
</tr>
<tr>
<td>FY17</td>
<td>344,094</td>
<td>53,377</td>
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<tr>
<td>FY18</td>
<td>394,125</td>
<td>61,853</td>
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<tr>
<td>FY19</td>
<td>443,020</td>
<td>72,005</td>
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<tr>
<td>FY20</td>
<td>482,092</td>
<td>66,830</td>
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<tr>
<td>FY21</td>
<td>476,530</td>
<td>62,045</td>
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<table>
<thead>
<tr>
<th>Assessed Differential Tuition</th>
<th>UG Resident</th>
<th>UG Non-Resident</th>
<th>Grad Resident</th>
<th>Grad Non-Resident</th>
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</thead>
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<tr>
<td>FY13</td>
<td>400</td>
<td>400</td>
<td>400</td>
<td>400</td>
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<td>FY14</td>
<td>500</td>
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<td>810</td>
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<td>FY15</td>
<td>1200</td>
<td>1224</td>
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<td>1240</td>
<td>1242</td>
<td>1248</td>
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<td>FY17</td>
<td>1281</td>
<td>1282</td>
<td>1296</td>
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<tr>
<td>FY18</td>
<td>1406</td>
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<td>FY19</td>
<td>1600</td>
<td>1600</td>
<td>1600</td>
<td>1600</td>
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<tr>
<td>FY20</td>
<td>1662</td>
<td>1678</td>
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<tr>
<td>FY21</td>
<td>1662</td>
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</table>

<table>
<thead>
<tr>
<th>Assessed Technology Fees</th>
<th>UG Tech. Fees</th>
<th>Grad Tech. Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY19</td>
<td>506</td>
<td>460</td>
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<tr>
<td>FY20</td>
<td>506</td>
<td>460</td>
</tr>
<tr>
<td>FY21</td>
<td>506</td>
<td>460</td>
</tr>
</tbody>
</table>

F) Comparative Data: College of Design Departments (See: Table #3)

Table #3 compares College of Design budgets by department on a per enrolled student basis for the 2020-21 academic year. It examines:

- Annual expenditures per undergraduate and graduate student relative to other professional programs in the College of Design.
- Public spending, in the form of faculty and staff salaries and benefits.
- Supplies and services budgets.

Interpretation of this data is difficult as it does not include private funding, research overhead returns, nor student fee supported activity; all of which vary from department to department. To further separate expenditures between graduate and undergraduate students is equally difficult, as faculty teach at both levels, sometimes within the same course. Factors such as research, advising and thesis mentoring also vary widely among faculty and in terms of learning venues for students.

BUDGET TABLE #3: Comparison of Spending per Student with other Professional Programs in the College of Design

<table>
<thead>
<tr>
<th>2020-21</th>
<th>Architecture</th>
<th>Graphic Design</th>
<th>Community &amp; Regional Planning</th>
<th>Landscape Arch.</th>
<th>Interior Design</th>
<th>AVC</th>
<th>Industrial Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries &amp; Benefits</td>
<td>2,564,679</td>
<td>1,292,946</td>
<td>1,098,898</td>
<td>1,273,508</td>
<td>854,842</td>
<td>2,115,590</td>
<td>983,230</td>
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<tr>
<td>Supplies &amp; Services</td>
<td>39,970</td>
<td>10,932</td>
<td>7,400</td>
<td>17,078</td>
<td>9,070</td>
<td>16,164</td>
<td>16,504</td>
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<tr>
<td>Undergrad Enrollment</td>
<td>518</td>
<td>319</td>
<td>82</td>
<td>123</td>
<td>255</td>
<td>104</td>
<td>237</td>
</tr>
<tr>
<td>Graduate Enrollment</td>
<td>38</td>
<td>25</td>
<td>26</td>
<td>13</td>
<td>11</td>
<td>13</td>
<td>18</td>
</tr>
<tr>
<td>Total Enrollment</td>
<td>556</td>
<td>344</td>
<td>108</td>
<td>136</td>
<td>266</td>
<td>117</td>
<td>255</td>
</tr>
<tr>
<td>Salaries &amp; Benefits Per Student:</td>
<td>4,613</td>
<td>3,759</td>
<td>10,175</td>
<td>9,364</td>
<td>3,214</td>
<td>18,082</td>
<td>3,856</td>
</tr>
<tr>
<td>Supplies &amp; Services Per Student:</td>
<td>71.89</td>
<td>31.78</td>
<td>68.52</td>
<td>125.57</td>
<td>34.10</td>
<td>138.15</td>
<td>64.72</td>
</tr>
</tbody>
</table>
5.8 Information Resources

A) Design Reading Room: The Reading Room is off the College of Design’s main atrium. It is a pleasant, airy space with considerable natural lighting, well-furnished and conducive to study. Equipment available in the library includes two scanners and five computer workstations.

The Reading Room is administered as a branch within the University Library system, which also includes Parks Library (the main library building on central campus, housing the bulk of the University Library’s collections). The Reading Room includes a collection of architecture and architectural monographs, as well as other media. These serve as a pedagogical resource for ready access to current information resources relating to the mission, goals, programs, and curriculum of Iowa State University’s architecture program. The collection is regularly reviewed, pruned, updated, and expanded to support the evolving curricula of the College of Design.

To support architecture research, the Reading Room provides access to subscription databases including: the Avery Index to Architectural Periodicals, DETAIL Inspiration, Art Full Text, Art Index, and Design and Applied Arts Index. The library regularly reviews indexing tools to expand or update resources where appropriate. As of 2014, ISU Parks Library subscribes to Artstor, “the most extensive image resource for educational and scholarly use. [Artstor] brings together media from top museums, archives, scholars, and artists, with a specialized suite of tools for teaching and learning with visual materials — all rights-cleared for education and research” (website). Subscription to this database replaces the previous services of the Visual Resource Librarian.

Two staff members, Tim Panages (Supervisor, Design Reading Room), and Jeff Alger (Subject Liaison Librarian, Parks Library), are responsible for management of the collection and facilities. Design Library staff provide assistance in the use of e-Library search engines and other electronic resources. Course reserve materials are maintained in closed stacks. The ready availability of information resources in both the Design Reading Room and the nearby Parks Library greatly enhances the educational experience of students in the architecture program.

B) Parks Library: The local collections of the Design Reading Room are supplemented by a major collection of research-level resources in the nearby Parks Library and remote storage with over 37,000 system-wide titles in the Library of Congress NA call number range. Architecture students have ready access and can avail themselves of the extensive holdings in Parks that relate to architecture topics. Additional online collections/websites specific to our field include:

- **ArtSource**
  "... a gathering point for networked resources on Art and Architecture."

- **Cyburbia** (formerly PAIRC: The Planning & Architecture Internet Resource Center)
  directory of Internet resources relevant to planning, architecture, urbanism and other topics related to the built environment.

- **Great Buildings Collection**
  Documents a thousand buildings, and hundreds of leading architects, with photographic images and architectural drawings, integrated maps and timelines, 3D building models, commentaries, bibliographies, web links, and more, for famous designers and structures of all kinds.

- **RIBA Library**
  largest and most comprehensive resource in the United Kingdom for research and information on all aspects of architecture.

- **Sweets**
  building product source for AEC professionals (Architects, Contractors, and Engineers).

C) Information Resource Management: Budgets for books, journals, and other information resources is allocated centrally by the University Library in consultation with the Library Advisory Committee. The budget is supplemented with one gift fund overseen by the University Library. The Library Advisory Committee serves as the primary faculty, student, and staff advisory body to the Dean of the Library. Responsibilities include:
• Advising on funding needs necessary to efficiently provide the type and quality of services needed by the university community within the context of a research university environment
• Advising on general policies related to the quality/depth of collections, services, instruction program, and infrastructure, as well as on major new initiatives and assessment processes
• Participating in strategic visioning with corresponding benchmarking criteria
• Considering broad national issues pertinent to scholarly communication and open access, and communicating its perspectives, as appropriate, within and externally to the university
• Facilitating communication with and obtaining feedback from the university community on library collections, programs, services, infrastructure, and communication mechanisms
6—Public Information

6.1 NAAB-Accredited Degree Statement

The following statement is found in our current University Catalogue description, and our website:

“In the United States, most registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit professional degree programs in architecture offered by institutions with U.S. regional accreditation, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted an eight-year term, an eight-year term with conditions, or a two-year term of continuing accreditation, or a three-year term of initial accreditation, depending on the extent of its conformance with established education standards. Doctor of Architecture and Master of Architecture degree programs may require a non-accredited undergraduate degree in architecture for admission. However, the non-accredited degree is not, by itself, recognized as an accredited degree.”

6.2 Access to NAAB Conditions and Procedures

(See website, under “Careers, Accreditation & Licensure”)

Conditions & Procedures for Accreditation (under “Professional Pathways” home page tab)
- 2020 NAAB Conditions for Accreditation
- 2020 NAAB Procedures for Accreditation
- 2015 NAAB Procedures for Accreditation (PDF)
- 2014 NAAB Conditions for Accreditation

6.3 Access to Career Development Information

Career Development Resources (under “Careers, Accreditation & Licensure” tab)
- ARCHCareers
- NCARB ARE 5.0 Handbook (PDF)
- AIAS InStudio Blog
- AIA Emerging Professionals Resources
- National Council of Architectural Registration Boards
- American Institute of Architects
- American Institute of Architecture Students
- Association of Collegiate Schools of Architecture

Other career resources: (”Professional Pathways” tab)

6.4 Access to Accreditation Reports and Related Documents

Reports: (”Careers, Accreditation & Licensure” tab)
- Employment Statistics for ISU College of Design Graduates
- Iowa State University Architectural Program Report 2012 (PDF)
- NAAB Visiting Team Report 2013 (PDF)
- Iowa State University Annual Report 2013 (PDF)
- Iowa State University Annual Report 2014 (PDF)
- Iowa State University Annual Report 2015 (PDF)
- Iowa State University Interim Progress Report for 2015 (PDF)
- Iowa State University Annual Report 2016 (PDF)
- Iowa State University Annual Report 2017 (PDF)
- Iowa State University Annual Report 2018 (PDF)
- Iowa State University Annual Report 2019 (PDF)
- Iowa State University Annual Report 2020 (PDF)

Architectural Registration Examination Pass Rates
- Iowa State University ARE Pass Rates with Comparison to Midwest (PDF)
- NCARB Pass Rates by School
- ARE Pass Rates, Past Three Years (PDF)

Student Policy Resources (”Policy and Governance” tab, home page side bar)
- Teaching & Learning Culture Policy (updated, 2021)
- Diversity Equity and Inclusion Statement (updated, 2021)
6.5 Admissions and Advising (see also 4.3 “Evaluation of Preparatory Education”)
General information on student advising is found in 5.4.4 under “Human Resources”.

A) Application Forms and Instructions
- Requirements for Pre-Architecture/Core Students is on the University Admissions page.
- Application instructions and forms for MArch applicants can be found at this Grad college link.

B) Admission Requirements - Undergraduate
i) Pre-Architecture: New Students.
Note: Because the pandemic limited opportunities for students to take the ACT or SAT, US freshman applicants wishing to enroll prior to Spring 2023 are not required to submit ACT or SAT scores. Applicants may decide whether they wish to self-report test scores and have them factored into their admission decision.

Students entering ISU directly are normally admitted based upon a ‘Regent Admission Index’ (RAI) score, based on the following formula:

\[(\text{ACT composite (or converted SAT) score } \times 3) + (\text{Cumulative GPA } \times 30) + (\# \text{ of years of high school core courses } \times 5)\]

To calculate, SAT scores are converted to ACT composite equivalents; high school GPA is expressed on a 4-point scale; and number of high school courses completed in the core subject area is expressed in terms of years or fractions of years. Applicants achieving at least a 245 RAI score and meeting minimum high school course requirements are automatically admitted. Applicants achieving less than a 245 RAI score and meeting minimum high school course requirements may also be admitted, but their applications will be reviewed on an individual basis.

Minimum High School Course Requirements for Admission:
- English/Language Arts: 4 years Emphasizing writing, speaking, and reading, and understanding and appreciation of literature
- Mathematics: 3 years including one year each of algebra, geometry, and advanced algebra
- Science: 3 years Including at least two years of courses emphasizing biology, chemistry, or physics
- Social Science: 2 years.

The admissions website includes additional information for students under the following categories:
- Non-Traditional Students
- General Equivalency Diploma (GED)
- High School Equivalency Test (HISSET)
- Home Schooled Students
- Students with Disabilities

ii) Transfer Students
Students transferring into CORE can receive credit using the following guidelines: (see link). Students who have previously enrolled in art/design courses may apply for direct entry, bypassing the Core Design Program, under the following circumstances (see also link):

- Students have applied and been admitted to Iowa State University with fall semester entry selected.
- Students are/were pursuing a related design degree with at least 6 studio art credits and 3 credits in art history completed.
- Students submit a 21- to 24-page PDF portfolio to the UG Recruitment Coordinator by May 15.

For those transferring from community colleges, the University recommends attending college for one year only. During this time students must earn at least 24 academic coursework credits and a minimum 2.25 GPA. We suggest taking courses in communications, humanities, social sciences, Math, and science. We discourage pursuing AAS degrees for those wishing to transfer. Studio art courses do not count towards the 24 academic credits needed to apply to transfer to Iowa State. Direct-entry admission is limited and subject to faculty review and space. Students are also advised to enroll in courses that help them build a portfolio for direct admission.
C) Admission Requirements: Graduate:
i) ISU-wide: Academic Records, GPA, Statement of Purpose, Letters of Recommendation
   - Digital Portfolio
   - Additional English Requirements: TOEFL Paper (PBT) 550; TOEFL Internet (iBT) 79; IELTS 6.5; PTE 53; Duolingo 105.

ii) Applications for admission to the MArch: must also meet the following requirements:
   - ISU Graduate College Application
   - US citizen
   - International
   - Architecture Program Application Form (PDF)
   - Three letters of recommendation
   - Statement of academic and personal interests
   - Portfolio
   - TOEFL scores (international applicants only)
   - Financial statement (international applicants only)

D) Evaluation of Non-Accredited Degrees: We use the University's transfer credit evaluation system to determine course equivalency. In instances where there is no direct equivalency, or where equivalency is ambiguous (evaluating a design portfolio to determine placement) the Academic Advisor, Undergraduate Coordinator, and Department Chair review materials and determine equivalency alongside with appropriate faculty in that substantive area.

E) Financial Aid and Scholarships (Please see also section 5.7) Links to relevant material:
   - Department: https://www.design.iastate.edu/architecture/choose-isu/financial-guidance/
   - College: https://www.design.iastate.edu/future-students/future-undergraduate/scholarships-financial-aid/
   - University: https://www.admissions.iastate.edu/cost

F) Diversity Goals and Admissions (see link): We aim to ensure that students from diverse backgrounds have enhanced resources to ease admission and provide first year entry support. Much of this work is overseen by our recruitment team and our Director of Equity, Inclusion and Multicultural Student Success. The director supports the college in its efforts to create an equitable and inclusive learning environment. The office of diversity focuses on assisting student’s with historically and systemically marginalized identities to achieve their personal and academic best. This includes but isn’t limited to Black, Indigenous, and People of Color (BIPOC), LGBTQIA+ community, and students with lower socio-economic backgrounds.

i) Admissions/Recruitment:
   - Targeted Recruitment: Architecture Recruitment works closely with the Office of Admissions on multicultural and Spanish-speaking student visit opportunities, and travels to locations with increased ethnic and racial diversity for recruitment events.

   - Multicultural Portfolio Workshops: The MSS and a group of peer mentors host spring workshops for multicultural students on assembling high-quality portfolios for the application process.

ii) Financial Support:
   - Design Future Leaders Award: A one year non-renewable $2500 scholarship available to non-white identifying Iowa freshmen residents with financial need as determined by their FAFSA. Also available to non-residents of any race or ethnicity with financial need enrolling as freshmen.

   - The Design Opportunity Award: Available to College of Design incoming freshman who identify as African American, Hispanic, or Native American.

   - ISU Diversity Scholarships: University scholarship opportunities for students from diverse backgrounds, including the George Washington Carver Program, and the Multicultural Vision Program, Other Specific Scholarships include the Carlota Dubon Gutierrez Latina/o Scholarship.
• **MLK Emergency Loan:** The Martin Luther King Jr. (MLK) Emergency Loan is an interest-free 30-day loan that assists students of color in meeting unusual/extenuating financial need.

iii) Peer/Academic Support

• **BUILD Learning Community:** The Building Up in Leadership in Design (BUILD) learning community is designed to aid first-year multicultural students (BUILD mentees) in the successful transition to college and completion of the Core Design Program by pairing each new student with an upper-class student (BUILD peer mentor) in their intended major. Mentors offer academic, cultural, and social support, guidance and encouragement to first year students.

• **The Academic Program for Excellence:** APEX is an eight-week academic summer program designed for incoming multicultural first-year students. APEX helps students transition to Iowa State University during the summer prior to their first semester. Students receive free summer room and board, and free summer tuition for up to 8 credits – as well as a head-start on college life.

iv) Messaging

• We send targeted messages to non-white identifying applicants. These inform students of CoD resources and services. ISU provides resources to non-white applicants through “CRM journeys”.

• The Graduate program reaches out directly to potential applicants internationally, including those in West Africa, to increase the diversity of our applicant pool. We also enlist, when possible, current students as points of direct contact from their home countries so as to discuss questions and concerns about the program, and the student experience in general.

6.6 Student Financial Information

6.6.1 Resources re: Financial Aid

Information regarding financial assistance is provided on our website under the “student life highlights” tab, “Financial Guidance and Resources” page, which provides resources on Tuition and related study costs, University level Financial Support, Department and College Fellowships and Awards and Laptop/Software purchase and support. The University offers financial assistance in the form of grants, scholarships and awards, loans, and part-time employment. Scholarship recipients are selected based on academic merit or other demonstrated talent. The Department is fortunate to be able to award numerous scholarships based on academic achievement and need. Over $100,000 is distributed to our students annually. See also the Financial Resources section.

**Graduate students** are eligible for administrative, teaching, and research assistantships. Positions are awarded based on merit and departmental needs and are currently awarded to the majority of second and third-year students. Their activities include helping individual faculty with research, conducting recitation sessions for large lecture courses, and supervising computer and model laboratories. Their presence is an invaluable resource for the department and the college. In cases where student and faculty interests align, upper-level *undergraduates* may participate in the Undergraduate Research Assistantship Program. (URA) Students work with faculty and staff, involved in research projects. Work-study positions contribute to student educational costs while providing valuable experience. Faculty can and do regularly support eligible students.

6.6.2 Study Cost Estimates

Information regarding anticipated costs is found under the “student life highlights” website tab, “Financial Guidance and Resources”, which includes links to tuition information for Architecture, and additional, program-specific costs (model making, laptop purchase etc.), as well as links to resources that assist in covering these costs. Students may defer laptop and software costs through our laptop purchase program, and we provide gently used supplies via our “Design Closet”. Increasingly, students display work on screens (in all studios since the last accreditation visit), allowing them to minimize physical print costs. We continue to look for ways to help students manage the costs associated with study, including our upcoming testing of one day of remote studio learning.
Supplementary Materials

Faculty CVs

Full Professors
  Hauptmann, Deborah, PhD (Dept. Chair)
  Leslie, Tom, AIA
  Passe, Ulrike
  Squire, Mitchell
  Zarecor, Kimberly, PhD

Associate Professors
  Bogdanović, Jelena, PhD
  Campbell, Cameron, AIA
  Doyle, Shelby AIA
  Frankowski, Nathalie
  Garcia, Cruz
  Kulić, Vladimir, PhD
  Muecke, Mikesch, PhD
  Spencer, Doug, PhD (DoGE)
  Whitehead, Robert, AIA
  Wheeler, Andrea, PhD
  Wohl, Sharon, PhD (UGC)
  Wu, Chengde, PhD

Assistant Professors
  Erdim, Firat
  Goché, Peter, AIA
  Senske, Nick

Full-time Term Faculty:
  Aversing, Anna, Associate Professor of Practice
  Hur, Bosuk (licensed in Korea), Associate Professor of Practice
  Iyanalu, Ayo, Assistant Teaching Professor
  Chikerinets, Roman, AIA, Assistant Teaching Professor
  Gleeson, Andrew, Assistant Teaching Professor
  Lair, Kevin, Assistant Teaching Professor
  Mannan, Rami, Assistant Teaching Professor

  Sobiech Munson, Ann*, Associate Professor of Practice
*No longer teaching, 2020 work included in evidence
Name: Deborah Hauptmann

Courses Taught (Four semesters prior to current visit):

As the department chair teaching is a small part of my appointment.

Arch 528A: Elective Seminar with Reinier de Graaf (OMA) Title: The World is Not Enough: The Case for Big Thinking

Lecture and teaching contributions to the following course: Arch 220 Contemporary Architecture; Arch 371 Human Behavior and Environmental Theory; Arch 201 & 301 Studios.

Educational Credentials:

PhD, Delft University of Technology, Delft, NL
Master of Architecture, University of Pennsylvania, Philadelphia, PA
Bachelor of Architecture, University of Texas, Austin, TX

Teaching Experience:

2013 – present  Professor and Chair of the Department of Architecture, College of Design, Iowa State University, Ames, IA

2010 – 2013  Professor of Architecture, Director, Delft School of Design & Interim Chair of Architecture Theory, Delft University of Technology (TU Delft)


Professional Experience:

Founding Partner, Sophos Architecture and Development, Austin, TX (1993-1998)
Ricardo Bofill: Taller de Arquitectura, Barcelona Spain (1990-1992)

Selected Publications and Recent Research:


Architecture and the Time of Space: The Double progression of Body and Brain, 2020

‘The After(s) and the End(s) of Theory’, in This Thing Called Theory, 2016

Professional Memberships: AIA Associate; ACSA
Name: Thomas Leslie, FAIA

Courses Taught (Four semesters prior to current visit):

Fall, 2020
ARCH 401. Integrated Studio. Des Moines Art Center Downtown. 6 cr.
ARCH 345, 347, 445. Structures modules for SCI-TECH sequence, 5 cr. total. Adapted coursework for all-online teaching.

Major Professor, Anna Aversing. “The Role of Kitsch in Architectural Communications.”

Spring, 2020
DSN S 545. Urban Hotel Studio, taught in collaboration with Lee Cagley. Eco-Resort Hotel, Diamond Head, Honolulu. Field Trip to Oahu. 6 cr.
ARCH 346, 348. Structures modules for SCI-TECH sequence. 3 cr. total. Adapted coursework for all-online teaching.

Fall, 2019
ARCH 603/403. Integrated Design Studio. Center for Experimental Music, Chicago, IL, partner with Sterling Bay, Developers, and SOM-Chicago. Field Trip to Chicago. 6 cr.
ARCH 345, 347, 445. Structures modules for SCI-TECH sequence, 5 cr. total.

Spring, 2019
Arch 517, 1a & 1b. “Big and Tall: Construction History from the Pyramids to the Burj.” 3 cr.

Educational Credentials:
B.S. in Architectural Studies (with high honors), University of Illinois at Urbana-Champaign, 1989
M.Arch., Columbia University GSAPP, 1992

Teaching Experience:
Iowa State University, 2000-present

Professional Experience:
Associate, Foster and Partners, London/San Francisco, 1993-2000
Intern, SOM-Chicago, 1990

Licenses/Registration:
State of Iowa, Licensed Architect #5499, NCARB Certificate 37618

Selected Publications and Recent Research:
Chicago Skyscrapers, 1934-1986 (Illinois, scheduled 2022)
Chicago Skyscrapers, 1871-1934 (Illinois, 2013)
Louis I. Kahn: Building Art, Building Science (Braziller, 2005)

Professional Memberships:
American Institute of Architects, Society of Architectural Historians, Construction History Society, International Association of Shell and Spatial Structures
Name: Ulrike Passe, Professor of Architecture with tenure

Courses Taught (Four semesters prior to current visit):

ARCH 576 DE: Berlin Summer Academy: Architecture for a low carbon life | 4
ARCH 601: Sustainable Design Graduate Net Zero Energy Studio | 6
ARCH 351/451X/551X: Whole Building Energy Performance Modeling | 3
ARCH 345/345L/545 M1, Building Science and Technology I, 3
ARCH 346/346L/546 M2, Building Science and Technology II, 5
ARCH 347/347L/545 M3, Building Science and Technology III, 5
ARCH 348/348L/548 M3, Building Science and Technology IV, 5
ARCH 445/445L, M2, Building Science and Technology V, 3
ARCH 490B / 590B: Independent Study (Design)

Educational Credentials: Dipl.-Ing. Architecture TU Berlin 1990

Teaching Experience:

2007 – present  Iowa State University.
2004           University of Kentucky, USA. Berlin-Urban Studio.
2002           University of Kentucky; USA. Berlin-Urban Studio.

Professional Experience:


Licenses/Registration: Registered Architekt Berlin Architektenkammer (# 06879)

Selected Publications and Recent Research:


Thompson, J., (PI), Ganapathysubramanian, B., Zhou, Y., Liebman, M., Schwab, N., Passe, U. (Senior Personnel), Krejci, C, Gassmann, P., ($2.5M), NSF INFEWS / T1: Social and biophysical models to integrate local food systems, climate dynamics, built forms, and environmental impacts in the urban FEWS nexus.

Professional Memberships: Society for Building Science Educators (SBSE) past president, Board of Directors of Passive Low Energy Architecture (PLEA), AIA International Associate.
Name: Mitchell Squire

Courses Taught (two academic years prior to current visit):
ARCH 403 Section 1 Fall 2021 Architectural Design VII
ARCH 528A Section 1 Fall 2021 Topical Studies in Architecture and Culture
DES S 546 Section 10 S2021 Interdisciplinary Design Studio
Fall 2020 FPDA Assignment
DES S 546 Section 10 S2020 Interdisciplinary Design Studio
ARCH 403 Section 1 Fall 2019 Architectural Design VII
ARCH 528A Section 1 Fall 2019 Topical Studies in Architecture and Culture

Educational Credentials
B. Arch., Iowa State University, 1994
M. Arch., Iowa State University, 2001

Teaching Experience
Visiting Professor, Bernard & Anne Spitzer School of Architecture at CUNY, F2020 – S2021
2020 Barber McMurry Visiting Professor of Practice - College of Arch/Design - Univ of Tennessee S2020
Professor of Architecture, Iowa State University F2016 – present
Visiting Associate Professor of Architecture, University of California Berkeley, F2015
Visiting Associate Professor of Architecture, University of California Berkeley, F2012
Visiting Professor, Grinnell College Dept of Theater and Dance, F2009 – S2010
Associate Professor of Architecture, Iowa State University, F2004 - S2009
Visiting Professor, University of Michigan A. Alfred Taubman College of Architecture & Urban PL – S2009
Assistant Professor of Architecture, Iowa State University, F2001 - S2004
Cass Gilbert Visiting Professor of Architecture, University of Minnesota, S2001

Professional Experience
Herbert Lewis Kruse Blunck Architecture, Des Moines, ss1994 – ss1997
Rudi Lee Dreyer Architects – Ames s1980 - s1994

Licenses/Registration (as appropriate)
NA

Selected Publications and Recent Research
1. aint-bad Magazine: Independent Publisher of Contemporary Art, Feature ISSUE No.15, 2021
3. Public Lecture: “Dreamy” at Grinnell College, Grinnell Iowa, Wednesday December 09, 2020
4. Public Lecture: “ELEGIES” at Bernard and Ann Spitzer School of Arch, November 10, 2020
5. Public Lecture: “Let’s Get Free!” at Cranbrook Academy of Art, Bloomfield Hills, Michigan, November 05, 2020,
6. Race &: a curated series of engagements hosted by RISD Architecture. September 4, 2020
7. Public Lecture and Performance: “a Gravity so Defiant / an Intimacy so Deformed” - University of Tennessee – Knoxville, February 05, 2020
9. The Young Gladiators #7 and #8 on view at Minneapolis Institute of Art, 2017/2018

Professional Memberships
Association of Collegiate Schools of Architecture
Name: Kimberly E. Zarecor

Courses Taught (Four semesters prior to current visit):
ARCH 201 Architectural Design I
ARCH 321 History of the American City
ARCH 322 Histories and Theories of Modern Architecture
ARCH 402 Architectural Design VI
ARCH 528E Research Methods for Architecture

Educational Credentials:
Ph.D in Architecture (History and Theory), Columbia University, 2008
M.Arch., Columbia University, 1999
B.A. in Art History, University of Massachusetts, Amherst, 1996

Teaching Experience:
Iowa State University, Professor, 2019-present
Iowa State University, Associate Professor, 2011-2019
Iowa State University, Assistant Professor, 2005-2011

Selected Publications and Recent Research:


Professional Memberships:
Society of Architectural Historians
Association for Slavic, East European, and Eurasian Studies
Czechoslovak Studies Association (President, 2016-2019)
Name: Jelena Bogdanović

Courses Taught (Four semesters prior to current visit):
ARCH 221: History of Pre-Modern Architecture [formerly History of Architecture I] (Fall 2020)
ARCH 221 H: History of Pre-Modern Architecture [formerly History of Architecture I] Honors section (Fall 2020)
ARCH 422: Topics in Medieval Architecture: Byzantine Architecture (Spring 2019, Spring 2020, Spring 2021)
ARCH 490D: Independent Study: Architectural History
  Readings in Modern Architecture (Spring 2019)
  Concepts for a Modern Church (Spring 2019)
ARCH 590: Special Topics in Architecture:
  Sustainability in Vernacular Architecture in Kashmir and Kerala (2 credits) (Spring 2020)
  Iconicity of Hagia Sophia (3 credits) (Spring 2019)
  Vernacular Architecture in India (1 credit) (Spring 2019)
ARCH 595: Seminar on the Built Environment I: History (Fall 2020)
ARCH 699: Research (Spring 2020, Fall 2020)

Educational Credentials:
2008  PhD (Princeton)
2005  MA (Princeton)
2002  MA (Vanderbilt)
1998  Dipl.Eng. in Architecture (U of Belgrade)

Teaching Experience:
2016-present  Associate Professor of Architectural History and Theory (with tenure)
  Department of Architecture, College of Design, Iowa State University, Ames, IA
2012-16  Assistant Professor of Architectural History and Theory
  Department of Architecture, College of Design, Iowa State University, Ames, IA
2008-12  Assistant Professor of Architectural History
  School of Art and Design, East Carolina University, Greenville, NC
2007-08  Instructor, East Carolina University, Greenville, NC
Summer 2007  Instructor, Doctor of Ministry Program, Wesley Theological Seminary, Washington D.C.
Spring 2007  Assistant in Instruction, Princeton University, Princeton, NJ
2000-02  Teaching Assistant, Vanderbilt University, Nashville, TN

Professional Experience:
N/A (work as a practitioner back in Serbia, many years ago)

Licenses/Registration:
N/A

Selected Publications and Recent Research:

Professional Memberships:
Association of Collegiate Schools of Architecture (ACSA), USA
Architectural Humanities Research Association (AHRA), UK
Society of Architectural Historians (SAH), USA
Society for Studies of Medieval Architecture in the Balkans and Its Preservation (AIMOS), Greece
Name: Cameron Campbell, AIA

Courses Taught (two academic years prior to current visit):
DSN S 546 Health Healing and Wellness Spring 2021 (co-taught with Daejin Kim Interior Design)
DSN S 546 Health Healing and Wellness Spring 2020 (co-taught with Daejin Kim Interior Design)

Educational Credentials
B. Arch., Iowa State University, 1997
M. Arch., Iowa State University, 2003

Teaching Experience
Temporary Assistant Professor, Iowa State University, 1999–2003
Assistant Professor, Iowa State University, 2003-2009
Associate Professor, Iowa State University, 2009–present

Administration Experience
Associate Dean for Academic Programs, Iowa State University, 2016-2017
Senior Associate Dean, Iowa State University, 2017- present

Professional Experience
Intern, Herbert Lewis Kruse Blunck 1995–1999
Architectural Photographer, Integrated Studio, 1998–present
Licensed Architect, Integrated Studio, 2003–present

Licenses/Registration
Registered Architect State of Iowa Registration #5776

Selected Publications and Recent Research
Inter Photo Arch “The Document, The Story and The Expression”, pp58-67
Pamplona Spain
Name: Shelby Doyle

Courses Taught (Four semesters prior to current visit):
DSN S 546: Robotic 3D Printing + Casting (Sp '21)
ARCH 433: Introduction to Digital Fabrication (Sp '21)
ARCH 401: Making With: Architecture of Robotic Construction (Fa '20)
ARCH 528A: Equity in Computing (Fa '20)
ARCH 438X: Architectural Robotics (Sp '19)
ARCH 433: Introduction to Digital Fabrication (Fa '19)
ARCH 401: WPA 2.0: Architecture + the Green New Deal (Fa '19)

Educational Credentials:
2011 Master of Architecture, Harvard Graduate School of Design, Cambridge, MA, USA
2004 Bachelor of Science in Architecture, University of Virginia, Charlottesville, VA, USA
2003 Denmark International Study Program in Architecture, Copenhagen, Denmark

Teaching Experience:
2015-Present Assistant Professor Iowa State University Department of Architecture, Ames, IA, USA
2013-2015 Visiting Assistant Professor, Louisiana State University School of Architecture, Baton Rouge, LA
2013 Instructor, Parsons: The New School for Design, School of Design Strategies New York, NY

Professional Experience:
2013 Design Staff, NAO, New York, NY, USA
2012 Curator, Our City Festival, Phnom Penh, Cambodia
2011-2012 Project Manager, Collective Studio, Phnom Penh, Cambodia
2005-2009 Project Coordinator, Architecture for Humanity, New York, NY, USA
2005-2008 Design Staff, CookFox Architects LLP, New York, NY, USA
2003-2004 Several small firms

Licenses/Registration:
2016-Present Registered Architect State of Iowa #07198
2016-Present National Council of Architectural Registration Board Certificate #121896
2006-Present LEED Accredited Professional, US Green Building Council

Selected Publications and Recent Research:

Shelby Doyle and Nick Senske in D. Kuhlmann, ed. GENDER MATTERS The Plan Journal, vol. 4 [2], 2019 (pp. 307-326)


Professional Memberships:
2016-Present American Institute of Architects, Member #38550112
Name: Nathalie Frankowski

Courses Taught (Four semesters prior to current visit):
Arch 202: Comrade, What is your Theoretical Bond Today? Architectural Questions on Land, Media, and Modernities
Arch 301: A Campus for Seed Whisperers
Arch 576: Post-Colonial Landscapes
AAD: A Great Loudreading is in the Making. But No One has Noticed.
Arch: Ways of Worldmaking
Arch 202: A Campus for Workshops for Other Worlds
Arch 201: Workshops for Other Worlds
ASOS S20: Hardcorist Lectores and their Worldmaking Laboratories
Arch 576: From Black Square to Black Reason
Arc 48484: From Black Square to Black Reason
Arc F19: Architecture Foundation 1

Educational Credentials:
Bachelor of Architecture: École Nationale Supérieure d’Architecture de Saint-Étienne 2006
M Arch: École Nationale Supérieure d’Architecture de Paris La Villette, 2008

Teaching Experience:
Associate Professor: Iowa State University 2021-present
Adjunct Assistant Professor: Columbia University in the City of New York, 2021
Visiting Lecturer: University of Illinois Urbana Champaign: 2020-Present
Assistant Professor: Virginia Polytechnic Institute and State University, 2020-21
Ann Kalla Professor: Carnegie Mellon University, 2019-20
Hyde Chair of Excellence in Architecture: University of Nebraska-Lincoln, 2017-19

Professional Experience:
Director: WAI Architecture Think Tank, (2008-present)
Architect, Steven Holl Architects (20010-2013)

Selected Publications and Recent Research:
Loudreading Post-Colonial Landscapes (to the beat of Reggaeton), (Avery Review, 2020) Loudreading Post-Colonial Pedagogies (Routledge, 2021)
Worldmakers Unite!, Perspecta Magazine (The MIT Press, 2022)
Name: Mikesch Muecke

Courses Taught (Four semesters prior to current visit):
ARCH202: Architectural Design II (Spring 2021)
ARCH 401: Architectural Design V (Fall 2020 and 2021)
ARCH 521: Urbanism in Film (Fall 2020 and 2021)
DSNS 546: Interdisciplinary Studio (Spring 2020 and 2021)
ARCH 528A: Preservation X Technology (Spring 2020)

Educational Credentials:
Bachelor of Design with a Major in Architecture, University of Florida, 1989
M Arch, University of Florida, 1991
M Arch (post-professional), Princeton University, 1995
PhD in Architectural History and Theory, Princeton University, 1999

Teaching Experience:
Adjunct Assistant Professor: Iowa State University 1995-1997
Assistant Professor: Iowa State University 1997-2002
Associate Professor: Iowa State University 2002 - present

Professional Experience:

Selected Publications and Recent Research:
Mikesch Muecke (with Nathaniel Robert Walker, Assistant Professor of Architectural History in the Department of Art and Architectural History at the College of Charleston): “Madness and Method in the Junkerhaus: The Creation and Reception of a Singular Residence in Modern Germany,” published in the blind peer-reviewed journal Arris, the Journal of the Southeast Chapter of the Society of Architectural Historians, Volume 26, 2015, p. 6-21.
Book project on the architecture in Robert Altman’s early films.
Ongoing research into the impact of technology on preservation and cultural heritage.

Professional Memberships:
SESAH: Southeast Society of Architectural Historians
Association of Collegiate Schools of Architecture
Name: Cruz Garcia

Courses Taught (Four semesters prior to current visit):
Arch 202: Comrade, What is your Theoretical Bond Today? Architectural Questions on Land, Media, and Modernities
Arch 403: Lazy Landscapes at the End of Work
Arch 576: Post-Colonial Landscapes
AAD: A Great Loudreading is in the Making, But No One has Noticed.
Arch: Ways of Worldmaking
Arch 202: A Campus for Workshops for Other Worlds
Arch 201: Workshops for Other Worlds
ASOS S20: Hardcorist Lectores and their Worldmaking Laboratories
Arch 576: From Black Square to Black Reason

Educational Credentials:
Bachelor of Environmental Design Universidad de Puerto Rico 2006
M Arch: Universidad de Puerto Rico, 2008

Teaching Experience:
Associate Professor: Iowa State University 2021-present
Adjunct Assistant Professor: Columbia University in the City of New York, 2021
Visiting Lecturer: University of Illinois Urbana Champaign: 2020-Present
Assistant Professor: Virginia Polytechnic Institute and State University, 2020-21
Ann Kalla Professor: Carnegie Mellon University, 2019-20
Hyde Chair of Excellence in Architecture: University of Nebraska-Lincoln, 2017-19

Professional Experience:
Director: WAI Architecture Think Tank, (2008-present)
Associate Partner/Project Architect, standardarchitecture/ZAO, Beijing (2009-2014)

Selected Publications and Recent Research:
Narrative Architecture: A Kynical Manifesto (NAI010 Publishers, 2020)
Loudreading Post-Colonial Landscapes (to the beat of Reggaeton), (Avery Review, 2020)
Loudreading Post-Colonial Pedagogies (Routledge, 2021)
Worldmakers Unite!, Perspecta Magazine (The MIT Press, 2022)
Name: Vladimir Kulić

Courses Taught (Four semesters prior to current visit):
- ARCH 220 Questions for Contemporary Architecture
- ARCH 221 History of Architecture I
- ARCH 302 Architectural Design IV
- ARCH 425 Topics in 20th Century Architecture
- ARCH 598 The Architectures of Global Socialism

Educational Credentials:
- Ph.D. Architectural History, University of Texas at Austin, 2009
- M.S. Architectural Theory, University of Belgrade, 2002
- B.Arch., University of Belgrade, 1994

Teaching Experience:
- Iowa State University, Associate Professor, 2019-
- Florida Atlantic University, Assistant Professor 2008-2015, Associate Professor, 2015-2018
- University of Belgrade, Lecturer (Asistent), 1995-2001

Selected Publications and Recent Research:

Professional Memberships:
- Society of Architectural Historians
- European Architectural History Network
- Association for Slavic, East European, and Eurasian Studies
- Second World Urbanity
- do.co.mo.mo International, do.co.mo.mo US, founding member of do.co.mo.mo Serbia
Name Douglas Cunningham Spencer

Courses Taught (two academic years prior to current visit):
ARC 596 Seminar on the Built Environment II: Landscape
ARC 597 Seminar on the Built Environment III: Theory
ARC 602/DSN 546 Communities, Architecture and the Environment

Educational Credentials
B.A. Hons. History of Art, Design and Film Studies. Sheffield City Polytechnic, 1988
M.A. Cultural Studies, Thames Valley University, 1995
PhD Architecture History and Theory, 2012

Teaching Experience
2018 to date Associate Professor and Director of Graduate Education, Department of Architecture, College of Design, Iowa State University, Ames, Iowa
2016 to 2018 Director of PhD programme, University of Westminster, London
2015 to 2018 Lecturer in Architectural History and Theory, University of Westminster, London
2007 to 2018 Lecturer in Architectural History and Theory, Graduate School of the Architectural Association, London
2014 to 2018 Phd Supervisor, Royal College of Art
2013 to 2017 Phd Supervisor, University of East London
2012 to 2017 Phd Supervisor, Architectural Association
2008-2012 University of Westminster: Lecturer In Architectural History and Theory
2007 to 2016 University of East London: Senior Lecturer in Architectural History and Theory
2000-2008 Buckinghamshire Chilterns University College: Lecturer in Historical and Critical Studies
2006 Middlesex University: Visiting Lecturer – Architecture and Art History
2005 University of East London: Visiting Lecturer – MA Architecture
2000-1994 Amersham and Wycombe College: Lecturer in Historical and Critical Studies

Selected Publications and Recent Research
‘Going to Ground: Agency, Design and the Problem of Bruno Latour’ in Landscape as Territory, ed. Clara Oloriz Sanjuan, Barcelona: Actar, 2019
Name: Andrea Wheeler

Courses Taught
ARC 558 Green and Sustainable Architecture
ARC 557X Architecture and Sustainable Design
ARC 201 Design Studio II

Educational Credentials

Teaching Experience
Assistant Professor, Iowa State University, 2013–2019
Associate Professor, Iowa State University, 2013–current

Professional Experience
Research Fellow/Project Manager, University of Loughborough (Education), UK 2010-2013;
Academic Research Fellow (Policy) DEFRA, London, 2010; Post-Doctoral Research Fellow,
University of Nottingham, 2007-2010.
Intern, Lathams Architects, Derby, UK 2010;
Intern, Walker Troup Architects, Sutton Coldfield, Midlands, UK, 2006;
Planning Assistant, Shere Consulting Ltd., Woking, UK 2005-2006;
Intern, Remak Architects, Nottingham, 2004;
Intern, Marsh and Grochowski, Architects, Nottingham, 2002-2004;
Intern (Engineering) Shere Consulting, s’Hertogenbosch, Netherlands, 1996-1997;

Licenses/Registration (as appropriate)
N/A

Selected Publications and Recent Research
"Love energy and the heart of architecture" Vers une pensee, La Sorbonne, Universite Paris VIII, 7 - 8 June 2021 (presentation postponed due to COVID)


Professional Memberships
N/A
Name: Sharon Wohl

Courses Taught (Four semesters prior to current visit):

Arch 371: Human Behavior and Environmental Theory
Arch 522: Complex Adaptive Systems for Resilient Cities and Architectures

Educational Credentials:

Bachelor of Env. Design University of Manitoba 1988
M Arch: University of Manitoba, 1995
PhD: TU Delft, 2018

Teaching Experience:

Adjunct/Sessional Instructor: University of MB 2005-2014 (various appointments)
Assistant Professor: Iowa State University 2014 – 2020
Associate Professor: Iowa State University 2020 - present

Professional Experience:


Selected Publications and Recent Research:

The Warming Huts (co-editor): Dalhousie Architectural Press, 2021

Sensing the City: Legibility in the context of mediated spatial terrains: Space and Culture, 2019

Fluid Urbanism The Plan Journal (with Reny Revariah), 2018

Tactical Urbanism as a means of testing relational processes in space: Planning Theory, 2018

Professional Memberships:

AESOP: Association of European Schools of Planning
Association of Collegiate Schools of Architecture
Name: Chengde Wu

Courses Taught (Four semesters prior to current visit):
Arch 601: Sustainable Building Design (2021 Fall)

Educational Credentials:
Ph.D. in Architecture: Texas A&M University, 2017
Master of Computer Science: Texas A&M University, 2017
M.Sc. in Architecture: Myongji University, Korea, 2006
B.Sc. in Architecture: Yanbian University of Science and Technology, China, 2001

Teaching Experience:
Associate Professor: Iowa State University 2021 - present
Research Fellow/Lecturer: UNC Charlotte (2018-2021)
Assistant Lecturer: Texas A&M University (2017-2018)
Instructor of record: Texas A&M University (2014-2016)
Adjunct Professor: Kaywon University of Art & Design, Korea (2006-2011)

Professional Experience:
Assistant Designer: EST Design & Exhibition Ltd., Beijing, China (2001-2003)

Selected Publications and Recent Research:
Chengde Wu and Mark J. Clayton. BIM-based acoustic simulation Framework. 30th CIB W78 International Conference, Beijing, China, October 9-12, 2013
Name: Rob Whitehead, AIA, LEED AP

Courses Taught (Four semesters prior to current visit):
- Arch 345, 346, 347, 348, & 445: Building Science and Technology I-V
- Arch 302, Arch 401, & Arch 603: Architectural Design IV-V, & Integrative Design (Grad)

Educational Credentials:
- Bachelor of Architecture: Iowa State University, 1993
- Master of Architecture (Post-Professional): University of Texas at Austin, 1997

Teaching Experience:
- Lecturer / Senior Lecturer: Iowa State University 2007 – 2012
- Assistant Professor: Iowa State University 2012 – 2018
- Associate Professor: Iowa State University 2018 – present
- Faculty Fellow for High Impact Practices, Center for Excellence in Learning and Teaching (CELT), Iowa State University, 2019-202

Professional Experience:
- Principal Architect, Whitehead Design Workshop, Des Moines, IA, 2007-present
- Project Designer, BNIM Architects, 2010 National AIA Firm of the Year, Des Moines, IA, 2009

Selected Publications and Recent Research:
- Micro-Structure Damping System for Resilient Facades, NSF ECI grant application (review pending). Investigation Team: PI, Simon LaFlamme (Civil Eng.), Co-PI R. Whitehead (Arch),

Professional Memberships:
- American Institute of Architects, 1993-Present (Licensed Architect, State of Iowa)
- Structural Pedagogy and Historical Spatial Structures working group, International Association for Shell and Spatial Structures, 2014- present
- Building Technology Educators Society (BTES): Director 2014-16, Member 2011-present
Name: Firat Erdim

Courses Taught (Four semesters prior to current visit):
ARCH 403: Architectural Design VII – A Paradise Built in Hell
ARCH 538: Regimes of Perception
ARCH 506: Architectural Design & Media II: Materiality and Representation
ARCH 699: Research
ARCH 530: Formworks
DSNS 546: Interdisciplinary Design Studio

Educational Credentials:
B. Arch., Irwin S. Chanin School of Architecture, Cooper Union for the Advancement of Science and Art, 2001.
M. Arch., School of Architecture, University of Virginia.

Teaching Experience:
Assistant Professor of Architecture, Department of Architecture, College of Design, Iowa State University, Ames, IA. 2016-PR.
Assistant Professor, School of Architecture and Design, IE University, `Segovia, Spain. 2013-16.
Visiting Faculty, Faculty of Fine Arts and Design, Izmir University of Economics, Izmir, Turkey. 2012-13.
Adjunct Assistant Professor, College of Architecture, Illinois Institute of Technology, Chicago, IL. 2008-12.
Lecturer, School of Architecture, University of Virginia, Charlottesville, VA. 2007-08.

Professional Experience:
Independent Artist, 2001-Cr.
Co-Founder and Co-Director, Flash Atölye, Karşıyaka, İzmir, Turkey. 2012-13.
Design Staff, D’Aquino Monaco Inc. New York, NY. 2005-06.

Licenses/Registration: N/A

Selected Publications and Recent Research:
- Loom Room Harp, Anderson Gallery, Drake University, IA. 2021.
- Moorings Bearings Soundings, Constance Gallery, Graceland University, IA. 2019.
- Choros: Metropiliz Future Forest, Museo dell’Altro e dell’Altrove di Metropoliz, Rome. 2015.

Professional Memberships:
Fellow of the American Academy in Rome
Name: Peter P. Goché

Courses Taught (Four semesters prior to current visit):
2020 (F) Architectural Design V: Black Contemporary Imaginary, Arch 403
2020 (F) Design Studio I, Dsn S 102
2020 (S) Architectural Design IV: Hudson River Housing: Artist Residency, Arch 302
2020 (S) Studies in Architecture: Drawing Culture, Arch 531
2019 (F) Architectural Design V: Tadzio’s Wait: Performance Archive, Arch 403
2019 (F) Design Studio I, Dsn S 102
2019 (S) Design Studio, Dsn 546: Black Contemporary
2019 (S) Studies in Architecture: Drawing Culture, Arch 531

Educational Credentials:
2005 Master of Architecture, Iowa State University, Ames, Iowa US
1991 Bachelor of Architecture, Iowa State University, Ames, Iowa US

Teaching Experience:
2016-present Assistant Professor, Iowa State University, Department of Architecture, Ames, Iowa, US
2013-16 Senior Lecturer, Iowa State University, Department of Architecture, Ames, Iowa, US
2006-13 Full-time Lecturer, Iowa State University, Department of Architecture, Ames, Iowa, US
2008 (S) Full-time Lecturer, Rome Program - Iowa State University, Department of Architecture, Rome, IT
2003-07 Adjunct Professor, Drake University, Department of Art and Science, Des Moines, Iowa US
2000-03 Part-time Lecturer, Iowa State University, Department of Architecture, Ames, Iowa, US

Professional Experience:
1999-present Sole Proprietor, Goché Inclusions llc, Ames, Iowa, US

Licenses/Registration:
1996-present National Council of Architectural Registration Board, Certificate No. 57982, State of Iowa Registration No. 03748

Selected Publications and Recent Research:
2018 “Parallel Projections” by Peter P. Goché and Samantha Krukowski, Drawing On Vol. 03 (Journal of Architectural Research by Design). Published online only: http://drawingon.org/uploads/papers/IS02-06_180716
2018 “Surfaceworks Out There” In Here: Surface Tension and Spatial Apparatus, Drawing On Vol. 03 (Journal of Architectural Research by Design). Published online only: http://drawingon.org/uploads/papers/IS02-03_180305.pdf

Professional Memberships:
1995-present: American Institute of Architects
Name: Nick Senske

Courses Taught (Four semesters prior to current visit):
ARCH 201 Design Communications I
ARCH 231 Advanced Design Representation
ARCH 403/603 Architectural Design VII
ARCH 534 Topics in Computer-aided Architectural Design
DSN S 546 Interdisciplinary Design Studio: Augmented Reality

Educational Credentials:
2005-2011 Ph.D in Architecture (Design Studies), University of Michigan (withdrawn)
2003-2005 SMArchS Design + Computation, Massachusetts Institute of Technology
1998-2003 BArch, Iowa State University

Teaching Experience:
2015- Assistant Professor, Iowa State University
2010-2015 Assistant Professor, University of North Carolina at Charlotte
2006-2010 Graduate Student Instructor / Lecturer, University of Michigan, Ann Arbor

Professional Experience:
2008-2010 Co-Founder and Partner, Design Less Better, LLC, Ann Arbor, MI, U.S.A
2005-2008 Design Lead, Exmocare, LLC, Manassas, VA, U.S.A.
2004-2005 Architectural designer, MIT Food Services, Cambridge, MA, U.S.A.
1999-2001 Intern architect, Leo A. Daly Architects, Omaha, NE, U.S.A.

Selected Publications and Recent Research:


2018 Between Design and Digital: bridging the gaps in architectural education Shelby Doyle and Nick Senske in Brown, J. and Hufford, A. (Eds.) Charrette 4(1), Journal of the Association of Architectural Educators. (pp. 101-116)


Name: Anna Aversing, Assoc. AIA

Courses Taught (three semesters prior to current visit):
F2020 Arch 301 Design Studio III
F2020 Arch 302 Design Studio IV
F2021 Arch 301 Design Studio III
F2021 Arch 482/582 Professional Practice

Educational Credentials:
Master of Science in Architecture, Iowa State University, 2021
Bachelor of Architecture, Iowa State University, 2006

Teaching Experience:
Assistant Professor of Teaching, Iowa State University 2020 – 2021
Associate Professor of Practice, Iowa State University 2021 – present

Professional Experience:
Designer, Neumann Monson Architects, Iowa City, IA (August 2017 – June 2020)
Designer, Gensler, Chicago, IL (June 2016 - July 2017)
Designer, Wight & Company, Chicago, IL (January 2015 - June 2016)
Associate, Foster + Partners, New York, NY (February 2011 - October 2014)
Designer, Foster + Partners, London, UK (October 2006 - January 2011)

Selected Publications and Recent Research:
Penumbra of taste: uncovering the meaning of kitsch in architectural design and representation, Summer 2021, Iowa State University, Thesis Advisor: Thomas Leslie

Monumental Messages: how the mural boom impacts local architecture and public dialogue, Iowa Architect Magazine, Spring 2021

Vedic City Observatory and Davenport Bank and Trust, Society of Architectural Historians: Archipedia, 2020, publication forthcoming

Going Home: a public exhibition, The University of Iowa Stanley Art Museum in conjunction with the Figge Art Museum, Fall 2018

Design-Tech: Building Science for Architects (illustrations), Architectural Press 2014

Professional Memberships:
American Institute of Architects, Associate Member
Iowa Architect Magazine, Associate Editor-Elect, January 2020 - Present
Iowa Architectural Foundation, Architecture in the Community Committee, February 2021 - Present
Name: Bosuk Hur

Courses Taught (Four semesters prior to current visit):

- Arch 403 / 603: Architectural Design VII,
- Arch 302: Architectural Design IV,
- Arch 345/545: Building Science and Tech I,
- Arch 346/546: Building Science and Tech II,
- Arch 347/547: Building Science and Tech III,
- Arch 348/548: Building Science and Tech IV,
- Arch 445: Building Science and Tech V,
- Arch 490B: Architecture Independent Study (Section BH),

Educational Credentials:

- Harvard University Graduate School of Design, Cambridge, MA
  Department of Architecture Faculty Design Award
  Master in Architecture II, May 2012
- Iowa State University, Ames, IA
  Master in Architecture II, August 2006
- Iowa State University, Ames, IA
  Bachelor of Architecture, May 2005

Teaching Experience: Assistant Professor of Practice, January, 2016 – Present;
Iowa State University

Professional Experience:

- January, 2016 – Present: Design Principal at Folio in Seoul, South Korea
  (www.folioarch.com)
- September, 2012 – December, 2015: Project Designer at Stanley Saitowitz in
  San Francisco, CA (www.saitowitz.com)
- June, 2011 – July, 2011: Intern at Skidmore Owings Merrill in Chicago, IL
- September, 2006 – February, 2010: Junior Designer at Space Group in
  Seoul, South Korea

Licenses/Registration: N/A

Selected Publications and Recent Research:

- Industart: Street Seats, Publication April 2020
- Design Museum Portland: Street Seats, Publication June 2018
- Design Museum Portland Street Seats Exhibition, Invited Exhibition, Portland, OR, August 2019
- KICA (Korea Institute of Culture Architecture) International Exhibition/Publication, Invited Exhibition, Seoul, S. Korea, November 2017-2019
- Laka (www.lakareacts.com): Liberty Island Museum, Publication July 2018
- C3 Architecture Magazine: Liberty Island Museum, Publication Issue No. 390, 2017
- Archdaily (www.archdaily.com): Liberty Island Museum, Publication February 2017
- Bustler (www.bustler.net): Liberty Island Museum, Publication February 2017
- Archasm (www.archasm.in): Liberty Island Museum, Publication January 2017
- Landscape Architecture Korea: Recent Works, Interview, Issue No. 335, 2016
- Lafent: Bosuk Hur + Youngsu Lee Recent Works, Interview October 2016
- NY Contemporary 8 Invited Exhibition @ Seoul, Invited Exhibition, Seoul, S. Korea, November, December 2016
- Stop, Unravel, Absorb @ New York City and Shanghai, Invited Exhibition, Korea Cultural Center,
  New York City, NY and Shanghai, China, April 2016

Professional Memberships: N/A
Name: Ayodele Iyanalu

Courses Taught:

- ARCH 202  Architectural Design II
- ARCH 301  Architectural Design IV
- ARCH 401  Architectural Design VI
- ARCH 345/545  Building Science and Technology I (Environmental Forces)
- ARCH 348/548  Building Science and Technology IV (Structural Technology in Practice)
- ARCH 545L Building Science and Technology I Labs
- ARCH 546L Building Science and Technology II Labs
- ARCH 547L Building Science and Technology III Labs
- ARCH 548L Building Science and Technology IV Labs
- DSN S 302  Design Leadership Seminar

Educational Credentials:

- 2014-2016  M Architecture, Iowa State University, Ames
- 2015-2016  M Des in Sustainable Environments, Iowa State University, Ames
- 2009-2011  B Tech in Architecture, Federal University of Technology, Minna, Nigeria.

Teaching Experience:

- 2016-2021  Assistant Teaching Professor, Iowa State University, Ames
- 2014-2016  Graduate Teaching & Research Assistant, Iowa State University, Ames

Professional Experience:

- 2011-2014  Partner, Delariyo Environ, Kogi, Nigeria
- 2010-Date  Construction Consultant, Q-Score Enterprises, Lagos, Nigeria
- 2019-Date  Construction Consultant, Legacy Blueprints, Abuja, Nigeria
- 2012-2013  Project Architect, ACD, Lagos, Nigeria
- 2010-2012  Junior Architect, UKJ Consultants Ltd, Lagos, Nigeria
- 2009-2010  Project Supervisor, FGGB, Akure, Nigeria

Selected Publications and Recent Research:


- 2018—Date: “Puppet Details”: Speculative Anthropometric Structures.

  “Bolt 2.0”: Research and development of a force displacement device for application in building facades and structural assemblies.
Name: Roman Chikerinets

Courses Taught (Four semesters prior to current visit):

- DSNs_102 Core Design Studio 1 (F19) X2
- ARCH_301 Architectural Design Studio III - Architecture x Landscape (F19)
- ARCH_202 Architectural Design Studio II (S20)
- ARCH_436 Advanced Design Media (S20)
- DSNs_102 Core Design Studio 1 (F20)
- ARCH_301 Architectural Design Studio III - Architecture x Landscape (F20)
- ARCH_436 Advanced Design Media (F20)
- ARCH_202 Architectural Design Studio II (S21)
- ARCH_436 Advanced Design Media (S21)

Educational Credentials:

- M.Arch I; Pratt Institute GAUD (Graduate School of Architecture and Urban Design), 2012
- B.A. Fine Arts; Hunter College City University of New York, 2007

Teaching Experience:

- Assistant Teaching Professor; Iowa State University, College of Design, Department of Architecture, Ames IA 2016-present

Professional Experience: (selected)

- Designer/Project Manager; Haute Architecture D.P.C. New York NY 2013-2016 (high-end residential and commercial)
- Design Intern; Vito Acconci Studio, Brooklyn NY, 2012-2012 (cultural, public)

Licenses/Registration:

- Licensed Architect, State of Iowa #07742, 2019-present; NCARB certified

Selected Publications and Recent Research:

- “Very Very Real”, group exhibit, Design On Main Gallery, Ames IA, 2019
- “Between the Lines”, group exhibit, part of G.Stout Fellowships; Arts in the public Sphere, Des Moines IA

Professional Memberships: n/a
Name: Andrew Gleeson

Courses Taught (Four semesters prior to current visit):
Arch 401: Fourth Year Architecture Studio
Arch 402: Fourth Year Architecture Studio
Arch 505: First Year Graduate Architecture Studio
Arch 321: History of the American City

Educational Credentials:
B. Arch. Iowa State University, 2006
M Arch II: Harvard University, 2013

Teaching Experience:
Lecturer: Iowa State University 2017 – 2019
Assistant Teaching Professor: Iowa State University 2019-present

Professional Experience:

Selected Publications and Recent Research:
"The Crisis of Authenticity: Vertigo and the Seagram Building." Architecture and Film Symposium. 2021
"The Mies Mystique: Irreducible Opposites in the Work of Mies Van Der Rohe." ACSA. 2020
"860/880 Lake Shore Drive: Skyscraper as Prime Object." CTBUH.. First Skyscrapers|Skyscraper Firsts. Fall, 2019
"The Crisis of Monumentality: Mies van der Rohe and the Nazi Competitions." ACSA. 2018

Professional Memberships:
Association of Collegiate Schools of Architecture
Name: Kevin S. Lair

Courses Taught
ARCH 528A Design as Protest
DES 495 Design Launchpad
ARCH 202 Architecture Studio III
DES 230 Design Thinking
ARCH 301 Architecture Studio III
ARCH 490 Independent Study
DsnS446/546 Design for Change

Educational Credentials
Harvard University Graduate School of Design  Masters of Architecture (MArch) 1995
Drake University  Bachelor of Arts in Psychology 1990
Drake University  Bachelor of Fine Arts in Painting 1990

Teaching Experience
Iowa State University  Assistant Teaching Professor 2016 –
Indiana University  Assistant Professor, 2011-2016
Syracuse University  Assistant Professor, 2006-2011
Iowa State University  Lecturer, 2005-2006

Professional Experience
Westbrook Artists’ Site (WAS)  Winterset, IA  1995–
George Stout Fellowship for Art in the Public Sphere  Winterset, IA – 2017 –
MOD-ECO Design LLC -  Columbus, IN 2003-2016

Selected Publications and Recent Research
Iowa Farm Bureau Federation (IFBF) SHARE GRANT ($5000) New Initiative 2014

Professional Memberships
Society for Arts Entrepreneurship Education (SAEE)
Name: Rami Mannan

Courses Taught (Four semesters prior to current visit):

DSN S 102: Design Studio I
ARCH 201: Architectural Design I
ARCH 445 L: Building Science and Technology V Lab

Educational Credentials:

Bachelor of Architecture, Iowa State University, 2019
MSc Architecture, Iowa State University, 2021

Teaching Experience:

Assistant Teaching Professor: Iowa State University 2021 - Present

Professional Experience:

Architectural Intern: Neumann Monson Architects, 2018

Selected Publications and Recent Research:

Museum of Islamic Art in Qatar by I.M.Pei: Tradition and Modern Development in Islamic Architecture: NCUR Proceedings, 2019

Professional Memberships:

AIA: American Institute of Architects
Name: Ann Sobiech Munson, AIA CSI CCS CDT

Courses Taught (Four semesters prior to current visit):
- ARCH 482-582 Professional Practice in Architecture (Fall 2019, Fall 2020)
- ARCH 302 Architectural Studio IV / Place-Dwelling/Dwelling-Place: West Harlem Housing (Spring 2020)
- ARCH 401 Architectural Studio V / Masonry Poetics (Fall 2019)

Educational Credentials:
MArch, Iowa State University, 2000
BA (English and Spanish), Central College, 1991

Teaching Experience:
2019-2020: Associate Professor of Practice, Dept of Arch, Iowa State University
2016, 2017: Lecturer, Dept of Arch, Iowa State University (prof prac course only)
2007-2011: Director, Core Design Program; and Assistant Professor, Depts of Arch and Art & Design, Iowa State University
2004-2007: Lecturer, Dept of Arch, Iowa State University

Professional Experience:
2020-current: Facilities Project Manager, City of Des Moines (Des Moines IA)
2011-2019: Architect/Specifier, Associate, Substance Architecture (Des Moines IA)
2005-2007: independent specification consulting
1999 (summer) and 2000-2004: Intern Architect, Herbert Lewis Kruse Blunck Architecture (Des Moines IA; 2001 AIA Firm of the Year)

Licenses/Registration:
Licensed Architect, State of Iowa #06425 (since 2010)
CCS certification - Certified Construction Specifier (since 2011)
CDT certification - Construction Document Technologist (since 2002)

Selected Publications and Recent Research:
“What Matters Most? Contemporary Issues in Architectural Practice, through the lens of ISU students”; student work from F19 course in professional practice, 01 April 2020 (online/virtual, AIA Iowa Spring Conference).
“Women, Architecture, and Equitable Practice”; invited lecture, SDSU Dept of Arch, Brookings SD, 22 October 2018; and various presentations 2012-2018 on equitable practice on behalf of iaWia and its Best Practice Recommendations.

Professional Memberships:
American Institute of Architects (AIA) 2015 AIA Young Architects Award recipient
Construction Specifications Institute (CSI)
Iowa Women in Architecture (iaWia) co-founder and past chair
ADDENDUM

Response to “ISU APR Review From for 2020 Conditions_Borys

ADDITIONAL INFORMATION REQUESTS:

Note: the below is extracted directly from the above-mentioned document. Responses inserted in blue

PROGRAM AND STUDENT CRITERIA, 3.1 PC 1-8, and 3.2 SC 1-4

| Information to be added as per page 12 of the 2020 Procedures, 45 days before the visit |
| Supporting materials that provide evidence of how the program accomplishes and assesses objectives. |

For PC 2, numerous strategies for self-assessment are listed; it would be helpful to see documentation of final review/walk through and the evaluations that result, and UG student survey results.

Response: See PC2 self-assessment on ISU NAAAB Visit website

For PC 3, the most important strategy seems to be the Studio and Tech Substantive Area committees and their coordination; it would be helpful to know what kind of learning objectives or indicators they are watching and evaluating.

Response: The learning objectives are derived from the various NAAB conditions and procedures. As these change over time, so do the specific indicators.

For PC 5, Continuous Improvement is addressed very lightly; please provide some clarity on the role of the new labs and their impacts on student learning.

Response: The development of our labs was part of the Miller grant report is outlined in self-assessment for SC5. The impact of digital media and computational literacy pedagogy on student learning in the department of architecture in the past 5 years has been to bring the program and the student learning up to date with expectations of practice.

Background: This improvement began with the arrival of the new department chair in 2013. It was a result of one of several program deficits the chair found in need of address. The improvement thus began with hiring. The first year the hire was unsuccessful, the second recruiting was successful for both a faculty in the area of ‘Digital Fabrication & Design Build’ as well as in the area of ‘Computation’. Chair Hauptmann secured the largest start-up package in the history of the department or college for these two hires.
STUDENT CRITERIA, SC 5-6

Information to be added as per page 13 of the 2020 Procedures, 45 days before the visit

Supporting materials that provide evidence of how the program accomplishes and assesses objectives. Additional student work examples in accordance with the NAAB selection procedure specified in the Procedures.

4.1. Institutional Accreditation

As per the APR guidelines, a copy of the most recent letter should be included.

The link provided goes to an external website and requires the team members to do a search.

Response: Please refer to the following link:

- Higher Learning Commission Accreditation Letter (PDF, 1.34 MB)
  - You may also view the interim “assurance review”
    - https://www.provost.iastate.edu/sites/default/files/wdclientcss/Academic%20Programs/Accreditation/HLC%20Year%204%20Assurance%20Review.pdf

4.3 Evaluation of Preparatory Education

As per the APR guidelines, files showing admissions and transfer evaluation are required for the visit.

4.3.2 needs additional detail—process for evaluating transfer courses for equivalency to courses is described, but without reference to NAAB program and learning criteria.

Response:
We have very few transfer students, between zero and two per year. When we have a request for transfer credit and ad hoc committee is assembled that includes the dept. chair, undergraduate coordinator and a member of faculty (typically building technology) to review the request, portfolio, transcripts and other relevant documents. We do not accept transfer credit equivalence for required course that carry accreditation specific criteria. Typical transfer credit is used for electives and first year “core” design and drawing courses.
Also, worth noting - the way we organize our building technology sequence* prevents the transfer of a single technology course, so all transfer students are required to take the full 4 semesters of BT.

* Our BT sequence is structured with five courses, each course covering three technology areas (structures, material & assemblies, and building performance), divided into five-week sections over the course of the semester.

5.1.2 Governance

As per the APR guidelines, files showing admissions and transfer evaluation are required for the visit.

4.3.2 needs additional detail—process for evaluating transfer courses for equivalency to courses is described, but without reference to NAAB program and learning criteria.

Response: See above
### 5.2 Planning and Assessment

**As per the APR guidelines, processes for continuous improvement must connect various means of self-assessment to making incremental changes.**

5.2.2 This section of the APR describes many means of engaging in self-assessment; it is still difficult to see how the findings are assembled, evaluated, or made useful for planning—any additional information on how these activities are tracked or reported would be useful.

**Response:**
We first learned of the data driven approach to self-assessment and continuous improvement in May of 2021. Our program is only beginning to establish procedures and protocols that will meet with the assembly and evaluation of meeting results that NAAB may find useful for planning.

Over the past eight years, however, the program has successfully managed its “many means of engaging self-assessment” in a manner that has supported the vision for the future of the department in accordance with our own governance and strategic plan, and correlated input of all faculty and department leadership, and strategic partners with respect to deploying actions to advance our professional practice goals and objectives.

Of course, we greatly value the input of our peer institutions and collateral organizations, and while we did not previously compile evidence of our working process and deploy the organizational techniques requested as of May 2021, we are taking steps to do so in the future. In the meantime, please find that we have worked to help visualize our means of engaging in self-assessment in flow diagrams evincing the kinds of evaluations that occur. We also make reference to our strategic plan in terms of the kinds of metrics we follow.

5.2.5 The inclusion of professionals in reviews, juries, etc and on the advisory committee is noted, but with little sense of how resulting feedback is recorded or utilized. Further, there is no institutional review provided.

**Response:**
See PC2 self-assessment on ISU NAAB Visit website

### 5.5 Social Equity, Diversity and Inclusion

**As per the APR guidelines, 5.5.2 and 5.5.3 require comparison of demographics.**

The APR provides a useful understanding of the political context in which its aspirations are constrained, but it would nevertheless be useful for the team to see relevant demographic data for these sections.

**Response:**
BArch - We have included additional demographic data for B Arch students in the self-assessment data. For the Graduate program this data is not compiled/tracked so is unavailable.

MArch - We were unable to locate data for the initial NAAB report on the race and ethnicity of graduate students. We have asked our CoD administrators to look further into this, as subsequently requested by NAAB. We have been advised that the data is either not recorded, or else not even required in the case of international students.

### 5.6 Physical Resources

**As per the APR guidelines, a virtual tour is required 45 days in advance of the virtual visit.**

It is not required, but it would be helpful to have PDFs of facility floor plans. Provision of a link requires the team members to assemble all relevant information themselves.

**Response:**
Provided on ISU NAAAB Visit website
**6 – Public Information**

<table>
<thead>
<tr>
<th>As per the APR guidelines, the conditions and procedures in effect at the time of the last visit must be posted...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please add the 2009 Conditions and the 2012 Procedures to the programs’ website and to section 6.2 of the APR, and fix the link for the 2014 Conditions.</td>
</tr>
<tr>
<td><strong>Response:</strong></td>
</tr>
<tr>
<td><strong>Done</strong></td>
</tr>
</tbody>
</table>

In section 6.5 B, Admission requirements- undergraduate, not all of the links provided for different applicant conditions are working.

**Response:**

It is unclear which links are not working – when we follow the report links referenced in 6.5 all the links appear to be working at our end.