Architecture Program Report

University of Nebraska -Lincoln

September 7, 2023

February 1, 2024

NAB

National Architectural Accrediting Board, Inc.

Architecture Program Report (APR)

2020 Conditions for Accreditation 2020 Procedures for Accreditation

Institution	
Name of Academic Unit	
Degree(s) (check all that apply)	□ Bachelor of Architecture
Track(s) (Please include all tracks offered by the program under the respective degree, including total number of credits. Examples:	Track:
	⊠ <u>Master of Architecture</u>
	Track: pre-professional degree (54 credit hours)
150 semester undergraduate credit hours	Track: non pre-professional degree (92 credit
Undergraduate degree with architecture major + 60 graduate semester credit hours	
Undergraduate degree with non-	
architecture major + 90 graduate semester	
credit nours)	Track:
Application for Accreditation	Continuing Accreditation
Year of Previous Visit	2015
Current Term of Accreditation	Continuing Accreditation (Eight-Year Term)
(refer to most recent decision letter)	
Program Administrator	David Karle, Director of Program
Chief Administrator for the academic unit in	Kevin Van Den Wymelenberg, PhD
which the program is located (e.g., dean or department chair)	
Chief Academic Officer of the Institution	Katharing Ankargan Executive Vice Chancellar
President of the Institution	Chris Kabourek (Interim)
Individual submitting the APR	David Karle, Director of Program
Name and email address of individual to	David Karle, dkarle2@unl.edu
whom questions should be directed	

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

In this Introduction to the APR, the program must document all actions taken since the previous visit to address Conditions Not Met and Causes of Concern cited in the most recent VTR.

The APR must include the exact text quoted from the previous VTR, as well as the summary of activities.

Program Response:

Conditions Not Meet (Fall 2014): None

Causes of Concern (Fall 2014):

1.1 History and Mission:

The program has clearly communicated the history and the mission of the program. This description identifies both the opportunities and the challenges for the program moving forward. This condition is a cause of concern based on the timing of the visit and the unknown date for the establishment, or not, of the new college to house the program. The program will need to report the outcomes of this university decision and its impact on the program to the NAAB.

In the Summer of 2015, then NU President Hank Bounds cancelled consideration of a merger of the College of Architecture and the Hixson-Lied College of Fine and Performing Arts from the Board of Regents. As a result, the College of Architecture remained a standalone College and retained its four programs: Architecture, Community and Regional Planning, Interior Design, and Landscape Architecture.

Program Changes

Further, if the Accreditation Conditions have changed since the previous visit, the APR must include a brief description of changes made to the program as a result of changes in the Conditions.

This section is limited to 5 pages, total.

Program Response:

The College and Program has successfully rolled out the "2012 Curriculum," including the Design ONE (d.ONE) common first year as mentioned in the 2014 APR. As part of this rollout, the Program enhanced and added core undergraduate courses in Design Research and a Collaborate design studio, with the idea that a design research approach was further integrated into the M.Arch-level Design Research studios. The undergraduate courses were responding to contemporary issues that are still relevant and even more heightened today. During this process, the program strengthened the curricular alignment between the sequential disciplinary years (2nd through 4th). The d.ONE Core Team oversees the first year and consists of faculty from the three undergraduate disciplines (ARCH, IDES, LARC) who teach in the first year. The d.ONE core team meets regularly during the academic year to review and discuss the courses taught in the common first year, to assess course effectiveness, survey faculty, and meet with second-year faculty to discuss the translation from the first year to the second year of each program. The d.ONE sequence provides a strong foundation of interdisciplinary and collaborative approaches to design for 2-year M.Arch (2M) students matriculating through our entire curriculum (which represent ~98% of our 2-year M.Arch population).

Another change, made to strengthen the optional M.Arch Design Thesis sequence, was implemented in Spring 2019, when the Architecture faculty approved **ARCH 544: Design Thesis Prep.** This course supports preparatory research and argumentation leading to a

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well-conceived proposal for the M.Arch Design Thesis (ARCH 613 and ARCH 614). By focusing and defining the nature and scope of the Design Thesis, students attain clarity and direction in their architectural investigations. The seminar helps students ask relevant, current, and critical questions in architecture and learn how they can be explored and argued through an architectural project. This course contributes to the goal of the Design Thesis, which is for students to develop a clear and well-articulated project that asserts their own interests, a critical career skill needed to advance the discipline. The Design Thesis Preparation seminar counts as an Architecture Professional Elective, and students who are contemplating Design Thesis (approximately 15-20 students each year) must take the Design Thesis may elect to submit their proposals for acceptance into the Design Thesis Studio upon the completion of the course.

Assessment Improvement

In response to the NAAB 2020, our program reviewed the updated Student Criteria (SC) and Program Criteria (PC) and collectively determined the best alignment within our current curriculum to meet these criteria. The faculty discussed and confirmed that our existing curriculum scaffolds knowledge well throughout the curriculum, leading to a course assessment point per SC and PC.

To enhance our program assessment approach, in the Fall of 2020, the program established teaching teams in the thematic topics of Design, History/Theory, and Technology. The teaching team model allows faculty to discuss and share the course sequencing (knowledge scaffolding) between courses, which will lead to future NAAB assessment points in our curriculum. The faculty had robust conversations on how and when topics would be introduced, repeated, and meet competencies for assessment. The teaching teams also discussed and identified strengths, weaknesses, and opportunities to improve the sequences. The teaching teams have become an important feedback loop in scaffolding knowledge across our curriculum and meeting assessment goals. These teaching teams have become part of our three-step reflection process discussed in section 5.3.

The thematic teaching teams mentioned above are supported by our existing facultycoordinated design studio teaching teams for ARCH 210, ARCH 211, ARCH 310, ARCH 311, DSGN 410, and ARCH 411. These courses are important because the majority (98%) of our 2-year M.Arch students come from our undergraduate program, and these courses prepare our students for advanced M.Arch design research studios. The design studio teaching teams and faculty coordinators ensured that studios scaffolded appropriate PC and SC knowledge toward NAAB requirements. This is of particular importance to our program to ensure that our part-time lecturers understand and meet curricular benchmarks and scaffolding requirements. The studio-based faculty coordinator hosts at least three meetings, including before, during, and after the semester, and in some cases, specific teaching teams meet twice a month (e.g., ARCH 411). This instructor reflection approach follows the recommendations of our college instructional specialist's faculty reflection process. Having the expertise of an assessment expert has allowed our program to understand better and implement an assessment approach that is flexible for each faculty member and course. The faculty wrote the executive summaries, which can be found in the SC and PC assessment folders, to document the assessment process they used in their courses to meet the PC/SC. This process helped faculty take ownership of the assessment process and provided an opportunity for the program director and teaching teams to have coaching moments with faculty.

In response to the NAAB 2020 conditions, the program elected to achieve SC.5 and SC.6 in **ARCH 411: Integrate** for the 2-year M.Arch track **and ARCH 511i: Integrate** for the 3-year M.Arch track with support from **ARCH 430: Building Integration**. Starting in Fall 2020, the studio-based teaching team, along with the faculty member teaching ARCH 430, conducted preparatory meetings and biweekly coordination meetings during the spring semester. The

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entire teaching team, which includes three/four full-time UNL faculty and three part-time Temporary Lecturer (lecturer/T) instructors, worked together to ensure that all students were meeting SC.5 Design Synthesis and SC.6 Building Integration. The studio sections were coordinated while maintaining the academic independence of each instructor, while the teaching team produced a clear framework and schedule for delivering an integrated studio project. Following the initial coordination year, the teaching team continued to re-evaluate and refine each year to improve outcomes. This process included documenting successes, challenges, common agreements, and strategies for the following year related to each student cohort. In Spring 2023, the faculty produced a shared course rubric, located in the SC.5 and SC.6 course folders, for grading each component of SC.5 and SC.6. This is a good example of our faculty coordination and team-based assessment approach. The implementation of our teaching teams has increased faculty communication and strengthened the inclusion of faculty voices and curriculum oversight.

1—Context and Mission

To help the NAAB and the visiting team understand the specific circumstances of the school, the program must describe the following:

The institutional context and geographic setting (public or private, urban or rural, size, etc.), and how the program's mission and culture influence its architecture pedagogy and impact its development. Programs that exist within a larger educational institution must also describe the mission of the college or university and how that shapes or influences the program.

Program must specify their delivery format (virtual/on-campus).

Program Response:

The Architecture program is housed within the College of Architecture at the University of Nebraska–Lincoln. The University of Nebraska-Lincoln (UNL) is a public land-grant, Higher Learning Commission, tier-one Carnegie Classification of Institutions of Higher Education with over 23,000 students. The College of Architecture includes the Architecture, Community and Regional Planning, Interior Design, and Landscape Architecture programs, with each granting professional degrees based on the University's Lincoln City campus. As Nebraska's only land-grant, comprehensive research university, the <u>University's Role</u>, <u>Mission and Values</u> are directed to teach, do research, and serve Nebraskans. In 2019 the University collaboratively worked together to generate the <u>N2025 Strategic Plan</u> for the first five years of the 25-year vision articulated within the N150 (150 years of the University) Commission Report. This important document reinforced the <u>College of Architecture Strategic Plan</u> produced in the 2018-2019 academic year to support the N2025 plan.

The College of Architecture is guided by its mission that "we create a resilient, healthy, and beautiful world, within a diverse and inclusive culture of rigorous inquiry and innovation, united by the transformative power of planning and design. The College builds a culture where our intellectual environment thrives because of our diverse perspectives, dynamic close-knit community, and pursuit of meaningful impact." The College is active in meeting the tripartite land grant mission of the University: teaching, research, and service/outreach. The Architecture Program's mission supports and reinforces the College's mission.

The Program's mission states that we "provide the educational foundation for intellectually aware and self-realizing architecture professionals. We promote collaboration and engagement through excellence in design research and creative scholarship." The two-part mission statement is designed to guide our actions. The first sentence discusses what we do. Our "educational foundation" is defined by the scaffolding of knowledge and approaches from the undergraduate into the M.Arch program. The phrase "intellectually aware" is defined by the history/theory courses within the disciplinary curricular strand that provide students with a broad perspective of

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the discipline relative to society. This and other curricular strands culminate in the required synthesis in the final year of the undergraduate and graduate programs. The phrase "self-realizing" is defined as allowing students to author their own educations through undergraduate and graduate elective courses. The second sentence of the mission statement describes how we define the first sentence of the mission statement. The phrase "collaboration and engagement" refers to the reciprocity between stakeholders, faculty, and students whereby knowledge is co-created to impact design, research, and innovation. The phrase "excellence in design research and creative scholarship" is defined by our faculty and students' ability to obtain external peer-reviewed outcomes from coursework and independent investigations. Throughout the APR, we will highlight the major actions the Program is taking to foster collaboration, engagement, and research. See the 2-year M.Arch <<u>2M flow chart></u> (for students with undergraduate degrees in architecture) and the 3-year M.Arch <<u>3M flow chart></u> (for students with undergraduate degrees in other areas) that show these curricular strands as articulated in the below curricular diagram.



Curricular Diagram. The architecture faculty devised the following graphic curricular chart and sequencing between the undergraduate and graduate programs to guide specific course development.

The Program meets the terms of the mission statement by providing experiential learning throughout the four horizontal strands of our curriculum ("disciplinary," "design," "building technology," and "technique"), resulting in a comprehensive educational foundation and design research. The "disciplinary" strand places attention on architectural knowledge itself: its histories, its theories, and its core values. This strand ends with ARCH 680: Practice, a course that integrates knowledge toward the student's future in professional practice. The "technique" strand teaches specific graphic and information-based techniques and their use in architecture. After d.ONE, these courses are taught like workshops, and apart from ARCH 222: BIM for Design, most are electives. The "building technology" strand focuses on specific aspects of building technology, such as architectural structures, materials, and environmental systems, and ends with ARCH 430: Building Integration, which helps students synthesize all areas of building design, including financial constraints, into a single project. This course is tied to the Integrative Design Studio. The "design" strand is the studio sequence in which students synthesize knowledge gained in the other strands into projects that increase in complexity as the sequence progresses.

The undergraduate courses provide a strong foundation for students who graduate with a Bachelor of Science in Design – Architectural Studies degree. Currently, because the vast majority (~ 98%) of our enrolled M.Arch students have graduated from the UNL Bachelor of Science in Design – Architectural Studies program, our internal 2-year M.Arch students are formed by the mission statement of the BSD-Architectural Studies program undergraduate degree. It is therefore during the M.Arch program that students fully engage the mission's values for "self-realizing architecture professionals" to produce "design research and creative scholarship." Students in the 3-year M.Arch program are enrolled in the same rigorous, forward-thinking 3-credit core courses as undergraduate students during their first and second year in the program. These courses set a strong foundation for 3-year students to partially be combined with the 2-year M.Arch students in the second year of the curriculum.

The program's role in and relationship to its academic context and university community, including how the program benefits–and benefits from–its institutional setting and how the

program as a unit and/or its individual faculty members participate in university-wide initiatives and the university's academic plan. Also describe how the program, as a unit, develops multidisciplinary relationships and leverages unique opportunities in the institution and the community.

Program Response:

The Architecture Program is fortunate to have several program-wide and faculty relationships within the academic context and the university community. These relationships are essential to strengthening our program and strategically growing initiatives. The Program has benefited from partnerships with several University centers and agencies, including having a staff member from the <u>Center for Transformative Teaching</u> (CTT) assigned to support our College and Program. The staff members support the program directors, faculty, and the College Student Success Office. On a case-by-case basis, we have support from numerous student, faculty, and staff resources at the University of Nebraska. The Architecture Program benefits from having a faculty member represent the College and the Program on numerous university committees. The College maintains faculty positions on the <u>University Faculty Senate</u> and one member on the <u>University Curriculum Committee</u>. Faculty members have many opportunities for involvement on committees at the university level, such as the <u>Academic Planning Committee</u> and <u>Research Council</u>. Civic engagement and the commitment to professional and public service have a long tradition in the College and the Program. Students from the College have served as the national president for the AIAS six times, most recently during the 2003-2004 academic year.

The ways in which the program encourages students and faculty to learn both inside and outside the classroom through individual and collective opportunities (e.g., field trips, participation in professional societies and organizations, honor societies, and other program-specific or campus-wide and community-wide activities).

Program Response:

Students are initiated in d.ONE during their freshman year, and are encouraged to become members of student organizations. During the third year of the program, funds are provided to students to help offset the expenses of traveling to a larger regional city. In the 4th year and M.Arch program, students participating in service learning or design-build studios often travel to engage a community or project site. Learning also occurs through Peer Mentoring Program. Peer mentors are also designated as College Ambassadors. Additionally, in the <u>Responsible Design Learning Community (RDLC)</u>, students learn about and engage in the importance of sustainable design and environmental responsibilities as designers of the built environment. The <u>Undergraduate Creative Activities and Research Experience (UCARE)</u> program at the University is a paid opportunity for students to work one-on-one with faculty research mentors. The <u>University of Nebraska Honors</u> program enhances our students' educational experience by providing a challenging and creative academic program. <u>Experiential Learning</u> comes in many forms, Architecture program students receive hands-on experience in numerous courses through team-oriented project-based assignments that often have an engagement partner.

Summary Statement of 1 – Context and Mission

This paragraph will be included in the VTR; limit to maximum 250 words.

Program Response:

The Architecture Program is guided by the mission to "provide the educational foundation for intellectually aware and self-realizing architecture professionals. We promote collaboration and engagement through excellence in design research and creative scholarship." Our faculty, staff, and students actively participate in teaching, research, service, and engagement roles at the Program, College, and University levels to strengthen our collaborations and foster new ideas.

The Program is strengthened by the College of Architecture's mission to "create a resilient, healthy and beautiful world, within a diverse and inclusive culture of rigorous inquiry and

innovation, united by the transformative power of planning and design. The College builds a culture where our intellectual environment thrives because of our diverse perspectives, dynamic close-knit community, and pursuit of meaningful impact." The College's <u>Strategic Plan</u> identifies three core capacities: "Connection and Collaboration," "Culture and Environment," and "Innovation and Impact," which guide us into the future.

Our Program benefits from the University of Nebraska–Lincoln as a public land-grant Carnegie Classification Research I Institute that is guided by the N2025 strategic plan. The N2025 Strategic Plan outlines the aims, strategies, expectations, and targets for the first five years of the 25-year vision articulated within the N150 Commission Report.

2—Shared Values of the Discipline and Profession

The program must report on how it responds to the following values, all of which affect the education and development of architects. The response to each value must also identify how the program will continue to address these values as part of its long-range planning. These values are foundational, not exhaustive.

The Program embraces its regional context, with UNL surrounded by several 5-year professional B.Arch programs, the closest being Iowa State, Kansas State, Kansas, and the University of Wisconsin-Milwaukee. Additionally, Nebraska-Lincoln is the flagship university and has the only accredited architecture program in the state of Nebraska. As previously mentioned in the "Mission and Context" portion of the APR, because the majority of our 2-year M.Arch students come from our undergraduate program, the M.Arch program relies on our undergraduate courses to build knowledge and embrace our shared values.

Design

Architects design better, safer, more equitable, resilient, and sustainable built environments. Design thinking and integrated design solutions are hallmarks of architecture education, the discipline, and the profession.

Program Response:

The Program emphasizes design by "providing an educational foundation to create intellectually aware, self-realizing architecture professionals." It promotes "collaboration and engagement through excellence in design research and creative scholarship." Our program's design values influence our approach to <u>PC.2 Design</u>.

College Support of Value

The program faculty support and teach in the College's Design One (d.ONE) common interdisciplinary first-year curriculum, which positions design as a multidimensional process. The d.ONE courses begin the curricular strands of "Architecture Discipline," "Design," "Building Technology," "Technique," and "Elective/minor," which continue into the program's undergraduate and graduate levels. The "design" strand is at the center of what the College does, starting with DSGN 110: Design Thinking and DSGN 111: Design Make in d.ONE. DSGN 101: Intro to Design introduces students to the distinctive design disciplines and career paths in their first year, ensuring they understand the scope and value of each discipline. This also enables them to select the best discipline for their intended career.

Program Support of Value

The program level "design" strand prepares students for the future of professional practice in architecture. At the center of the architecture curriculum is the synthetic design studio strand, where students gain knowledge from support courses in different curriculum strands such as "architecture discipline," "building technology," "technique," "elective/minor," and other experiences. These are integrated into design projects in a creative and collaborative atmosphere. During the yearly course sequence, the curriculum strands align, scaffold

knowledge, and prepare students to address evolving design issues. The DSGN 110: Design Thinking course in the first year d.ONE and the DSGN 410: Collaborate studios in the fourth-year form bookends that address design as an overall discipline, as interdisciplinary collaboration, and as design-based research.

The 2nd- through 4th-year design studios within the design curriculum strand emphasize conceptual and spatial themes of "Represent," "Ideate," "Organize," "Situate." "Collaborate," and "Integrate." Through carefully calibrated design projects, each studio incrementally introduces and repeats essential design knowledge and abilities to scaffold knowledgebuilding through the undergraduate curriculum. This begins with preparing students to "Represent" architecture and ends with students being able to "Integrate" design. Both the second-year (Represent, Ideate) and the third-year (Organize, Situate) design sequences offer specific, discipline-based knowledge and skills required by the Architecture Program. They prepare students to enter the DSGN 410: Collaborate design studio in the fall of the fourth year, when students from Architecture, Interior Design, and Landscape Architecture engage with critical issues that transcend the purview of a single design discipline, engaging interdisciplinary teams. The DSGN 410: Collaborate studio is a signature moment in our undergraduate program that prepares students to consider multiple viewpoints and often includes an external partner. The ARCH 411/ARCH 511i: Integrate design studio concludes the undergraduate design strand and is considered the capstone of the core design sequence in which students design sophisticated and technically rigorous work.

As mentioned earlier, these courses are important because the majority (98%) of our 2-year M.Arch students come for our undergraduate program. Alternatively, 3-year M.Arch students are enrolled in two core foundational design studios (ARCH 500 and ARCH 501) taught by experienced faculty that build skills in design prior to entering the design research studios and ARCH 511i: Integrate design studio.

The rigor of the undergraduate design strand provides an educational foundation for students to think critically about the relationship between design and research in the M.Arch program. with students taking a core undergraduate course in ARCH 489: Design Research. Within the M.Arch program, students are required to take graduate design-research vertical studios that continue the design strand. The Design Research studio positions architectural exploration as a research protocol situated between the creative pursuits of the arts and the technical methodologies of the sciences. The Design Research studios prepare students to be selfmotivated professionals capable of using design to work through problems and generate new architectural knowledge, engaging them in design and research issues of contemporary significance. These studios often involve collaborations with professionals from within and outside the field of architecture. Recognizing that one's graduate education is largely selfdirected, students in the M.Arch program can focus their graduate education by enrolling in courses of their own interest, including professional elective seminars and Design Research studios. The program offers a Design Build studio option every semester taught by awardwinning faculty (Day and Griffiths) as a variation on the Design Research studio that engages students in design-intensive collaborations with creative, nonprofit clients that span design and construction. Several Design Build studio projects are represented on this college-level Community Projects site.

During their final year, M.Arch students may also choose the ARCH 613/614: Design Thesis studio to conceive and execute an independent investigation in architecture. These are formative for future professional development and can act as springboards for further academic pursuit. A correctly formed Design Thesis investigation identifies a subject for inquiry relevant to a larger architecture audience, and the student researches the subject by investigating scholarly sources and generating new creative content, developing a design thesis question, and generating a relevant response that can be supported and defended. In 2019, the program introduced a thesis prep course to better prepare students for taking the

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Design Thesis, and we are currently examining the thesis sequence to identify areas of success and improvement to best support our students.

The program prepares students for multiple career paths both through required courses and the availability of our student success coordinator, student advising, and exposure to the architecture profession. DSGN 410: Collaborate aids students in understanding the role of landscape architecture and interior design within the collaborative design process, thus aiding students in determining their future education. After experiencing this studio, a small number of interior design students elect to enter our 3-year M.Arch program to obtain a professional degree, though a smaller number of architecture students graduate with a Bachelor of Science in Design – Architectural Studies and elect to earn an MLA at another institution. The ARCH 680: Professional Practice course includes several curricular modules on career paths, both standard and alternative. In Spring 2023, the program hosted a public panel discussion in Omaha entitled, "Alternative Architecture" and invited four graduates from our program to speak about their paths and current practices in research, fabrication, software development, and data management. As a result of these courses and experiences, the program currently has graduates working for the National Park Service, the State of Nebraska Department of Natural Resources, and local nonprofits focused on ways to combat economic inequities in our neighborhoods and build healthy communities.

The program focuses on professional licensure through courses (ARCH 262, ARCH 411/ARCH 511i, ARCH 680), student organizations (AIAS), the College Career Fair, and the endowed Hyde Lecture series. The ARCH 411/ARCH 511i: Integrate design studios demonstrate an architect's professional responsibility to design integrated building proposals. Students consistently engage with professionals from structural, mechanical, and electrical disciplines throughout the semester to help them better understand the comprehensive coordination between disciplines. The AIAS chapter engages local professionals through mentoring, office tours, Lunch and Learns, and consultations on licensure. The NCARB representative and faculty advisor host yearly information sessions to inform students about the AXP and the steps necessary for professional licensure. The College Career Fair annually invites 60-64 local and regional firms to interview students for full-time and summer employment, with students sharing their portfolios with firms prior to arriving and casually talking with firms prior to scheduled interviews. Over the last five years, the Architecture Program has had a 96% job placement rate for graduating M.Arch students, and we are proud to say that this is one of the highest job placement rates at UNL. Through this hiring process, several students retain their summer jobs as part-time positions during the academic year. The success of these efforts in helping students understand professional licensure is assessed through course assignments and student participation at these events. Furthermore, ARCH 695: Internship is a graduate-level optional elective course that enables students to earn credit for summer internship experience. Students gain professional work experience paralleling the AXP guidelines published by NCARB, increase their awareness of the architectural practice and related fields, and critically engage with the type of practice they wish to continue with after graduation while gaining mentorship in navigating the job market.

The program actively integrates professional and technical skills by linking courses in the "Technical" and "Disciplinary" curriculum strands with studios in the "Design" strand. This is achieved through documented, cross-course scaffolded structural and material knowledge in early design studios. This is reinforced in ARCH 311: Situate studio and culminates in the fourth-year ARCH 411: Integrate design studio. This framework is crucial for repeated knowledge development and synthesis.

The program ensures a multi-layered action-oriented dialogue on design between students, faculty, staff, and professionals. The College Student Advisory Board (SAB) consists of at least one elected representative from each academic program within the College, including

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one each from the undergraduate and graduate/professional programs. The SAB selects students to serve on College Committees; meets monthly with the Dean to discuss the welfare of the College and student needs; recommends specific curriculum changes and proposals; suggests specific changes in student affairs, facilities, or resource materials to the Dean and the College Council; and serves as a communication link between College Committees and the student body. Students also have opportunities for professional engagement through Alumni Masters week, Multicultural Homecoming, local professional design reviews, Professional Advisory Committee (PAC), and while attending active construction sites in ARCH 680. These activities all provide students opportunities to have design dialogues with professionals and better understand the professional design process. The program also actively invites outside critics to final reviews, including local professionals and fly-in critics. Select invited juries determine the recipients of undergraduate and graduate design awards and add value to design conversations.

The program annually assesses design as part of its long-range planning at the end of the semester, when teaching teams meet prior to the entire faculty gathering to discuss the design outcomes from various levels of the program. This enables communication, transparency, reflection, and adjustments to be made from semester to semester.

Environmental Stewardship and Professional Responsibility

Architects are responsible for the impact of their work on the natural world and on public health, safety, and welfare. As professionals and designers of the built environment, we embrace these responsibilities and act ethically to accomplish them.

Program Response:

The program's mission statement supports Environmental Stewardship and Professional Responsibility by "providing the educational foundation for intellectually aware and self-realizing architecture professionals." The program addresses the challenges facing our nation and our world by preparing graduates to be active and engaged citizens who can act ethically and understand what it means to be a professional member of society. Our program's emphasis on Environmental Stewardship and Professional Responsibility influences our approach to <u>PC.3 Ecological Knowledge & Responsibility</u> and <u>SC.2 Professional Practice</u>.

College Support of Value

The program faculty support and teach in the College's d.ONE curriculum, which introduces students to solving the challenges facing our nation and our world. In DSGN 110: Design Thinking, students learn to come together in teams to serve common, socially responsible goals. Students can participate in the College's Freshman Housing Responsible Design Learning Community, which engages students in social events and public service projects. These students learn experientially how and when to work with others more effectively, focusing on sustainability, civic engagement, and design thinking. As future designers, the learning community provides students with experiences dealing with the environment, people. and communities through a process that engenders responsibility, innovation, and entrepreneurship. In DSGN 110: Design Thinking, students are active and engaged citizens that use a problem-seeking approach. They learn interviewing methods, practicing empathy, and clarifying information to define the program of their work. Additionally, the College's mission statement states that "we create a resilient, healthy and beautiful world," which guides all of the programs in the College toward environmental stewardship and professional responsibility. The College also partners with other programs on campus to offer a minor in Sustainability Studies.

Program Support of Value

The program focuses on solving the challenges facing our nation and our world throughout our curriculum. ARCH 461: Urbanism presents issues of contemporary urbanism, the processes of urban design, and solutions that address the role of public policy, ideology,

genesis, race and place, and the development of urban form. One course outcome is that students can identify social and global forces influencing patterns of urbanism, and this outcome is assessed through course assignments. ARCH 680: Professional Practice builds student skills and experience in collaboration, ethical business management, and leadership in the community, preparing students for professional opportunities and success after graduation. The course defines the role of the architecture and landscape architecture professions in the worlds of today and tomorrow, allowing students to explore a project's path through the office, starting from marketing, contracts, planning, design, and contractual documents through implementation, construction, and facilities management. The course further defines ethical business and management principles of the professional office, project organization, and personal and professional development as outlined in the ethical standards and accreditation criteria of each of the College's professions. Additionally, students can receive an undergraduate minor while enrolled in the Architecture Program, including the Sustainability Studies minor, which includes the course offering ARCH 107: Sustainability Basics and the Built Environment, or the Landscape Architecture minor, which includes the offering LARC 492: Selected Topics in Landscape Architecture: Cultural Landscapes at Risk, Environment & Future Transport, and Critical Urbanisms: Design for Justice.

The program develops active and engaged citizens through first- and second-year courses as clearly demonstrated in DSGN 410: Collaborate. After four semesters of focused immersion in the architecture discipline, the "Collaborate" studio brings together students from different disciplines from within and outside of the College of Architecture to engage in design research and team-based approaches to complex problems. Interdisciplinary teams explore issues across a range of project types, including housing, retrofitting infrastructure, and design-build. Differing models of collaboration immerse teams of students to address significant concerns facing their respective disciplines: for example, through integrated collaboration, which consists of solving complex problems within an interdisciplinary team that integrates shared disciplinary issues throughout the design process. In an integrated design problem, different discipline specificities are not easily separated, and could consist of a master plan analysis, a community master plan, or an urban design that utilizes a collective approach where design addresses complex global and local issues. Over the years, the collaborative design studios have engaged different community and stakeholder partners, and in Fall 2022, the six design studio sections encompassed all fourth-year students from Architecture, Interior Design, and Landscape Architecture. Additionally, the program offers award-winning faculty-led initiatives ASSIST: Community Engagement, Research & Design Studio; Fabrication and Construction Team (FACT); and PLAIN: Design Build that focus on experiential learning pedagogy through engaging communities every semester.

In ARCH 613/614: Design Thesis, students engage in independent research to develop responses to pressing environmental and professional challenges facing the nation and the world, fostering agency and professionalism in students. Recent thesis proposals have addressed material reuse, disenfranchised communities, depopulating towns, interior building reuse, and engaging queer communities on issues of gender disparities in the discipline.

The program approaches stewardship of the environment through the required courses ARCH 311: Situate design studio and ARCH 360: Site in the third year, which address architecture's relationship to the built and natural environment. The design studio exposes students to the dynamic characteristics of working in different conditions with acute ethical implications involving the built environment. These issues have always been present in undergraduate design studios, graduate-level vertical studios, and many student design thesis projects. In ARCH 360: Site, students investigate the interrelationship between the physical context created by nature and humanity, and the various design professions concerned with site development and buildings. Their site research, analysis, selection, and development projects, along with practical exercises, form the basis of the lab experience. Additionally, ARCH 461: Urbanism introduces students to issues of contemporary urbanism

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and the processes of urban design, including the experiential nature of cities, the role of public policy, ideology, genesis, and the development of urban form and space. Course modules focused on stewardship include Logistics Landscape, Conduit Urbanism, Landscape Urbanism, and Urban and Regional Ecologies. ARCH 333: Environmental Systems addresses issues of health, safety, and welfare in the built environment, with students learning the characteristics and performance of the built environment with respect to thermal and psychrometric characteristics in buildings. Specific topics examined include human comfort, heat gain/heat loss, ventilation, natural energy systems, sustainable design principles, and plumbing and life safety systems in the built environment.

The U.S. Green Building Council Student Organization (USGBCS) traditionally develops annual programming, events, and resources that focus on advanced green building and design practices to create a more sustainable future. The USGBCS is connected to the regional and national green building community, and advances concerns of sustainability, health and wellness, equity, and resilience. This student organization is currently on hiatus and actively searching for participants to assist in its revitalization.

The program annually assesses environmental stewardship and professional responsibility as part of its long-range planning at the end of the semester, when teaching teams meet prior to the entire faculty gathering to discuss the outcomes from various levels of the program. This enables communication, transparency, reflection, and adjustments to be made from semester to semester.

Equity, Diversity, and Inclusion

Architects commit to equity and inclusion in the environments we design, the policies we adopt, the words we speak, the actions we take, and the respectful learning, teaching, and working environments we create. Architects seek fairness, diversity, and social justice in the profession and in society and support a range of pathways for students seeking access to an architecture education.

Program Response:

The program faculty recognizes the need to increase awareness and discussion around diversity, equity, and inclusion. The faculty are committed to taking personal and institutional responsibility for student success by introducing more inclusive design education practices. The program recognizes that achieving diversity of students and faculty requires providing equity and inclusion to underrepresented populations. Our program's value of Equity, Diversity, and Inclusion influences our approach to PC.8: Social Equity and Inclusion.

University Support of Value

The program faculty and students have direct access to the University's <u>Office of Diversity</u> and Inclusion, which cultivates an inclusive mindset of excellence through inclusion and equity strategies in preparing students to become future leaders in design practice. Inclusive excellence is essential to the university's mission as a flagship institution because of its geographic isolation and lower level of student diversity. The University's initiative builds on the Association of American Colleges & Universities Making Excellence Inclusive and their notion of Equity-Mindedness. To ensure this, the university requires all undergraduate students to take an Achievement-Centered Education (ACE) course that requires them to demonstrate global awareness or knowledge of human diversity by analyzing a current issue. Additionally, the university's Vice Chancellor for Diversity and Inclusion Marco Barker initiated a Path Towards Inclusive Excellence and requested all colleges to prepare diversity and inclusion plans to strengthen their impact. The University is home to the Jackie Gaughan Multicultural Center, which continues the tradition of past UNL Culture Centers by providing a home away from home for underrepresented students and welcoming all UNL students, faculty, staff, alumni, and guests.

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College Support of Value

The program faculty supported and helped the College develop our <u>Diversity and Inclusion</u> <u>website</u> and <u>College Diversity Plan</u>, which provides students direct access to diversity resources and professional development opportunities that foster a respectful learning and teaching environment. The website provides resources and opportunities for students and faculty, alumni spotlight features, and ways students, faculty, and the public can get involved by attending a Nebraska Community of Learners session or our college's Hyde Lecture series. The College Diversity Plan aligns with our <u>College Strategic Plan</u>, which identifies Culture & Environment as one of our three core capacities for leading the College into the future. This core capacity includes strategies to leverage our existing strengths to invigorate and extend each core capacity. Additionally, in 2023 we joined the <u>Dean's Equity and</u> <u>Inclusion Initiative</u> and are participating in the <u>fellowship program</u>.

The College also fosters an inclusive environment through two opportunities to support student transition from high school to college. The first is a required zero-credit freshmanlevel smart-start course designed to familiarize students with the tools and resources necessary to succeed at the College and the University. The second is an optional Responsible Design Learning Community, a collaborative effort among the College of Architecture, Academic Affairs, and University Housing that assists first-year students in their academic and social transition to the University.

Finally, the College of Architecture Learning Culture Policy articulates the role of faculty members and students in establishing a culture of learning. The studio culture policy is currently undergoing revisions, with the goal of both the College Student Advisory board and the College Faculty Affairs Committee reviewing and updating this document annually. The College's public Hyde Lecture series helps bring about awareness and understanding of EDI. In the 2020-2021 academic year, a program faculty member chaired the lecture series, which featured speakers from across disciplines united under the common theme of "Building Justice: Design and Planning for a Just Society." Our professions have long excluded people of color and underserved groups in both processes and outcomes, and to confront this injustice, the series invited lecturers who argued that design and planning should explicitly foster a just society as an act of hope requiring not only an awareness of inequity, but a commitment to refuting it in its many forms.

Program Support of Value

The program supports the College's Culture & Environment core capacity and has prioritized three strategies. The first priority is to "recruit, enroll, and retain diverse populations of students who will positively contribute to our mission." The program understands that achieving this requires creating a supportive, welcoming environment, and each semester offers diversity professional panel discussions, a freshman-level Responsible Design Learning Community, and peer mentoring, while also supporting the National Organization of Minority Architecture Students (NOMAS), and Queer Nebraska Design Students (QNDS).

As of Fall 2022, the College of Architecture had approximately 588 students, 83% undergraduate (484) (306 in BSD-Arch) and 17% graduate/master's level (105 M.Arch,) (75 in the 2-year program and 17 in the 3-year program). The BSD-Arch undergraduate degree includes 30% students of color, while the M.Arch degree includes 19% of students of color. The BSD-Arch undergraduate student population is 48% female, and the M.Arch student population is 42% female. However, it should be noted that these percentages within undergraduate majors are significantly different: Architecture is 48% female and 32% students of color, Interior Design is 89% female and 27% students of color, and Landscape Architecture is 43% female and 23% students of color. Based on the College strategic plan, the College has set a goal of increasing diversity by 1.5% and first-generation students by 7.5% by 2025. The program is further committed to increasing diversity among the faculty, and continues to prioritize hiring diverse candidates during full- and part-time faculty

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searches. As a result, the program annually hires eight female part-time lecturers to teach in our program, and actively invites diverse critics to end-of-semester design reviews.

Second, the program prioritizes "student wellness, professionalism, and responsibilities." Within second-year design studios, rather than emphasizing nonstop production, the faculty have intentionally slowed down the pace of work so that students have time to reflect. Faculty provide a project schedule to assist students with time management as a countermeasure against a culture of all-nighters. Throughout the semester, program faculty and the director prioritize communication with students on the importance of breaks, healthy diet, a good sleep routine, physical and mental health to promote wellness.

Third, the program prioritizes "increase[ing] curricular flexibility and accessibility." This was accomplished primarily in the common first-year freshman semester by allowing students to transfer into the College after the fall semester. Consequently, students were able to take courses in the spring semester and summer sessions to meet the requirements for admission into the second year of the program. In Spring 2023, we had 21 transfer students join the College of Architecture, 13 internal and 8 external transfers, with 11 enrolling in the Architecture Program.

The program has hosted several Master Alumni and Multicultural Alumni to broaden student understanding of diverse cultural and social contexts. While these alumni were on campus, they gave public presentations, visited courses and design studios, and engaged in smaller conversations with students. Our recent alumni include Phuong Nguyen AIA as the 2022 Alumni Master. Nguyen is a graduate of the Architecture Program and has been named to the AIA next to lead Program. Charyl F. McAfee-Duncan FAIA, the 2021 Alumni Master, is the first African American woman fellow of the American Institute of Architects in Dallas and the second in Texas, serving on various Dallas AIA committees. Additionally, the program hosted Brad Brooks as the 2021 Distinguished Alumni of Color as part of the University's Multicultural homecoming event. Additionally, the program runs an active Instagram account highlighting diverse professional alumni under the theme of "Where THEY are NOW" to create awareness, along with posts on current students entitled "Who WE are NOW." The program currently has two alumni of color who were selected from a national call to serve on the 2021 NCARB Think Tank and the 2021 NCARB Rethink Tank. These efforts help our program reinforce the conversation of equity, diversity, and inclusion by bringing diverse alumni into the classroom and sharing their professional successes with our students. Students are exposed to equity, diversity, and inclusion content throughout the curriculum, specifically in DSGN 140: History of Design, ARCH 240: Architecture History and Theory I, ARCH 241: Architecture History and Theory II, and ARCH 461: Urbanism. These courses address EDI from a range of perspectives, allowing students to better understand diverse cultural contexts and approaches by centering minority voices and undoing Western-centered viewpoints. Program faculty recognize the need to work on diverse project types in design studios and seminar courses to improve awareness of students and communities. In recent years, design studio faculty and students have worked with the Santee Sioux Tribe, Nebraska Game and Parks, Junior Achievement of Lincoln, The Sandhills Institute, Sandhills Center for Hope, and Partners for Livable Omaha to initiate diverse conversations and integrate these topics into the classroom. These engagements have given a voice to underrepresented populations and shown students that design is for everyone. In addition to the required courses mentioned, in the past we have offered courses on Black Architects and Women in Design.

The program provides opportunities for students to travel throughout the curriculum. These hands-on learning opportunities consist of field trips for an afternoon or long weekend. During their third year, students are provided program funding to help offset the expenses of traveling to a larger regional city. In both the fourth year and the M.Arch program, students participating in service learning or design-build studios often travel to engage a community or

project site, which might be within the city of Lincoln or involve several hours travel across Nebraska. The program offers summer programs to Barcelona and Paris, exchange programs with the University of Hannover (Bilateral), and graduate-level semester-long experiences in London. In 2019 the college celebrated the 50th anniversary of the London program, a semester-long immersive education abroad experience.

Additionally, the program proudly sponsored and hosted the 2022 <u>SAY IT LOUD</u> exhibition by Beyond the Built Environment for one week on the UNL campus. The goal of the SAY IT LOUD initiative is to raise up minority groups of professionals who work in the built environment. Architects, contractors, engineers, interior designers, landscape architects, and planners from across Nebraska who identify as women and/or Black, Indigenous, or People of Color submitted work for the state's exhibit, which is now set to travel to locations across Omaha and Lincoln.

The program fosters a work/school/life balance culture through the "Employment and Course Load Guidelines." The program is a demanding discipline requiring significant commitment to succeed, and for this reason, the program has adopted guidelines recommending that students who are employed not exceed the guidelines. In the M.Arch program, students holding teaching or research assistantships cannot exceed 12 credit hours per semester, and students holding these positions are prohibited from engaging in any other form of remunerative employment without the permission of the program director. Additionally, to maintain a work/school/life balance for faculty and staff, the program director has requested that work-related emails be sent only during normal business hours, with the intent that faculty and staff not feel required to work or respond to emails after hours. Students have access to and support from the <u>Counseling and Psychological Services (CAPS)</u> and the <u>Suicide Prevention Website</u>, while faculty and employees have access to the <u>Employee</u> Assistance Program (EAP).

As part of the Connection and Collaboration segment of the College Strategic Plan, the Architecture Program is actively engaged in conversations with Metropolitan Community College (MCC) to develop an articulation agreement enabling a more accessible approach to the professional program for MCC students. MCC was chosen as a potential feeder program based on their 39% minority population, their associate and certificate programs in Architectural Design Technology—AEC Professions and related areas, and their proximity to the Lincoln campus and the professional UNL Architecture degree program. Many of the foundation and general education courses provided by MCC are transferable to the Architecture Program. Progress on this collaboration was paused due to the onset of the COVID-19 pandemic.

The Architecture Program has set a goal of partnering with the University Career Services' new Micro-Internship and Mentoring program, which assists first-generation and BIPOC students in finding short-term professional opportunities. These micro-internships are paid positions that typically last two to six weeks totaling 10-40 hours of work. The program will pilot this program with a professional office in the summer of 2023.

The program annually assesses equity, diversity, and inclusion as part of its long-range planning at the end of the semester, when teaching teams meet prior to the entire faculty gathering to discuss the outcomes from various levels of the program. This enables communication, transparency, reflection, and adjustments to be made from semester to semester.

Knowledge and Innovation

Architects create and disseminate knowledge focused on design and the built environment in response to ever-changing conditions. New knowledge advances architecture as a cultural force, drives innovation, and prompts the continuous improvement of the discipline.

Program Response:

The program's mission supports knowledge and innovation by "providing the educational foundation for intellectually aware and self-realizing architecture professionals," and by fostering student learning through "design research and creative scholarship." Our program's value of knowledge and innovation influences our approach to <u>PC.5: Research and Innovation</u>.

University Support of Value

The program faculty actively contribute to the University's Carnegie Classification Research I Institute by engaging in activities that create knowledge and innovation.

Students in the program gain experience by actively participating in faculty research through the optional University Undergraduate Creative Activities and Research Experience (UCARE) program, which pays students a stipend between their second and fourth years to serve as research partners with faculty. The results of these collaborations are presented at the campus-wide undergraduate and graduate student research days. After participating in UCARE, several of our students have been selected to present at both national and international venues. The university is itself further committed to knowledge and innovation through the building of the Nebraska Innovation Campus (NIC) and Nebraska Innovation Studio (NIS), which opened in 2015. Nebraska Innovation Campus is a world-class facility and organization priority designed to facilitate new and in-depth partnerships between the University of Nebraska and private sector businesses, a place for students to build big ideas, where imagination meets hard work, and where collaboration yields results. NIC provides individuals and organizations with access to culture, talent, and resources. Nebraska Innovation Studio is one of the nation's top makerspaces, housing a full metal shop, wood shop, rapid prototyping room, art studio, and ceramics and textiles equipment, NIS is open to university faculty, students, staff, and community members who pay a monthly membership fee. Our students use this space often, and we have sometimes been able to secure funding to cover student membership fees, or have built membership costs into course fees.

College Support of Value

Knowledge and innovation directly align with the College's Strategic Plan, which identifies "Innovation and Impact" as one of our three core capacities to lead our college into the future. This core capacity includes strategies articulated to leverage our existing strengths, and the College places great importance on bringing relevant and impactful voices in architecture and design to the school each year. Due in part to the College's relatively remote location outside major metropolitan areas and distant from other schools of architecture, the faculty have long believed that the College should be continually reinvigorated with outside voices. Since 1986, the endowed Hyde Lecture Series (including exhibitions) and the endowed Hyde Chair of Excellence visiting professor have served as a central and vital aspect of the College's culture. This endowment allows the College to invite renowned and up-and-coming scholars and practitioners to spend a semester or more at the College. The Hyde Lecture Series, Hyde Exhibitions, and the Hyde Chair of Excellence are overseen at the College level by the Speakers & Exhibitions Committee, which is established annually by the Dean with at least one Architecture Program representative. In addition to outside voices having an impact, the College and the program track how our knowledge and innovation within our projects are impacting communities across the state of Nebraska, as shown on the College's community engagement map.

Program Support of Value

The program is committed to building knowledge across semesters leading toward innovation. In the studio, inquiry and innovation are not only possible, but required. This occurs at the undergraduate level in the ARCH 411: Integrate studio, where students engage with allied professionals (e.g., structural, environmental, mechanical) to incorporate diverse perspectives and knowledge into their design proposals. At the M.Arch level, students are enrolled in Design-Research studios (DRs), and the entire M.Arch curriculum is constructed to support faculty- and student-initiated design research agendas. The DRs sequence, which has a design-build variant, allows students to follow an agenda or interest for more than one semester. The structure and teaching assignments allow faculty to continue design research agendas for multiple semesters, with some students continuing their work for a second semester. Students can choose from semester- and year-long studios in many emphasis areas. Year-long studios are also supported and form a differentiation from the typical American semester-based model. The DRs sequence positions architectural exploration as a research protocol situated between the creative pursuits of the arts and the technical methodologies of the sciences. The studios prepare students to be self-motivated professionals capable of using design to work through complex problems and generate new architectural knowledge by engaging in design and research agendas of contemporary significance. Each semester, the program offers an M.Arch design-build studio, which allow students to engage in design-intensive projects with creative, nonprofit clients in collaborations that span design and construction. The design-build studios have won numerous awards including ACSA Education Awards, state and regional AIA awards, a Progressive Architecture Award, and several exhibitions.

The studio, however, is not the only venue that embodies the need to pursue new knowledge. At the undergraduate level, students enroll in four foundational History/Theory courses: DSGN 140, ARCH 240, ARCH 241, and ARCH 341. These courses use our in-house library to conduct research on course-related topics, which results in students using scholarly writing and images to craft a coherent argument about design. Additionally, ARCH 489: Design Research introduces students to the possibilities that present themselves when design moves beyond problem solving. At the conclusion of ARCH 489: Design Research, students understand frameworks they can apply to design and methodical approaches they can apply to research. The course material is assessed through assignments, papers, projects, presentations, and guizzes. The structural sequence consists of three courses: ARCH 231, ARCH 331, and ARCH 332. The concept for the sequence begins by encouraging the development of an intuitive sense or experience of visualizing structural behavior, considering the elementary modes of action and their relationships to different materials in the first structural fundamentals course. This is followed by the structural mechanics course designed to identify and determine the static loads and force components acting on structural elements, along with their resulting reactions and properties of those elements used to resist the loading conditions. Finally, the structural optimization class challenges students to appropriately size their structural building members, using both calculations and rule-ofthumb techniques focused on the loading conditions and common building materials of wood, steel, and concrete. The three-course sequence works together to conceive structural behavior, identify loading stresses and reactions of shapes and materials, and realistically resist these forces through the sizing of structural elements.

Students enrolled in the M.Arch program can take professional elective courses from our tenured and tenure-track faculty. One of many reasons students choose to pursue the M.Arch at UNL is because of the wide variety of professional electives offered. Students may focus their professional elective studies on specific areas such as history/theory, fabrication/materiality, representation, building technology, urbanism, or professional development, or take a wide variety of electives from across the spectrum. Because faculty bring their scholarship and creative activity into the classroom, select students work closely with faculty to co-author external peer-reviewed research outcomes, such as conference posters and papers. A selected number of M.Arch students are hired as research assistants

to participate in faculty-funded research projects. Additionally, M.Arch students can contact faculty for independent study opportunities to earn credit for continuing research on a studio or seminar topic. Students enrolled in the M.Arch program will also take one outside elective from an area other than Architecture, exposing them to other disciplines such as Community and Regional Planning, Interior Design, Landscape Architecture, Horticulture, Theater Design, Studio Art, or Graphic Design, to name a few.

One of the options for the final sixth-year studio is the pursuit of a Design Thesis (ARCH 613/614). Students who choose this path are given great latitude to propose a project and blaze their own path with the guidance of a faculty mentor. Design Thesis investigations are instrumental in future professional development and may also act as springboards for further academic pursuit. A correctly formed Design Thesis investigation identifies a subject for inquiry that is of relevance to a larger architecture audience, researches the subject through both scholarly sources and the generation of new creative content, develops a Design Thesis question, and ultimately generates a response that can be supported, argued, and defended. Design thesis projects are bound as books shelved in our library and permanently uploaded to the internet for anyone to access. We hope the Design Thesis experience will be the first of many contributions students will make to the collective knowledge of the professional community. Students enrolled in the M.Arch are also able to enroll in dual-degree masters with Community and Regional Planning and Business and can additionally enroll in an MSc or Urban Design Certificate program.

The program houses several faculty-led research and collaboration labs, including ASSIST: Community Engagement, Research & Design Studio (Hardy), <u>Computational Architecture</u> <u>Research Lab (CARL)</u> (Newton), <u>Fabrication and Construction Team (FACT)</u> (Day), and <u>Plain</u> <u>Design-Build</u> (Griffiths). These labs address a unique aspect of the architectural discipline that supports not only faculty research but also student-centered learning in seminars, core courses, and design studios. All of these labs engage numerous communities and agencies to create a direct impact on the built environment. The outcomes from these labs have received numerous awards, grants, engagement opportunities, and publications, and are a testament to our faculty's dedication and commitment to research and innovation.

The program recently implemented a Design-Research and Fabrication Grant program to advance knowledge and innovation among our faculty and students. Since 2020 the program has partnered with <u>Sand Creek Post and Beam</u> and the <u>Nebraska Masonry Alliance</u> to offer seed funding to support faculty research. This research funding has engaged numerous students in undergraduate and graduate-level design studios and resulted in material-specific mockups, prototypes, and public exhibitions.

The program has several faculty who serve in academic and professional leadership roles, including NCARB, NAAB Board, ACSA Board, ACSA TAD Editorial Board, SAH Archipedia/BUS, Magazine on Urbanism (MONU) Board, AIA-NE Board, AIA-DEI Committee member, State Board of Architects & Engineers, Omaha by Design Advisory Committee, Partners for Livable Omaha Advisory Board, Design Alliance Omaha (daOMA) Board, and Rural Prosperity Nebraska. These membership roles allow our faculty to keep our program updated on the most current knowledge and innovation in the architectural discipline. Since 2017, the program has organized an annual public exhibition and symposium in Omaha entitled PROJECT, featuring student work from the Master of Architecture Program. The design research, design-build, and independent thesis projects showcase the breadth of the architectural discipline and exploration of various design themes. This exhibition allows our program to showcase our work and start a dialogue with the community, including local architects and the general public.

The program has several students, individually and in teams, who have received external recognition for their research and creative actives, including published articles and projects in

books and journals and presented at conferences. Students have further received design awards from ACSA, Society of American Registered Architects – National, Society of American Registered Architects – New York, AIA-Central States, AIA-Nebraska, Lyceum Competition, RIBA President's Medal, and the AIA Dallas Ken Roberts Memorial Delineation Competition.

The program annually assesses knowledge and innovation as part of its long-range planning at the end of the semester, when teaching teams meet prior to the entire faculty gathering to discuss the outcomes from various levels of the program. This enables communication, transparency, reflection, and adjustments to be made from semester to semester.

Leadership, Collaboration, and Community Engagement

Architects practice design as a collaborative, inclusive, creative, and empathetic enterprise with other disciplines, the communities we serve, and the clients for whom we work.

Program Response:

The program's mission supports leadership, collaboration, and community engagement by "promoting collaboration and engagement through excellence in design research and creative scholarship," encouraging students to create an impact through collaborations. Our program's values of leadership, collaboration, and community engagement influence our approach to <u>PC.6: Leadership and Collaboration</u>.

College Support of Value

The program faculty and students support and co-developed our College strategic plan, which identifies three core college capacities, including "Connection and Collaboration." The first and fourth years of the undergraduate curriculum serve as bookends to address design both as an overall discipline and an interdisciplinary collaboration. These are signature moments in all three undergraduate programs, with students from Architecture, Interior Design, and Landscape Architecture coming together in both first-year courses and the fourth-year course DSGN 410: Collaborate. During the first year, courses establish an interdisciplinary foundation for students to collaborate by building skills, shared dialogue, and creative confidence. During the fourth-year DSGN 410: Collaborate, students engage with critical real-world design problems and issues in interdisciplinary teams that transcend the purview of a single design discipline. Interdisciplinary faculty teaching studios foster a collaborative environment by facilitating "T-Week," or Team-Building Week. This approach introduces students to peer and self-assessment, skills and learning styles, teamwork readings, reflection assignments, and disciplinary vs. interdisciplinary team conversations. Within the collaborative studio environment, students learn how to value, respect, and understand disciplinary perspectives. The studio sections are often co-taught by faculty from different disciplines/professions who model collaborative partnerships. The College and all three undergraduate disciplines value these relationships, with the goal of modeling a collegial, interdisciplinary approach.

In addition to disciplinary-specific faculty, these collaborative studios often engage various stakeholders, including from the community, state agencies, and nonprofit organizations. In the past, several DSGN 410: Collaborate design studios have taken experiential learning field trips with students to participate in community engagement activities with stakeholders. Examples include Indian Cave State Park (Nebraska Game and Parks); Timberlyne Production facility in Wayne, Nebraska; Nebraska 4-H Institute of Agriculture and Natural Resources; Cedar Point Bio Station at Lake Ogallala; Four Aces Dairy in Osmond, Nebraska; an abandoned missile site near Seward County; and the University of Nebraska Medical Center (UNMC) Midtown Omaha Campus. These immersive, hands-on experiential learning opportunities expose students to diverse thought, spatial experiences, and collaboration with local stakeholders. DSGN 410 forms a signature moment in all three undergraduate

programs and provides students with opportunities to gain creative confidence, improve their collaboration skills, and co-create knowledge. The College and the program track how many community engagement projects we conduct annually to show how both entities create an impact throughout the state of Nebraska, as shown on the <u>community projects map</u>.

Program Support of Value

The program provides opportunities for students to collaborate as early as their second year on collaborative phases while also creating individual designs. Starting in ARCH 311: Situate, DSGN 410: Collaborate, and ARCH 411: Integrate, students collaborate on either individual design phases or an entire design project. Collaboration is also supported by the ARCH 461: Urbanism and ARCH 489: Design Research lecture courses, where students discuss weekly reading assignments and complete assignments in teams. In the M.Arch program, students often collaborate on team-based studio projects, including design-build projects that engage community or stakeholder groups. In recent years, the M.Arch program has seen more design thesis students engaging community partners within their thesis investigation including communities in Detroit, Michigan and rural Nebraska. The program faculty and thesis mentors understand and support these engagements with the community toward mutually beneficial outcomes.

Architecture students are eligible to join several student organizations, including the American Institute of Architecture Students (AIAS), Alpha Rho Chi (AXP), ASUN, National Organization of Minority Architecture Students (NOMAS), Tau Sigma Delta (TSD), Queer Nebraska Design Students (QNDS), and the US Green Building Council (USGBC). Several student organizations provide leadership by engaging with local professionals to support student learning and awareness. The AIAS president serves as an ex-officio member of the AIA-Nebraska Board of Directors and attends quarterly meetings. The NOMAS chapter hosts Diversity, Equity, and Inclusion professional panel discussions. The student organizations (AIAS, AXP, TSD, NOMAS) annually host four Career Fair preparatory sessions. In all cases, student organization leadership introduces students to additional leadership at both the College and program levels, including the Student Advisory Board (SAB), and student representative positions on program ad-hoc committees such as search committees for faculty and staff hires, peer mentoring, and Responsible Design Learning Community graduate peer mentors. Students have also participated in Rural Prosperity Nebraska's Rural Fellows program, which connects students with rural Nebraska communities for collaborative service-learning experiences. Rural Fellows spend their summers living in Nebraska towns, working on locally-designed projects that support local businesses, and making progress toward specific, strategic goals to help communities thrive.

In the third and fourth years, students are eligible to become Undergraduate Learning Assistants (ULA), who work with a faculty member on course maintenance, delivery assistance, and development. These positions can later develop into Graduate Learning Assistantships (GLA) and Graduate Teaching Assistantships (GTA). Through the Undergraduate Creative Activities and Research Experience (UCARE), students also lead and collaborate in co-creating disciplinary knowledge with faculty members.

The program has impactful and growing collaborations with several local industries that allow students to gain firsthand knowledge from experts and the ability to work with building materials (mass timber, CLT, masonry, and façade systems). Since 2014 the program has partnered with SGH Concepts and Dri-Design to help students better understand the collaborative working relationship between architects and suppliers, with the program annually hosting a presentation/panel discussion sharing the collaborative process and the roles of architects and suppliers. Additionally, since 2022 the program has partnered with Nebraska Masonry Alliance and Sand Creek Post and Beam (Timberlyne) to engage faculty and students in design research and fabrication opportunities with masonry and heavy timber construction.

The program annually assesses leadership, collaboration, and community engagement as part of its long-range planning at the end of the semester, when teaching teams meet prior to the entire faculty gathering to discuss the outcomes from various levels of the program. This enables communication, transparency, reflection, and adjustments to be made from semester to semester.

Lifelong Learning

Architects value educational breadth and depth, including a thorough understanding of the discipline's body of knowledge, histories and theories, and architecture's role in cultural, social, environmental, economic, and built contexts. The practice of architecture demands lifelong learning, which is a shared responsibility between academic and practice settings.

Program Response:

The program's mission supports lifelong learning by providing "the educational foundation for intellectually aware and self-realizing architecture professionals" and supports students through the ongoing, voluntary, and self-motivated pursuit of knowledge. Our program's value of lifelong learning influences our approach to <u>SC.2_Pro Practice</u> and <u>SC.5_Design</u> <u>Synthesis</u>.

College Support of Value

The program faculty support and teach in the College's Design One (d.ONE) common interdisciplinary first-year curriculum, which provides a foundation and interdisciplinary knowledge for lifelong learning. DSGN 110: Design Thinking prepares students to think contextually and expansively, extending the boundaries of the design agenda to shape the way students observe the built environment. The course introduces students to the design thinking method through several individual and team-based projects, and is followed by DSGN 111: Design Making, which translates the design thinking method into a design studio process. During the fourth year of the curriculum, students come back together in the DSGN 410: Collaborate design studio, ARCH 489: Design Research, and ARCH 461: Urbanism to understand how diverse perspectives change design, research, and the built environment. These learning environments introduce students to the impacts, opportunities, and potential of external voices in the design of the built environment. The skills gained from these courses and instructional approaches are necessary as students continue to work with future professionals and stakeholders. The College provides broad educational experiences, lifelong learning, and continuous integration between theory and practice through the annual Hyde Lecture series. The 2022-2023 Hyde Lecture Series explores the theme of Information Stimulus, and in Spring 2023, the College co-hosted Martha Swartz's lecture "The Urban Landscape and The Future of Cities" with the UNL E.N. Thompson Forum on World Issues.

University undergraduate students must complete the Achievement-Centered Education (ACE) general education program consisting of ten courses. The ACE program is built around student learning outcomes, as shown in the <u>ACE rubrics</u>. that answer the fundamental question, "What should all undergraduate students—irrespective of their majors and career aspirations—know or be able to do upon graduation?" Five of the ten ACE requirements are covered in non-architecture core courses, while the remaining five are covered by the Architecture Program. ACE enhances the undergraduate experience by providing broad exposure to multiple disciplines, complementing the major and helping students develop important reasoning, inquiry, and civic capacities. Additionally, ACE is outcome-focused: students know why they are taking the class and what they will learn. ACE is designed to help students integrate what they learn throughout their education and in their lives.

Program Support of Value

The program faculty believe that a rich education in architecture must blend with a broad general education, resulting in a "T-Shaped Person" at the core of the curriculum. The vertical

NA/AB

bar on the letter *T* represents the depth of related skills and expertise in a single field, whereas the horizontal bar represents the ability to collaborate across disciplines with experts and apply knowledge in areas other than one's own. The program encourages students' independent learning through reflective convergent and divergent thinking by placing more emphasis on the process of learning and exploration rather than on the final product or design. This method of instruction guides students to be self-directed learners near the beginning of the curriculum and allows for the integration of "Architecture Discipline," "Building Technology," "Technique," and "Elective/Minor" courses within the studio strand.

ARCH 680: Professional Practice covers a broad and continually evolving topic: What is of critical importance today may become part of the background tomorrow. With that in mind, and because students are only beginning what may be long careers, the course strives to stimulate an ethos of lifelong learning and an entrepreneurial mindset. As students embark on their careers, we want to equip them with the knowledge they need to form their own paths through the practice of the discipline. We want to help them make intelligent and informed career decisions, even if those decisions lie outside the traditional roles of the professions.

To support diverse thinking and co-creation of knowledge, most faculty members teach one professional elective each year, depending on the nature of the class. This allows students to serve as participants in the faculty member's research through the course requirements. This idea of shared design research is further integrated into the M.Arch-level studios, with the structure of the M.Arch portion of the curriculum ensuring that students have multiple opportunities to access this experience. Ultimately, students are responsible for their own learning, and this way of thinking encourages M.Arch students to author their own educations and take ownership of possible specializations. The self-directed Design Thesis provides students with the opportunity to conduct self-directed investigations on a topic of their choice, with the goal that they will continue engaging with the design thesis prompt, question, and investigation into their professional careers.

The program provides further opportunities for students to continue their education beyond the classroom by engaging with the profession. Opportunities include professional office tours, career fair preparatory sessions (Portfolio design layout, CV/ Resume, Soft skills + Interview skills, Portfolio design review) and panel discussions. Additionally, students regularly host visiting guests to the college (e.g., Hyde lecturers, faculty search candidates, master alumni, and multicultural alumni) for meaningful one-on-one and small-group conversations. Students engage with the profession through sponsored competitions, including the fourth-year ARCH 411: Integrate SGH + Dri-Design competition, the third-year ARCH 311: Situate BVH Competition, and the ARCH 232: Material Assemblies Nebraska Masonry Alliance competition. These professional connections expand student knowledge of industry standards and emphasize the continuous integration between theory and practice.

The program annually assesses lifelong learning as part of its long-range planning at the end of the semester, when teaching teams meet prior to the entire faculty gathering to discuss the outcomes from various levels of the program. This enables communication, transparency, reflection, and adjustments to be made from semester to semester.

3—Program and Student Criteria

These criteria seek to evaluate the outcomes of architecture programs and student work within their unique institutional, regional, national, international, and professional contexts, while encouraging innovative approaches to architecture education and professional preparation.

As previously mentioned in the "Mission and Context" and "Shared Values" section of the APR, because the majority of our 2-year M.Arch students come from our undergraduate program, our M.Arch program relies on our undergraduate courses to build knowledge toward the program and student criteria.

3.1 Program Criteria (PC)

A program must demonstrate how its curriculum, structure, and other experiences address the following criteria.

PC.1 Career Paths

How the program ensures that students understand the paths to becoming licensed as an architect in the United States and the range of available career opportunities that utilize the discipline's skills and knowledge.

Program Response:

Our Approach

The Program focuses not only on the current state of architectural practice, but on the practice's future and the world in which our graduates will emerge as architects. To achieve this end, our students are introduced to this concept in the common first-year course. The College of Architecture introduces students to the d.ONE common first year through a series of courses that prepare them to enter a professional program (Architecture, Interior Design, or Landscape Architecture). During the d.ONE curriculum, and prior to selecting a professional program, students enrolled in DSGN 101: Intro to Design grow to understand the roles and responsibilities of each discipline. This is crucial for students to gain creative confidence, build skills they can apply to all disciplines, and ultimately understand the basic framework to licensure and career opportunities.

After entering the program, our students learn to recognize the paths to their intended careers through education, experience, and examination. Students are informed of this during the common first year, and the importance of each step is repeated within the program.

Course Sequence

DSGN 101: Intro to Design (2 CH) provides students with an overview of the professions by alumni from each discipline. This helps students define the scope of the design professions within the College of Architecture and allied disciplines. In the next course phase, students read Susan Szesany's "Design in the Collaboration Era" from SOM Journal 8 and watch two professional lectures and one presentation from the program director for each undergraduate program, providing an overview of the disciplines and professions. This exposure reinforces the initial alumni presentations, helps students articulate the design professions, and prepares them to enter the architecture program. Students are exposed to different careers in the form of practice models for all disciplines as homework prep for each discipline-specific course module. For example, before the Architecture lecture by the program director, students watch two short films, one featuring Jeanne Gang and the other with David Adjaye, with both architects talking about their processes, guiding principles, and how they see architecture's role in society. Additionally, students are exposed to Emily Pilloton's Project H not-for-profit practice in Bertie County and MASS Design Group, Project Architecture (1% pro bono work), and other non-traditional practices. Lastly, the Program Directors give presentations on the paths to becoming licensed and available career paths.

ARCH 680: Professional Practice (3 CH) covers a broad and continually evolving topic: that what is of critical importance today may become part of the background tomorrow. With that in mind, and because students are only at the start of what may be long careers, the goal of the course is to stimulate an ethos of lifelong learning and an entrepreneurial mindset. As students embark on their careers, we want to equip them with the knowledge they need to form their own paths through the practice of the discipline. We want to help students make intelligent and informed career decisions, even if they lie outside the traditional roles of the professions. Within the course, session themes include Practice Modes (traditional, alternative, future), Practice Management, and Project Management. Overarching course themes include Ethics, Future Focus, Professional Choices, and Entrepreneurial Mindset. These principles are achieved through guest lectures and video lectures by individual experts, panel discussions with two or more guests in conversation, ProPEL – Professional Practice Education Library ACSA & NCARB, discussion sessions, and site visits on campus field trips for CA assignment.

ARCH 689: Internship (3 CH) is a summer course that offers students admitted into the M. Arch degree program the opportunity to earn up to six credit hours toward their degree. The course objective is to award academic credit to students who have independently negotiated summer employment with an NCARB-certified architect or another form of employment that meets the requirements for AXP experience. The course illustrates the many experiences offered by the profession, and students compare these experiences at the end of the semester. Students are expected to provide a record of work completed, a reflection on the quality and type of work conducted over the summer through a formal journal of weekly activities, and a public presentation of their work and experience at the end of the summer. Students who complete the course will gain insight into the professional work experience paralleling the AXP guidelines published by NCARB, increased awareness of the architectural practice and related fields, a critical position toward the type of practice and work experience they can continue with after graduation with a professional degree in architecture, and the ability to assist and mentor navigating the job market, internship experience, and the AXP requirements put forth by NCARB.

ARCH 492/592/892: Career Path Mini-Course (Round-table discussions with Industry Professionals) (1 CH) is an optional elective course taught by the College of Architecture Friends Association (CAFA). Over the years, CAFA has taught numerous mini-courses related to "Drawing Workshops," "Community Facilitation," "Communication Skills," "The Construction Industry," and "Practice." In Spring 2023, the "Career Path" mini-course was taught for the first time. The course had three class periods consisting of professional panel discussions on "Leadership and the Non-Traditional Paths of Graduates from College" and "Life After College."

Non-Curricular Activities

Through the program's strong, ongoing relationship with the Nebraska Board of Engineers and Architects, students become familiar with the process of securing licensure. For many years, the program has had a seat on the Board to ensure continued communication with the program, and Brian Kelly, AIA, is currently serving as Chair from 2023-24. Through this relationship, the entire faculty has been made aware of pending legislative bills on architecture and engineering licensure. The specific licensure process is presented to all professional degree students by the Executive Director of the State Board in the ARCH 262: Building Organization and ARCH 680: Professional Practice courses each year, during which the Director goes over the steps that students must follow to gain licensure.

After graduation, members of the college community continue to assist and encourage former students both formally and informally to complete the licensure process. Licensure is one of several key conversation topics college representatives have with younger alumni, and alumni are encouraged to let the program know when they have completed the examination

process so we can congratulate them. Our program's faculty board member annually attends the State Licensee Recognition Ceremony to celebrate our alumni who have gained licensure.

The program has an Architecture Licensing Advisor (Brian Kelly), and each year students are provided with AXP program information and encouraged to meet with the Licensing Advisor. These students work closely with both the Licensing Advisor and the faculty member teaching the internship course when they apply for summer internships.

Jeff Day, FAIA, NAAB president elect, participated in the 2021 NCARB Scholars in Professional Practice program at the California Polytechnic University, San Luis Obispo. Each year, NCARB, the National Council of Architectural Registration Boards, invites a select group of professional practice educators to attend a multi-day professional development opportunity that focuses on both current and forward-looking trends in academia and practice. During this exclusive training event, up to 20 faculty members from architecture schools around the country convene to share best practices, learn from experts, and enhance the delivery of their professional practice courses. Additionally, Day served on the NCARB Education committee from 2021-2022 as the ACSA observer.

Reinforcing the DSGN 101 alumni presentations, the program annually posts alumni stories on Instagram under the theme of "Where They Are Now." Since 2020 the College Instagram series has highlighted alums working in traditional architectural practice and alums working in allied fields, including Experience Designer for Nike, Digital Transformation Specialist, Data Solutions Manager, Digital Fabricator, Art Curator, and Real Estate Developer and Designer. The stories highlight a range of professionals working across different professional industries in a variety of architecture offices.

The College annually hosts a Career Fair in the spring semester. Before the fair, our student organizations host pre-fair prep sessions focused on Portfolio "Design" layout coordinated by AIAS, "CV/ Resume" coordinated by NOMAS, "Soft Skills and Interview Skills" coordinated by Alpha Rho Chi, and "Portfolio Design" coordinated by Tau Sigma Delta. Students attending these sessions are given opportunities to reflect on their material and receive professional advice. Since the program began these sessions in 2019, professionals have commented that students' preparation and confidence have improved significantly.

Student organizations frequently engage the professional community through firm tours, mentoring meetings, Lunch and Learns, and career advice. The AIA-Nebraska + AIAS Mentoring Network initiated a program to match students with professional architects to help prepare them for their careers. This is an opportunity for students to engage and network with practicing architects, tailor meetings to educate students, share resources and successes, seek outside guidance about career paths and challenges, and build lasting relationships. These efforts beyond the program help students make educated, informed career choices. For example, in Fall 2022, Richard A. Griffin, an alumni of the program, discussed the Design and Construction Management career path with our students. AIAS also helps to connect students to professionals through group and individual mentoring, firm and site tours, ARXP and ARE information sessions, professional networking through social events, and other valuable tools for career progression (headshots, portfolio and project review, student mentorship, etc.). Additionally, NOMAS has hosted two professional panels to discuss career paths and their current role in the profession, and the College Hyde Lecture Series provides opportunities for students to listen to practicing architects discuss the impacts of their work.

Assessment

When assessing PC.1 we use DSGN 101: Intro to Design and ARCH 680: Professional Practice to examine students' understanding of the paths to becoming licensed as an architect in the United States and the range of available career opportunities that utilize the

discipline's skills and knowledge. The students who have passed the course have met these expectations and to better meet the criteria we are considering a quiz in ARCH680 to assess basic knowledge of the path to licensure via education, experience, and examination, beginning with Spring 2023. We will examine the same outcomes beginning with the Spring 2024 and expect to see productive improvement of student learning.

The assessment method for the learning outcomes includes one project in ARCH 680: Professional Practice in which students speculate on their own career goals, their anticipated paths toward those goals, and their anticipated paths to licensure in architecture (should that be part of their plan).

The **ARCH 680: Professional Practice** results were reflected upon by the faculty member and Graduate Teaching Assistant during and at the end of the semester. The faculty member recognized that while all students were able to write in detail about their immediate futures, and to speculate about more distant career options, many did not have clearly formed plans. A minority wrote that they wanted to start their own architecture firms one day and were able to articulate paths toward that goal, which involved gaining relevant experience and professional licensure along the way. Others explicitly stated that they did not want to run their own firms, but wrote about finding potential roles in larger, established firms. However, many were still unclear about their futures, but stated that their immediate goal was to seek licensure as efficiently as possible—a common goal among students in the class. Out of 48 students in the class, the average score for Project 4 was 93%. Only one student did not pass the assignment, and this was simply due to not submitting the required essay.

Based on the student results the faculty member has received from the Career Mission assignment, the Practice Modes module, which is geared toward meeting PC.1, is quite successful in opening students' minds to the range of possibilities for careers following a professional architecture degree. One possible additional assessment that we are considering is a simple quiz to assess basic knowledge of the path to licensure via education, experience, and examination. While the program believes that all students are well informed by the Architecture Program, an additional guided assessment will help us gather more specific data.

PC.1 is assessed in three quizzes in **DSGN 101: Intro to Design, Module 8 Quiz,** Professions Overlaps & Origins, **Module 9 Quiz**, Professional Distinctions, and **Model 11 Quiz**, Architecture.

The **DSGN 101:** Intro to **Design** results were reflected upon by the faculty member and Graduate Learning Assistant during and at the end of the semester. Additionally, the findings will be presented to the d.ONE core team. **Module 8 Quiz,** Professions Overlaps & Origins: The average score of 81% (100% highest and 22% lowest scores) suggests there can be clarification and improvement. The lowest-scoring questions were those related to visual communication drawings (orthographic and diagraming) in the design fields. **Module 9 Quiz,** Professional Distinctions: The average score of 94% (100% highest and 50% lowest scores) suggests that the majority of students understood this content. One question asks students to "select the systems [used by the discipline] that are specific knowledge/expertise that separates the one discipline from the other two. The architecture-focused question received: 81% correct, the Interior Design-focused question received: 97% correct, and the Landscape Architecture-focused question received: 97% correct. **Model 11 Quiz**, Architecture: The average score of 81% (100% highest and 22% lowest score) suggests there can be clarification and improvement. 97% of the students answered that they "understand how their academic education will lead them to a career path."

Based on the student results, the **DSGN 101: Intro to Design** course will continue with these modules and quizzes. Additionally, the course will consider a form of a pre-test to determine

the growth of student knowledge throughout the semester along with improvement to the quizzes. **Module 8 Quiz**, Professions Overlaps & Origins: Given that this course is taken in the fall semester of their freshman year, it is understandable that students may not yet know about drawing conventions such as orthographic and diagramming. Consideration should be made if this is an appropriate question to ask in the course or if additional teaching content should be provided. **Module 9 Quiz**, Professional Distinctions: With an average score of 94% the students are comprehending the information. No change is necessary for this quiz. **Model 11 Quiz**, Architecture: Consideration should be given to why the average score is 81% and consideration should be given to isolating specific questions to better understand where the students are having trouble comprehending the information.

ARCH 680: Professional Practice (3 CH) is assessed through our program's three-step framework for collecting, reflecting, and considering changes. This framework for assessment is discussed in greater detail in Section 5.3. Additionally, the course instructor has provided an assessment executive summary page that explains this process further and can be found in the <u>criterion assessment folder</u>.

PC.2 Design

How the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors, in different settings and scales of development, from buildings to cities.

Program Response:

Our Approach

The Architecture Program at UNL ensures that all students understand and gain skills in the methods and processes of PC.2 Design through a multi-course "Design" strand. Through this structure, students are educated to be future professionals, with design positioned as the intentional shaping of the built environment to leverage the architect's agency to address critical global issues. The studio is the program's primary vehicle for students to understand and explore design, and every student enrolled in the program is required to pass each core studio to ensure the depth and breadth of their disciplinary learning. At the same time, students' knowledge and abilities are enriched by support courses in different curricular strands, including "Architecture Discipline," "Building Technology," "Technique," "Elective/Minor," as well as other experiences that are integrated into design projects at scales from small (e.g., installations) to large (e.g., buildings and urbanism). During the yearly studio sequence, the curriculum strands align, scaffold knowledge, and prepare students to address evolving issues.

The structure of the Design strand involves two bookend courses, starting with the DSGN 110: Design Thinking course in the first year d.ONE and ending with the DSGN 410: Collaborate studios in the fourth year, which combine Architecture, Interior Design, and Landscape Architecture. Both address design according to a specific discipline as well as transcend the purview of a single design discipline through multidisciplinary teams who engage real-world design problems through design-based research. Inclusive of the bookend studios, the 2nd- through 4th-year design studios emphasize several conceptual and spatial design themes: "Represent," "Ideate," "Organize," "Situate," "Collaborate," and "Integrate." Through design projects, each studio incrementally introduces and repeats essential design knowledge and reinforces key abilities to scaffold knowledge through the undergraduate curriculum. This process culminates in the ARCH 411/ARCH 511i: Integrate design studio, which serves as the capstone of the design sequence, demonstrating the architect's professional responsibility to design integrated building proposals.

Beyond methods of delivery, project types, conceptual issues, and forms of representation that continuously add to students' design fluency, the rigor of the undergraduate design strand provides the educational foundation for the M.Arch program, where students take

graduate design-research vertical studios. The Design Research studio positions architectural exploration as a research protocol situated between the creative pursuits of the arts and the technical methodologies of the sciences. By engaging in design and research problems of contemporary significance, these studios prepare students to be self-motivated professionals capable of using design to work through problems and generate new architectural knowledge. Many of these studios involve collaborations with professionals from within and outside the field of architecture.

In their final year, students can take the ARCH 613/614 Design Thesis course, which enables each student to conceive and execute an independent investigation into architecture. Design Thesis investigations are formative in their role for future professional development, and may also act as springboards for further academic pursuit. The Design Thesis investigation identifies a subject for inquiry relevant to a larger architecture audience. In addition to honing their spatial design skills, students often design new innovative methods for approaching a project. The student researches the subject by both investigating scholarly sources and generating new creative content, developing a design thesis question and generating a response that can be supported and defended.

To support students, the program actively invites outside critics, including local professionals and fly-in critics, to final reviews. Invited juries elevate conversations and enhance the student's understanding of design. Select juries determine the recipients of undergraduate and graduate design awards to demonstrate design excellence. The conversations surrounding design sequencing continues within faculty self-assessment through course assignments and projects, with teaching teams, organized by studio year, meeting regularly to assess the overall progress prior to the full faculty gathering. During end-of-semester reviews, the full faculty meet to review specific courses at various levels relative to design outcomes and NAAB criteria. The faculty discuss design process and pedagogical outcomes for each year and cohort. This three-part structure enables communication, transparency, reflection, and adjustments to be made from semester to semester.

Course Sequence

The Architecture Program has a Design sequence of interlinked core courses (DSGN 110/111, ARCH 210/211, ARCH 310/311, DSGN 410, and ARCH 411), focused elective courses (ARCH 4XX/5XX/8XX), and extracurricular activities. The sequence begins with the introductory DSGN 110: Design Thinking course in the first year, builds up to assessment in the DSGN 410: Collaborate in the fourth year, and culminates with advanced design research studios at the master's level.

DSGN 110: Design Thinking (2 CH, ACE 7) is the first core course within the Design strand. Taken during the fall semester of the student's first year, it is a required course for all three of the College's design disciplines: architecture, interior design, and landscape architecture. It also meets UNL's <u>ACE learning outcome #7</u> by using knowledge, theories, or methods appropriate to the arts to understand their context and significance. The course introduces design problems employing a user-focused, iterative, and team-based process. Through experiential labs, lectures, workshops, and class discussions, students practice design thinking to promote innovation in many disciplines.

DSGN 111: Design Making (3 CH) is a first-year design course in the spring term. Like DSGN 110: Design Thinking above, it is a required course for all three of the College's design disciplines (architecture, interior design, and landscape architecture). It builds on the skills that students acquire in Design Thinking by focusing on formal and spatial constructs. Through multiple short design projects, the course integrates craft and compositional principles into the design process, introducing different techniques for communicating ideas through physical and digital modeling, orthographic projection, freehand drawing, and other forms of graphic representation.

ARCH 210: Represent (5 CH) is a second-year fall core design studio that introduces architectural design through reflective and projective techniques. This includes divergent and convergent approaches focus on fundamental ways in which user(s), matter, and environment inform architecture. The studio provides awareness and builds skills related to architectural representation through multiple coordinated lectures and three primary design projects that bridge scales, complexities, and settings.

ARCH 211: Ideate (5 CH) is a second-year spring core design studio that introduces architectural design through reflective and projective techniques. This includes the consideration of multiple parameters including structure, organization, and material acknowledging their potential to inform each other. Exercises engage a student's ability to effectively and persuasively communicate design positions with regards to appropriateness. To deliver awareness and build skills related ideation, the studio offers coordinated lectures and three primary design projects at increasingly complex scales, requirements, and settings.

ARCH 310: Organize (5 CH) is a fall course in the third year of the architecture program that addresses architectural design as a complex programmatic and spatial organization. This includes the creation and critique of the design program; the proposal of plausible structures, materials, and their expressions; and the exploration of analytical and expressive potentials of representation. Students gain this awareness and develop these skills through multiple design projects that add complexity, scale, and building requirements.

ARCH 311: Situate (5 CH) is a spring third-year design studio. This studio considers architectural design as a means of creating effective and appropriate relationships with both created and natural environments. It is loosely coordinated with ARCH 360: Site (3 CH), which involves the selection and critique of site, the analysis and documentation of contextual conditions, and the incorporation of structure, material, and their expressions into design. Through two primary design projects that add complexity across ecology, context, material, and structure, the course introduces students to environmental stewardship, accessibility, life safety, and building envelope systems working towards more integration.

DSGN 410: Collaborate (5 CH, ACE 10), a fourth-year fall design studio that works in cooperation with IDES 311: Interior Design Studio IV (5 CH) and LARC 311: Design Studio IV: Ecological and Cultural Landscape Systems (5 CH), and serves as the program's assessment point. It enables students from all three disciplines to come back together after working in four studios within their own disciplinary to engage in a collaborative design project rooted in a research approach. These studios utilize multidisciplinary, interdisciplinary, or trans-disciplinary teams to explore faculty-lead issues across a range of design project types and development scales ranging from buildings to cities. They produce high-quality design work through varied methods and processes to integrate multiple factors into their joint design resolution.

ARCH 411: Integrate (5 CH) is the fourth-year spring design integrated studio and the culmination of the Design stand. It is tightly coordinated with ARCH 430: Building Integration (3 CH), and addresses complex design problems in relation to the integration and consideration of environmental stewardship, technical documentation, accessibility, site design, life safety, environmental systems, structural systems, and building envelope systems and assemblies, emphasizing technological considerations as formal and organizational determinants. During this process, students engage with professionals from structural, mechanical, and electrical disciplines to help them understand coordination and develop advanced design comprehension.

Along with their core education, students also have options to take electives (ARCH 4XX/5XX/8XX) related to design. These electives offer specific areas of advanced study that

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deal with more focused understanding of the design processes, methods, and forms of representation. These include ARCH 443/543/843 Architectural Representations: Theory & Applications (3 CH), ARCH 440/540/840: Details (3 CH), and ARCH 417/516/817: Product Design (3 CH).

Supplemental Experiences

Non-curricular activities supported by the Program and the College that introduce views and approaches to design not typically represented in the design strand include the Hyde Lecture Series, which is open to all students. The series hosts experts in the disciplines of architecture that enrich the ongoing dialog around varied practices of design that are paramount to the forefront of the profession. The lecture series has brough renowned designers and firms including LakeFlato (2022), Andrés Jaque (2022), Estudio Teddy Cruz + Fonna Forman (2021), and MASS Design Group (2018).

The program also hosts the Hyde Chair of Excellence, which was established in 1986 and attracts visiting faculty of national and international distinction. The Hyde Chair attracts emerging voices in design from both practice and teaching that elevate design in the program. Recent chairs include Cruz Garcia and Nathalie Frankowski (2017-2018), Anthony Morey (2017), Cristina Murphy (2016), and Stewart Hicks (2016). Their residency at UNL includes directing a design studio, conducting a graduate-level seminar, and presenting a public lecture. The Hyde Chair also participates in various College activities, including design reviews. The Hyde Chair of Excellence was made possible by the generosity of Flora Hyde to honor the memory of her late husband, A. Leicester Hyde, a 1925 graduate of the Architecture and Engineering program.

Assessment

When assessing PC.2, the program used DSGN 410: Collaborate for the 2-year M.Arch track and ARCH 511i for the 3-year M.Arch track to examine how the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors in different settings and scales of development ranging from buildings to cities. The students who have passed the course have met these expectations. Due to the complexity of this course's assessment process across diverse sections, we plan to strengthen this process to better understand each student's contribution to the team and create a common library of readings. We will continue to discuss ARCH 410's role in the curriculum beginning with Fall 2023. We will then examine the same outcomes beginning with the Fall of 2024 and expect to see improvement.

DSGN 410: Collaborate (5 CH), All studio sections have multiple assessment points throughout the semester. Most sections have a pattern of assessment approximately every 4 weeks:

- Project Research and Framing 4 wks = 15% + PSE*.01
- Concept & Schematic Design 4 wks =
- Design Development 4 wks
- = 15% + PSE*.02 = 15% + PSE*.03
- Specialization/Final 3 wks
 - = 20% + PSE*.04
- * See below for more information on Peer and Self-Evaluations (PSE)

Each assessment point is further broken down by a rubric within our Learning Management System (Canvas). The sub-criterion in each rubric is particular to each studio section but works toward assessing design that is unique to that studio. An example of a rubric breakdown for Schematic Design (SD) is:

- Conceptualization 25%
- Schematic Design (SD) Process 25%
- SD Communication 25%

- SD Resolution – 25%

The aggregate grade data has been collected for two years, since the curricular allocation/implementation of the new 2020 NAAB criteria. The data shows the following aggregate assessment rates (rounded to the nearest percentage):

- 82% excellent (A, A-)
- 16% good (B+, B, B-)
- 1% adequate (C+, C)
- ... non-passing grades ...
- 1% poor/incomplete (C-, D, F)

Several studio sections issue PSE to students after each assessment point. This provides an important reflection for students and offers data on individual performance within a team. The PSE asks students to assess their performance as well as that of their peers, from 1 (low) to 5 (high), across 6 criteria. The PSE provides insight and form about 1/3 of the overall studio grade by modulating the assessment for each phase of the design project:

- PSE.01 = 5% Project Research and Framing
- PSE.02 = 10% Concept & Schematic Design
- PSE.03 = 10% Design Development
- PSE.04 =5% Specialization

In studios that use the PSEs, the evaluation criteria scoring helps determine the assessment of student performance during each phase of a studio project. They are useful tools for student reflection and provide valuable insight for the instructors. The studios that utilize the PSEs show a 5% modulation of individual student grades in terms of the team design. This helps the instructors form an accurate assessment of individual student design performance. For example, if a team grade is 90%, a higher assessed collaborator would average 92.5% (A-) and a lower assessed collaborator 87.5% (B+).

Studio instructors are asked to prepare samples of student work from their studios, including a high-pass, mid-pass, and low-pass. They also reflect and prepare a verbal summary on:

- 1) What skills did students enter and then exit the studio with?
- 2) What areas were students successful in and what do they need improvement on?
- 4) How were the NAAB criteria integrated with the studio assignments?
- 3) How are the course outcomes and NAAB criteria being met by course outcomes?

The DSGN 410 coordinator holds a teaching team meeting where the work of each studio section is presented and the questions above are discussed. Additionally, instructors discuss what they learn from the top, middle, and bottom 1/3 of their studios. The discussion focuses on the qualitative aspects of leadership and collaboration within the studio environment. A few of the relevant reflections are:

- Students arrived with appropriate skills in Representation, Ideation, Organization (programming), and situating a design. By this stage in the design sequence, most students were well-versed in design process and had appropriate design skills. However, the range of student abilities between the upper end and lower end was far greater than expected.
- There was a general willingness to work with new methods and accept the overall challenge of the project.
- Students could use improvement on maintaining rigor throughout the whole project; while rigor is initially high, it tapers in the later phases.
- Working outside of plan (in physical model or section) seems more difficult for students than it should at this stage.
- It was noted several times that student design ideas were very additive, and that they could use additional practice pulling back and filtering secondary ideas.

Based on the above data collection and teaching team reflection, the team felt that the program does a good job meeting PC.2 Design across the design sequence and that DSGN 410 was a good 'capstone' measure. The 'role of the design process in shaping the built environment' was fulfilled throughout the studio sequence. We felt that 'processes of integrating multiple factors' were clearly demonstrated and evident in the design phasing. At present, 'integration across different settings and scales' is met in 410 through the territories and scales of the multiple disciplines as they are negotiated and resolved in the design. However, it is important to note that 'from buildings to cities' is met within the program but not necessarily in DSGN 410 alone. All studios felt there were clear assignments and assessments for design within the studio. However, there are a few smaller ongoing discussions and considerations which include:

- Strengthening the understanding and assessment of an individual student's contribution to a team effort.
- How do we more clearly assess a high-performing student in a poor-performing team, or the poor performance of a student within a high-preforming team?
- Implementing a common library of design readings (appropriately challenging for this level) while maintaining individual studio section identities and design projects.
- Continuing to discuss the position of 410 as the bridge between 311 to 411 and what that means to aspects of integrated design in relation to the other component, such as interdisciplinary collaboration and working on advanced design processes.

For PC.2 in the 3-year M.Arch track, the program used **ARCH 511i: Integrate** to examine these same factors, and found that most of our students have met these expectations. This positive assessment has encouraged us to continue to develop course content and project types to better meet the criteria within the course beginning with Spring 2023. We will then examine the same outcomes in the Spring of 2024, and expect to see consistency of student learning.

The program regularly completes the three-step program assessment framework to collect, reflect, and consider. Initially, faculty collect content throughout the semester and at the end of each project phase. The following breakdown includes the phase percentages toward the final grade and the semester average collected via Canvas.

- P1: Schematic Design 30% (semester average: 86.4%)
- P2: Integration & Synthesis.
 - Project book (team) 40% (semester average: 88.2%)
 - Project book (individual components) 10% (semester average: 87.87%)
 - Digital presentation/printed drawings/oral presentation 10% (semester average: 89.9%)
 - Development and Leadership (instructor assessed) 5%
 - Daily Preparation and Studio Engagement (semester average: 89.2%)
 - (4) P2 Project Specific sub-phases (semester average: pass/fail)
 - Project Book Prelim (semester average: pass/fail)
 - Team Contribution (peer-assessed) 5%
 - (2) Peer Assessments

The faculty member teaching the studio is part of a design studio teaching team, which meets every two weeks to discuss student performance in the relevant design phases. During these meetings, faculty report on semester benchmarks, share areas of strength and areas of improvement for the student cohort. Additionally, at the end of the semester, the teaching team meets, the work of each studio section is presented and the discussion points are reflected upon. Faculty discuss what they learn from the top, middle, and bottom 1/3 of their
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studios. The discussion focuses on the qualitative aspects of design within the studio environment. In Spring 2023, students were given in-semester process grades and final grades for each phase. The final semester grade breakdown was:

- o 66% excellent (A, A-)
- 33% good (B+, B, B-)
- \circ 0% adequate (C+, C)
 - ... non-passing grades ...
- \circ 0% poor/incomplete (C-, D, F)

In this studio, faculty collected a student "skills assessment" survey where they ranked their abilities in computer/digital representation, modeling, diagramming, hand representation, writing, and public presentations. These are the building blocks required to think, represent, and present a design idea and a critical step in making design teams. Students enhance their designs throughout the semester by participating in technical reviews with external critics (mechanical, electrical/lighting, and structural).

In the Spring 2023 semester, the requirement for students to design a portion of the program for their building was introduced. This requirement resulted in students considering a program narrative, user research, program allocation, and program analysis with specific considerations of the context. This exercise resulted in a diversity of program types and brought an extra level of energy to the studio as they were able to compare various approaches to the same brief. Additionally, in Spring 2023, the ARCH511i studio project brief defines phases of research *for, on, and by* design that include, site analysis, user analysis, climate analysis, regulatory requirements, building precedent, and design. This exercise is built on skills introduced in the design research course offering the opportunity to explore them with their own voices.

Reflecting on the collected data and the teaching team's reflection, the team felt that the program does a good job meeting PC.2 Design across the 3-year design sequence. The 'role of the design process in shaping the built environment' was fulfilled throughout the studio sequence. We felt that 'processes of integrating multiple factors' were clearly demonstrated and evident in the design phasing. At present, 'integration across different settings and scales' is met in 511i through environmental and building performance at different material scales in the design. However, it is important to note that 'from buildings to cities' is met within the program but not necessarily in ARCH511i alone. All studios felt there were clear assignments and assessments for design within the studio. As part of the reflection process, the faculty continues thinking about strengthening design knowledge in 3M core design studios. The third design studio is ARCH 5/610: Design Research (5 CH), where the 3M students are mixed with the 2-year M.Arch students. For the past three years, the program advising staff (director and student success office) has recommended a specific design research studio to the 3M that is considered a precursor to the ARCH 511i: Integrate design studio. A professional often teaches this section, bringing a unique and important perspective to how studio research/questions can inform a building. This studio helps students continue to build design skills while considering space, form, materiality, and structure.

The ARCH 511i faculty member is considering adding a learning styles assessment starting in Spring 2024. This will be compared with the leadership skills question in the "Skills Assessment" survey and provides an opportunity to discuss with students who may not know their learning styles. Additionally, the faculty are discussing amending the third design studio syllabus (ARCH 5/610 design studio) for the 3-year cohort to ensure the 3M students get the support they need to best transition into the ARCH 511i: Integrate Design Studio.

DSGN 410: Collaborate (5 CH) and ARCH 511i: Integrate (5CH) are assessed through our program's three-step framework for collecting, reflecting, and considering changes to the course. This framework for assessment is discussed in greater detail in Section 5.3.

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Additionally, the course instructor provided an assessment executive summary page that explains this process further and can be found in the <u>criterion assessment folder</u>.

PC.3 Ecological Knowledge and Responsibility

How the program 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.

Program Response:

Our Approach

Aspects of ecological knowledge and responsibility are found throughout the curriculum to prepare students to address the challenges of climate crisis, pollution, resource scarcity, and mental and physical illness in a holistic way. Faculty address issues of sustainable and ecological urbanism, the material life cycle, and characteristics and performance of the built environment. By examining issues at both large and small scales, designers engage critical issues as they shape and are shaped by the human world. At the same time, the integration of technology supports a holistic view of building performance centered on ecological and human well-being. The program implements this expanded view by rigorously evaluating appropriate technological systems, disciplinary practices, and reasoned outcomes. This expanded view encourages students to seek broad knowledge of the different impacts of ecological understanding, fostering life-centered outcomes in students' work. By offering this material through different methods of delivery, courses demonstrate the value and importance of ecological thinking and continuously add to students' knowledge, understanding, and abilities. This prepares them to practice architecture in a way that emphasizes this holistic philosophy of addressing the climate crisis.

Course Sequence

DSGN 110: Design Thinking (3 CH) prepares students to address complex issues regarding design's relation to ecological knowledge and responsibility. A team-based project focusing on waste in the built environment, which has been in place for five years, helps students to propose solutions to wicked problems through in-depth analysis and systems thinking. Students craft design responses based on research, which are then explored through ideation, prototyping, and testing. The results of the course see students taking positions on a wide range of relevant issues from product to urban scales.

ARCH 107: Sustainability Basics and the Built Environment (3 CH, ACE 8) is part of the undergraduate Sustainability Studies minor offered by the College of Agricultural Sciences & Natural Resources. The Sustainability Studies minor prepares students to contribute solutions for current and future local, regional, and global environmental challenges. Stewardship and the efficient, sustainable use of environmental, financial, and human resources serve as the foundational concepts for this minor. More specifically, the educational component provides students with explicit opportunities to engage in their communities and develop skills to employ a systems approach to managing the growth of our habitats, at the same time achieving a balance of economic development with the conservation of the earth's natural system.

ARCH 232: Building Assemblies (3 CH) provides students with a basic understanding of embodied energy analysis for mass timber construction. The course demonstrates Life Cycle Analysis for engineered lumber (glulam and CLT) structures that demonstrate low-carbon embodied energy, carbon sequestration, and the potential for disassembly and re-use.

ARCH 311: Situate (5 CH) is a third-year studio where students create effective and appropriate relationships with manmade and natural environments. The studio covers the selection and critique of sites; the analysis and documentation of contextual conditions; and

the incorporation of structure, material, and their expressions into design. Approached through two primary design projects, student learning is supported by lectures, readings, videos, site visits and specialized software (Climate Consultant and Climate Studio). Through all of these, students engage in issues of climate, ecology, and rudiments of building performance. These are viewed as factors that should positively influence ethical design decisions.

ARCH 333: Building Environmental Technical Systems I (3 CH) considers the characteristics and performance of buildings with respect to the thermal and psychrometric environment in buildings related to human comfort, heat gain and loss, ventilation, natural energy systems, sustainable design principles, and plumbing and life safety systems in the built environment. Students learn and use Wrightsoft software to simulate heating, ventilation, and air conditioning in a design proposal.

ARCH 360: Site Context Issues (3 CH) is the PC.3 assessment point. This course investigates the interrelationship among the physical context created by nature and humanity, and the various design professions concerned with site development and architectural ideas. Site analysis, research, selection, and development projects, along with practical exercises, form the basis of the lab experience. Students develop an understanding of the dynamic between the built and natural environments through a series of topical lectures, two quizzes, and two projects. The first project requires students to complete site inventory and analysis for their project sites within the ARCH 311 course, noting how ecological and climactic considerations can inform preliminary design decisions. The second project serves as a precedent analysis that requires students to identify ecological, advanced building performance, adaptation, and resilience principles in a built work that can subsequently be adapted and applied to their own design proposals within the ARCH 311 studio course.

ARCH 411: Integrate (5 CH, ACE 10) involves the continuation of complex problems as they relate to the integration and consideration of environmental stewardship, technical documentation, accessibility, site design, life safety, environmental systems, structural systems, and building envelope systems and assemblies, emphasizing technological considerations as formal and organizational determinants.

ARCH 430: Building Integration (3 CH) covers the integrative study of structural, building technology, and environmental technology systems in a building within the context of ARCH 411. The course emphasizes the role that structural, mechanical systems, and assemblages play in the evolution of architectural design projects. Students demonstrate an understanding of the principles that underlie each of the technical systems and demonstrate their ability to apply those principles to the design project. Students learn and use Climate Studio software, a Rhino plug-in, to simulate workflows to optimize buildings for energy efficiency, daylight access, electric lighting performance, visual and thermal comfort, and other measures of occupant health. In this course, students learn an overview of environmental impacts focusing on passive solar heating and cooling methods, water reuse, regional materials, solar wind, and geothermal energy.

ARCH 461: Urbanism (3 CH) addresses issues of contemporary urbanism and the processes of urban design, including the experiential nature of cities, the role of public policy, ideology, and the genesis and development of urban form and space. Ecological modules include Logistics Landscape, Conduit Urbanism, Landscape Urbanism, and Urban and Regional Ecologies. The course also covers topics of environmental justice in environmentally sensitive areas dealing with water pollution, floods, and management.

Along with ecological knowledge and responsibility in their core education, different electives play a vital role in bolstering student understanding. ARCH 4XX/5XX/8XX: Graduate Electives (3 CH) offer specific areas of advanced study. From Fall 2018 to Fall 2021, these

electives included ARCH 467/567/867: Planting Design (4 CH), ARCH 597/897: Innovative Timber Construction (3 CH), ARCH 497/597/897: Healthcare Design for Remote & Rural Populations (3 CH), and ARCH 497/597/897: Healthcare Design (3 CH).

Non-Curricular Activities

Extracurricular activities supported by the College and University introduce views typically not represented in the Program, or share further exploration and research in support of PC.3. These include the Hyde Lecture Series, which hosts experts in the disciplines of Architecture that enrich the ongoing dialogue around ecological approaches that are paramount to the profession and our graduates. High-profile lecturers include Martha Schwartz (2023), Matt Wallace from LakeFlato (2022), Andrés Jaque (2022), and Billy Fleming (2020).

Opportunities for students to gain ecological understanding also occur through our active student groups. These include the American Institute of Architecture Students (AIAS), which provides students with progressive programs, information, and resources on issues critical to architecture and different aspects of education. The group also promotes excellence in architectural education, training, and practice around sustainability. Increased awareness is also conveyed through the U.S. Green Building Council student organization (USGBCS), which develops annual programming, events, and resources that focus on advanced green building and design practices to create a more sustainable future. The organization is connected to the regional and national green building community, and advances concerns of sustainability, health and wellness, equity, and resilience.

Assessment

When assessing PC.3, we look at **ARCH 360: Site** to examine students' 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. The students who have passed the course have met these expectations. Due to the considerations mentioned in our executive summary, we took the opportunity to rebuild portions of the course to more closely align with the goals of PC.3, beginning with Spring 2023. We will examine the same outcomes along with new exercises each week on ecological knowledge and responsibility and refine lectures, and consider adjusting projects and quizzes, beginning with the Spring 2024, and expect to see productive improvement of student learning.

The assessment method for the learning outcome includes Project 2 and two quizzes (Quiz 3/Quiz 4). **Project 2**: The final project asked students to identify and analyze how architects and designers leverage ecological awareness, advanced building performance strategies, and principles of adaptation and resilience within their design work and realized buildings. Through an analysis of AIA COTE Top Ten award-winning architectural projects, students identified ecological, building performance, and resilience strategies that could be effectively integrated into their own design proposals. After completing this initial precedent analysis, students were then required to diagram how these strategies could be implemented into their own design studio (**ARCH 311**) projects. Each booklet was divided into multiple sections according to strategy type: e.g., ecological systems and considerations, building performance, angregated data from CANVAS.

Quiz 3: Quiz questions were based on lecture materials covering principles of ecological systems and building performance related to PC.3. Quiz questions were grouped according to these topics, and aggregated data were collected from CANVAS.

Quiz 4: I developed quiz questions based on the lecture materials covering principles of resilience and adaptability related to PC.3. Quiz questions were grouped according to these topics, and aggregated data were collected from CANVAS.

The results included the faculty member and graduate teaching assistant reviewing the course content on a weekly basis and adjusting lectures and/or in-class workshops to respond to student knowledge. Additionally, the faculty member presented an overall evaluation of the course to both the ARCH 311 teaching team and the entire College of Architecture faculty at the end of the semester. Project 2: All student groups completed this project, receiving an average score of **92%** on the overall assignment. The low score was an 80%, and the high score was a 98%. Quiz 3: With one student withdrawing from the course midway through the term, 69 students completed this guiz, with an average score of 93%, a high score of 100%, and a low score of 60%. In evaluating the guiz results from a topical perspective, students received an average score of 94% on questions related to ecological considerations and systems and an average score of 92% on questions related to building performance. Quiz 4: With one student withdrawing from the course midway through the term (as noted above), 69 students completed this guiz, with an average score of 97%, a high score of 100%, and a low score of 67%. Because all quiz questions related specifically to questions of resilience and adaptability, no further analysis of student scores was completed.

The recommendations for changes based on the above assessment points include integrating a series of short, in-class exercises into each week of the course that will allow students the opportunity to develop their understanding of ecological knowledge and responsibility through individual investigation and application. Additional concepts to focus on within these shorter exercises will include: connections between regional climate, passive heating and cooling strategies, and building resilience; relationships between material specification and embodied carbon; and the relationship between site design, building systems design, and issues of water reuse and stormwater management. In addition to further developing and refining the content of the course lectures, I also intend to develop a collection of supplemental readings, podcasts, and videos that provide students the opportunity to gain further understanding of course topics through a diversity of media.

Project 2: Require each group to present both their initial precedent analysis and their final implementation diagrams to the entire class. This peer-to-peer presentation format will provide an opportunity for recursive learning in which students examine the relationship between building design and ecological performance across multiple projects or types of analysis.

Quiz 3: Expand the quiz to include a greater diversity of question types, including questions that require students to articulate their own understandings of key course concepts in short response or essay format. Rather than questions focused on comprehension of isolated terms or concepts, such short-answer questions would require students to synthesize their knowledge of ecology and building performance and demonstrate how building design can integrate into contextual ecological systems.

Quiz 4: Expand the quiz to include a greater diversity of question types, including questions that require students to articulate their own understandings of key course concepts in short response or essay format. As with Quiz 3, modify the quiz review process to improve the evaluation of student understanding.

ARCH 360: Site Context Issues (3 CH) is assessed through our program's three-step framework for collecting, reflecting, and considering changes. This framework for assessment is discussed in greater detail in Section 5.3. Additionally, the course instructor provided an assessment executive summary page that explains this process further and can be found in the <u>criterion assessment folder</u>.

PC.4 History and Theory

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.

Program Response:

Our Approach

The Program is committed to the need for diverse and useful histories and theories. The program ensures that students understand PC.4 History and Theory through a multi-course history and theory sequence, graduate seminars, and supplemental opportunities in our curriculum. These offer depth and breadth to each student's disciplinary and interdisciplinary learning. Examining design at scales large and small, including urbanism, architecture, interiors, and designed objects, the scope of the core courses is by necessity both chronologically broad (ranging from ancient to contemporary) and geographically broad (ranging from regionally, nationally, and globally). Within this sequence, histories and theories of architecture are framed as the basis for understanding the past, how we understand the present, and as a guide for future action. The curriculum covers a range of design issues through various methods of delivery (lectures, videos, and others) that position design as a diverse social, cultural, economic, political, and philosophical phenomenon, engaging critical issues as they shape the human and more-than-human world. In presenting this material. each course demonstrates various historical and theoretical perspectives, continually adding to students' knowledge of ideas, guestions, precedents, and texts. In addition to delivering historical content and theoretical polemics, the sequence introduces students to historiographic methods and scholarly practices relevant to the disciplines of history, theory, and architectural practice. The program also integrates history and theory themes and positions into numerous design studios; initiated in the 2nd-year design studios (ARCH 210/211) and culminating in the Graduate Design Thesis (ARCH 613/614), this integration encourages students from an early level that designing should exist in dialogue with historical questions, precedents, and theories,

Course Sequence

The Architecture Program has a History and Theory sequence of interlinked core courses (DSGN 140, ARCH 241, ARCH 240, and ARCH 341), focused elective courses (ARCH 4XX/5XX/8XX), and extracurricular activities. The sequence begins with introductory history in the first year, assessment in ARCH 240, and culminates with advanced seminars at the master's level.

DSGN 140: History of Design (3 CH, ACE 5) is the first core course within the History and Theory strand, typically taken during the spring semester of the first year. As a required course for all College design disciplines (Architecture, Interior Design, and Landscape Architecture), it meets UNL's Achievement-Centered Education (ACE) learning outcome #5: "Use knowledge, historical perspectives, analysis, interpretation, critical evaluation, and the standards of evidence appropriate to the humanities to address problems and issues." DSGN 140 offers a broad thematic introduction to the history and theory of design in consideration with political, economic, and societal shifts. Through lectures, readings, and assignments, students develop an understanding of design terminology, themes, and significant precedents. They are also introduced to the skills needed for scholarly research and historiographical methods.

ARCH 241: Architecture History & Theory II (3 CH, ACE 5 & 7) is a second-year Fall core history and theory course that meets UNL's Achievement-Centered Education (ACE) learning outcome #5 (mentioned above) and #7: "Use knowledge, theories, or methods appropriate to the arts to understand their context and significance." This introductory survey focuses on modern architecture and contemporary developments by interweaving works from the 18th to 21st centuries and understanding them within their larger social, cultural, technological,

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political, and intellectual contexts. Through lectures, readings, discussions, and independent research on assigned topics, students learn about diverse perspectives across time and geographic space by investigating a range of multi-scalar artifacts in the built environment that architects and designers co-create. This range includes furniture, industrial objects, speculative projects, manuals, manifestos, treatises, exhibitions, interiors, landscapes, buildings, infrastructure, and cities. The course theme of modern architecture is purposefully taught in the fall semester in the second year before Architecture History & Theory I in the fall semester of the third year so that students can critique the view that history is a progression of styles that suggests chronological progress.

ARCH 240: Architecture History and Theory I (3 CH, ACE 5 & 7) (assessed course) is a third-year core history and theory course that meets UNL's ACE Learning Outcomes #5 and #7 mentioned above. The course introduces the early histories and theories of architecture, with a broad scope intellectually (ranging from mytho-poetics to science and art), chronologically (ranging from ancient Egypt to the 18th century) and geographically (including Asia, Africa, the Americas, the Mediterranean basin, and Europe). The course includes lectures, readings from a textbook, discussions, videos, and independent research on assigned topics, covering social, cultural, political, ecological, and philosophical aspects enmeshed with design thinking and making. By examining historical works and histories, students grow to understand architecture's changing nature and practices while developing skills in scholarly research and historiographical methods appropriate to the humanities. This course is purposefully taught in the Spring semester following Architecture History & Theory II to undo the view that architectural history is a progression of styles as well as the bias of chronological progress.

ARCH 341: Architectural Theory (3 CH) is taken in the Spring of students' fourth year. The course examines written accounts of what architecture should be and why. By comparing positions on architectural issues that have persisted throughout the history of architectural theory, students learn about these issues and the ways in which architects take positions. Through readings of selected texts, conducting research both individually and in teams, writing both individually and in teams, joining small-group and whole-class discussion sessions, and attending faculty lectures, students develop critical thinking skills that they apply to hypothetical situations of design practice. This establishes a foundation for M.Arch design research and design thesis studios.

The four primary courses that support PC.4 are bolstered by an array of courses that teach other aspects of history and theory. These include ARCH 262: Building Organization (3 CH), which offers an introduction to spatial organization as related to architectural programming and the design process. This course exposes students to historical types and their consequential effects. ARCH 461: Urbanism (3 CH) addresses issues of contemporary urbanism and the processes of urban design, including the experiential nature of cities; the role of public policy, ideology, and genesis; and the development of urban form and space through time. ARCH 489: Design Research (3 CH) provides students with an overview of the complementary and contributory relationship between research and design, with particular emphasis on design research as an exploratory and forward-looking activity.

Along with their core education, students also take at least one history and theory curricular elective in the graduate program. ARCH 4XX/5XX/8XX Graduate Electives (3 CH) offers specific areas of advanced study covering a range of topics, including but not limited to "Allure of the Incomplete," "Theory and Application," "Architectural Imaginary," "Women in Design," and "In Defense of the Moving image."

Non-Curricular Activities

Both the College and University support activities that introduce views not typically represented in the program or that further support PC.4. These include the Hyde Lecture

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Series, which hosts experts in the disciplines of architecture that enrich the ongoing dialog around agendas that are paramount to the professions and our graduates. Several times each year, lecturers present topics related to complex histories and theories in architecture and urbanism.

Students can gain valuable research and mentoring opportunities in the Undergraduate Creative Activities and Research Experience (UCARE) program, which offers competitive support for UNL undergraduates to work one-on-one with faculty research advisors on research or creative activities. Some of these opportunities include engaging in understanding histories and theories of architectural form, space, materiality, and community impact.

The College of Architecture also provides Education Abroad opportunities (London, England; Paris, France; Hannover, Germany; Clermont-Ferrand, France; Barcelona, Spain; Tianjin, China). These opportunities enable students to experience the histories of architecture and urbanism firsthand while learning about these cities and their environs from subject experts.

Assessment

When assessing PC.4, we use **ARCH 240:** Architecture History and Theory I to examine students' understanding of the histories and theories of architecture and urbanism framed by diverse social, cultural, economic, and political forces nationally and globally. The students who have passed the course have met these expectations and to better meet the criteria we will introduce a new lecture on U.S. national content and recalibrate the delivery of economic context within the course beginning with Fall 2023. We will examine the same outcomes beginning with the Fall of 2024, and expect to see productive improvement of student learning.

The assessment method for the learning outcome includes final grades, aggregate scores for each of three exams corresponding to the course's three parts (Part 1: Ancient Western Traditions, Part 2: Global Traditions, and Part 3: Early Modern Traditions), and aggregate scores of one Research Assignment (divided into eight parts) and one student learning self-assessment.

The results included in the summative assessment were approached individually and with the faculty H/T teaching team at the end of the Spring semester. During this meeting, the team reported empirical evidence and aggregate data and discussed their individual reflections. Overall, the delivery of the course was sound, and student scores on Exams One and Three fell within the normal range. However, scores on Exam Two were high. The assignment's scores were strong, though students struggled with writing in a scholarly manner, which limited their research assignments. This was shown in the frequency of questions/emails received (not tracked). The student self-assessment survey exposed a discrepancy between the grading assessment and the student perception of course offering relative to the themes of economic and political forces. This is likely due to economic and political forces not being foregrounded as much as other conversations. Lastly, due to the period covered by the course (pre-history to approximately 1800), national content is present in one lecture on "Free People of Color in New Orleans" and their contribution to architecture. Because the geopolitical entity of the United States did not exist for most of the years covered by the course, National content is admittedly limited.

The recommendations for changes based on the above assessment points include adjustment to Exams based on student performance. Scholarly writing for the research assignment can be better scaffolded through examples and a short presentation, which should reduce the number of student questions, and requiring each student to visit UNL's Writing Center to gain edits and feedback to writing issues unrelated to architectural content. Additionally, students perceived a lack of economic and political context in the course's

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content. This is like due to the manner in which this content is presented (often at the start of a lecture) and without much reemphasis later in the lectures. While this content was presented, the faculty member intends to clarify and better note these forces at work (e.g., feudalism, rise of the bourgeois, capitalism, etc.) during lectures, add more US national content, and add one more lecture on early American architectural theory, its relation to European discourse, and how it perpetuated settler colonialist agendas to show the downside of the exportation of social, cultural, political and economic forces. This will be tested on Exam Three.

Arch 240: Architecture History and Theory I (3 CH) is assessed through our program's three-step framework for collecting, reflecting, and considering changes to the course. This framework for assessment is discussed in greater detail in Section 5.3. Additionally, the course instructor provided an assessment executive summary page that explains this process further and can be found in the <u>criterion assessment folder</u>.

PC.5 Research and Innovation

How the program prepares students to engage and participate in architectural research to test and evaluate innovations in the field.

Program Response:

Our Approach

The Architecture program ensures breadth and depth of learning in PC.5 Research and Innovation through specific core curricular courses, electives, and non-curricular activities. This attempts to fulfill the College of Architecture's mission of creating "a diverse and inclusive culture of rigorous inquiry and innovation."

The program's role relative to research and innovation is to prepare students to engage these processes in and outside the academy. When our graduates enter the profession, they are positioned to test and evaluate innovations. We believe the foundation for innovative thinking and design is a lifelong pursuit. It is our view that a sound education is a precursor to this accomplishment. Throughout the curriculum, we define three categories of research: research *for* design, research *on* design, and research *by* design.

- Research for Design is the use of research methods to inform a work of design. Research is external to the design project, providing a background context for design or legitimization for design probes or inventories of existing knowledge as a foundation for design rather than producing new ideas. This approach is typically initiated and tested in foundational design studios and is often completed as a collaborative process (e.g., representation or precedent research).
- Research on Design, uses research methods common to humanities and sciences to understand and explore design and/or issues related to the varied aspects of design. This approach is introduced in history and theory courses (e.g., historical works are explored from the lens of specific social, cultural, political or economic issues).
- Research *by* Design, elevates design as a form of research in itself. This involves a particular way of thinking and a significant approach to knowledge that helps students understand a topic or issue within or outside the field (e.g., a design build where students conduct innovative materials research, detailing, or construction methods). This approach is introduced in foundational design studios through iterative and incremental design tasks that build knowledge and creative confidence.

Design Research co-mingling of design and research such that together new knowledge is produced that would not emerge from traditional research methods alone or the design

process itself. This approach is introduced in the ARCH 489: Design Research lecture course to create a foundation for the M.Arch design research studios. The heart of the Master of Architecture is the design-research studio. The design-research studio positions architectural explorations as a research protocol situated between the creative agendas of the arts and the technical methodologies of the sciences. The studios prepare students to be self-motivated professionals capable of using design to work through complex problems and generate new architectural knowledge. Building on the technical and disciplinary proficiency developed in an undergraduate architecture program or the first-year of the 3M program, students engage design and research agendas of contemporary significance. Design Research studios often involve collaborations with students and professionals from outside the field of architecture. Through this synthesis, students become co-researchers in design research studios. The M.Arch program also offers students the opportunity to conceive and execute an independent design research investigation of similar depth and rigor as the Design Research Studios through ARCH 613: Design Thesis (fall) (5 CH) and ARCH 614: Design Thesis (spring) (5 CH) in their last year. ARCH 613/614: Design Thesis allows students to make their own research contributions design thesis. The Design Research studios and the Design Thesis track prepare students to be self-motivated professionals capable of using design to address complex problems and generate new architectural knowledge.

Course Sequence

The Architecture Program has embedded research and innovation in a sequence of core courses (DSGN 110, ARCH 231, ARCH 341, DSGN 410 and ARCH 411), focused elective courses (ARCH 4XX/5XX/8XX), and extracurricular activities. Beginning with the introductory Design Thinking in the first year and assessment in ARCH 411, it culminates with advanced research studios at the master's level.

DSGN 110: Design Thinking (3 CH) offers an introduction to design problems to cultivate a problem-seeking mentality that is developed through a user-focused, iterative, and teambased process. Through experiential labs, lectures, workshops, and class discussions, students practice "design thinking" to promote innovative strategies toward problem solving.

ARCH 231: Structural Fundamentals (3 CH) introduces the concept of structure as integral and essential to architectural design. The course exposes students to basic physical principles and structural systems, and these principles enable students to understand limit conditions and how to use them as positive forces in their work.

ARCH 240/241: Architecture History & Theory I & II (3 CH each, ACE 5 & 7) attends to ancient through contemporary developments in architecture within their larger social, cultural, technological, political, and intellectual contexts. Through lectures, readings, discussions, and independent research on assigned topics, students learn about diverse perspectives across time and geographic space by investigating a range of multi-scalar artifacts in the built environment that architects co-create. In examining this content, students learn about the ways architecture's changing nature and practices developed through research and innovations in thinking, geometry, skills, tools, and inventions.

DSGN 489: Design Research (3 CH) is the assessment point. It involves a comprehensive overview of the complementary and contributory relationship between research and design. It has a particular emphasis on design research as a projective activity, and frames diverse types of research (*for, on,* and *by* design). Students typically enter this course with limited knowledge of in-depth architectural research, and through a demonstration of the rigor and sophistication required for productive research, students learn that architectural research is crucial to both improving their own design capabilities and advancing design professions. The course is framed as preparation for entering the M.Arch Design Research studios and eventually the professional field, preparing students to test and evaluate innovation in

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settings where it is pressing. In this course, M.Arch candidates partnering with faculty to cocreate knowledge and innovation in the studio is essential.

ARCH 510/511/610/611: Design Research Studios (5 CH) are year-long studios with different emphasis areas that students can self-select. Each design-research studio positions architectural explorations as a research protocol situated between the creative agendas of the arts and the technical methodologies of the sciences. The studios prepare students to be self-motivated professionals capable of using design to work through complex problems and generate new architectural knowledge. Building on the technical and disciplinary proficiency developed in an undergraduate architecture program or the first-year of the 3M program, students engage design and research agendas of contemporary significance. Design-research studios often involve collaborations with students and professionals from outside the field of architecture. In these studios, students are co-researchers with faculty, creating new ideas rather than simply consuming knowledge.

ARCH 544: Design Thesis Prep (2 CH) is intended to strengthen the optional M.Arch Design Thesis sequence, and supports preparatory research and argumentation leading to a well-conceived proposal for the M.Arch Design Thesis (ARCH 613 and ARCH 614). By focusing and defining the nature and scope of the Design Thesis, students attain clarity and direction in their architectural investigations. The seminar helps students ask relevant and critical questions in architecture and learn how they can be explored through a clear, wellarticulated architectural project that asserts students' own interests for years to come and advances the discipline. The Design Thesis Preparation seminar counts as an Architecture Professional Elective, and students who are contemplating Design Thesis must take the Design Thesis Preparation Seminar in the spring of their penultimate year in the program. Students may elect to submit their proposal for acceptance into the Design Thesis Studio upon the completion of the course.

ARCH 613/614: Design Thesis (5 CH) recognizes that one's graduate education is largely self-directed, and presents Master of Architecture 2-year (2M) and 3-year (3M) students the opportunity to conceive and execute an independent investigation in Architecture. Design Thesis investigations are instrumental in their role for future professional development, and may also act as springboards for further academic pursuit. A correctly-formed Design Thesis investigation identifies a subject for inquiry that is of relevance to a larger architecture audience, researches the subject both through the discovery of scholarly sources and the generation of new creative content, develops a Design Thesis question, and ultimately generates a response that can be supported, argued, and defended in a polemical way.

Along with research and innovation in the core education, student understanding is reinforced by electives (ARCH 4XX/5XX/8XX), which offer specific areas of advanced study relative to research and innovation with subject experts. From Fall of 2018 to Fall 2021, these electives included ARCH 592/892: Innovative Timber Construction (3 CH), ARCH 492/592/892: Healthcare Design for Remote & Rural Populations (3 CH), ARCH 492/592/892: Groundforms (3 CH), and ARCH 492/592/892: Agency and Authorship (3 CH).

Non-Curricular Activity

Non-curricular activities supported by the College and University introduce further exploration and research in support of PC.5. These include the Hyde Lecture Series, UCARE, UNL's Research Days, and peer-reviewed outlets. The Hyde Lecture Series hosts subject experts inside and outside the discipline of Architecture, exposing students to ways research and innovation are deployed and realized in practices around the United States and the world. Many students participate in funded research activities with faculty as research assistants. The UCARE (Undergraduate Creative Activities and Research Experience) program, which is administered at the University level, offers a paid opportunity to work one-on-one with a faculty research advisor (approx. 10-15hrs/week) in fields ranging from arts, education,

engineering, and humanities to traditional sciences. These UCARE research projects, pursued over the summer or full academic year, allow students to work side by side with faculty. Topics vary based on the research foci of the faculty and the interests of the students, and UCARE students are required to participate in the "Undergraduate Poster Session and Creative Exhibition." Selected M.Arch students have the chance to be research assistants on faculty grants or conduct independent study credits with oversight from a faculty member. Students are also encouraged to participate in the graduate research exhibition and the undergraduate research day to share their research accomplishments with both their peers and the institutional community.

Innovative work produced in a design research studio is often disseminated through external, peer-reviewed outlets, including conferences (papers, posters, etc.), publications (books, journals, magazines, etc.), local/regional awards (AIA-Nebraska, AIA-Central States), and national awards programs (The Society of American Registered Architects (SARA), The *Ken Roberts* Memorial Delineation Competition, and Progressive Architecture (P/A) Awards), and international awards (RIBA's Presidents Medals Student Awards) and exhibitions (Roca Gallery in London).

Assessment

When assessing PC.5, we use **ARCH 489: Design Research** to examine how the course prepares students to engage and participate in architectural research to test and evaluate innovations in the field. The students who have passed the course have met these expectations and to better meet the criteria we will adjust the difficulty levels of the assignments within the course to create more consistency beginning with Fall 2023. We will then examine the same outcomes beginning with the Fall of 2023, and expect to see productive improvement of student learning.

The assessment method for the learning outcome includes lessons on the four research methods (precedents, literature review, experimentation, and survey), and students advanced from knowledge acquisition (individual preparation to group work), to knowledge application (basic to advanced level). While the faculty recognize that there are more research methods than the four covered in this course, we determined the course content based on the time limitation and the desire to have students master each topic. As a result, in recognizing that the course is not comprehensive in its coverage, the final module deals with the topic of "Expanding the Concept of Design Research." Students were asked to self-reflect on the following questions at the end of the semester: How likely are you to conduct design research (research for/on/by design) in the future? And, please tell us what will prevent you from doing research in relation to design.

In terms of knowledge acquisition and application, students did very well on all four topics of research methods, with the lowest class average being 81.27 (precedent – knowledge application – advanced level) and the highest being 91.66 (literature review – knowledge application – basic level). This instructor attributes the differences in the average scores to the difficulty level of each assignment, rather than to the type of research method.

Students' responses to the question "How likely are you to conduct design research in the future?" is also encouraging. Those who think they will most likely engage in design research in the future amounted to about 2/3 of the class, and, if we add those who think they will somewhat likely engage, the number rises to over 90%. Based on these figures, we can confidently conclude that students are deeply committed to design research and have found it highly relevant, and we trust that the students are overall well prepared for engaging in architectural research and applying it for testing and evaluating inventions in the field.

As for the question, "What will prevent you from doing research in relation to design?" the most common answer by far was "time constraints," with the second most common being

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"lack of resources." Looking further into their answers, I have found that while students can see the value of research in the design disciplines, they are also aware of the timeconsuming nature of research and wary of the possible lack of support by their future studio professors or employers for these research activities.

In terms of recommendations for changes based on the above assessment points in terms of the differences in the average scores of the assignments noted above, the faculty member plans to adjust the difficulty levels so that the assignments are challenging and satisfying at the same time. The current coverage of this course is a result of the decision made a number of years ago to prioritize mastery of each topic over the number of topics covered, ending in the final topic of "Expanding the Concept of Design Research." At this time, no plans exist to include additional topics to the course coverage.

ARCH 489: Design Research (3 CH) is assessed through our program's three-step framework for collecting, reflecting, and considering changes to the course. This framework for assessment is discussed in greater detail in Section 5.3. Additionally, the course instructor provided an assessment executive summary page that explains this process further and can be found in the <u>criterion assessment folder</u>.

PC.6 Leadership and Collaboration

How the program ensures that students understand approaches to leadership in multidisciplinary teams, diverse stakeholder constituents, and dynamic physical and social contexts, and learn how to apply effective collaboration skills to solve complex problems.

Program Response:

Our Approach

The program ensures that all students understand approaches to leadership and how to collaborate to address complex problems. We believe that good leadership requires healthy collaboration, and that healthy collaboration, in turn, requires good leadership. Healthy collaboration is defined as collaboration that supports each discipline and aims to positively impact the outcomes of the collaboration, which is modeled by faculty in studio and seminar classes. Good leadership is emphasized in three key areas: individual, group, and community. Individual leadership includes personal inventories, understanding oneself, and improving personal skills to move one toward becoming the best that one can be. Group leadership, in turn, includes developing a team culture, skills, and knowledge to ensure that one's organization is the best it can be. Community leadership, finally, includes etiquette, social justice, and collaboration.

This criterion is embedded in both the College's Strategic Plan and the Program's mission of "promoting collaboration and engagement through excellence in design research and creative scholarship." The program also embraces the diversity of students' abilities and interests to help them pursue whatever roles they seek in their architectural lives. We understand that leadership and collaboration occur in different capacities and at multiple scales across various roles, and our most important tasks are respecting disciplinary design approaches and working across those differences to achieve common goals. Through both curricular and non-curricular efforts, students grasp the ways leadership and collaboration have meaningful impact today.

The reciprocity between leadership and collaboration cannot be taught in a single course, but is nurtured throughout the program. As with most learning outcomes, there are distinct levels of achievement regarding leadership. Our program's first step is to instill all students with the creative confidence to engage their own voices both individually and within a group. Students are then placed in situations where understanding multiple voices and perspectives allows them to address design problems that require more sophisticated negotiation, enriching their professional abilities to deal with real-world issues. For example, engaging with a community

on a project requires students to negotiate multiple perspectives, including student, faculty, and community voices. To better prepare our students for these roles, we highly encourage them to join a student organization.

Architecture students are eligible and encouraged to join student organizations and leadership positions within the College. Leadership opportunities at both the College and program levels include the Student Advisory Board (SAB) and student representative positions on program ad-hoc committees such as search committees for faculty and staff hires, peer mentoring, and Responsible Design Learning Community graduate peer mentors. The program has several partnerships with local industries that allow students to engage in impactful collaborations to gain firsthand knowledge from experts and exposure to innovative materials. Since 2014 the program has partnered with SGH and Dri-Design to help students better understand the collaborative working relationship between architects and suppliers, with the program annually hosting a presentation/panel discussion about the collaborative process and the roles of architects and suppliers. Additionally, since 2022 the program has helped faculty and students partner with the Nebraska Masonry Alliance and Sand Creek Post and Beam in design research and fabrication opportunities with masonry and heavy timber construction. Through these partnerships, students gain knowledge and creative confidence to work with industry contractors and supplies.

Course Sequence

Our pre-professional program begins at the College level, with the common first-year d.ONE course **DSGN 110: Design Thinking (3 CH)**. This course introduces students to a user-focused, team-based process of exploring issues prior to disciplinary specialization that enables them to work with a cross-section of students from diverse backgrounds across the College. Through the course assignments, students establish a foundation for leadership and collaborative skills such as professional dialogue, creative confidence, and transparent decision making through real-world design problems.

Collaboration is contingent on each student being able to offer ideas, skills, and design knowledge to a larger conversation. After they enter the professional program, which begins in the second year, students work within their individual disciplines to develop specific design techniques. In ARCH 210: Represent (5 CH), ARCH 211: Ideate (5 CH) and ARCH 310: Organize (5 CH), studios approach design problems individually to ensure that all students develop their own voices and the ability to communicate both verbally and visually to position design ideas derived from sound judgments based on multiple parameters. As with all studios, students develop different leadership skills based on their personal abilities and strengthen a collaborative dialogue within their cohort at the studio-wide level.

ARCH 311: Situate (5 CH) is a third-year design studio where students work in teams to develop effective collaboration. During the course, students are encouraged to move from self-discovery and creative confidence to a more complex dialogue with one another. Through these dialogues, each studio section discusses more detailed aspects of user, environmental parameters, and advanced understanding of user-focused qualities. Together in small groups, students work to resolve more complex design projects that typically involve challenging physical sites and numerous variables.

DSGN 410: Collaborate (5 CH, ACE 10) is the program's assessment point. This fourth-year fall studio brings together students from the three undergraduate programs in the College (architecture, interior design, and landscape architecture) to address complex design issues that encourage and require collaborative input from different disciplinary perspectives. The course is a signature moment in all three undergraduate programs, with a level of development that builds on both creative confidence and intradisciplinary collaboration to promote interdisciplinary co-creation. The DSGN 410: Collaborate studio sections are typically structured around engagement projects that advance co-creation to include external

stakeholders. Additionally, these studios are sometimes co-taught by faculty from different disciplines and areas of expertise to enhance the conversation and provide a model for faculty collaboration. Studios utilize multidisciplinary, interdisciplinary, and trans-disciplinary teams to explore issues across a range of project types; these team-types might span an entire semester, or alternate between different multi-disciplinary team formations throughout the studio to continually provide different forms of project dialogue and perspectives. Groups are formed through skill and learning style assessments, with leadership collaboration assessed in part through peer evaluations. Students engage in collaboration and leadership in a variety of other ways as well, including the AIA Central States Region Student Design Competition, where they work together across academic year to compete collaboratively. Additionally, in ARCH 411: Integrate (5 CH), students collaborate on either individual design phases or an entire design project. Collaboration is also supported by the ARCH 461: Urbanism and ARCH 489: Design Research lecture courses, where students discuss weekly reading assignments and complete assignments in teams.

In the M.Arch program **Design Thesis (ARCH 613/614)**, students often collaborate on teambased studio projects that engage community groups on a conceptual or design-build project. The program faculty and thesis mentors support these engagements and their mutually beneficial outcomes. Recent partners come from the immediate UNL community, state agencies, and nonprofit organizations: examples include Indian Cave State Park (Nebraska Game and Parks); Timberlyne Production facility in Wayne, Nebraska; Nebraska 4-H Institute of Agriculture and Natural Resources; Cedar Point Bio Station at Lake Ogallala; Four Aces Dairy in Osmond, Nebraska; an abandoned missile site near Seward County; and the University of Nebraska Medical Center (UNMC) Midtown Omaha Campus. These immersive, hands-on experiential learning opportunities expose students to diverse ideas from different leaders and build collaborative skills through a design-focused engagement process. Both the College and the program track community engagement projects we conduct annually throughout the state of Nebraska and beyond to understand the impact of these collaborations.

Non-Curricular Activities

Once in the professional program, architecture students are eligible to join student organizations, including the American Institute of Architecture Students (AIAS), Alpha Rho Chi (AXP), ASUN, National Organization of Minority Architecture Students (NOMAS), Tau Sigma Delta (TSD), Queer Nebraska Design Students (QNDS), and the US Green Building Council (USGBC). Student organizations require students to take on leadership roles that engage faculty, students, staff, and local professionals to support student learning and awareness. For example, the AIAS president serves as an ex-officio member of the AIA-Nebraska Board of Directors and attends quarterly meetings to better connect the student voice to the profession. The NOMAS chapter also hosts Diversity, Equity, and Inclusion professional panel discussions, and select organizations (AIAS, AXP, TSD, NOMAS) annually host four Career Fair preparatory sessions.

In the third and fourth years, undergraduate students are eligible to become Undergraduate Learning Assistants (ULA), who work with faculty on course maintenance, delivery assistance, and development. These positions have the potential to develop into Graduate Learning Assistantships (GLA) and Graduate Teaching Assistantships (GTA), where students often collaborate with faculty on course content and delivery methods. Students in ULA, GLA, and GTA positions can gain creative confidence and classroom leadership through their roles.

Through the Undergraduate Creative Activities and Research Experience (UCARE), students also lead and collaborate in co-creating disciplinary knowledge with faculty members on specific areas of research and creative activity. Students can also participate in Rural Prosperity Nebraska's Rural Fellows program, which connects students with rural Nebraska

communities for collaborative service-learning experiences. Rural Fellows spend their summers living in Nebraska towns, working on locally-designed projects that support local businesses, and working together to achieve specific, strategic goals to help communities thrive.

Assessment

When assessing PC.6, we used **DSGN 410: Collaborate** for the 2-year M.Arch track and **ARCH 511i : Integrate** for the 3-year M.Arch track to examine students' understanding of approaches to leadership in multidisciplinary teams, diverse stakeholder constituents, and dynamic physical and social contexts, and how to apply effective collaboration skills to solve complex problems. The students who have passed the course have met these expectations and to better meet this criteria we plan to strengthen the difference between Design and Collaboration assessment, develop our self- and peer-assessment matrix (particularly for teams), and make assessment more consistent within these courses beginning with Fall 2023. Additionally, ARCH 511i is considering using a learning styles survey at the beginning of semester to help ensure teams are evenly distributed. We will examine the outcomes during the following terms and expect to see productive improvement of student learning.

DSGN 410: Collaborate, The assessment method for the learning outcome includes multiple assessment points throughout the semester, approximately every 4 weeks. These design phases vary between studios, but a good example is:

- Project Research and Framing 4 wks = 15% + PSE*.01
- Concept & Schematic Design 4 wks = 15% + PSE*.02
- Design Development 4 wks = 15% + PSE*.03
- Specialization/Final 3 wks = 20% + PSE*.04
- * See below for more information on Peer and Self-Evaluations (PSE)

Several studio sections issue versions of peer and self-evaluations (PSE) to students after each assessment point. This provides an important reflection for students and offers data on performance, teamwork, teamwork contributions and leadership, and time spent. The PSE asks students to assess their performance as well as that of their peers, from 1 (low) to 5 (high), across 6 criteria. An example of the PSE can be found in the instructional documents. The PSE criteria are listed below. The PSE provides insight for about 1/3 of the overall studio grade by modulating the assessment for each phase of the design project. Student assessment is an important component in helping to assess both Collaboration and Leadership:

- PSE.01 = 5% Project Research and Framing
- PSE.02 = 10% Concept & Schematic Design
- PSE.03 = 10% Design Development
- PSE.04 = 5% Specialization

The results included that students arrived with appropriate skills in Representation, Ideation, Organization (programming), and situating a design. There was a greater range of presentation skills than expected, and although students demonstrated exposure to all the elements within a design, there was room for improvement in certain practical elements. Students were very successful and left the studio with a good understanding of navigating different project workflows across different disciplines. Their collaboration skills were honed, and they exited thinking about designs in terms of 'we' instead of 'l'. Their technical skills were also developed to a pre-ARCH 411: Integrate studio level. The PC.6 Leadership and Collaboration criteria is well-integrated for this specific studio; but project assessment rubrics could have more clarity in separate criteria of Leadership, Collaboration, and Design.

The recommendations for changes based on the above assessment points include a few smaller ongoing discussions and considerations that include strengthening the separation of assessments between Design and Collaboration within the studio: How do we assess a good design with poor collaboration, or good collaboration with a poor design outcome within the studio, and what carries the most weight? Implementing a better assessment of Leadership in relationship to Collaboration and working in teams. Other considerations include revising and implementing Peer and Self Evaluation forms across all the studio sections, and compiling a reading list/lecture information available to all sections on team building, collaboration, and leadership when working together. This will enable students to not only learn about interdisciplinary collaboration by engaging with it, but will also provide them with the appropriate tools for understanding and successfully navigating the process.

ARCH 511i Collaborate (3-year M.Arch), the assessment method for the learning outcome includes during the semester via faculty team-making approach, several peer assessments, and at the end of each semester, the design studio faculty collect design work and reflect on the outcomes individually, with the teaching team and the entire faculty. Before making teams in the ARCH 511i: Integrate Design studio, students complete a "skills assessment" survey ranking their abilities in computer/digital representation, modeling, diagramming, hand representation, writing, and public presentations. The faculty member collates the results and looks at the data holistically to inform creation of teams that represent a diversity of skillsets. Teams are generated by considering the strengths and weaknesses of each student while evenly distributing their skills and abilities. After the teams are made, students complete a peer assessment survey three times throughout the semester.

This information is also used to assess the skills students are bringing into the studio environment. For example, previous survey results have indicated an elevated level of confidence in digital modeling (specifically Rhinoceros 3D) and the Adobe Creative Suite, but their confidence in physical model making and hand sketching is markedly lower. This data is helpful in determining whether adjustments need to be made in previous courses to expand the range of tools at the student designers' disposal.

The studio approaches leadership and collaboration in three ways. The "studio-wide" approach provides the co-researching, co-developing, and co-designing aspects of a design project using the diverse perspectives from their undergraduate degrees. The "peer-to-peer" approach provides focused collaboration between two or three students on a phase or entire project. The "external agencies" approach allows students to collaborate with external agencies and nonprofits to facilitate the design process. The peer assessment also allows faculty members to collate and review the student's responses. To assess each student accurately, the 3M core teaching faculty continues to reflect on the size and roles of teams in collaborative design projects (i.e., groups of two versus groups of three or more).

The results include the skills assessment survey, which ensures the faculty member is confident the teams are formed to anticipate success through being dependable, communicating well, being willing to accept tasks, completing work on time, working thoroughly, resolving conflicts, considering suggestions, and contributing to the workload. The peer assessment also allows faculty members to collate and review the student's responses. If faculty members identify anomalies, they may hold a team meeting to discuss team dynamics openly. The faculty member pays particular attention to the responses to the following questions: "your team member contributed their fair share," and "personal reflective assessment: your contribution to the project was less, equal, or more than their teammates." Comparing responses within each team offers the faculty member insights into potential discrepancies in team members' perceptions of workload. To assess each student accurately, the 3M core teaching faculty continues to reflect on the size and roles of teams in collaborative design projects (i.e., groups of two versus groups of three or more).

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The ARCH 511i faculty members are considering adding a learning styles assessment starting in Spring 2024. Data collected will be compared with the leadership skills question in the "Skills Assessment" survey and provide an opportunity to discuss with students who may not know their learning styles. Additionally, the formation of teams will likely be more diverse with regard to the ways in which students see the world and process information about it. Use of this strategy in the past has helped with conflict avoidance/resolution, as students can understand various approaches to design thinking and analysis/synthesis.

DSGN 410: Collaborate (5 CH, ACE 10) and ARCH511i (5CH) are assessed through our program's three-step framework for collecting, reflecting, and considering changes to the course. This framework for assessment is discussed in greater detail in Section 5.3. Additionally, the course instructor provided an assessment executive summary page that explains this process further and can be found in the <u>criterion assessment folder</u>.

PC.7 Learning and Teaching Culture

How the program fosters and ensures a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation among its faculty, students, administration, and staff.

Program Response:

Our Approach

The Program fosters a positive, respectful learning environment in which all students, faculty, staff, and administrators feel welcome, valued, and respected. The College of Architecture 2025 Strategic Plan emphasizes our commitment to creating a "diverse and inclusive culture of rigorous inquiry and innovation" organized around five core values: *Demand Excellence, Be Courageous, Practice Empathy, Look Beyond,* and *Inspire Impact.* These values guide the development, assessment, and continual revision of the policies, organizational structures, and resources that support all members of our close-knit community. The program has defined the language for student and faculty success in specific, targeted ways that support multiple communities of students, faculty, and staff.

The College-wide Learning Culture Policy, along with a 0-credit DSGN 010: Smart Start course for incoming students, ensures a healthy learning culture within the classroom. Students and faculty further participate in a range of activities beyond the classroom that foster well-being and engagement, including peer mentoring, student organizations, the student advisory board, non-curricular learning opportunities, and teaching workshops. Annual reviews and monthly meetings with all College faculty, staff, and administrators ensure a positive workplace environment in which every member of our community is encouraged to contribute to our collective mission of creating a "resilient, healthy, and beautiful world."

Opportunities

The College-wide <u>Learning Culture Policy</u> is fully integrated into the curriculum and establishes guidelines for a positive, respectful learning environment. The policy ensures that faculty shall "challenge students to achieve their greatest ability while remaining supportive of the individual" and "provide a framework for a healthy balance between design studio, other curricular and extra-curricular activities and responsibilities." It also outlines how students can contribute to the learning culture within the College by ensuring safety, cleanliness, and respect for peers. The policy was drafted by students and faculty and is currently undergoing another review by students and faculty to ensure the language remains accurate.

In addition to the Learning Culture Policy, the College of Architecture's 0-credit DSGN 010: Smart Start course for incoming freshmen supports students' transition from high school to college. The course, which consists of four in-person meetings plus interactive online

modules, introduces students to a range of College and campus resources, and students engage in a community outreach project one Saturday each month.

The program fosters a teaching and learning culture with professional practice to enhance student knowledge and exposure. The College of Architecture Friends Association offers one-credit sessions on Community Facilitation, Career Paths, Communication Skills, Construction Industry, and Practice. These sessions provide a continuous dialogue with the profession on topic areas for which the program students are seeking additional support. Additionally, M.Arch students can enroll in the ARCH 695: Internship course, giving them academic credit for documenting and reflecting on the work they do in a professional setting.

The Program has a strong faculty mentoring program outlined in the program bylaws, which outlines the definition and selection process for a faculty mentor. In January 2023, the faculty reviewed the language in the bylaws and approved the following adjusted language. This amended language stipulates that non-tenured faculty members must select a mentor after the first semester in the program. Additionally, the Annual Faculty Evaluations are another way the Program and faculty can review and discuss teaching evaluations and effective learning and learning environments in their classes. This is a time to discuss best practices, and if needed, the program director may seek additional support from the College's instructional designer. In Spring 2021, a University task force assessed the course evaluation questions, which resulted in changing the focus of the evaluations to focus on students reflecting on their own learning. Through this process, our Program faculty can request that additional questions be added to the evaluation to assess their course content or learning environment (lecture, seminar, or studio).

Non-Curricular Activities

Students and faculty within the Program are encouraged to participate in non-curricular activities that further support their personal growth and intellectual development. First-year students entering the College can join the "Responsible Design" learning community, in which students live together in Abel Hall, enroll in designated core courses as a cohort, and attend activities and events organized by a faculty sponsor. Additionally, students can join organizations such as AIAS and NOMAS, or serve on the student advisory board, which interfaces directly with College leadership to provide feedback on issues and initiatives that impact students. The College also maintains a robust peer mentoring program, which fosters a culture of knowledge sharing and support among students at different levels. As they progress within the program, students can collaborate with faculty on research projects through the University's UCARE program (Undergraduate Creative Activities and Research Experience) and serve as learning assistants for program courses with responsibilities, including course preparation, assignment review, and skill-based tutorials. On the faculty side, the University offers exceptional resources for developing innovative approaches to teaching, including the Institute for Online Teaching, Peer Review of Teaching, and the Center for Transformative Teaching.

Students help guide both the College and the program by serving on the Student Advisory Board (SAB), which meets directly with the Dean once a month. Additionally, upper-level undergraduate and graduate students can be selected to serve as learning assistants in core DSGN and ARCH courses within the program. The learning assistant program creates a framework for 4th-year and M.Arch students to build learning and teaching knowledge by helping students not as far along in the program grow, providing meaningful impact on their peers. Lastly, the peer mentoring program supports student success, mentorship, and healthy practices in college.

Faculty can test and innovate their teaching by attending College-wide Lunch and Learns through the University Center for Transformative Teaching and the Institute for Online Teaching. Faculty can participate in the university's Faculty-led Inquiry into Reflective and

Scholarly Teaching (FIRST), a professional development program that provides a model for faculty can document, assess, and make their teaching and students' learning visible.

Assessment

At the end of each semester, College and Program faculty meet to share their reflections on the curriculum and specific areas of concern. Prior to the end-of-semester Program retreat, the teaching teams convene to assess student performance relative to the educational objectives outlined in the course syllabi. The notes and reflections from these individual teaching team meetings are then collected and shared with Program faculty during the end-of-semester retreat. Given the nature of these discussions, the assessments and reflections related to PC.7 are often more qualitative than quantitative, including observations on student work habits and potential opportunities to enrich the culture of learning within the Program.

When assessing PC.7, the Program used different program primary elements to examine how we foster and ensure a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation among faculty, students, administration, and staff. The assessment method for the learning outcome includes collecting the exit survey from undergraduate and M.Arch students (~40% response rate for each). The exit survey consists of thematic questions on the topics of *facilities, faculty, educational experience with design studio, core courses, elective courses, and overall experience*. In addition to the exit survey, the program collected student Course Evaluations that asked students to rate various aspects of student learning (~40% response rate per semester). These questions provided us with a basis to assess our program learning and teaching culture.

The results were generated by comparing the exit survey from Spring 2022 and Spring 2023. The undergraduate exit survey saw a decrease in studio and structures student experience and an increase in history theory student experience. With the introduction of studio coordinators and teaching teams, we hope the studio experience will increase in 2024. The M.Arch exit survey from Spring 2022 and Spring 2023 saw a decrease in students rating their history and theory elective courses and an increase in students rating their structures and technology education. We hope that with the return of full-time teaching faculty from sabbaticals, this rating will increase in 2024 (see exit survey data below).

EXIT SURVEY	2022	2023	2022	2023
	(28 undergraduate	(27 undergraduate	(14 M.Arch	(11 M.Arch
	student reply)	student reply)	student reply)	student reply)
Studio	(1-3 range)	(1-4 range)	n/a	n/a
Experience	1.86 (mean)	2.3 (mean)		
(1-high, 5-low)				
History and	(1-5 range)	(1-5 range)	(1-3 range)	(2-4 range)
Theory elective	3.19 (mean)	2.52 (mean)	2.09 (mean)	2.25 (mean)
courses				
(1-high, 5-low)				
Structures and	(1-4 range)	(1-4 range)	(1-5 range)	(1-4 range)
Technology	2.35 (mean)	2.83 (mean)	3 (mean)	2.64 (mean)
(1-high, 5-low)				

Additionally, the Program reviewed the average course evaluations between Fall 2022 and Spring 2023 and found these to be effective data points to access learning and teaching culture (see Program average data below).

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COURSE EVALUATIONS		Fall 2022 (mean)	Spring 2023 (mean)
(5-high, 1-low)	I feel welcome and respected.	4.44	4.42
	I understand course expectations and how my performance is evaluated.	4.07	4.09
	I feel challenged to learn a lot in this course.	4.33	4.13
	Course activities effectively promote my learning and interest in the subject.	3.93	4.03
	The learning tools (e.g. course texts, notes, slides, videos, exams, projects, etc.) support my learning.	4.31	4.09
	I have opportunities to learn with and from other students in this course.	4.33	4.28
	The feedback I receive on my work is useful to me for making changes and improvements.	3.90	3.82

The Program saw similar course evaluation responses between Fall 2022 and Spring 2023, with the greatest change being a decrease in ratings of learning tools (e.g., course texts, notes, slides, videos, exams, projects, etc.). However, 'Feeling welcome & respected' received the highest rating, suggesting a positive culture, while the lowest rating came from the 'Feedback students received.' Additionally, the faculty feedback decreased from 2022 to 2023. As a result, the faculty plan to incrementally release grades starting at the 4-week and midterm points in the semester.

Another evaluation for the course was for students to rate various teaching elements in the classroom. Below are two example questions showing the top three responses (see Program average data below).

	12 teaching elements were provided. The three highest percentages are below. (Fall 2022)	12 teaching elements were provided. The three highest percentages are below. (Spring 2023)
What has been beneficial to your learning? From the following list of teaching elements, what is the one thing that has been the most	Course Learning Materials and Tools (18.01%)	Course Learning Materials and Tools (16.24%)
beneficial for your learning in this course so far? After your selection, please provide written comments about the element.	with Students (15.81%)	Assignments or Projects (15.72%)
	Engagement in Assignments or Projects (14.34%)	Quality Interactions with Students (15.21%)

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Course Learning	Course Learning
Materials and Tools	Materials and Tools
(14.39%)	(12.50%)
Instructor	Timely and useful
Communication	Feedback for
(10.70%)	Improvement
. ,	(15.10%)
	, <i>,</i> ,
	Course Learning Materials and Tools (14.39%) Instructor Communication (10.70%)

In 2023, the Program saw students' engagement in "assignments or projects" (15.72%) as a highlight because it was not in the top three rankings in Fall 2022. Overall, this is positive and informs the Program that students are interested and excited by the course content and learning opportunities. A need for improvement was "timely and useful feedback for improvement" (15.10%), which is a combined rating for lecture-, seminar-, and studio-based courses. This is being addressed through the strategy mentioned above. Additionally, in 2023, the Program saw a decline in "course learning materials and tools" (16.24%), but this element also shows up as needing improvement. This may be a result of the reduction in COVID-influenced hybrid classrooms and the decrease in faculty's desire for online platforms. As a result, the Program should consult the College instructional designer for best practices for effectively using learning materials and tools.

While each full-time and part-time faculty member is provided individual course evaluation reports, there is currently no process for sharing and discussing the Program averages for course evaluations. The Program should consider including a discussion about the Program averages during the semester retreat or at the start of the semester, and whether using 'average' scores or 'benchmark' score is more advisable. The student survey questions that result in a lower rating should be reviewed and discussed by the teaching teams to ensure the faculty are collectively aware of the percentage and can work toward improvement. The Program has set a goal of having 50% student participation in completing the course evaluations. Additional reflection should be considered by breaking down the Program average into different learning environments, i.e., lecture courses, seminars, and design studios, to ensure a focused faculty approach to improvement in the classroom. The Program has also set a goal of having 50% student participation for the undergraduate and graduate survey. Once these goals are met in the future, the Program will set new goals.

Another example of improving teaching and learning, was following the Fall end-of-semester retreat in 2022, the Program faculty charged a faculty committee with reviewing the procedures for students in the Design Thesis, including potential revisions to the optimism, respect, review process, and evaluation rubric. The PPC conducted an analysis and put forward a proposal aimed at improving the culture and teaching and learning focused on optimism and respect. This proposal was shared with the Program faculty, who submitted comments and suggested revisions before the proposal was officially adopted through a faculty vote and implemented in Fall 2023 with great success. In addition to this specific consideration related to Design Thesis, we are continually implementing new strategies to create a healthy and supportive work environment across all studios, specifically in foundational studios (ARCH210 and Arch211).

Learning and Teaching Culture is assessed through our program's three-step framework for collecting, reflecting, and considering changes. This framework for assessment is discussed in greater detail in Section 5.3. Additionally, the course instructor provided an assessment executive summary page that explains this process further and can be found in the <u>criterion assessment folder</u>.

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PC.8 Social Equity and Inclusion

How the program furthers and deepens students' understanding of diverse cultural and social contexts and helps them translate that understanding into built environments that equitably support and include people of different backgrounds, resources, and abilities.

Program Response:

Our Approach

The Architecture program is committed to increasing awareness and discussion around diversity, equity, and inclusion, and recognizes that to achieve diversity among students and faculty, we must first provide equity and inclusion to underrepresented populations. The program understands that the first step to achieving this is having open conversations in our studios, seminars, and public forums, and has sought multiple ways of starting these conversations. The Architecture program has hosted several Master Alumni and Multicultural Alumni to broaden student understanding of diverse cultural and social contexts. While alumni were on campus, they give a public presentation, visited courses and design studios, and hold several smaller conversations with students. Our recent alumni include Phuong Nguven AIA as the 2022 Alumni Master. Nguyen is a graduate of the Architecture program who has been named to the AIA Next to Lead Program. Charyl F. McAfee-Duncan FAIA was the 2021 Alumni Master, and is the first African American woman fellow of the American Institute of Architects in Dallas and the second in Texas, serving on various Dallas AIA committees. Additionally, the program hosted Brad Brooks as the 2021 Distinguished Alumni of Color as part of the University's multicultural homecoming event. While on campus, these alumni connect with students via one-on-one discussions, public presentations, lunch conversations, and desk crits. To promote our efforts toward diversity and inclusion, the program has posted numerous Instagram graphics highlighting our diverse professional alumni under the theme of "Where THEY are NOW," along with posts on current students entitled "Who WE are NOW." These efforts help our program strengthen the conversation toward equity and inclusion.

This approach is also supported by faculty, who recognize the need to work on diverse project types to improve awareness surrounding students and communities. This is achieved in both design studios and professional seminar courses that address the diversity of social differences (e.g., race/ethnicity, indigeneity, class, gender, gender identity, sexual orientation, country of origin, and (dis)ability), and historically underrepresented populations. In recent years, faculty have worked with several nonprofit agencies, including the Santee Sioux Tribe, Nebraska Game and Parks, Junior Achievement of Lincoln, the Sandhills Institute, Sandhills Center for Hope, and Partners for Livable Omaha. Initiating conversations and integrating these topics into the classroom help us to support the College of Architecture's Strategic Plan goal of recruiting, enrolling, and retaining diverse populations of students who will positively contribute to our mission.

Course Sequence

The Architecture program ensures that students understand PC.8 Social Equity and Inclusion through a multi-course sequence coupled with supplemental opportunities.

DSGN 101: Introduction to Design (2 CH) introduces students to key fundamentals of design, the professions, and social equity and inclusion. The course raises awareness of design culture and the value of design, demonstrates the role of empathy in human-centered design, and develops a commitment to design excellence and socially responsible design. The course addresses cultural diversity by exploring the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity on the societal roles and responsibilities of architects. Additionally, the course provides an understanding of the architect's responsibility to work in the public interest, respect historic resources, and improve the quality of life for local and global neighbors.

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ARCH 241: Architecture History and Theory II (3 CH, ACE 5 & 7) is a second-year Fall core history and theory course that meets UNL's Achievement-Centered Education (ACE) learning outcomes #5 ("Use knowledge, historical perspectives, analysis, interpretation, critical evaluation, and the standards of evidence appropriate to the humanities to address problems and issues") and #7 ("Use knowledge, theories, or methods appropriate to the arts to understand their context and significance"). This introductory survey focuses on modern architecture and contemporary developments by interweaving works from the 18th to 21st centuries and understanding them within their larger social, cultural, technological, political, and intellectual contexts. Through lectures, readings, discussions, and independent research on assigned topics, students learn about diverse perspectives across time and geographic space (North America, Europe, South America, etc.) by investigating a range of multi-scalar artifacts (from furniture to cities) in the built environment that architects and designers co-create.

One narrative thread draws awareness to issues involving diversity, equity, and inclusion by discussing racism in the discipline, exclusionary land use, the Civil Rights movement, and the negationist claim of "Lost Cause," and by centering figures such as Paul Williams who overcame entrenched systems.

ARCH 360: Site Context Issues (3 CH) introduces students to a broad array of issues related to the physical, cultural, and social contexts of a project site with a strong focus on the regulatory context of the built environment. Through a series of weekly lectures, students gain an understanding of regulatory frameworks that directly address questions of equity and inclusion within the built environment. Students first examine the historic development and implementation of land use and zoning regulatory frameworks as socially informed constructs have historically been utilized to disenfranchise certain population groups. Examining this history allows students to understand regulatory frameworks as socially informed constructs rather than neutral legal requirements. Students are encouraged to critically analyze the ways in which such frameworks work to promote or inhibit equity and inclusion. Students also learn about the legal codification and spatial characteristics of accessible and universal design principles, and use what they have learned to design a fully accessible site layout as part of an in-class sketch problem. This process encourages students to consider the needs and physical abilities of a diverse population of individuals.

ARCH 461: Urbanism (3 CH) is the assessed course examining historical and contemporary settlement patterns across the United States, identifying the diverse cultural and social contexts within each city and urbanistic movement. The course starts with the CityLab "Who's Who of Urbanism," a primer on the names often associated with writing on cities and less-known activists and advocates. From this point of view, students are immediately introduced to the breadth of urbanism as a process and not as an object. Through readings and discussions regarding diverse cultural and social contexts, students use the Socratic method to unpack weekly societal and global questions on a specific theme. Through these questions, reflections, and discussions, students can view examples and equally translate their understanding into built environments that equitably support and include people of different backgrounds, resources, and abilities. During weekly lectures, equity and inclusion is introduced with historical references on redlining and housing segregation that occurred through wealth, schools, health, and policing. The class directly addresses the theme of "Race and Place" with readings on infrastructure, suburbia, housing, and ecology.

DSGN 410: Collaborate Design Studio (5 CH, ACE 10) consistently partners with underserved communities to create impact and awareness. For example, a DSGN 410: Collaborate design studio consisting of architecture, interior design, and construction management graduate students studied the issue of increasing housing density in Valentine, Nebraska, examining issues of affordability, sustainability, construction methods, and

understanding user groups to create a holistic picture of the housing situation. After several years of this effort, our faculty and students will soon see their vision for affordable housing in Valentine become a reality. Thanks to a collaboration focusing on rural, attainable housing with College of Architecture faculty and students, the Lincoln-based Hoppe Development has broken ground on a townhouse project in Valentine. The 15-unit housing development, the Sandhills Townhomes, began as a concept generated by one of the College's 2020 design studios.

Non-Curricular Activities

The 2020-21 CoA Hyde Lecture series featured speakers from across disciplines united under the common theme of "Building Justice: Design and Planning for a Just Society." Our professions have long excluded people of color and underserved groups in both processes and outcomes. To confront this exclusion, the 2020-21 Hyde Lecture Series brought in lecturers who believe design and planning should be explicitly engaged with fostering a just society. Doing so is an act of hope requiring not only an awareness of true inequity, but also the compulsion to refute it in its many forms. Additionally, in 2021-22 the Hyde Lecture series brought in lecturers under the theme of "Emerging Opportunities for Equality in Planning and Design."

The College proudly sponsored and hosted the 2022 "SAY IT LOUD" exhibition by Beyond the Built Environment and Pascale Sablan for one week on the UNL campus. The goal of the SAY IT LOUD initiative is to raise up minority groups of professionals who work in the built environment. Architects, contractors, engineers, interior designers, landscape architects, and planners who identify as women and/or Black, Indigenous, or people of color from across Nebraska submitted work for the state's exhibit, which is now set to travel to locations across Omaha and Lincoln.

The Architecture program has set a goal of partnering with the University Career Services' new "Micro-Internship and Mentoring" program, which assists first-generation and BIPOC students in finding short-term professional opportunities. These micro-internships are paid positions that typically last two to six weeks with a total of 10-40 hours of work.

Assessment

When assessing PC.8, we look to **ARCH 461: Urbanism** to examine students' understanding of diverse cultural and social contexts within the built environment that equitably support and include people of different backgrounds, resources, and abilities. The students who have passed the course have met these expectations and to better meet the criteria we have introduced new authors on the topic of diversity, quizzes, and reflections to the course, beginning with Fall 2022.

The assessment methods included **Week 9 Quiz:** based on course material from the online academic lecture, a reading on designing a more equitable future, and an academic podcast. **Question 1:** What did you think this material was going to address prior to reading compared to your understanding after you read the material? **Question 2:** What did you learn from the material you selected? How might that change the way you design? **Week 16 Self-Reflection Quiz:** student-based self-assessment quiz including **Question 1:** Based on your knowledge at the beginning of the semester, what is your current understanding of diverse cultural and social contexts? **Question 2:** Based on your knowledge at the beginning of the semester, what is your current understanding of the built environments that equitably support and include people of different backgrounds, resources, and abilities? **Week 16 Self-Reflection essay:** student-based self-assessment reflection essay quiz. **Question 1:** Throughout the semester we have directly and indirectly discussed topics of "Race and Place" specifically related to cultures, context, and how we might equitably support people from different backgrounds. What is your understanding of "diverse cultural and social contexts" that have informed patterns of Urbanism? **Question 2:** Translate your

understanding of diverse cultural and social context into at least two examples of built environments that equitably support and include people of different backgrounds, resources, and abilities.

The results included the **Week 9 Quiz:** The students who completed the quiz all received full credit. This was an introductory quiz that asked them to consider how the course material might change the way they design. The instructor needs to continue defining terms used in class, but through the process, the students learned to consider the effect that building design has on the surrounding community. **Week 16 Self-Reflection Quiz:** demonstrated that students had indeed self-reflected, with **87%** of students responding positively to the idea of understanding diverse cultural & social contexts and **95%** of students responding positively to the idea of different backgrounds, resources, and abilities. **Week 16 Self-Reflection Essay:** The personal reflection essays showed that **93%** of students scored at adequate levels in terms of understanding diverse cultural and social contexts and **89%** of students scored at adequate levels in terms of understanding diverse of understanding of built environments that equitably support and include people of adequate/passing levels with regard to understanding of built environments that equitably support and include people of adequate/passing levels with regard to understanding of built environments that equitably support and include people of different backgrounds, resources, and abilities.

The recommendations for changes based on the above information include providing a pretest to gauge students' incoming knowledge of PC.8, which will allow faculty to better measure the growth of their knowledge during Week 9 and Week 16. Additionally, one recommendation was to integrate themes of equity and inclusion from PC.8 earlier in the semester when discussing weekly themes of land settlement, migration, and city development. Week 9. This was an introductory guiz on what the students learned from the weekly material and how this knowledge might change the way they design. Consider making this guiz Pass/Fail and adding another guiz with a rubric directly tied to PC.8. Create a more robust comparison between the sources, by randomly assigning all three references among the students in equal numbers. Week 16 Self-Reflection Quiz. This assignment included a two-point rubric assessing students' understanding of the equity and inclusion values of PC.8. The same pre-semester guiz guestions will be used on this guiz to better assess how much students learned from the beginning to the end of the semester. This guiz was helpful in determining students' post-semester reflection, and is planned again for next semester. A goal was set of increasing the number of students self-indicating a "High" level by 10% (~8 students) during the next course offering. Week 16 Self-Reflection Essay. This assignment included a two-point rubric assessing students' understanding of the equity and inclusion values of PC.8. This guiz was helpful in determining students' understanding of diverse and equitable social contexts and built environments, and will be assigned again next semester. A goal was set of increasing the number of students scoring at a "Mastery" level by 10% (~8 students) during the next course offering.

ARCH 461: Urbanism (3 CH) is assessed through our program's three-step framework for collecting, reflecting, and considering changes to the course. This framework for assessment is discussed in greater detail in Section 5.3. Additionally, the course instructor provided an assessment executive summary page that explains this process further and can be found in the <u>criterion assessment folder</u>.

3.2 Student Criteria (SC): Student Learning Objectives and Outcomes

A program must demonstrate how it addresses the following criteria through program curricula and other experiences, with an emphasis on the articulation of learning objectives and assessment.

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.



Program Response:

Our Approach

The Architecture program ensures the health, safety, and welfare of the built environment at a variety of scales of design and levels throughout our curriculum. The program references the American Institute of Architects' (AIA) definitions to define health as those aspects of design that improve the physical, emotional, and social well-being of occupants, users, and other stakeholders affected by buildings and sites; safety as those aspects of design that protect occupants, users, and other stakeholders affected by buildings or sites from harm; and welfare as those aspects of design that enable equitable access, elevate the human experience, encourage social interaction, and benefit the environment. The program recognized the need to go beyond understanding these factors and to also relate them to current societal trends confronting the architecture discipline.

Course Sequence

The Architecture program teaches various aspects of health, safety, and welfare through design starting in the first-year pre-architecture curriculum, assessment in ARCH 333 in the third year, and reinforcement courses ARCH 430 and ARCH 461 in the fourth year.

DSGN 101: Introduction to Design (2 CH) is an interdisciplinary course that discusses human problems, empathy as a driver of design, and understanding the needs, feelings, and desires of diverse user groups. The course explores design as an agent for change. Additionally, the course structures discussions on design ethics addressing specific questions: Is it [design] safe? Is it harmful to the environment? How can we make people's lives easier, safer, healthier, and more joyful? The course lays the foundation for students to understand health, safety, and welfare in the built environment.

DSGN 140: History of Design (3 CH) emphasizes the historical relationship between design and health through lectures and case studies. The module on furniture design, for instance, highlights the ways in which modernist designers responded to the tuberculosis epidemic during the early twentieth century by designing "cure chairs" for infected patients. Alvar Aalto's Scroll Chair, designed for the Paimo Sanitorium, is presented as a case study to illustrate this history. At the urban scale, the module on modern cities highlights the antiurban sentiments that emerged in response to the London Cholera outbreak of 1854. These sentiments are traced through the development of the Garden City movement in England, which emerged as a critical response to the unhealthy conditions of the industrial city. By emphasizing the interrelations between design and health, this course encourages students to understand that design is interwoven with the prevailing issues of larger society. This firstyear course is required for all undergraduate students, setting a foundation for second-year architecture courses.

ARCH 211: Represent Design Studio (5 CH) prompts students to engage with health and safety by considering ADA-compliant ramps and handrails, as well as creating awareness of basic fire safety regulations. Additionally, the semester's culminating project involves a restaurant, allowing students to consider how their designs support nutrition and food sourcing.

ARCH 262: Building Organization (3 CH), focuses on understanding the needs and values related to the building program and users: for example, during the course, students research the Fair Housing Act and develop an understanding of how discriminatory practices impacted housing availability for different groups of people. The course addresses health as it relates to light, cross-ventilation, rules of thumb, and patterns of development, including social and spatial patterns in relationship to European right to light and 25' leasing depths vs. 45' US leasing depths and how this affects patterns of development in the envelopes. The course covers accessible dwellings that shape development patterns and safety in terms of egress

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and welfare in terms of social vs. private arrangements of space, along with the pragmatics of access vs. the social implications of different access types.

ARCH 333: Environmental Systems (3 CH) (assessed course) addresses the characteristics and performance of building with respect to thermal and psychrometric environments in buildings related to human comfort, heat gain/heat loss, ventilation, natural energy systems, sustainable design principles, and plumbing and life safety systems in the built environment. Upon completing the course, students can apply the principles of plumbing, fire protection, heating, ventilating, and air conditioning that are necessary to create a safe, healthy, and productive building environment. This includes learning how to effectively balance mechanical criteria such as thermal properties, installation cost, energy efficiency, human comfort, life safety, sustainability, and other factors to produce a more holistic view of a building's performance. The course teaches and assesses these themes through chapter readings, weekly reflections, quizzes, exams, and final projects. The "Drawdel" is a culminating project that brings together the thematic topics of the course into one assignment that addresses health, safety, and welfare.

ARCH 430: Building Integration (3 CH) emphasizes and reinforces the previous course content and is highlighted for the duration of our code analysis of studio projects. The course challenges students to develop a basic understanding of the code as they begin a project and use the code to their advantage and offer information while crafting their design. The course teaches students about the lifespan of a product, including the energy and resources that go into the creation and demolition of items. The materials architects use and how architects choose to use them has a dramatic impact on the health of users within a building, and the course teaches students to consider the lifespan of a product, including the energy and resources that go into the creation and demolition of items. In this manner, the course goes beyond a mere understanding of the code: both the course and the teaching team inform students why codes are in place, and that, rather than simply forming criteria to be achieved, the code is only a minimum. As designers and architects, we must always strive to make our buildings safer and healthier. The course teaches students the concepts behind the Well Building Standard, which can be used and adopted into all facets of design and architecture. It is important for students to possess this understanding at such a level that it becomes part of their unconscious design choices.

ARCH 461: Urbanism (3 CH) emphasizes health, safety, and welfare at the urban scale, focusing on historic and contemporary examples. The course begins with urban public health and the overcrowding of urban spaces, which leads to the spread of illness and diseases. Students develop an awareness of urban health concerns, along with the rapid urbanization that resulted in the City Beautiful movement. More contemporary examples of urban health, safety, and welfare include focusing on post-industrial redevelopment, specifically waterfront brownfield property. The course discusses how natural disasters (e.g., floods), food production and food deserts, walkability, and transportation have caused significant impacts and segregation in urban spaces. The course also examines the process of urbanization from growth to decline to address shrinking cities, land banking, and demolition impacts on urban environments. To contextualize these issues at a broader scale, the course reframes weekly discussions to ask relevant questions impacting the urban environment at global and societal scales.

Non-Curricular Activities

Beyond the required courses, the college provides a variety of opportunities to learn more about health, safety, and welfare. The <u>Hyde Lecture Series</u> is a longstanding endowed program within UNL's College of Architecture, and each year the College hosts experts in the disciplines of Architecture, Interior Design, Landscape Architecture, and Planning that enrich the ongoing dialog around agendas that are paramount to the professions and our graduates. The college hosts Well Building Lunch and Learns and the UNL Sustainability on Wheels

program, which is geared toward developing a culture of sustainability across the campus community by reaching every faculty and staff member at UNL. Students can also take the elective course ARCH107 Sustainability Basics and the Built Environment toward obtaining an undergraduate minor in Sustainability Studies. Lastly, the College is currently undergoing a two-phase building renovation and addition, which the program sees as an opportunity to offer a professional elective course that provides students with insight into how the College of Architecture building has addressed the health, safety, and welfare of students, faculty, and staff.

Assessment

When assessing SC.1, we look to **ARCH 333: Environmental Systems** to examine students' understanding the impact of the built environment on human health, safety, and welfare at multiple scales, from buildings to cities. The students who have passed the course have met these expectations and to better meet the criteria we will add a pre-semester quiz to gauge prior knowledge of the built environment, beginning with Fall 2023. We will examine the same outcomes beginning in Fall 2023, and expect to see productive improvement of student learning.

The assessment method for the learning outcome includes, **Part 1: (Chapters 1–4):** Fundamentals of the Indoor Environment, **Part 2: (Chapters 5 & 6):** Calculation of Heating & Cooling Loads, **Part 3: (Chapters 7–11):** Heating, Ventilation, Air Conditioning & Refrigeration (HVAC &R), and **Part 4: (Chapters 12–15):** Plumbing Systems (including Storm Systems & Fire Protection).

The results included formative assessments (start-of-semester, mid-semester, and end-ofsemester) to help guide every semester. The faculty member has learned which components are harder for students to understand and has systemically improved content in the more difficult topics. The faculty member found that some topics are better served with additional reading material, while others are better served by active learning exercises or activities performed in class under direct supervision.

The post-chapter quizzes help the faculty member determine whether students understand the base-case material. The four exams (about one every month) allow the faculty member to assess how students are applying the skills they have learned throughout the semester. The faculty member has also scheduled checkpoints to provide feedback on student progress toward the final proposal, including the "drawdel."

Part 2, which introduces heating and cooling loads, seems to be the most challenging. In this section, the faculty member usually takes extra time to explain the same concepts in diverse ways to accommodate different student learning styles. At the end of every semester, each student willing to provide feedback submits a course evaluation. The faculty member reviews this feedback and makes adjustments in future years to continually improve the coursework. There is also a peer evaluation section of the final proposal where students evaluate themselves and their teammates, allowing for further course improvements. This student feedback also led to the publication of a course-customized textbook to improve student learning.

The recommendations for changes based on the above information include the faculty member realizing that the material and time investment for the "drawdel" needs to be updated to match the students' technological advancements, and the faculty member has thus implemented the move to a digital format. This new format will also allow students to receive incremental feedback with the various checkpoints of the class. Additionally, the faculty member is considering the continuation of the formative assessments and the introduction of a pre-semester quiz to gauge prior knowledge of the built environment. The infusion of software or visualization techniques (such as refresher videos) for the hard-to-comprehend

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concepts would significantly ease the course difficulty, especially for the heating and cooling load concepts in Part 2.

The "drawdel" assignment will be completed in a digital format moving forward, eliminating the foam board and 3-D model creation. This reduces the time students take to coordinate the 3-D model and gives them more time to delve deeper into concepts they can use to present the "drawdel" developed by their team.

ARCH 333: Environmental System (3 CH) is assessed through our program's three-step framework for collecting, reflecting, and considering changes to the course. This framework for assessment is discussed in greater detail in Section 5.3. Additionally, the course instructor provided an assessment executive summary page that explains this process further and can be found in the <u>criterion assessment folder</u>.

SC.2 Professional Practice

How the program ensures that students understand professional ethics, the regulatory requirements, the fundamental business processes relevant to architecture practice in the United States, and the forces influencing change in these subjects.

Program Response:

Our Approach

The Architecture program prides itself on our mission to "provide the educational foundation for intellectually aware and self-realizing architecture professionals." Throughout the program, students gain the ability to become self-realizing architecture professionals capable of performing in an emerging design discipline. The program maintains a strong undergraduate curriculum focused on the role of architectural practice through the design and execution of architectural spaces and buildings. The program asks students to bridge academic investigation and professional practice by collaborating with Landscape Architecture and Interior Design students in the 4th-year design studio. In this studio, students work together to confront real-world issues such as climate change, rapid urbanization, and cultural, technological, and social change. Throughout the undergraduate degree, students are exposed to professional practice in various ways via professional Lecture/T faculty teaching at all levels of our program and through professional consultants who attend classes to help review and educate our students. In the M.Arch program, students can engage with professional practice on a higher level by taking the required course Arch 680: Professional Practice course and the elective course ARCH 695: Internship.

Course Sequence

The Architecture program ensures the fostering of SC.2, Professional Practice through three required courses in the undergraduate and graduate curriculums: DSGN 101, DSGN 410, and assessment in ARCH 680.

DSGN 101: Introduction to Design (3 CH) is a required interdisciplinary first-year course introducing students to architecture, industrial design, interior design, landscape architecture, and related design fields, the forces that shape these fields, and the processes of production they rely upon. Two educational objectives of the course include defining the scope and ethics of the design professions within the College of Architecture and allied disciplines and developing an awareness of the historical emergence of the design disciplines and their contemporary relationship.

DSGN 410: Collaborate Studio (5 CH, ACE 10) introduces students to professionalism and reinforces professional ethics by having students work in interdisciplinary collaborative teams on a design project. This approach bridges academia with professional practice to build collaboration skills and abilities within our students. Each studio section typically engages a community partner in the planning and design phases of the studio project. In previous

semesters the DSGN 410 faculty partnered to offer service-learning pedagogy to engage communities of very different types, including Nebraska Game and Parks, UNL Cedar Point Bio Station, Four Aces Dairy, the University of Nebraska Medical Center, Ice Coring & Education Silo (ICE), Boys Town of Nebraska, Omaha Mobile Stage, the town of Valentine, Nebraska, Hoppe Homes, and UNL Construction Management. Additionally, the program typically offers two studio sections taught by local professionals who bring in interdisciplinary colleagues from their offices to share knowledge and engage in the planning and design process.

ARCH 680: Professional Practice (3 CH) has three primary goals. The first is to define the role and function of the professions of the College of Architecture in today's and tomorrow's professions and society. The second is to explore a project's path through the office, beginning from marketing, contracts, planning, design, and contractual documents to implementation, construction, and facilities management. The third is to define ethical business and management principles of the professional office, project organization, and personal and professional development as outlined in the Ethical Standards and Accreditation Criteria of Architecture Program. The course is centered around a broad and continually evolving topic: What is of critical importance today may become part of the background tomorrow. The course aims to stimulate an ethos of lifelong learning and an entrepreneurial mindset, and as students embark on their careers, we want to equip them with the knowledge needed to form their own paths through the practice of their discipline, helping them make intelligent and informed career decisions, even if they lie outside the traditional roles of the professions.

The course is comprised of topical presentations by the instructor, guest lecturers, and panelists, and selected readings provide background and context for the subject being addressed, including clarifying the topic, techniques, or systems being employed. Each class meeting is organized around one of three thematic areas: Practice Modes (traditional, alternative, future), Practice Management, and Project Management. Several overarching themes reappear in various sessions throughout the semester, such as Ethics, Future Focus, Professional Choices, and an Entrepreneurial Mindset. To promote variety and examine topics from different perspectives, the class operates in distinctly different formats, including guest lectures/video lectures by individual experts, panel discussions with two or more guests in conversation, ProPEL (Professional Practice Education Library produced by ACSA & NCARB), discussion sessions, and site visits.

Finally, **ARCH 695: Internship** is a graduate-level optional elective course enabling students to earn credit for summer internships where they gain professional work experience paralleling the AXP guidelines published by NCARB, increase their awareness of the architectural practice and related fields, and take a critical position toward the type of practice/work experience they would like to continue with after graduation with a professional degree in architecture. These internships assist students with navigating the job market, the internship experience, and understanding the AXP requirements put forth by NCARB.

As described later in section 5.4.2, the Program of Architecture has an active licensing advisor in place fulfilling the duties as prescribed by the National Council of Architecture Registration Boards. Brian M. Kelly, AIA, is an associate professor of architecture and a licensed architect in the State of Nebraska who has served as advisor since 2018. Within the College, he serves in several capacities that link students with professionals and usher them through the licensure process. This involves coordinating the annual Internship and Career Fair, which brings between 60-70 regional and national firms into the College for a two-day event that contributes the Program's high placement rate for graduating students. Professor Kelly also teaches ARCH 695: Internship, which helps transition students into a professional environment and addresses the path to licensure through presentations and encouraging the initiation of an NCARB record.

Although annual meetings with students vary in type, the Program makes a concerted effort to make sure they are familiar with the process to becoming licensed professionals. In 2022, Professor Kelly helped organize a meeting with students and NCARB staff Martin Smith at the College of Architecture with the annual AIA meeting. He attends the NCARB biannual summit, including the 2019 summit in Minneapolis, the 2021 summit in Miami, and the 2023 summit. In 2023, Professor Kelly sat on a panel discussion with licensure candidates organized by the UNL AIAS members, and invited the Executive Director of the Board of Engineers and Architects to attend as well. In addition to Professor Kelly's efforts, students are also exposed to the licensure process twice in our curriculum: once at the undergraduate level in ARCH 262: Building Organization, and once at the master's level in ARCH 680: Professional Practice.

Professor Kelly also serves on the Nebraska Board of Engineers and Architects (of which he is currently chair) and NCARB national committees, including the Education Committee and the ARE 5.0 Item Writing Subcommittee. Through this engagement, he has several touchpoints with candidates moving through the licensure process and recognizes them when they achieve licensure through the annual ceremony at the Nebraska State Capitol. Combined, these activities represent both our program and professional community from the local to the national level on issues impacting professional licensure.

Non-Curricular Activities

In addition to required courses, the program provides opportunities for students to gain further insight into professional practice. The <u>Hyde Lecture Series</u> is a longstanding endowed program within UNL's College of Architecture, and each year the College hosts experts in the disciplines of Architecture, Interior Design, Landscape Architecture, and Planning that enrich the ongoing dialog around agendas that are paramount to the professions and our graduates. Additionally, the <u>College of Architecture Friends Association</u> (CAFA) offers courses related to professional exposure and insight.

Our faculty fulfill the University's land grant mission to provide service to communities, with several undergraduate and graduate courses each semester engaging external communities, stakeholders, and partners. Several College student organizations provide firm tours throughout the academic year, allowing students to gain exposure to architectural practice. The College hosts a Career Fair annually that allows students to interview for summer internships and full-time employment. To better prepare students for professional practice, student organizations host professionals for <u>Career Fair Prep sessions</u> on portfolio design layout, CV/resume writing, soft skills and interview skills, and portfolio design.

Assessment

When assessing SC.2, we look to **ARCH 680: Professional Practice** to examine students' understanding of professional ethics, regulatory requirements, and the fundamental business processes relevant to architecture practice in the United States, and the forces influencing change in these subjects. The students who have passed the course have met these expectations and to better meet this criteria we have enhanced course materials, quizzes, weekly reflections and exams to the course, beginning with Spring 2023. We will examine the same outcomes beginning in Spring 2024, and expect to see productive improvement of student learning.

Lectures and panel discussions during the Practice Management and Project Management themes are specifically geared towards the outcome of SC.2 Professional Practice. While Practice Modes is focused on PC.1 Career Paths, much of the content pertains to SC.2 as well. See the ARCH 680 syllabus for specific lecture topics, guest speakers, reading, and other details.

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Two quizzes and three assignments relate to SC.2 Professional Practice: P1: Practice as Project, 20% of grade P2: Marketing Plan, 20% of grade P3: Field Notes, 15% of grade 2 Quizzes, 10% of grade Participation, 15% of grade

P1: Practice as Project, aims to help identify personal motivations and how to translate them into a possible practice model through an examination of practice characteristics such as Mission, Finance, and Legal. Project Two will extend this to include Marketing and Business Development strategies. Taken together, P1.0 and P2.0 treat the conception and establishment of a practice as the first design project of the firm. In teams of 3-5, students submit: Practice Design Plan; 3-minute pitch (slide deck); and a Portfolio of selected work (using their own work to represent the hypothetical firm portfolio).

P2: Marketing Plan, helps students develop a business development strategy for their hypothetical practices and allows them to test their marketing plans via a response to an actual Request for Qualifications and by preparing a slide deck for a project interview. This project intentionally overlaps with Project One both in terms of content (the brand and marketing plan have similar aspects) and the schedule of deadlines. This project is intended to be accomplished by the same team as Project One. Project deliverables: Marketing Plan; RFQ response; and Interview slide deck

P3: Field Notes, allows students to work in teams and file notes from an actual site visit to a project on the UNL campus. The instructor and GLA will arrange site tours to projects in different stages of construction. In most cases, students observe an actual project OAC meeting. Project deliverables: Completed Field Report form.

See assessment evidence for detailed project statements.

Quiz 1: Firm Finance_Practice Management 2

Covers content from ProPEL Firm Finance Unit and assigned reading.

Quiz 2: Value & Fees_Project Management 3

Covers content from the Propel Fees Unit and assigned reading.

The results included the project assessment outcomes:

P1: Practice as Project: average score of 88% with 48 students completing the assignment.
P2: Marketing Plan: average score of 92% with 48 students completing the assignment.
P3: Field Notes

Quiz outcomes (see quiz statistics for detailed report): **Quiz 1:** 92% average score with 47 of 48 students completing the quiz on time. **Quiz 2:** 95% average score with 48 of 48 students completing the quiz on time.

Immediate feedback from the automatically graded quizzes and prompt feedback from the manually graded assignments (reviewed by both the TA/GLA and the Instructor) help students make improvements over the semester. The faculty and TA/GLA noticed improvement in Project 2 outcomes after Project 1 (Project 2 is a continuation of work started in Project 1). Surprisingly, the participation grade was the lowest of all graded outcomes, with an average score of only 85%. The only requirements for this grade are attendance and asking at least two relevant questions during guest lectures or panel discussions. Students were prompted each week to ask questions, and were reminded that this is a graded assignment, but still, many did not ask questions or only asked one.

The recommendations for changes based on the above assessment points include looking at techniques to encourage more active participation in the course. Long-term assessment processes will be developed to ensure that students are meeting professional practice goals. The program will look to increase the participation in a feedback loop with alumni, the Professional Advisory Committee, Professional Lecturer/T faculty, and invited professionals to review student performance related to professional ethics, regulatory requirements, the fundamental business processes relevant to architecture practice in the United States, and the forces influencing change in these subjects.

ARCH 680: Professional Practice (3 CH) is assessed through our program's three-step framework for collecting, reflecting, and considering changes to the course. This framework for assessment is discussed in greater detail in Section 5.3. Additionally, the course instructor provided an assessment executive summary page that explains this process further and can be found in the <u>criterion assessment folder</u>.

SC.3 Regulatory Context

How the program ensures that students understand the fundamental principles of life safety, land use, and current laws and regulations that apply to buildings and sites in the United States, and the evaluative process architects use to comply with those laws and regulations as part of a project.

Program Response:

Our Approach

The Architecture program considers regulatory context to be a broad set of conditions influencing the internal and external organization of architecture and its surroundings. The program considers the term "context" in its various physical forms, including but not limited to ground, lot, block, and city-scale factors. Context also refers to non-physical conditions such as economic, logistical, social, cultural, and environmental conditions. Students are exposed to the dynamic characteristics of regulation (e.g., zoning, code analysis, life safety, ADA, egress) by working in various rural and urban conditions throughout the United States and sometimes abroad. Regulations are seen as positive constraints that help students consider the health, safety, and welfare of a project's users and the wider public. Because these positive constraints are continuously presented in the undergraduate and graduate studio sequence, students are expected to address them through ethical and poetic design responses.

Course Sequence

ARCH 210: Represent (5 CH) and **ARCH 211: Ideate (5 CH)** are required second-year core design studios that introduce the SC.3 criterion of Life Safety and Land Use through selected projects. The ARCH 210 design studio introduces beginning design students to the fundamentals of architectural design through reflective and projective strategies, and students develop skills to communicate architectural ideas through representational techniques. One course outcome is an ability to design and communicate an architectural project that effectively considers fundamentals such as users, matter, and environment in their projects. The ARCH 211 studio builds upon the spatial fundamentals introduced in ARCH 210 while integrating additional design considerations, including structure, organization, user, and materiality.

ARCH 262: Building Organization (3 CH) reinforces the design studios by providing indepth exposure and evaluation of all parts of SC.3 through lectures across a range of building programs, including housing, office, retail, and mixed-use. Students learn about common patterns of design and development through the exploration of normative and experimental projects accompanied by a bit of theory. The course explores the forces that shape buildings, including life safety, land use, and current laws and regulations, along with their

consequential spatial effects. Students are introduced to building codes and learn how to calculate occupancy loads and egress requirements for code review and compliance, as well as check for allowable occupancies and specific zoning requirements. The course then transitions into architectural programming and explores methods used in the gathering of both qualitative and quantitative information. Students explore user groups, activity needs, NASF requirements, and building efficiencies through area-takeoffs from a variety of projects while also learning to calculate overall GSF and preliminary cost estimates.

The **ARCH 310**: **Organize (5 CH)** and **ARCH 311**: **Situate (5 CH)** design studios are offered in the fall and spring of third year, and involve projects that engage the realization of architecture as a multiplicity of material and immaterial ideas, user requirements, and regulated systems to evaluate and create effective, appropriate relationships through design work. The third year is pivotal in enabling students to progress the resolution of a project by theorizing and thinking deeply about the spaces, user experiences, and details they are concretizing in the material language of architecture. Students learn to integrate site inventory with regulatory context into their design projects, including land use, current laws and regulations, life safety, topography, ADA, and ecological factors. Students continue to understand and challenge conventions while reframing design problems in terms of internal and external relationships.

BVH Architecture-Norman Ochsner Design Excellence, inaugurated in the Spring of 2023, is a funded design competition in ARCH 311: Situate. This funding enables three regional jury members (two professional and one academic) to travel to Lincoln to evaluate the most successful team projects from each studio section. The monetary prize is awarded to a third-year architecture student(s) to honor work that has demonstrated creative and technical excellence in organizing and situating the overall success of architecture. Students also need to show proficiency in meeting the course objectives pertaining to constraints and opportunities related to regulatory context.

ARCH 360: Site Context Issues (3 CH) is the program assessment point. This course works in coordination with the ARCH 311 design studios and includes a series of lectures, quizzes, and projects that build students' understanding of site context and regulatory considerations. Students complete a comprehensive site inventory and analysis project that requires an understanding of site-specific ecological systems, climate considerations, relevant social and cultural factors, and various regulatory frameworks and mechanisms such as life safety and accessibility, land use, zoning, and building energy code requirements. The concepts employed within this project are introduced through a series of lectures and are subsequently reinforced through in-class workshops that help students gain familiarity with reading, interpreting, and applying various types of building codes or regulatory documents. Ultimately, by analyzing the broader context of their respective studio sites in this way, students can apply the information and understanding gained in ARCH 360 directly to their design processes within the ARCH 311 studios.

ARCH 461: Urbanism (3 CH) provides students with an understanding of the elements of urbanism that are influenced by life safety, land use, and current laws and regulations. Students come to understand historical and contemporary patterns of urbanism, identify social and global forces influencing patterns of urbanism, and apply appropriate research methods to document patterns of urbanism. Students learn how laws and regulations influence the design of buildings, sites, cities, and regions, and the course discusses how laws and regulations have impacted historical landscape planning and the grid of urban and rural communities.

Non-Curricular Activities

College- and program-registered student organizations (RSOs) often organize guided tours of buildings (such as the Nebraska State Capitol and the Sheldon Art Museum) and

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professional architecture offices in Lincoln, providing students with insight and knowledge regarding the regulatory context of these buildings.

The program also offers the CoA Hyde Lecture Series, which brings lecturers of national and international distinction that discuss the value of site issues from across disciplines including recent speaker Matt Wallace from LakeFlato and Matthew Kreilich from Snow Kreilich Architects. The Hyde Lecture Series enables the program to bring in voices in design from both practice and teaching that elevate aspects of design related to regulatory context within the program.

Assessment

When assessing SC.3, we look to **ARCH 360: Site** to examine students' understanding of the fundamental principles of life safety, land use, and current laws and regulations that apply to buildings and sites in the United States, and the evaluative process architects use to comply with those laws and regulations as part of a project. The students who have passed the course have met these expectations and to better meet this criteria we have introduced a new project, two quizzes, and a self-assessment, beginning with Spring 2023. We will examine the same outcomes beginning in Spring 2024, and expect to see productive improvement of student learning.

The assessment method for the learning outcome includes one faculty-assessed project (Project 1), two quizzes, and one student self-assessment survey.

Project 1: The first project required students to work as studio cohorts to develop a comprehensive site context inventory and analysis booklet for their respective studio project sites. Each booklet was divided into multiple thematic sections and included a section focused specifically on regulatory context. **Week 4 Quiz:** based on the lecture materials covering land use, zoning, and environmental regulation. Quiz questions were grouped according to these topics. **Week 9 Quiz:** based on the lecture material on life safety, topography and grading, and accessibility. Quiz questions were grouped according to these topics. **Week 9 Self-Reflection Survey**: Students completed an initial content knowledge survey during the first week of the course in which they were asked to rate (on a scale of 1 to 5) their current understanding of five general topics: land use, zoning, life safety, regulation, and ecological responsibility. After eight weeks of coursework focused specifically on considerations of land use, zoning, life safety, and building regulation, students were asked to complete the survey again. The results of this midterm survey are outlined below:

Question 1: On a scale of 1 to 5 (with 1 being no understanding and 5 being expert understanding), how would you rate your current understanding of the concept of **land use**? The respondents answered with the following ratings: **22%**-5, **63%**-4, **15%**-3, **0%**-2, **0%**-1. This represents an increase from an average rating of 2.6 to an average of 4.1.

Question 2: On a scale of 1 to 5 (with 1 being no understanding and 5 being expert understanding), how would you rate your current understanding of the concept of **zoning**? The respondents answered with the following ratings: **25%**-5, **60%**-4, **15%**-3, **0%**-2, **0%**-1. This represents an increase from an average rating of 3.0 to an average of 4.1.

Question 3: On a scale of 1 to 5 (with 1 being no understanding and 5 being expert understanding), how would you rate your current understanding of the concept of **life safety**? The respondents answered with the following ratings: **23%**-5, **55%**-4, **22%**-3, **0%**-2, **0%**-1. This represents an increase from an average rating of 2.4 to an average of 4.0.

Question 4: On a scale of 1 to 5 (with 1 being no understanding and 5 being expert understanding), how would you rate your current understanding of the concept of
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regulation? The respondents answered with the following ratings: **8%**-5, **55%**-4, **33%**-3, **3%**-2, **0%**-1. This represents an increase from an average rating of 3.1 to an average of 3.7.

Prior to the beginning of the semester, the faculty worked in collaboration with the **ARCH 311** studio teaching team to develop the schedule and pacing of the course to ensure that the concepts reviewed and projects completed in **ARCH 360** could subsequently be utilized effectively within the **ARCH 311** studio projects. The results of the collected assessment points included the following:

Project 1: All four studio section groups completed this project. The groups received an average score of **89%** on the overall assignment and an average score of **92%** on the "Regulation" section of the assignment.

Week 4 Quiz: All 70 students enrolled in the course completed this quiz, with an average score of 87%. In evaluating the quiz results from a topical perspective, students received an average score of 81% on questions related to land use, an average score of 87% on questions related to zoning, and an average score of 84% on questions related to environmental regulation.

Week 9 Quiz: With one student withdrawing from the course midway through the term, 69 students completed this quiz, with an average score of **88%**. In evaluating the quiz results from a topical perspective, students received an average score of **88%** on questions related to life safety, an average score of **85%** on questions related to accessibility and parking requirements, and an average score of **90%** on questions related to grading and topography.

Week 9 Self-Reflection Sixty-nine (69) students took the initial survey, and 59 students took the midterm survey. The faculty member was encouraged to see a clear increase in student ratings of their own understanding of the key concepts of the course.

The recommendations for changes based on the above assessment points include plans to integrate a series of short, in-class exercises into each week of the course that will allow students to develop their understanding of the course concepts through individual investigation and application. **Project 1.0**: While this project was successful in allowing students to apply their knowledge of regulatory frameworks to their specific studio sites, there were limited opportunities for students to see how the same regulatory frameworks might apply to different site conditions. In future offerings of the course, each group will be required to present both their initial site inventory and their final site analysis to the entire class to provide them with another means of demonstrating their own understanding and provide an opportunity to see the varied influences of regulatory frameworks on drastically different project sites and building types.

Week 4 Quiz: While generally successful, this quiz evaluated student understanding through a series of multiple-choice questions. In subsequent offerings of the course, the course will expand the quiz to include a greater diversity of question types, including questions that require students to articulate their own understandings of key course concepts in short response or essay format.

Week 9 Quiz: Like the Week 4 quiz, this quiz evaluated student understanding through a series of multiple-choice questions. In subsequent offerings of the course, the course will expand the quiz to include a greater diversity of question types, including questions that require students to articulate their own understandings of key course concepts in short response or essay format.

Week 9 Self-Reflection: Overall, this survey was successful in evaluating student learning, and the course plans to assign it again next year. The faculty member set a goal of

increasing the participation rate to 100% and increasing the number of students selfindicating an Expert level of understanding within each category by 10% (~7 students) during the next course offering.

ARCH 360: Site Context Issues (3 CH) is assessed through our program's three-step framework for collecting, reflecting, and considering changes to the course. This framework for assessment is discussed in greater detail in Section 5.3. Additionally, the course instructor provided an assessment executive summary page that explains this process further and can be found in the <u>criterion assessment folder</u>.

SC.4 Technical Knowledge

How the program ensures that students understand the established and emerging systems, technologies, and assemblies of building construction, and the methods and criteria architects use to assess those technologies against the design, economics, and performance objectives of projects.

Program Response:

Our Approach

The program provides a holistic view of technical knowledge and prepares students to address future material use and construction challenges. We promote the application of technical knowledge that enhances building performance and awareness of environmental impacts, not just the use of technologies themselves. Technical knowledge is taught as a holistic, integrated framework laddering approach that builds up to ARCH 411/511i, resulting in a synthesis of the technical and the conceptual. Except for the combination of ARCH 430: Building Integration and ARCH 411/511i: design studios, the technology courses have supporting but not synchronous connections with studios. Instead, the courses are loosely coordinated with the studio syllabi: for example, a previous year or semester's building technology course(s) feeds into the applied knowledge of next semester's studio outcomes.

We achieve this approach by offering 6 courses (18 credit hours total) starting in the second year of the professional program. The sequence begins in the second year with ARCH 231: Structural Fundamentals and culminates in the fourth year with ARCH 430: Building Integration. Prior to entering the second year of the professional program, students take courses in the math (calculus), science (physics), and computation (computer application in design) components related to technical knowledge. These courses introduce technological principles of material, structure, and building systems that can be applied to subsequent content, eventually working toward the synthesis of technical resolution that co-exist in the architectural building.

Course Sequence

From the second through the fourth years, students take one main architecture (ARCH) building technology course per semester. In this approach, students are incrementally and consistently considering how technical resolutions inform architectural space, form, and materiality.

ARCH 231: Structural Fundamentals (3 CH) introduces concepts of structural support in buildings and covers the essentials of elements and systems and their response to the forces imposed upon them. Both historic and contemporary structures are included in this development of an understanding of structural function. Through case studies and illustrations, students gain further understanding of how structures work, and model demonstrations are incorporated into the course to provide a more tactile, hands-on learning experience. The course consists of the rudimentary study of various structural systems, their suitability, and the role they play as a design form determinant. This study is prefaced and supplemented with a brief initiation into basic physical principles and theory and behavior of

systems. Basic physical principles introduce elementary modes of action and their relationship with the typical materials and elements of which building structural systems are assembled. The discussion around the theory and behavior of systems focuses on design integration and appropriateness.

The course applies inquiry learning as the primary means for students to develop an inherent understanding of structural systems. Teaching practices that utilize a disposition of inquiry learning include problem-based learning (learning that begins with an ill-structured problem or case-study); project-based learning (where students create a project or presentation as a demonstration of their understanding); and design-based learning (learning through the working design of a solution to a complex problem). The course supports SC.4 and ARCH 430: Building Integration by introducing students to systems, technologies, and assemblies of building construction.

ARCH 232: Material and Assemblies (3 CH) introduces techniques used to make different types of buildings. The aim of the course is to demonstrate the implications of different factors (materiality, physical constraint, labor, skill, and technology) on projects from a diverse range of contexts. Students learn and reflect on different material assemblies, including engineered lumber, grid shell domes, masonry vaulting, precast cladding, and mass-customized systems, among others. The course supports SC.4 and ARCH 430: Building Integration by reinforcing student knowledge of systems, technologies, and assemblies of building construction and introducing students to the methods and criteria that architects use to assess these technologies against the design, economics, and performance objectives of projects.

ARCH 331: Structural Mechanics (3 CH) familiarizes students with statics and strengths of materials to establish a theoretical and scientific basis for understanding structural theory; the basic structural principles and systems related to concepts of stress, strain, and material properties; and connecting structural theory with application. The course uses the analytical study of problems to inform the successful design process working toward a solution. This approach involves emphasizing the representation of mechanics problems through graphics and mathematics to help students understand the geometric and physical meanings of applied forces on structural elements and systems. Students are expected to understand clarity of mechanics and the applicability of the basic principles and methods to structural element and system stability and hence, the resolution of forces. The course supports SC.4 and ARCH 430: Building Integration by reinforcing student knowledge of systems, technologies, and assemblies of building construction along with the methods and criteria that architects use to assess these technologies against the design, economics, and performance objectives of projects.

ARCH 332: Structural Optimization (3 CH) prepares students to identify and explain the basic issues of conceiving and manipulating structural design options, analyze and compare various subsystem layouts adequate for schematic and preliminary design, and connect structural theory with application. This course incorporates quantitative analysis, using formulas and calculations as needed for the approximate design of building structure elements. Students come to understand and communicate clearly about the basic types of structural forces, subsystems, and their interaction options as architectural form determinants, applying an overall approach to structural design appropriate for schematic and preliminary design purposes. They further develop an awareness of the fundamental compatibility between architectural and engineering design thinking. The course supports SC.4 and ARCH 430: Building Integration by reinforcing student knowledge of systems, technologies, and assemblies of building construction, along with the methods and criteria that architects use to assess these technologies against the design, economics, and performance objectives of projects.

ARCH 333: Environmental Systems (3 CH) discusses technical knowledge as the characteristics and performance of the built environment with respect to thermal and psychrometric characteristics in buildings related to human comfort, heat gain/loss, ventilation, natural energy systems, sustainable design principles, and plumbing and life safety systems in the built environment. The course supports SC.4 and ARCH 430: Building Integration by reinforcing student knowledge of systems, technologies, and assemblies of building construction, along with the methods and criteria that architects use to assess these technologies against the design, economics, and performance objectives of projects.

The course supports SC.4 and ARCH 430: Building Integration by reinforcing student knowledge of systems, technologies, and assemblies of building construction, along with the methods and criteria that architects use to assess these technologies against the design, economics, and performance objectives of projects.

ARCH 430: Building Integration (3 CH) is the program assessment point. The course examines the impact of systems, structure, and technologies of construction, the tectonic expression on architectural design, and establishes a reflexive relationship between idea and technique. This course systematically covers material that directly relates to the studio sequencing of the ARCH 411/511i: Integrate design studios. In the course students work both at the strategic level of the program and the tactical level of building technology as they continue to address architectural ethics in the design studio and technical resolution as defined in building codes and design practice. The course content is organized into the following categories: Module 1: Building Codes; Module 2: Building Materials, Assemblies, and Envelopes; Module 3: Building Services Systems and Performance; and Module 4: Technical Documentation.

Non-Curricular Activity

Several student organizations provide firm tours throughout the academic year, allowing students to gain exposure to the integration of technical knowledge. For the last several years, the College of Architecture has been a living laboratory for understanding building construction and integration. Several curricular and non-curricular activities have been able to observe this process unfold right in front of them. Additionally, the University is building a new music building adjacent to Architecture Hall, which will also serve as a learning tool for students. The College is fortunate to have several alumni return to the College and share their stories: for example, in Fall 2022, Richard A. Griffin hosted a Lunch and Learn to discuss his career in design and construction management. For several years, the program has partnered with Nebraska Masonry Alliance to host a student-centered hands-on block and brick wall assembly demonstration, where students are paired with brick masons to build a small mockup of a block and brick wall assembly. Additionally, students participate in several industry tours of Reimers Kaufman Concrete Products, Yankee Hill Brick & Tile, and Timberlyne.

Assessment

When assessing SC.4, we look to **ARCH 430: Building Integration** to examine students' understanding of the established and emerging systems, technologies, and assemblies of building construction, and the methods and criteria architects use to assess those technologies against the design, economics, and performance objectives of projects. Students work in the same teams as their design studio (ARCH 411 and ARCH 511i). The students who have passed the course have met these expectations and to better meet the criteria we have introduced assignments on Climate Studio and Energy Code, beginning with Spring 2022. We will examine the same outcomes beginning in Spring 2024 and expect to see productive improvement of student learning.

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The assessment method for the learning outcome includes a mix of individual and group assignments along with a quiz at the end of each module. Below are the data points from individual assignments, group assignments, group exercises, and the final exam.

Group Assignment – HVAC System. Students created three-dimensional HVAC diagrams to show their emerging systems and how hot and cold air could be both supplied and returned to and from a source. The grading criteria was focused on the student's ability to demonstrate their knowledge of a complete system throughout the building. Module 2 of the course covered building materials, assemblies, and the envelope. The course material was used by the students to complete their complete HVAC system. This assignment was assigned approximately three weeks before the final due date for the studio projects. This allowed us to go into depth for each group's projects and give feedback that was able to make it into their final production drawings. Average Grade – 79%

Group Exercise – Climate Studio. ARCH 430 introduced the students to Climate Studio, a technology that allows designers to produce realistic scenarios to measure environmental impact. Students utilized this technology to improve their design's environmental impact by developing multiple studies within the software to compare items such as carbon footprint, thermal analysis, and daylighting. This exercise was ungraded and was reflected in the students' final deliverables in their end of year submissions.

Group Assignment – Structural Model. Groups were tasked with designing the entire structural assembly. Module two's emphasis on the structural design was essential in the students' understanding of how the structural system would go together. This assignment required the students to look at the assembly of their building's construction of their designs from the ground up. This began with their ability to identify an appropriate footing and foundation. The students then had to look at how the vertical structural elements would tie into the foundation and be supported laterally by horizontal members. For multiple story projects, the students demonstrated the floor assembly of each level, calling out the materials and how they would be supported from the floor below. Average Grade – 95%

Individual Assignment – Cartoon Set. For the Cartoon Set assignment, students were able to take a look at their designs as a whole. Cartooning out their entire set, placing temporary images or narratives on different sheets had them asking and answering their design questions early in the process. This was an opportunity for the students to see how the entire design would come together and how they would be able to clearly and concisely convey their design intent at an early stage. Average Grade – 96%

Individual Assignment – Cost Estimate. The cost estimate assignment was based on module four's financial consideration topic. We had the students draw a portion of their typical exterior wall section in its entirety. Not only did they have to draw it, but they also had to come up with the quantity of material it would take to complete the assembly. The students were then able to take this information into an online tool called RSMeans. On this site, the students were able to input their wall assembly material data and see what the average cost would be to have this wall assembly constructed. Through the comparison of performance and economics, the students were able to adjust their assemblies and materials to drive the design to have the highest level of value. Average Grade – 97%

Individual Assignment – Energy Code. Students were asked to use the EPA Energy Star Target Finder to assess the performance objectives of their building's design. The material for all code assessments, including the energy code, was presented early in the semester during module one. This allowed the students to start off with a solid foundation and not have to make as many changes later in the semester. Students had to make design decisions such as roof type, wall type, and fenestration percentage to see how what kind of an impact these

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decisions would have on their overall site and source EUI (energy use intensity). Average Grade – 97%

Final Exam. An exam made up of 100 questions based on lectures and presentations throughout the semester. The exam was open note and also timed. The intent of the questions on the exam were to determine how efficiently students are able to find information that had been provided to them throughout the semester. Questions based on code, material, sustainability, and constructability were some of the main topics covered. Average Grade – 88%

The results from each assessment point are mentioned above. In addition, the end-ofsemester 'project book' submissions for the entire project intentionally addressed each of the topics that were covered in ARCH 430. Students have the resources to reflect on and apply the knowledge they gained through module one "Building Codes", module two "Building Materials, Assemblies and Envelope", module three "Building Service Systems and Performance", and module four "Technical Documentation" to deliver the most comprehensive projects possible.

The recommendations for changes based on the above assessment points include further coordination between ARCH 430 and the design studios. This coordination is essential to best align the learning outcomes between the two courses and faculty. Additional lectures and content are needed to support the student learning in the HVAC course module, which had the lowest test scores.

ARCH 430: Building Integration (3 CH) is assessed through our program's three-step framework for collecting, reflecting, and considering changes to the course. This framework for assessment is discussed in greater detail in Section 5.3. Additionally, the course instructor provided an assessment executive summary page that explains this process further and can be found in the <u>criterion assessment folder</u>.

SC.5 Design Synthesis

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.

Program Response:

Our Approach

At the center of the program curriculum is the synthetic design studio, where students integrate knowledge gained from support courses and other experiences into design projects in a creative, collaborative atmosphere. These courses are taken by both BSD and three-year M.Arch students. Each course enhances the curricular strand and integrates cumulative knowledge, with each strand supporting studio synthesis and building toward its own capstone. Starting in the second year, the program builds knowledge of each element of this criterion in a series of required core classes focusing on users, site conditions, accessible design, and environmental impacts. These are then integrated into the shaping of their design projects in ARCH 411/ARCH 511i. The rigor of the design strand provides an educational foundation for students and prepares them to think critically about the relationship between design and multiple variables that inform architectural decisions large and small. Three of the program's curricular strands, "Architectural Discipline," "Technique," and "Building Technology," are fully integrated with the "Design" strand during the fourth-year spring semester when the ARCH 411: Integrate design studio and ARCH 430: Building Integration culminate our mission statement of providing an "education foundation" rooted the ability to make thoughtful design decisions. These two courses conclude the undergraduate program and are considered the capstone of the core design sequence in which synthesis is

demonstrated via projects. The ARCH 511i: Integrate design studio is the equivalent offering to M.Arch program to 2M and 3M students. The following points describe ways each strand addresses the criteria:

- Architectural Disciplinary strand places attention on architectural knowledge itself—its history, its theories, and its core values. This strand supports students in learning a range of topics that spatially and culturally inform the built environment, building foundational knowledge that leads toward the ARCH 411: Integrate design studio and ends with ARCH 680: Professional Practice. This course integrates professional knowledge to stimulate an ethos of lifelong learning and an entrepreneurial mindset. As students embark on their careers they are equipped with the technical and professional knowledge to make intelligent and informed career decisions, even if they operate outside the traditional roles of the professions.
- Technique strand teaches specific graphic and information-based techniques and their use in architecture. After d.ONE, these courses are taught like workshops, and apart from ARCH 222: BIM for Design, most are electives. Students can also choose from advanced BIM courses on Parametric and Energy Modeling. There are a range of focused electives, including courses such as Innovative Timber Construction.
- The Building Technology strand focuses on specific aspects of building technology, such as architectural structures, materials, and environmental systems, and ends with a revised ARCH 430: Building Integration course that allows students to synthesize all areas of building design, including financial constraints, into a single project. This course is tied to the ARCH 411/511i studios and works in concert with them in the development of student projects during the term.
- The Design strand is the studio sequence in which students synthesize knowledge gained in the other strands into projects that increase in complexity as the sequence progresses. The undergraduate sequence ends with ARCH 411/511i: Integrate, a comprehensive architecture studio paired with ARCH 430, and M.Arch studios become Design Research Studios at the graduate level. Within the strand, faculty have the freedom to develop their own project briefs while meeting learning outcomes that build toward full integration. This openness enables students to experience diverse ways that architects make decisions and bring together different types of information relative to the variables of project type, size, and their sites.
- Finally, general education and focus areas are included as a series of electives: 21 credit hours at the undergraduate level and 27 credit hours at the graduate level (plus a 3 credit History/Theory Elective and 2 credits of Technique Electives). These courses, which enable students to cultivate their interests, often explore contemporary issues related to users, regulatory environments, site, accessible design, environmental impacts, and other topics. They add depth and breadth to the students' knowledge and their ability to synthesize understanding, make ethical judgments, and act appropriately during the practice of architecture.

Course Sequence

ARCH 210: Represent (5 CH) introduces knowledge of user requirements, material basics, and fundamentals of site conditions. Using reflective and projective representational techniques enables students to put this content to use in the ARCH 411: Integrate design studio and ARCH 430: Building Integration.

ARCH 211: Ideate (5 CH) also introduces knowledge of multiple parameters, including simple structures, programmatic organization, and basic material that informs design

synthesis. Students develop the ability to effectively and persuasively communicate an appropriate design position that is valuable for ARCH 411: Integrate design studio and ARCH 430: Building Integration.

ARCH 310: Organize (5 CH) introduces regulatory requirements, accessible design, and consideration of measurable environmental impact while reinforcing user requirements and site conditions learned in ARCH 210: Represent and ARCH 211: Ideate, which students then put to use in the ARCH 411: Integrate design studio and ARCH 430: Building Integration.

ARCH 311: Situate (5 CH) reinforces student knowledge of regulatory requirements, accessible design, consideration of measurable environmental impact, user requirements, and site conditions developed in previous studios. Students are then able to put this understanding to use in the ARCH 411: Integrate design studio and ARCH 430: Building Integration.

ARCH 360: Site (5 CH) also reinforces student knowledge of regulatory requirements, accessible design, consideration of measurable environmental impact, user requirements, and site conditions developed in previous courses, which students then put to use in the ARCH 411: Integrate design studio and ARCH 430: Building Integration.

DSGN: 410: Collaborate (5 CH) also reinforces student knowledge of regulatory requirements, accessible design, consideration of the measurable environmental impact, user requirements, and site conditions developed in previous courses. It does this through a collaborative environment in which diverse programs come together and students work in teams to integrate their previous knowledge into a design project. After learning from non-architecture majors in ARCH 410, students then put their disciplinary understanding to full use in the ARCH 411: Integrate design studio and ARCH 430: Building Integration.

ARCH 411 and ARCH 511i: Integrate (5 CH) is the program assessment point. This design studio challenges students to develop comprehensive building designs that respond to site, program, social, cultural, and technical demands. Students develop projects to a high degree of resolution while considering financial, sustainability, and constructional factors in all technical aspects of making buildings, including structural systems, environmental control systems, material selection, and building envelope design. These factors are considered not as impediments to creative expression, but as productive constraints that yield successful architectural proposals. Students also learn and apply technical documentation standards in their work, an effort that is supported by ARCH 430: Building Integration, which runs in parallel with this design studio. ARCH 430 focuses on integrated building structure, environmental systems, codes, and construction systems into a single project design developed between these parallel courses. The ARCH 411/511i design studio emphasizes the value of evolving and integrating building systems in parallel throughout the design process.

Non-Curricular Activities

The College of Architecture's Hyde Lecture Series bring in experts in the disciplines of Architecture, Interior Design, Landscape Architecture and Planning that enrich the ongoing dialog around agendas that are paramount to the professions and our graduates. Speakers frequently show evidence of what informed their thinking while demonstrating synthesis through specific design decisions on their projects.

Several student organizations provide firm tours throughout the academic year, allowing students to gain exposure to the integration of design synthesis. For the last several years the College of Architecture has been a living laboratory for understanding building construction and integration. Several curricular and non-curricular activities have taken

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advantage of seeing and observing the process unfold right in front of them. Additionally, the University is building a new music building adjacent to Architecture Hall, which will also serve as a learning tool for students. The College is fortunate to have several alumni come back to the College and share their stories: for example, in Fall 2022, Richard A. Griffin hosted a Lunch and Learn to discuss his career in design and construction management. For several years, the program has partnered with Nebraska Masonry Alliance to host a student-centered hands-on block and brick wall assembly demonstration, where students are paired with brick masons to build a small mockup of a block and brick wall assembly. Additionally, students participate in several industry tours of Reimers Kaufman Concrete Products, Yankee Hill Brick & Tile, and Timberlyne.

Assessment

When assessing SC.5, we look at **ARCH 411, ARCH 511i: Integrate (5 CH)** and **ARCH 430: Building Integration (3 CH)**, to examine students' 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. The students who have passed the course have met these expectations and to better meet the criteria we have annually revised the project booklet with emphasis on consideration of environmental impact and accessible design, beginning with Spring 2021. We will continue to examine the same outcomes in Spring 2024, and expect to see productive improvement of student learning.

ARCH 430: Building Integration (3 CH). Students had a mix of individual and group assignments along with a quiz at the end of each module. Below are the data points from individual assignments, group assignments, group exercises, and the final exam.

Individual Assignment – Energy Code. Students were asked to use the EPA Energy Star Target Finder to assess how their building designs would perform against the national average building of similar type. Through this assignment, there was an emphasis on how to design the best system that were both environmentally friendly and most comfortable in regards to the user requirements. By meeting the energy code requirements, each student had to make design decisions such as roof type, wall type, and fenestration percentage to see how what kind of an impact these decisions would have on their design's overall energy performance. Average Grade – 97%

Individual Assignment – Code Search. Each student was asked to research an assigned International Building Code term introduced to them during module one. The grading criteria for this assignment included identification, definition, interpretation, and a simple sketch was graded for accuracy and completeness. Average Grade 94%

Group Exercise – Climate Studio. ARCH 430 introduced the students to Climate Studio, a technology that allows designers to produce realistic scenarios to measure environmental impact. The students utilized this technology to improve their design's environmental impact by developing multiple studies within the software to compare items such as site conditions, carbon footprint, thermal analysis, and daylighting. This exercise was ungraded and was reflected in the student's final deliverables in their end of year submissions by displaying the measurable environmental impact their design decisions led to. Many students ran through multiple iterations incorporating the different site conditions that their project had to offer. This has an impact on the final design of their building's location, geometry, window placement, and window shading.

Group Assignment – Egress Diagram. The egress diagram incorporated all of the module one information the students had been introduced to. Not only did the egress diagrams require an understanding of the International Building Code, it also required them to demonstrate their understanding of accessible design. The designs had to represent a floor

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plan meeting all of the requirements in the 2010 ADA standards. The student's studies produced accessible designs in terms of door approach, fixture clearances, and the height of countertops. Average Grade – 79%

Final Exam. An exam made up of 100 questions based on lectures and presentations throughout the semester. The exam was open note and timed. The intent of the questions on the exam was to determine how efficiently students can find information that had been provided to them throughout the semester. Questions based on code, material, sustainability, and constructability were some of the main topics covered. Average Grade - 88% The results from each assessment point are mentioned above. Students are encouraged to observe their overall designs throughout the course. Beginning with the understanding of the regulations they had to abide by students were able to find interesting ways to push their designs to a high level. Even the thought process behind their site selection and orientation coupled with their attention to detail when it came to measurable environmental impacts sets a mental precedent for them to be intentional in what they do. While they are working on their structural layout, they are considering the MEP implications. While they are designing their HVAC system, they are also thinking about how it may impact the design of their wall assemblies. Understanding the structural, HVAC, environmental, and architectural systems and how they are able to work together is a skill that is sharpened with each passing lesson and assignment. The end of the semester submissions for the entire project intentionally addressed each of the topics that were covered in ARCH 430. Students have the resources to reflect on and apply the knowledge they gained through module one "Building Codes". module two "Building Materials, Assemblies and Envelope", module three "Building Service Systems and Performance", and module four "Technical Documentation" to deliver the most comprehensive projects possible. The intent of this class was to make sure the students are aware of what they are deciding and why they are deciding it. The thought, knowledge, and attention to detail required when it comes to design was portrayed within the curriculum of ARCH 430.

The recommendations for changes based on the above assessment points include further coordination between ARCH 430 and the design studios. This coordination is essential to best align the learning outcomes between the two courses and faculty. Additional lectures and content is need to support the student learning in the egress course module.

ARCH 411 and ARCH 511i (5 CH). All of the learning objectives and student performance criteria are assessed through the primary deliverable for ARCH 411, ARCH 511i, and ARCH 430, which is the project book developed in the studio with coordinated assistance from ARCH 430. The book covers in-depth documentation of each student team's studio project for the term. The project book has required sections that must be completed for each team's project that specifically target SC.5 listed below:

User Requirements. Communicate the analysis of user requirements that directly inform the design project and demonstrate the critical reflection of this analysis with supported conclusions. **Regulatory Requirements.** Communicate the regularity requirements for the project through graphics and text. **Site Conditions.** Communicate the analysis of site conditions that directly inform the design project and demonstrate the critical reflection of this analysis with supported conclusions. **Site and Building Plan – Accessible Design.** Originate and effectively represent a design solution for the site and building plan that demonstrates the accommodation and integration of the project concept, site, program, regulatory requirements, accessible design, and other key constraints in the project to produce rich spatial experiences with significant cultural/disciplinary impact. **Environmental Impact.** Demonstrate and communicate the use of environmental impact measures to improve the project's design.

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The ARCH 411, ARCH 511i, and ARCH 430 teaching team, comprised of all of the instructors of each ARCH 411 and ARCH 511i design studio section and the instructor for ARCH 430, meet as a group at the end of the term to review the final project books for all student projects. The team looks over each project book and assigns a "Passing" or "Failing" designation in relation to how these books fulfill the listed SC.5 criteria. The results for all student team projects from all sections of ARCH 411 and ARCH 511i are listed below:

User Requirements. 90% Passing C and above, 10% Failing C- and below.

<u>Grading Rubric:</u> C: Adequate. Acceptable graphic and written communication of the user requirements that mostly supports the design synthesis strategy but may have some errors or missing elements.

Regulatory Requirements. 97% Passing C and above, 3% Failing C- and below.

<u>Grading Rubric:</u> C: Adequate. Acceptable graphic and written communication of the regulatory requirements of the project that has some errors.

Site Conditions. 90% Passing C and above, 10% Failing C- and below.

<u>Grading Rubric:</u> C: Adequate. Acceptable graphic and written communication of the site conditions that mostly supports the design synthesis strategy but may have some errors or missing elements.

Site and Building Plan – Accessible Design. 82% Passing C and above, 18% Failing Cand below.

<u>Grading Rubric:</u> C: Adequate. The site and building plans are moderately original and are mostly effective in addressing the stated project goals, user requirements, regulatory requirements, site conditions, and accessible design, while producing mostly appropriate functional and qualitative spatial experiences with low cultural/disciplinary impact. Adequate representation through text, annotations, and graphics with some minor errors.

Environmental Impact. 80% Passing C and above, 20% Failing C- and below.

<u>Grading Rubric:</u> C: Adequate. Basic use of environmental impact measures that only improves the design in minor ways. These projects demonstrate a basic process for using environmental impact measures to inform the design that may be trivial, or partially developed. They demonstrate a basic understanding of the principles involved with the environmental impact measure(s) being explored. Adequate representation through text, annotations, and graphics with little to some minor errors.

The performance on the SC.5 criteria was quite high and improved from the previous year. The weakest area in previous years had been consideration of environmental impact, and the teaching team observed that students had improved in this area significantly, but that this was still the criteria with the lowest passing rate at 80%. The team also observed that accessible design had the second-lowest passing rate of 82%. In addition to these areas in need of improvement, the team also identified several challenges in teaching the studio:

- The number of requirements in the studio is a challenge.
- The workflow that students are using for technical drawing seems inefficient.
- Instructors must do heavy instruction on technical systems.
- Every studio had 1-2 team dynamic issues, making fair grading difficult if one team member is doing all the work.

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These results were then presented to the faculty of the Architecture Program during the Endof-Semester Review of Work for discussion. The faculty noted the improvement of the projects in general and specifically the improvements in student performance on the use of environmental impact assessments in the design process.

The ARCH 411 and ARCH 511i teaching team discussed several ways to address the challenges listed above. To improve the passing rate in accessible design and environmental impact, the team will emphasize these more through intermediate checkpoints in the term. To reduce the workload for students and faculty, the team discussed the possibility of removing the SC.5 criteria from ARCH 411 and ARCH 511i but leaving the SC.6 criteria in. Another idea to address the workload issue is to reduce the number of required graded items in the project book and streamline activities where possible. The team will, therefore, work to streamline the project book in future versions of the course.

In terms of improving students' technical drawing workflow, the team discussed how earlier courses in the sequence might help develop these skills, and how they might also began developing resources to help students build more efficient drafting skills. The teaching team also proposed the need for a better strategy to deal with team dynamic issues, which will be developed for the next offering of the course.

ARCH 411 (5 CH), ARCH 511i (5 CH), and ARCH 430: Building Integration (3 CH), are assessed through our program's three-step framework for collecting, reflecting, and considering changes to the course. This framework for assessment is discussed in greater detail in Section 5.3. Additionally, the course instructor provided an assessment executive summary page that explains this process further and can be found in the <u>criterion</u> assessment folder.

SC.6 Building Integration

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.

Program Response:

Our Approach

Three of the program's curricular strands, "Architectural Discipline," "Building Technology," and "Technique," are fully integrated with the "Design Synthesis" strand during the fourth-year spring semester, when the ARCH 411: Integrate design studio and ARCH 430: Building Integration culminate our mission statement to provide an "education foundation" rooted in thoughtful design decisions. The courses conclude the undergraduate program and are considered the capstone of the core design sequence in which building integration is demonstrated, while ARCH 511i: Integrate is equivalent design studio offered in the M.Arch program to 2-year and 3-year students.

Starting in the second year, the program builds student knowledge of each element of this criterion in a series of required core classes focusing on building organization, structures, building assemblies, envelope systems, mechanical systems, site context issues, life safety systems, the measurable outcomes of building performance, and construction documents. These courses are taken by both undergraduate and three-year M.Arch students. The rigor of the design strand provides a foundation for students to work toward full building integration and prepares them to think critically about ways to integrate multiple forms of input in their decision-making process that leads to thoughtful and well-resolved work.

Course Sequence

The **ARCH 210: Represent (5 CH)** design studio is the first studio in the Architecture program sequence, and it introduces architectural design through reflective and projective techniques. Course assignments focus on fundamental ways in which people, matter, environment, and disciplinary content inform design decisions. The projects in the studio grow in scale and complexity, which demands they rehearse more difficult forms of integration. The course introduces students to material selection, structural systems, and life safety elements of SC.6 that build towards their application in ARCH 411: Integrate design studio.

ARCH 231: Structural Fundamentals (3 CH) follows the belief that architects must first develop an intuitive understanding of structure before learning the deductive formulas and quantitative principles behind structure performance. As such, this course introduces students to the basic "rules of thumb" associated with common structural systems. Students gain an understanding of stand structural systems and the forces that share them while developing an ability to compare and contrast different structural systems and learning how they behave as form determinates in architectural design. The course covers historical as well as contemporary case studies and provides hands-on learning experience to help students develop a tacit knowledge of basic structural principles that will aid them in future design projects.

ARCH 211: Ideate (5 CH) is a design studio that focuses on ways designers generate and develop architectural ideas. Students consider multiple parameters, including structure, material, form, function, and representation and how they collectively inform architectural ideas. Students also learn to effectively and persuasively communicate design positions with regard to appropriateness, novelty, and clarity. The course reinforces student preliminary knowledge of envelope systems and assemblies, structural systems, and life safety, which build toward their use in the ARCH 411: Integrate design studio.

ARCH 232: Materials and Assemblies (3 CH) teaches students to think through materials, assemblies, and how they influence contemporary approaches to building design. The course covers a range of material and standard assemblies, as well as emerging practices. Students learn the basic principles of building envelope (wall and roof) construction as influenced by thermal performance, climate and moisture, sustainable practices, cost, and constructability. Ultimately, the course aims to help students make intelligent and informed decisions about material selection and building construction systems while reinforcing student knowledge of envelope systems, assemblies, and building performance in support of the ARCH 411: Integrate design studio.

The **ARCH 310: Organize (5 CH)** design studio draws on content from ARCH 262: Building Organization, asking students to develop or critique a complex building program and explore resulting normative and experimental spatial configurations. The course introduces students to environmental control systems and measurable outcomes of building performance while reinforcing envelope systems and assemblies, structural systems, and life safety in support of the ARCH 411: Integrate design studio.

ARCH 311: Situate (5 CH) is a third-year design studio that aims to give students an understanding of the relationships between site, design ideas, and architecture at multiple scales. Through two team-based design projects, students consider the effects of more variables than previous studios, including topography, site conditions, ecology, climate, and cultural issues on design decisions. The complexities of site and their experiences are primary factors that shape judgement and integration. The course reinforces student knowledge of building envelope systems and assemblies, structural systems, life safety systems, and introduces measurable outcomes of building performance through software (Cove Tool and Climate Studio) in support of the ARCH 411: Integrate design studio.

ARCH 333: Environmental Systems (3 CH) addresses the characteristics and performance of building with respect to thermal and psychrometric environments in buildings related to human comfort, heat gain/loss, ventilation, natural energy systems and sustainable design principles, and plumbing and life safety systems in the built environment. Upon completing the course, students will be able to apply the principles of plumbing, fire protection, heating, ventilating, and air-conditioning necessary to create a safe, healthy, and productive building environment. This includes learning how to effectively balance mechanical criteria such as thermal properties, installation cost, energy efficiency, human comfort, life safety, sustainability, and other factors to produce a more holistic view of a building's performance.

ARCH 411 (5 CH) and ARCH 511i: Integrate (5 CH) is the program assessment point. This design studio challenges students to develop comprehensive building designs that respond to site, program, social, cultural, and technical demands that can be fully integrated into their proposals. Students develop these integrative projects to a high degree of resolution while considering sustainable and constructional factors in all technical aspects of making buildings. These including structural systems, environmental control systems, life safety, material selection, and building envelope and assembly design, and the measurable outcomes of building performance. These factors are considered not as impediments to creative expression, but as productive constraints that yield successful architectural proposals. Students also learn and apply technical documentation standards in their work, an effort that is supported by ARCH 430: Building Integration (3 CH), which runs in parallel with this design studio. ARCH 430 focuses on integrated building design strategies, and students learn to integrate design ideas, site conditions, building structure, environmental systems, codes, and construction systems into a single project design developed between these parallel courses. The ARCH 411/511i design studio emphasizes the value of evolving and integrating building systems in parallel throughout the design process.

Non-Curricular Activities

The College of Architecture's Hyde Lecture Series brings in experts in the disciplines of Architecture, Interior Design, Landscape Architecture and Planning that enrich the ongoing dialog around agendas that are paramount to the professions and our graduates. Speakers frequently show evidence of what informed their thinking while demonstrating synthesis through specific design decisions on their projects.

Several student organizations provide firm tours throughout the academic year, allowing students to gain exposure to the integration of building integration. For the last several years, the College of Architecture has been a living laboratory for understanding building construction and integration. Several curricular and non-curricular activities have taken advantage of seeing and observing the process unfold right in front of them. Additionally, the University is building a new music building adjacent to Architecture Hall, which will also serve as a learning tool for students. The College is fortunate to have several alumni come back to the College and share their stories: for example, in Fall 2022, Richard A. Griffin hosted a Lunch and Learn to discuss his Design and Construction Management career. For several years, the program has partnered with Nebraska Masonry Alliance to host a student-centered hands-on block and brick wall assembly demonstration, where students are paired with brick masons to build a small mockup of a block and brick wall assembly. Additionally, students participate in several industry tours of Reimers Kaufman Concrete Products, Yankee Hill Brick & Tile, and Timberlyne.

Assessment

When assessing SC.6, we look to ARCH 411 (5 CH), ARCH 511i (5 CH) and ARCH 430: Building Integration (3 CH), to examine students' 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. The students who have passed the course

have met these expectations and to better meet the criteria we have annually revised the project booklet with emphasis on consideration of building performance and Wall Sections and Details, beginning with Spring 2021. We will continue to examine the same outcomes in Spring 2024 and expect to see productive improvement of student learning.

All of the learning objectives and student performance criteria are assessed through the primary deliverable for ARCH 411, ARCH 511i, and ARCH 430, which is the project book, which is developed in the studio with coordinated assistance from ARCH 430. The extensive and detailed book documents each student team's studio project for the term. The project book has required sections that must be completed for each team's project that specifically target SC.6 listed below:

Building Integration – Wall Sections and Details

Originate and effectively represent a design solution for building integration that demonstrates the integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, the measurable outcomes of building performance, and the conceptual objectives of the project to produce rich spatial experiences with significant cultural/disciplinary impact.

Structure

Originate and effectively represent a design solution for the structure of the project that demonstrates the integration of architectural systems, the project concept, and other key constraints in the project to produce rich spatial experiences with significant cultural/disciplinary impact.

Environmental Systems

Originate and effectively represent a design solution for the project's environmental systems that supports the project concept and objectives while fulfilling technical requirements and producing functional and comfortable architectural spaces.

Life/Safety and Egress

Originate and effectively represent a design solution for life/safety and egress that supports the larger project concept and goals, meets code requirements, and produces rich spatial experiences.

Building Performance

Demonstrate and communicate the use of measurable building performance measures to improve the integration of architectural systems.

The ARCH 411, ARCH 511i, and ARCH 430 teaching team, comprised of all of the instructors of each ARCH 411 section and the instructor for ARCH 430, meet as a group at the end of the term to review the final project books for all ARCH 411 and ARCH 511i student projects. The team reviews each project book and assigns a "Passing" or "Failing" designation in relation to how these books fulfill the listed SC.6 criteria. The results for all student team projects from all sections of ARCH 411 and ARCH 511i are listed below:

Building Integration – Wall Sections and Details. **83%** Passing C and above, **17%** Failing C- and below.

<u>Grading Rubric:</u> C: Adequate. The building integration design is moderately original and is mostly effective in addressing the stated project goals and regulatory requirements through the integration of building envelope, structural, environmental, life/safety, and building performance analysis, while producing mostly appropriate functional and qualitative spatial experiences with low cultural/disciplinary impact. These projects demonstrate a lack of understanding of some of the principles of the systems and their integration with a few

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significant errors. These projects provide representation of a building integration strategy through text and graphics that is mostly clear but with some significant errors in craft and/or content.

Structure. 93% Passing C and above, 7% Failing C- and below.

<u>Grading Rubric:</u> C: Adequate. The structural design of the project is moderately original and is mostly effective in addressing the stated project goals, user requirements, regulatory requirements, site conditions, and integrating environmental, life/safety, building envelope assemblies with the structural system. These projects evidence a basic awareness of most structural principles but with some errors in the structural design. Adequate representation through text, annotations, and graphics with some minor errors.

Environmental Systems. 93% Passing C and above, 7% Failing C- and below.

<u>Grading Rubric:</u> C: Adequate. The environmental system design of the project is moderately original and is mostly effective in addressing the stated project goals, user requirements, regulatory requirements, and site conditions. These projects evidence a basic awareness of the principles involved with each environmental system but with some errors in their application. Adequate representation through text, annotations, and graphics with some minor errors.

Life/Safety and Egress. 93% Passing C and above, 7% Failing C- and below.

<u>Grading Rubric:</u> C: Adequate. The life/safety and egress design is mostly effective in supporting the larger project concept and goals, meeting code requirements, while producing mostly appropriate functional and qualitative spatial experiences. Adequate representation through text, annotations, and graphics with little to some minor errors.

Building Performance. 83% Passing C and above, 17% Failing C- and below.

<u>Grading Rubric:</u> C: Adequate. Basic use of measurable building performance measures that only improves the design in minor ways. These projects demonstrate a basic process for using building performance measures to inform the design that may be trivial, or partially developed. They demonstrate a basic understanding of the principles involved with the building performance measure(s) being explored. Adequate representation through text, annotations, and graphics with little to some minor errors.

The performance on the SC.6 criteria was quite high and improved from the previous year. The weakest area was in the consideration of building performance, with a passing rate at 83%, though this was an improvement from the previous year. "Building Integration – Wall Sections and Details" had the same passing rate. The teaching team observed that the students failing these areas were typically in the lowest-performing percentile for other grading criteria as well. These students had significant problems understanding, designing, and representing the technical systems and control layers involved in the building envelope.

In addition to these areas in need of improvement, the team also identified several challenges in teaching the studio:

- The number of requirements in the studio is a challenge.
- The workflow that students are using for technical drawing seems inefficient.
- Instructors must do heavy instruction on technical systems.
- Every studio had 1-2 team dynamic issues, making fair grading difficult if one team member was doing all the work.

These results were then presented to the faculty of the Architecture Program during the Endof-Semester Review of Work and discussed. The program faculty noted the improvement of the projects in general, and specifically the improvements in student performance on the use of building performance assessments in the design process.

The ARCH 411, ARCH 511i, and ARCH430 teaching team discussed several ways to address the challenges listed above. To improve the passing rate in building integration and measurable building performance, the team will emphasize these more through intermediate checkpoints in the term. To reduce the workload for students and faculty in ARCH 411 and ARCH511i, the team discussed the possibility of taking the SC.5 criteria out of ARCH 411 and ARCH 511i but leaving SC.6 in. Another idea to address the workload issue is reducing the number of required graded items in the project book and streamlining activities where possible, and the team will work to streamline the project book in future versions of the course. In terms of improving students' technical drawing workflow, the team discussed how earlier courses in the sequence might help develop these skills, and they began developing resources to help students build more efficient drafting skills. The teaching team also proposed the need for a better strategy to deal with team dynamic issues. This strategy will be developed for the next offering of the course.

ARCH 411 (5CH), 511i (5 CH), and **ARCH 430: Building Integration (3 CH)** are assessed through our program's three-step framework for collecting, reflecting, and considering changes to the course. This framework for assessment is discussed in greater detail in Section 5.3. Additionally, the course instructor provided an assessment executive summary page that explains this process further and can be found in the <u>criterion assessment folder</u>.

4—Curricular Framework

This condition addresses the institution's regional accreditation and the program's degree nomenclature, credit-hour and curricular requirements, and the process used to evaluate student preparatory work.

4.1 Institutional Accreditation

The APR must include a copy of the most recent letter from the regional accrediting commission/agency regarding the institution's term of accreditation.

Program Response:

The Higher Learning Commission completed a comprehensive evaluation on January 23, 2017 for the University of Nebraska, which resulted in "Continue Accreditation" as of May 15, 2017. The most recent letter of re-accreditation can be found <u>at the following link</u>.

4.2 Professional Degrees and Curriculum

The NAAB accredits professional degree programs with the following titles: the Bachelor of Architecture (B. Arch.), the Master of Architecture (M. Arch.), and the Doctor of Architecture (D. Arch.). The curricular requirements for awarding these degrees must include professional studies, general studies, and optional studies.

4.2.1 Professional Studies

Courses with architectural content required of all students in the NAAB-accredited program are the core of a professional degree program that leads to licensure. Knowledge from these courses is used to satisfy Condition 3—Program and Student Criteria. The degree program has the flexibility to add additional professional studies courses to address its mission or institutional context. In its documentation, the program must clearly indicate which professional courses are required for all students.

Programs must include a link to the documentation that contains professional courses are required for all students.

Program Response

Bachelor of Science in Design – Architectural Studies, 120 credits for degree (non-professional degree)

The Professional Program in architecture is a six-year course of study that includes a oneyear pre-professional segment, a three-year core segment culminating in the award of the Bachelor of Science in Design (BSD-Architectural Studies), and culminates in the final twoyear exploratory segment that results in the receipt of the professional master of architecture degree (M.Arch). See the <u>BSD-Architectural Studies flow chart</u> for course sequencing.

After completing the d.ONE curriculum common to all undergraduates in the College of Architecture, students apply for admission into the architecture program's professional program. The professional Program in architecture consists of two components: the fouryear Bachelor of Science in Design (BSD-Architectural Studies) and the subsequent two-year Master of Architecture (M.Arch). In addition, both the BSD-Architectural Studies and the M.Arch programs are STEM accredited. Upon the completion of the BSD-Architecture Studies, students in good standing will complete an abbreviated application with a statement of professional goals to be considered for admission into the M.Arch program.

Students must earn at least a C (2.0) in all courses with an ARCH and DSGN prefix to earn credit toward their degree. Students will be required to retake all required core courses with a grade of C- or below, but will not be required to repeat courses that were taken as electives.

Although the Bachelor of Science in Design degree is an integral part of the professional Program in architecture, it should be clearly understood that the undergraduate BSD is not a

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professional degree and is not separately accredited by the National Architectural Accrediting Board. Most state registration boards will not acknowledge any degree unless accompanied by an accredited professional degree. The first accredited professional degree awarded by the College of Architecture is the Master of Architecture degree, which is awarded at the successful conclusion of the Professional Program in architecture: the 2-year M.Arch (2M) and 3-year M.Arch (3M). This is the only accredited professional architecture Program in the state of Nebraska, and it is structured to develop highly competent professional architects capable of performing effectively in an evolving discipline. A full list of required professional courses and credit hours can be found in Section 4.2.5.

Master of Architecture, four semesters, 58-credit Program.

The STEM-designated, 2-year M.Arch (2M) Program is designed for students wishing to pursue a master's degree in architecture after receiving a bachelor's degree in architectural studies. Students graduating from this National Architectural Accreditation Board (NAAB) accredited Program can work toward becoming a licensed architect. 2M students also have the ability to obtain a dual degree in <u>Community and Regional Planning</u> (CRPL) and <u>Business</u> (MBA). See the <u>2-year M. Arch flow chart</u> for course sequencing. A full list of required professional courses and credit hours can be found in Section 4.2.5.

Master of Architecture, six semesters, 92-credit Program.

The STEM-designated, 3-year M.Arch (3M) Program is designed for students wishing to pursue a master's degree in architecture after receiving a bachelor's degree in another field. Students graduating from this National Architectural Accreditation Board (NAAB) accredited Program can work toward becoming a licensed architect. The 3M Master of Architecture curriculum begins with foundational first-year core courses, after which students are integrated in with the 2M students. We are actively trying to grow the 3M degree path, which has seen an increase in enrollment from UNL undergraduate interior design students and an increase in total enrollment to 9 students in Fall 2023. See the <u>3-year M.Arch flow chart</u> for course sequencing. A full list of required professional courses and credit hours can be found in section 4.2.5.

The 2M and 3M curriculums integrate Design Research Studios, professional electives, and lecture-based courses. The heart of the Master of Architecture Program is the design-research studio. This intensive educational environment positions architectural exploration as a research protocol situated between the creative agendas of the arts and the technological methodologies of the sciences. These studios prepare students to be self-motivated professionals capable of using design to work through complex problems and generate new architectural knowledge as they engage in design and research agendas of contemporary significance. In these studios, students are co-researchers with faculty, creating new ideas rather than simply consuming knowledge. During the Program, students select a completion track of either a sequence of Design Research Studios or a two-semester Design Thesis. M.Arch students also have the option of traveling to London, Paris, and/or Barcelona.

4.2.2 General Studies

An important component of architecture education, general studies provide basic knowledge and methodologies of the humanities, fine arts, mathematics, natural sciences, and social sciences. Programs must document how students earning an accredited degree achieve a broad, interdisciplinary understanding of human knowledge.

In most cases, the general studies requirement can be satisfied by the general education program of an institution's baccalaureate degree. Graduate programs must describe and document the criteria and process used to evaluate applicants' prior academic experience relative to this requirement. Programs accepting transfers from other institutions must document the criteria and process used to ensure that the general education requirement was covered at another institution.

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Programs must state the minimum number of credits for general education required by their institution <u>and</u> the minimum number of credits for general education required by their institutional regional accreditor.

Program Response:

The Architecture Program requires 30 undergraduate credit hours of general studies courses, which meets the University's <u>Achievement-Centered Education</u> (ACE) program criteria. Within the 30 ACE credit hours, students are required to take Calculus (MATH 104), English Composition (ENGL 150/151), Communications (COMM 286), and Physics (PHYS 151), of which Calculus, English Composition, and Communications are prerequisites for entering the second year of any undergraduate Professional Program (Architecture, Interior Design, Landscape Architecture). The remaining ACE credit hours are met within the architecture curriculum: for example, ARCH 241: History and Theory I meets ACE 7: "use knowledge, theories, or methods appropriate to the arts to understand their context and significance."

Additionally, undergraduate students have 18 open electives, which provide them with the opportunity for an undergraduate minor. Students can minor in Community Regional Planning, Landscape Architecture, or Product Design within the College of Architecture, or any minor offered by the university.

Undergraduate transfer course work is rigorously reviewed by the UNL Undergraduate Admissions Office and transfer experts in the College of Architecture. Our advising team uses tools such as <u>"Transferology"</u> and an established list of <u>transfer course equivalencies</u> that have been evaluated to determine transfer credit for general studies courses. General studies electives obtained at the undergraduate level are not re-evaluated for entry into the Master of Architecture Program.

The 2-year M.Arch (2M) Program requires six credits of outside general electives, three credits of college electives, and three credits of open electives. The 3-year M.Arch (3M) Program requires three credits of college electives and three credits of open electives.

The Architecture Program accepts transfer students into the undergraduate Program and external applicants into the M.Arch 2-year and M.Arch 3-year Programs. Prior to being admitted to the programs, the student transcripts, syllabus, and portfolio (if applicable) are reviewed by the Program director and a <u>Student Transfer Review Form</u> is completed to consider course equivalents taken at another institution. M.Arch students enrolled in 200-, 300- or 400-level courses must receive a "B" or better to pass. All new or transfer students, regardless of previous courses taken, are required to take the Integrate design studio (ARCH 411 or ARCH 511i) and ARCH 430.

4.2.3 Optional Studies

All professional degree programs must provide sufficient flexibility in the curriculum to allow students to develop additional expertise, either by taking additional courses offered in other academic units or departments, or by taking courses offered within the department offering the accredited program but outside the required professional studies curriculum. These courses may be configured in a variety of curricular structures, including elective offerings, concentrations, certificate programs, and minors.

The program must describe what options they provide to students to pursue optional studies both within and outside of the Department of Architecture.

Program Response:

The Program supports and encourages students to pursue optional studies such as double majors/minors/certificates by providing room in the curriculum to pursue these paths. Undergraduate students have twelve credit hours of ACE requirements and eighteen credit hours of open electives, allowing them to obtain a non-professional undergraduate minor.



M.Arch 2-year (2M) students can take eighteen credit hours of "ARCH" designated elective courses, three credits of college (IDES, DSGN, LARC, CRPL) designated elective courses, three credits of an open elective, and six credits outside the College of Architecture. M.Arch 3-year (3M) students can take nine credit hours of "ARCH" designated elective courses, three credits of college (IDES, DSGN, LARC, CRPL) designated elective courses, and three credits of an open elective. This encourages M.Arch-level students to author their own educations and learning ownership with opportunities for specialization.

M.Arch 2-year (2M) students have the ability to obtain a dual degree in <u>Community and</u> <u>Regional Planning</u> (CRPL) and <u>Business</u> (MBA). Students may also choose to enroll in the Community and Regional Planning (CRPL) Program's <u>Urban Design Certificate.</u>

NAAB-accredited professional degree programs have the exclusive right to use the B. Arch., M. Arch., and/or D. Arch. titles, which are recognized by the public as accredited degrees and therefore may not be used by non-accredited programs.

Programs must list all degree programs, if any, offered in the same administrative unit as the accredited architecture degree program, especially pre-professional degrees in architecture and post-professional degrees.

Program Response:

Bachelor Science in Design – Architectural Studies, 120 credits for degree (non-professional degree)

Master of Architecture 2-year (2M), 58 credits for degree (professional degree) Master of Architecture 3-year (3M), 92 credits for degree (professional degree)

Master of Science-Architecture, 36 credits for degree (non-professional degree)

The number of credit hours for each degree is outlined below. All accredited programs must conform to minimum credit-hour requirements established by the institution's regional accreditor. Programs must provide accredited degree titles, including separate tracks.

4.2.4 Bachelor of Architecture

The B. Arch. degree consists of a minimum of 150 semester credit hours, or the quarter-hour equivalent, in academic coursework in general studies, professional studies, and optional studies, all of which are delivered or accounted for (either by transfer or articulation) by the institution that will grant the degree. Programs must document the required professional studies courses (course numbers, titles, and credits), the elective professional studies courses (course numbers, titles, and credits), the required number of credits for general studies and for optional studies, and the total number of credits for the degree.

Program Response:

N/A

4.2.5 Master of Architecture

The M. Arch. degree consists of a minimum of 168 semester credit hours, or the quarter-hour equivalent, of combined undergraduate coursework and a minimum of 30 semester credits of graduate coursework. Programs must document the required professional studies classes (course numbers, titles, and credits), the elective professional studies classes (course numbers, titles, and credits), the required number of credits for general studies and for optional studies, and the total number of credits for both the undergraduate and graduate degrees.

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Program Response:

See the charts below for a list of required courses and credit hours.

Undergraduate Courses:

Required Prof Courses		Elective Prof courses		General Studies		Optional Studies	
Course #s & Titles	crds	Course #s & titles	crds		crds		crds
DSGN 101: Introduction to Design	2	Elective (ACE 6,8,9)	9	MATH 104: Calculus	3		
DSGN 110: Design Thinking	3	Elective (open)	9	ENGL 150/151	3		
DSGN 111: Design Making	3			COMM 109/286	3		
DSGN 120: Design Drawing	4			PHYS 151	4		
DSGN 123: Computer Apps in Design	3						
DSGN 140: Design History	3						
ARCH 241: History & Theory II	3						
ARCH 262: Building Organization	3						
ARCH 240: History & Theory I	3						
ARCH 360:Site	3						
ARCH 461: Urbanism	3						
ARCH 489: Design Research	3						
ARCH 341: Theory	3						
ABCH 210: Studio - Represent	5						
ARCH 211: Studio - Ideate	5				<u> </u>		
ARCH 310: Studio - Organize	5				<u> </u>		
ARCH 311: Studio - Situate	5						
DSGN 410: Studio - Collaborate	5						
ARCH 411: Studio - Integrate	5						
ARCH 222: BIM 1	1						
ARCH 3/527 Parametric	1						
ARCH 231, Structural Fundamentals	3						
ARCH 232, Material Assemblies	3						
ARCH 331, Structural Mechanics	3						
ARCH 332, Structural Optimization	3						
ARCH 333, Environmental Systems	3						
ARCH 430, Building Integration	3						
Total req prof	89	Total req prof	18	Total req prof	13	Total req prof	
Total # of degree Credits: 120							

2-Year M.Arch (2M)

Required Prof Courses		Elective Prof courses		General Studies		Optional Studies	
Course #s & Titles	crds	Course #s & titles	crds		crds		crds
ARCH 510: Design Research Studio	5	History / Theory Elective	3				
ARCH 511: Design Research Studio	5	Elective (ARCH)*	18				
ARCH 610: Design Research Studio or ARCH 613: Design Thesis	5	Elective (College)	3				
ARCH 611: Design Research Studio or ARCH 614: Design Thesis	5	Elective (open)	3				
ARCH 680: Professional Practice	3	Elective (Outside)	6				
		Tech. Elective	1				
		Tech. Elective	1				
		Thesis Prep (optional) 2 credits*					
Total req prof	23	Total req prof	35	Total req prof	0	Total req prof	
Total # of degree Credits: 58						•	

*Students who choose the design thesis path will take ARCH 544: Thesis Prep for 2 credit hours that will count toward the ARCH professional elective total.

All 2-year M.Arch students complete 58 credits of graduate course work.

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3-Year M.Arch (3M)

Required Prof Courses		Elective Prof courses		General Studies		Optional Studies	
Course #s & Titles	crds	Course #s & titles	crds		crds		crds
ARCH 241: History & Theory II	3	History / Theory Elective	3				
ARCH 262: Building Organization	3	Elective (ARCH)*	9				
ARCH 240: History & Theory I	3	Elective (open)	3				
ARCH 360:Site	3	Elective (College)	3				
ARCH 461: Urbanism	3						
ARCH 489: Design Research	3	Elective (TECH)	1				
ARCH 341: Theory	3						
ARCH 222: BIM 1	1	Thesis Prep (optional) 2 credits*					
ARCH 231, Structural Fundamentals	3						
ARCH 232, Material Assemblies	3						
ARCH 331, Structural Mechanics	3						
ARCH 332, Structural Optimization	3						
ARCH 333, Environmental Systems	3						
ARCH 430, Building Integration	3						
ARCH 500: Design Studio	5						
ARCH 501: Design Studio	5						
ARCH 510: Design Research Studio	5						
ARCH 511i: Design Studio - Integrate	5						
ARCH 610: Design Research Studio or ARCH 613: Design Thesis	5						
ARCH 611: Design Research Studio or ARCH 614: Design Thesis	5						
ARCH 680: Professional Practice	3						
Total req prof	73	Total req prof	19	Total req prof	0	Total req prof	
Total # of degree Credits: 92							

*Students who choose the design thesis they will take ARCH 544: Thesis Prep for 2 credit hours that will count toward the ARCH professional elective total.

All 3-year M.Arch students complete 52 credits of graduate course work. 3-year M.Arch students enrolled in undergraduate courses must receive a "B" or better to pass the course. (Undergraduate students enrolled in the same course must receive a "C" or better to pass.)

4.2.6 Doctor of Architecture

The D. Arch. degree consists of a minimum of 210 credits, or the quarter-hour equivalent, of combined undergraduate and graduate coursework. The D. Arch. requires a minimum of 90 graduate-level semester credit hours, or the graduate-level 135 quarter-hour equivalent, in academic coursework in professional studies and optional studies. Programs must document, for both undergraduate and graduate degrees, the required professional studies classes (course numbers, titles, and credits), the elective professional studies classes (course numbers, titles, and credits), the required number of credits for general studies and for optional studies, and the total number of credits for the degree.

Program Response:

N/A

4.3 Evaluation of Preparatory Education

The NAAB recognizes that students transferring to an undergraduate accredited program or entering a graduate accredited program come from different types of programs and have different needs, aptitudes, and knowledge bases. In this condition, a program must demonstrate that it utilizes a thorough and equitable process to evaluate incoming students and that it documents the accreditation criteria it expects students to have met in their education experiences in non-accredited programs.

4.3.1 Evaluation of Prior Academic Coursework

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A program must document its process for evaluating a student's prior academic coursework related to satisfying NAAB accreditation criteria when it admits a student to the professional degree program.

See also Condition 6.5

Program Response:

The M.Arch 2-year (2M) Program requires all applicants to hold a Bachelor Science in Design – Architectural Studies or its equivalent from a NAAB-accredited institution. The M.Arch 3-year (3M) Program requires all students to hold a bachelor's degree in any field and to have completed a college-level calculus course (3 credits) prior to beginning coursework.

M.Arch two-year (2M) applicants who have obtained the Bachelor of Science in Design: Architectural Studies degree from UNL are required to have passed all of their UNL undergraduate courses. If students have a cumulative GPA of 3.0 or higher after their BSD – Architectural Studies, they are automatically admitted into the 2-year M.Arch program. Students with a cumulative GPA of less than 3.0 are required to apply to the Program with an application, statement of intent, transcript, and letters of recommendation.

2M applicants holding a Bachelor Science in Design – Architectural Studies or its equivalent from another NAAB-accredited institution are reviewed by our Student Affairs Committee (SAC) admission committee. After reviewing the student's application, the committee makes a recommendation to the Program director. The 2M applicant requirements are a personal statement, resume, portfolio, and transcript. The Program director evaluates the applicant's transcripts for deficiencies using the <u>M.Arch Course Equivalent</u> form; deficiencies must be completed before or while enrolled in required professional degree courses. Students will be required to submit appropriate syllabi upon request during the evaluation period. All incoming students, regardless of previous courses, are required to take the Integrate design studio (ARCH 411 or ARCH 511i) and ARCH 430, though exceptions may be made if a student's work is clearly competent.

3M applicants are required to submit a full application, including a transcript from a bachelor's degree in another field to be reviewed by our Student Affairs Committee (SAC) admission committee. After reviewing the student's application, the committee makes a recommendation to the Program director. The 3M applicant requirements are a personal statement, resume, optional portfolio, and a transcript, and international students are required to submit test scores documenting English language proficiency. The evaluation process is the same as for external 2M students.

Full details about undergraduate courses can be found in the <u>Course Catalog</u> on the UNL website.

Transfer Credit Rules

Transfer credit is evaluated at the College level for general coursework and at the Program level for technical, professional, and non-accredited credits.

College Evaluation of Transfer Credit

First-time students transferring to the College of Architecture from a similar accredited professional degree Program are evaluated on the basis of the current undergraduate catalog in effect at the time the student enrolls in the College of Architecture.

Confirmation Procedure:

- 1. It is the student's responsibility to initiate this task.
- 2. The student procedure is to seek review of appropriate materials from the Student Success office.



3. A portfolio review will determine confirmation of credit. This review will be done by the appropriate faculty member or committee.

Evaluation of General Education Credits

Transfer students who have formally applied for admission will have their academic credits evaluated by the Office of the University Registrar and the College of Architecture. The College will evaluate all hours submitted on an admission application but reserves the right to reject any of these credits.

Program Evaluation of Professional Credit

All professional credits earned at another university to be applied toward the Master of Architecture degree must be approved by the Professional Program Committee in cooperation with the Program director. At least 50 percent of the required coursework for the professional degree must be completed at the University of Nebraska–Lincoln, with the exception of those students who are applying to enter the Program with a four-year degree from an accredited architecture Program. No professional transfer credit will be accepted from a non-accredited architecture Program.

Process

The Program director will select and identify those courses that are applicable to the professional Program in architecture, interior design, and landscape architecture. The College of Architecture will not accept courses for transfer that are below a 2.0 GPA on a 4-point scale.

Evaluation of Technical and Non-accredited Transfer Credits

Students who wish to transfer credits from technical or non-accredited colleges must have architecture credits evaluated by the director and/or appropriate Program representatives. Non-architecture credits will be evaluated by the appropriate university department.

Evaluation of Graphics, Design, and Production Drawing Credit

Transfer credit for graphics, basic and architectural, landscape architecture, and/or interior design work and production drawings will not be granted until the student's work has been reviewed by the architecture, landscape architecture, or interior design Program director. This review will determine allowable transfer credit in the design, production drawings, and graphics areas, whether the grades presented are C, B, or A, and students will be placed accordingly.

Clarification and Appeal

Students who have questions about or wish to appeal the initial College evaluation of their transfer credits should contact the Student Success Office. If the evaluation is not satisfactorily resolved, students have the right to register an appeal with the Student Affairs Committee of the architecture, landscape architecture, or interior design Programs.

4.3.2 Standards for Preparatory Education Experience

In the event a program relies on the preparatory education experience to ensure that admitted students have met certain accreditation criteria, the program must demonstrate it has established standards for ensuring these accreditation criteria are met and for determining whether any gaps exist.

Program Response:

Upon acceptance of their track designation, the transfer students' application material is reviewed by the Architecture Program director to determine course equivalents, as outlined in section 4.3.1.



Undergraduate students are provided final documentation of how transfer credit has been evaluated in the official degree audit, which students can access at any time and is updated and maintained by the registrar's office.

M.Arch students are provided final documentation of how credit has been evaluated in the official degree audit, which students can access at any time and is updated and maintained by the Student Success Office.

4.3.3 Evaluation of Degrees in Admissions Process

A program must demonstrate that it has clearly articulated the evaluation of baccalaureatedegree or associate-degree content in the admissions process, and that a candidate understands the evaluation process and its implications for the length of a professional degree program before accepting an offer of admission.

Program Response:

Upon acceptance of their track designation, the transfer students' application material is reviewed by the architecture Program director to determine course equivalents as outlined in section 4.3.1.

Undergraduate students are provided final documentation of how transfer credit has been evaluated in the official degree audit, which students can access at any time and is updated and maintained by the registrar's office.

M.Arch students are provided final documentation of how credit has been evaluated in the official degree audit, which students can access at any time and is updated and maintained by the Student Success office.

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5—Resources

5.1 Structure and Governance

The program must describe the administrative and governance processes that provide for organizational continuity, clarity, and fairness and allow for improvement and change.

5.1.1 Administrative Structure

Describe the administrative structure and identify key personnel in the program and school, college, and institution.

Program Response:

The university's executive group consists of the Board of Regents, the President, the Chancellor, and the Executive Vice Chancellor. The University of Nebraska President oversees all four campuses (UN-Lincoln-flagship campus, UN-Omaha, UN-Medical Center, and UN-Kearney) while the individual Chancellors and Executive Vice Chancellors oversee the individual campuses. The University is organized into nine colleges, each led by a dean: Agricultural Sciences & Natural Resources, Architecture, Arts & Sciences, Business, Education and Human Sciences, Engineering, Hixson-Lied Fine & Performing Arts, Journalism & Mass Communications, and Law.

The College of Architecture Organizational Chart can be found at the following link.

Administrative Positions

The College of Architecture Dean is Kevin Van Den Wymelenberg, Ph.D., who assumed the position in January 2023. Since the last accreditation visit, Sharon Kuska (2022-2023), Kathy Ankerson (2016-2022), and Kim Wilson (2012-2016) have served in the position. Former Dean Kathy Ankerson is currently serving as the UNL Executive Vice Chancellor.

The Associate Dean of Faculty and Academic Programs is Sharon Kuska, Ph.D. and the Associate Dean of Research is Rumiko Handa, Ph.D. These academic positions were put in place by Dean Ankerson.

The Director of Architecture is David Karle, who has been serving in the position since January 2020. Since the last accreditation, Jeff Day (2012-2017), Sharon Kuska (2017-2018), and Sarah Deyong (2018-2020) have served in the position.

The Director of Community and Regional Planning is Zhenghong Tang, Ph.D., the Director of Interior Design is Lindsey Bahe, and the Interim Director of Landscape Architecture is Sarah Karle.

The Dean is assisted in leading the college by the Leadership Team, consisting of Program Directors, Associate Deans, an Advising & Student Success Director, a Director of Communications, and the Business Manager.

The Dean and Program Directors are supported by the following staff: See <u>College Organization Chart</u> for further breakdown.

Cameron Andreesen, University of Nebraska Foundation liaison Matt Bukrey, Shop & Media Center Kathlene Bateman, Assistant to the Dean Leslie Gonzalez, Academic Advisor / Recruiter Robyn Goodwin, Business Manager Jeff Jackson, Enterprise Desktop Associate Stephanie Kuenning, Advising & Student Success Director Jaime Mastera, Academic Advisor

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Kerry McCullough-Vondrak, Director of Communications Amy Ort, Instructional Specialist Sarah Troupe, Academic Navigator

Faculty Governance

The College Strategic plan under "Culture + Environment" states that "together we share a commitment to effective organizational culture, responsible citizenship, and shared governance." To support this statement, former Dean Ankerson implemented College committees to oversee curricular and student affairs, engagement and enrichment, facilities and resources, faculty affairs, a student advisory board, and the d.one core team.

5.1.2 Governance

Describe the role of faculty, staff, and students in both program and institutional governance structures and how these structures relate to the governance structures of the academic unit and the institution.

Program Response:

The College of Architecture is comprised of four Programs: Architecture, Interior Design, Landscape Architecture, and Community and Regional Planning. The Dean of the College of Architecture is the chief administrative officer for the College. The Dean reports directly to the Vice Chancellor for Academic Affairs and is one of 15 deans (9 of whom are academic) within the University of Nebraska-Lincoln.

The Dean's Office is the governing body of the College of Architecture and acts as the liaison to the University administration, the Dean of Libraries, and the University Foundation. The Dean has a staff consisting of an administrative assistant, student workers, a secretary, an accountant, a Student Success Coordinator, and a development officer, along with several technicians. The Dean's Office coordinates the College's speakers and exhibits program and the visiting scholar's program, through a faculty committee, as well as overseeing human resource support for the College. The Dean's Office has an Associate Dean of teaching and faculty affairs and an Associate Dean of Research to support students and faculty. The Dean's Office also oversees support staff activities paid out of state support funds and differential tuition, including the media center, shop, and information technology.

The College maintains two faculty positions on the UNL Faculty Senate and one member on the University Curriculum Committee. Faculty members have many opportunities for involvement at the university level on committees, such as the Academic Planning Committee and Research Council. The Architecture faculty always has a seat on the UNL Aesthetic (architectural) Review Committee and the Innovation Campus Architectural Review Committee, with Professor Jeffrey L. Day currently serving on both committees.

The Architecture Program is an independent unit administered by the Director of the Architecture Program. There are three principal faculty committees: Faculty Affairs (FAC), Student Affairs (SAC), and Professional Program (PPC). The duties for each of these committees are defined in the Program Bylaws and Appendix. In addition, there is a Chair of Graduate Studies (Zac Porter) who assists in coordinating with the Graduate College for the administration of post-professional studies. This person is elected by the faculty and serves a three-year term. See the Program Bylaws under <u>NAAB Information</u> on the Program webpage.

Currently, Dean Van Den Wymelenberg holds monthly College leadership meetings consisting of the Dean, Associate Deans, the Program directors for all College Programs, Business Manager, the Dean's assistant, the Director of Communications, and the Student Success Coordinator. The role of this group is to share in the governance of the College and ensure the open sharing of information between Programs.

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Membership on the standing committees is distributed equitably across the Program faculty and is determined either by faculty vote or appointment by the Director (see Bylaws). Membership on standing committees is subject to a three-year term, and it is the tradition of the Program to allow faculty to rotate between committees when their terms end. The Program holds monthly faculty meetings, plus additional meetings at the beginning and end of each semester. All curriculum decisions are first reviewed by the Professional Program Committee, then brought before the full faculty for discussion and action. All course changes, including the creation of elective courses, are subject to faculty approval.

Collectively, student organizations offer students multiple opportunities to take on leadership positions throughout the Program and College. In addition, the College has a Student Advisory Board (SAB), with a membership elected by student peers for all levels of the curriculum. The presidents of all the certified student organizations are also ex-officio members of this group, which advises the Dean and administration on various issues and policies developed in the College. Students, along with appointed faculty members, also serve as members of the Professional Program Committee (PPC), which is responsible for monitoring the curriculum and reviewing course substitutions proposed by students. Students also serve on faculty search committees as voting members. The Program views students as a vital part of the community, with faculty and administration consistently drawing upon their presence and leadership in the governance of the Program and College.

5.2 Planning and Assessment

The program must demonstrate that it has a planning process for continuous improvement that identifies:

5.2.1 Multiyear Strategic Objectives

The program's multiyear strategic objectives, including the requirement to meet the NAAB Conditions, as part of the larger institutional strategic planning and assessment efforts.

Program Response:

Since the last accreditation report, the Program has met our strategic objectives to execute the following goals:

- 1. Change the focus of fundamental design in the first year from composition to creative problem solving
- 2. Create more explicit pedagogical emphasis on collaboration and interdisciplinarity
- 3. Begin the disciplinary focus in Architecture earlier (i.e., in the 2nd year)
- 4. Focus the Program on preparing students for the future of professional practice
- 5. Create a collaborative and interdisciplinary studio at the upper level (i.e., in the 4th year)
- Define clear curricular strands: "architectural discipline," "building technology," "Technique," "design synthesis (studio)," and "elective/minor," and reinforce each as separate but related areas or sequences
- 7. Include AXP and the full range of professional development toward licensure as part of the curriculum
- 8. *Distinguish the M.Arch level from the undergraduate level of the Professional Program
- 9. *Create opportunities for faculty to integrate teaching, research, and engagement in design-research studios at the M.Arch level.

* These 2014 APR strategic objectives continue to be a focus of our Program.

Since the last report, the Program has increased student knowledge of AXP by adding AXP presentations at various points in the students' experience at UNL. Through required academic courses, it is delivered in ARCH 260, which is a required undergraduate course addressing typology, building organization, and building code basics. At the graduate level, it

is presented in ARCH 680: Professional Practice, where the Executive Director of the State Licensing Board attends to share the path to licensure. Additional presentations are offered through the ARCH 695: Internship course offered in the summer term. Lastly, NCARB staff visited the College and presented AXP through a Lunch and Learn meeting that coincided with the state AIA conference. Professional development is fostered through office visits and construction site visits (via student organizations) and the Hyde Lecture Series.

The Program continually seeks opportunities to distinguish the M.Arch level Program from the undergraduate level. The M.Arch program involves faculty research interests aided by students engaging in the co-creation of knowledge and highlights the diversity of the research happening in the faculty seminars. We are promoting the M.Arch dual degree options with Community and Regional Planning and Business by bringing faculty representatives into undergraduate courses, and are promoting the M.Arch Design Research studios being offered by nationally known professional offices and Hyde Chairs of Excellence. The Program continues to showcase the Design Thesis projects to bring awareness to independent research. M.Arch students can obtain an Urban Design certificate housed in the Community and Regional Planning Program, and the Architecture Program has considered the option of graduate/professional certificates in focused areas. The Program has further emphasized "Where they are now" Instagram posts highlighting our M.Arch alumni working across the country, and offers a semester-long education abroad experience to London for M.Arch students.

The Design Research studios are the focal point of our M.Arch program, and highlight the faculty-center focus on the complementary and contributory relationship between research and design (research *for*, *on*, and *by* design). The range of research topics posed by faculty allow students to test and evaluate innovations in the field. Additionally, this type of work prepares students to consider the optional year-long Design Thesis path.

In response to the NAAB 2020, the Program reviewed the new Student and Program criteria and worked with faculty to determine the best alignment of the new criteria within our current curriculum. The faculty discussed and confirmed that our existing curriculum scaffolds knowledge throughout the curriculum, which leads to appropriate one assessment point per Student Criteria (SC) and Program Criteria (PC). Initiated in the Fall of 2020, the Program established teaching teams in the thematic topics of Design, History/Theory, and Technology. The teaching team model allows faculty to discuss and share the course sequencing (knowledge scaffolding) between courses, which leads to future assessment points in our curriculum. The faculty discussed how and when topics will be introduced, repeated, and meet competencies for assessment. The teaching teams also discussed strengths, challenges, and opportunities to improve the sequences. The teaching teams have become an important feedback loop in scaffolding knowledge across our curriculum and meeting our assessment points.

These thematic teaching teams are supported by our existing faculty-coordinated design studio teaching team's model for ARCH 210, ARCH 211, ARCH 310, ARCH 311, DSGN 410, and ARCH 411. The design studio teaching teams and faculty coordinators ensure that studios scaffolded appropriate PC and SC knowledge toward NAAB requirements. This is of particular importance to our Program to ensure our part-time lecturer/T instructors understand and meet the curricular benchmarks and scaffolding requirements. The studio-based faculty coordinator hosts at least three meetings, including before, during, and after the semester, and in some cases, specific teaching teams meet twice a month (ARCH 411). This instructor reflection approach follows the recommendations of the College's instructional specialist faculty reflection process.

The Program ensures that the curriculum scaffolds knowledge and that the requirement for assessed courses meet the 2020 NAAB conditions by listing the NAAB criteria and the student learning objectives to meet the criteria in the syllabus. This ensures that full-time and lecturer/T faculty continually meet the student learning objectives for the course and the NAAB requirement. The specific SC and PC objectives will be assessed by the teaching teams and discussed with the entire faculty on a rotating basis. The "Design" teaching teams will assess studio content each semester, while the remaining core courses in the "History/Theory" and "Technology" tracks will be discussed by the teaching teams and faculty once a year.

In 2019, the College of Architecture developed an <u>N2025 Strategic Plan</u> that identified three core objectives and capacities, including Connection and Collaboration, Culture and Environment, and Innovation and Impact. These core capacities align with the University's N2025 Strategic Plan. Each capacity has specific strategies articulated to leverage our existing strengths to invigorate and extend each of these capacities. The strategic plan has 1-2 year and 3-5 year action steps. The Program supports these action steps and reports to the Dean as requested. The Program actively focuses on three main strategies: to "recruit, enroll, and retain diverse populations of students who will positively contribute to our mission," to "emphasize student wellness, professionalism, and responsibilities," and "increase curricular flexibility and accessibility." As of Summer 2023, the Dean of the College of Architecture currently participates in the <u>Deans' Equity and Inclusion Initiative</u> to help build diversity in the academic community.

Finally, the Program supports and responds to University and College-level strategic objectives and initiatives. In 2019 the University of Nebraska published the <u>N2025 Strategic Plan</u>, which identified six aims:

- Innovate student experiences that prepare graduates to be lifelong learners and contributors to the workforce in Nebraska and the world.
- Establish a culture at Nebraska committed to increasing the impact of research and creative activity.
- Focus research, scholarship, creative activity, and student experiences to foster innovative, interdisciplinary endeavors and solve challenges critical to Nebraska and the world.
- Broaden Nebraska's engagement in community, industry, and global partnerships.
- Create a climate at Nebraska that emphasizes, prioritizes, and expands inclusive excellence and diversity.
- Prioritize participation and professional development for all Nebraska students, staff, and faculty.

The first four aims focus on the University's mission-centric areas, while the others focus on the people. Achieving the vision of N2025, students at UNL will have multiple opportunities to engage in documented experiential learning throughout their undergraduate careers. Experiential learning is all about encountering new situations, reflecting on one's observations, and actively applying them to the world. Whatever the student's interests—research, education abroad, community engagement, internships, and others—the College of Architecture prides itself on providing this experiential learning in several courses and design studios.

Since 2019, the University's Office of Diversity and Inclusion has worked directly with institutional leaders in multiple ways, including through the Council of Inclusive Excellence and Diversity. Another outcome of the University Strategic plan was the College's student-facing web page and the College Diversity Plan, which promotes <u>equity in ways that benefit students, faculty, and staff</u>. The current diversity, equity, and inclusion planning aims of the



College of Architecture are integral to recruiting exceptional faculty, staff, and students to the College.

The Program also supports the University Achievement-Centered Education (ACE) curriculum review, which consists of an annual review process of the <u>Student Learning Outcomes (10</u> <u>SLOs)</u> within the ACE general education Program by using an ACE Assessment Instructor Guide. This review process ensures our students meet the larger educational goals of the university and general education.

5.2.2 Key Performance Indicators

Key performance indicators used by the unit and the institution

Program Response:

Both the Program and UNL use several metrics to understand and assess our year-to-year performance, including the N2025 Strategic Plan and the College of Architecture Strategic plan described below.

UNL N2025 Strategic Plan

In 2019, the University of Nebraska published the <u>N2025 Strategic Plan</u>, which listed six aims, each of which uses a list of strategies, expectations, and targets to serve as benchmarks. The aims are as follows:

- 1. Innovate student experiences that prepare graduates to be lifelong learners and contributors to the workforce in Nebraska and the world,
- 2. Establish a culture at Nebraska committed to increasing the impact of research and creative activity,
- 3. Create a climate at Nebraska that emphasizes, prioritizes, and expands inclusive excellence and diversity,
- 4. Broaden Nebraska's engagement in community, industry, and global partnerships,
- Focus research, scholarship, creative activity, and student experiences to foster innovative, interdisciplinary endeavors and solve challenges critical to Nebraska and the world,
- 6. Prioritize participation and professional development for all Nebraska students, staff, and faculty.

These aims are centered around the following targets:



Figure Caption: Tableau graph showing College of Architecture undergraduate 1st year retention rates over the last five years compared to UNL averages.

Retention Rates (first year to second year) for the d.ONE common curriculum are as follows:

- In 2021, the College retained 80.7% of students within UNL and 59.1% within the College (CoA cohort: 147). This was compared to the UNL average of 81.5% retained at UNL and 61.1% retained in all colleges (UNL cohort: 4,709).
- In 2020, the College retained 79.8% of students within UNL and 70.2% within the College (CoA cohort: 117). This was compared to the UNL average of 79.7% retained at UNL and 60.8% retained in all colleges (UNL cohort: 4,705). (Note: In Fall 2020, ACT test scores were removed from admissions standards.)
- In 2019: The College retained 85.7% of students within UNL and 74.3% within the College (CoA cohort: 94). This was compared to the UNL average of 85% retained at UNL and 64.7% retained in all colleges (UNL cohort: 4,749). (Note: In March 2020, COVID-19 impact safety measures were enacted by the University, resulting in students being able to elect to pass/fail their Spring semester courses.)
- In 2018, the College retained 79.5% of students within UNL and 50% within the College (CoA cohort: 101). This was compared to the UNL average of 81.2% retained at UNL and 60.5% retained in all colleges (UNL cohort: 4,806).
- In 2017, the College retained 80.7% of students within UNL and 62.5% within the College (CoA cohort: 115). This was compared to the UNL average of 80.1% retained at UNL and 60.4% retained in all colleges (UNL cohort: 4,888).
- The College of Architecture has consistently fallen within a reasonable margin of the UNL average for "retained at UNL" and "retained in college."

Retention Rates (2nd to 3rd to 4th year) for the BSD-Arch Program overall are as follows:

- For the 2020 cohort, 76 students enrolled in the BSD-Arch Program in their 2nd year, 73 were retained in the 3rd year, and 70 were retained in the 4th year.
- For the 2019 cohort, 50 students enrolled in the BSD-Arch program in their 2nd year, 49 were retained in the 3rd year, and 48 were retained in the 4th year.
- For the 2018 cohort: 70 students were enrolled in the BSD-Arch Program in their 2nd year, 66 were retained in the 3rd year, and 66 were retained in the 4th year.
- The average overall retention rate for the BSD-Arch Program for the 2020-2018 cohorts is 94%.

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Graduation Rates (4-year BSD-ARCH). The retention/graduation rates for Architecture Program 2nd year enrollment followed by the number of those students who continue in the Program and graduated in the 4th year are as follows:

- In Fall 2020, 76 students enrolled in the 2nd year of the BSD-Arch Program. Of those students, 66 (86%) graduated in Spring 2023.
- In Fall 2019, 50 students enrolled in the 2nd year of the BSD-Arch Program. Of those students, 45 (90%) graduated in Spring 2022.
- In Fall 2018, 70 students enrolled in the 2nd year of the BSD-Arch Program. Of those students, 66 (100%) graduated in the Spring 2021.
- The average overall graduation rate between the 2nd and 4th year for the 2020-2018 cohorts is 92%.

Retention Rates from the 4th year of the BSD-Arch Program into the 2-year M.Arch are as follows:

- In the 2020 cohort, 66 4th-year students graduated in Spring 2023 and 34 (51%) enrolled in the M.Arch program.
- In the 2019 cohort, 45 4th-year students graduated in Spring 2022 and 35 (77%) enrolled in the M.Arch program.
- In the 2018 cohort, 66 4th-year students graduated in Spring 2021 and 23 (34%) enrolled in the M.Arch program.
- Overall, the College retains approximately 50% of 4th-year students into the M.Arch program. The lower Spring 2021 retention is likely due to post-pandemic graduates wanting to take a break from school and work prior to obtaining a M.Arch degree.

Enrollment:

• With the Architecture Hall renovation and future expansion, the Architecture Program has increased enrollment by 30% in the undergraduate Program and 18% in the M.Arch program (see APR section 5.5.2 for enrollment breakdown).

Diversity:

- The Program has seen a strong increase in ethnically diverse students since the inception of the strategic plan. In Fall 2022 the BSD and M.Arch programs had 109 students of color, and 55 Hispanic students. This is compared to 96 students of color (43 Hispanic students) in Fall 2021, 99 students of color (38 Hispanic students) in Fall 2020, and 51 students of color (31 Hispanic students) in Fall 2019.
- In Fall 2022 the BSD and M.Arch programs had 370 total students and 181 (48%) female students. This is compared to 370 total students and 164 (49%) female students in Fall 2021, 370 total students and 164 (49%) female students in Fall 2020, and 323 total students and 139 (43%) female students in Fall 2019.
- Overall, the Architecture Program is seeing steady growth in student diversity categories (ethnicity and gender), with the highest growth in our Hispanic and female populations.

Research and Engagement Participation:

- All full-time Program faculty (Tenure Track or Professor of Practice) have a percentage of their apportionment set aside to conduct research.
- See the Program Outcomes response below showing faculty research impacts, along with the engagement partners map.

Professional Development:



- All full-time Program faculty (Tenure Track or Professor of Practice) are given a stipend to pursue professional development at conferences, workshops, and professional organizations.
- We invite university and local experts to College and Program retreats to expand faculty and staff knowledge and best practices for teaching, research, and engagement.

Mentoring/Advising:

- The College <u>Advising and Student Success Office</u> has three dedicated staff members to assist students with admissions, advising, and overall success in the College.
- Staff regularly attend the Academic Advising Association (AAA) Conference, along with other professional development and training opportunities.
- We provide opportunities for students to mentor by having new freshmen and upperlevel students support one another through our <u>peer mentor</u> and ambassador Programs.

These University-level approaches and targets feed into the mantra that "Every person and every interaction matters."

The aims and targets guide the University and are supported by our <u>College of Architecture</u> <u>Strategic Plan (2019-2024)</u>. The College gauges overall success by measuring the:

- Draw of our community's creative ecosystem, as seen in student demand as well as faculty and staff recruitment and retention;
 - The Architecture Program has seen a 22% enrollment increase since the last accreditation report: 295 students in 2014 to 380 students in Fall 2022.
 - The undergraduate Architecture enrollment (2nd year to 4th year) has seen a 30% increase, moving from 140 students in 2014 to 201 students in Fall 2022.
 - The M.Arch enrollment (2M and 3M) has seen a 15% increase, moving from 63 students in 2014 to 74 students in Fall 2022.
- Excellence, breadth, and innovation of our design and planning education through recognitions, our retention, graduation rate, and career placement;
 - See the University retention and graduation rates listed above.
 - The Architecture Program has an average of 96% job placement for graduating M.Arch students over the last five years.
- Impact of our research, scholarship and creative activities through awards, publications, projects, and recognitions;
 - Since the last accreditation report, Program faculty have won numerous awards from the Fellow American Institute of Architecture, PA Architecture, AIA-Nebraska, and AIA-Nebraska Architecture, including the Design Education Award, Residential Design Architecture Award, The Plan Award, ACSA Education awards, and the Ken Roberts Memorial Delineation Competition.
 - Faculty have published books with Routledge, chapters in various edited books, and articles in the Journal of Architectural Education (JAE), Technology, Architecture + Design Journal (TAD), LOG, MONU Magazine on Urbanism, Interiors, and ANUARI d'Arguitectura i Societat and
 - Faculty have received numerous grants, including from Nebraska Environmental Trust and the National Science Foundation.
 - Depth of our engagement with our professional, local, national, and international communities;

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- The Program continues to strengthen its engagements partnership locally and internationally with our study abroad partnerships, as shown on the engagement partners map.
- Diversity and breadth of backgrounds of our students, staff, and faculty.
 See section 5.2.2 for breakdown.

Our path to success focuses on building three existing core capacities: "Connection and Collaboration," "Culture and Environment," and "Innovation and Impact." All three of them lead the College into the future.

The Program contributes to the College's strategic plan by striving to achieve the following three strategies:

1. Recruit, enroll, and retain diverse populations of students who will positively contribute to our mission.

- 2. Emphasize student wellness, professionalism, and responsibilities.
- 3. Increase curricular flexibility and accessibility.

Additionally, the Program is continually guided by our mission statement that "The Architecture Program provides the educational foundation for intellectually aware and self-realizing architecture professionals. We promote collaboration and engagement through excellence in design research and creative scholarship."

5.2.3 Progress Towards Multiyear Objectives

How well the program is progressing toward its mission and stated multiyear objectives.

Program Response:

During the 2021-2022 academic year, the Program reviewed and revised the Program mission statement with the goal of guiding our future. The Program identified the need to expand our mission beyond the question of "What do we do?" to include "How we define what we're doing?" The result of this approach yielded discussions that culminated in defining our goals for education, collaboration, and engagement, resulting in a revised mission statement: "The Architecture Program provides the educational foundation for intellectually aware and self-realizing architecture professionals. We promote collaboration and engagement through excellence in design research and creative scholarship."

The Program achieves this mission through multiple curricular and non-curricular activities in the undergraduate and graduate Programs. The Program provides experiential learning in the strands of "architectural discipline," "building technology," "technique," "design synthesis (studio)," and "elective/minor," resulting in a comprehensive educational and design research foundation. The Program applies this in our approach to research, teaching, service, and engagement. Through design research and scholarship, we promote architecture that enhances and engages diverse areas of the public. Students and faculty come together in a creative environment that integrates studio-based teaching, rigorous design research and creative output, and community-focused engagement.

As noted in sections 5.2.1 and 5.2.2, the Program actively focuses on three main strategies, with the strategies used to achieve each outlined below:

1. Recruit, enroll, and retain diverse populations of students who will positively contribute to our mission.

The Program understands that achieving this recruitment and retention of diverse populations requires creating a supportive and welcoming environment. We achieve this through the following activities:
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The Program director and advising staff host more than 100 students and their families annually for campus visits. Additionally, we host open houses both at the College and in collaboration with local architecture firms in Omaha and Lincoln.

In partnership with UNL's Undergraduate Admissions office, we have representation at recruiting events geared specifically toward diverse audiences across Nebraska, the United States, and abroad. The College of Architecture recruiting team has partnered with Undergraduate Admissions and the Office of Scholarships and Financial Aid to identify diverse populations and provide financial support, particularly to first-generation and ethnically diverse students. The College and Program faculty also employ similar strategic scholarship opportunities to diverse populations to assist in retention efforts.

In partnership with the College of Engineering, we host a "Women in STEM" event where female, STEM-focused high school students attend a day-long event learning about STEM majors and participate in an interactive activity focused on architecture.

The College of Architecture also regularly hosts 25-35 high school students each summer at our Career Explorations in Architecture, Interior Design, and Landscape Architecture camp.

In effort to retain students, each semester we offer a diversity and equity professional panel discussion, and students can participate in the freshman-level Responsible Design Learning Community and registered student organizations such as the National Organization of Minority Architecture Students (NOMAS) and Queer Nebraska Design Students (QNDS).

2. Emphasize student wellness, professionalism, and responsibilities.

To support retention efforts, our Student Success Team leads a 0-credit (DSGN 010) Smart Start course for incoming freshmen, which supports students' transition from high school to college. The course, which consists of four in-person meetings plus interactive online modules, introduces students to a range of College and campus resources. The course is designed around the Husker POWER model, where students develop a sense of their Purpose, Ownership, Well Being, Engagement, and Responsibility while enrolled at the College of Architecture.

Within second-year design studios, rather than emphasizing nonstop production, the faculty have intentionally slowed down the pace of work to give students time to reflect and rest. The faculty provides a project schedule to assist students with time management as a countermeasure to the culture of pulling all-nighters. Both faculty and the Program director prioritize communication with students on issues of physical and mental health, including a healthy diet, exercise, and proper sleep routine to promote wellness.

Each semester, the College hosts a "build-up" week prior to final design studio reviews. Each day leading up to the design studio week, the College hosts a variety of events to reduce student stress and encourage wellness, such as "Pizza and Lawn Games with the Dean" and "Popcorn Bar and Puppies." These activities encourage students to take a well-earned break when preparing for their end-of-semester reviews.

To support our students' professional development, each spring the College hosts training sessions for the Career Fair and Career Preparation, including portfolio design layout, CV/resume, soft skills and interview skills, and portfolio design.

The Program also encourages M.Arch graduate teaching assistants to attend the Graduate Studies TA orientation. In addition to general sessions on policies and teaching resources, TA workshops focus on Grading and Assessment, Preparing Lesson Plans or Class Activities, Understanding Students' Needs, and Establishing Rapport.

All M.Arch students have access to an assigned professional academic advisor in the College's Student Success Office, who connects students to campus resources related to health and wellbeing.

3. Increase curricular flexibility and accessibility.

This was accomplished primarily in the common first-year freshman semester by allowing students to transfer into the College after the fall semester. Consequently, students were able to take courses in the spring semester and summer sessions to meet the requirements for admission into the second year of the Program. In Spring 2023, we had 21 transfer students join the College of Architecture (13 internal and 8 external), with 11 enrolling in the Architecture Program.

Students can also achieve an undergraduate minor as part of their course of study. Common minors that students pursue include Business, Art, Landscape Architecture, Product Design, and Committee and Regional Planning. Additionally, M.Arch students can obtain a dual master's degree in Business and Community and Regional Planning and a graduate certificate in Urban Design.

The Program provides opportunities for UNL undergraduate students, specifically internal Interior Design and Landscape Architecture students within the College of Architecture, to enroll in the 3-year M.Arch program. These students bring a unique perspective and are encouraged to leverage their varied expertise to find unique and perhaps unexpected intentions for architectural form.

The Program does not generate institutional program review report.

5.2.4 Strengths, Challenges, and Opportunities

Strengths, challenges, and opportunities faced by the program as it strives to continuously improve learning outcomes and opportunities.

Program Response:

The Program continually seeks dialogue with students, faculty, and stakeholders to improve learning outcomes and opportunities. We are a small, close-knit community of faculty and students who work well together in a collaborative and respectful way toward the betterment of all.

Our strengths are the interdisciplinary common first-year d.ONE and interdisciplinary fourthyear studios, which have become signature moments in our undergraduate Program. The d.ONE first year provides students with the foundational knowledge to apply for and enroll in the second year of the Architecture Program with an emphasis on interdisciplinary collaboration.

We have committed full-time and part-time faculty who teach in the undergraduate Program, and due to our enrollment size, we often have at least two professionals teaching a studio section at each level of the curriculum. Our enrollment growth is evidence of our Program's strengths, but it also creates the challenge of ensuring that the increased number of students are meeting course objectives and feel engaged in our community. To alleviate this challenge, the Program strengthened the role of the studio coordinator at each level to ensure all faculty are sharing and discussing studio outcomes throughout the semester. The M.Arch design research studios are a particular strength of our Program, and often gain

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external peer review recognition in the form of awards, conference papers and posters, media attention, and exemplary community engagement.

Because enrollment and retention are key performance indicators, the Program monitors them closely. Our strong enrollment over the past five years has yielded the largest undergraduate and graduate enrollment numbers in the Program's history. (See APR section 5.2.2 for breakdown.)

The Program director works closely with the Student Success center and advising team to ensure that students are continually supported. We carefully monitor enrollment numbers to ensure we can continue to effectively deliver our course content.

The Program also has a strong alumni group who support our Program by teaching courses and hiring our students for summer and full-time employment. We are happy to share that over the last five years, the Architecture Program has had a 96% job placement rate for graduating M.Arch students, and we are proud that this is one of the highest job placement rates at UNL. The College and Program are excited by the new building renovation (Fall 2022) and addition (Fall 2024) that will support our growth with the expansion in studio capacity and ability to maintain dedicated studio desk space even amidst dramatic enrollment growth. The Program also offers exciting global experiences in London, Barcelona, Paris, and Hanover, Germany that foster students' global awareness and personal, academic, and professional growth.

Our Program is centered around student experience by building a sense of collegiality, community, and faculty accessibility, which has resulted in an increase in our student enrollment. Because of this, enrollment is one of our strengths but also a challenge. Due to the increase in undergraduate enrollment, we need more full-time faculty (tenure track or professors of practice) to teach in our Program. Maintaining consistent lecturer/T Professional faculty is also becoming increasingly difficult: the Program relies significantly on lecturer/T faculty for teaching, and when their professional offices are busy with many active projects, it is difficult for these lecturers/T faculty to commit to teaching. This is certainly the case when a design studio requires 12 hours per week of instructional time. To alleviate this shortage, we have found creative ways to support lecturer/T faculty by increasing communication with our teaching teams. Additionally, lecturer/T faculty are increasingly looking to co-teach, allowing more flexibility to complete their professional responsibilities. We have also coordinated with professional offices and their employees to request that professionals commit to three years of teaching a studio to maintain consistency, which has worked well in NAAB heavy design studios such as ARCH 411. We are fortunate to have large national/international architecture offices located in nearby Omaha, including Leo A. Daly, DRL, RDG, and HDR.

Another challenge lies in identifying funding for graduate-level scholarships and travel opportunities, which are necessary to support and retain our students. The cost of materials is becoming more of a financial concern for our students, and faculty are continually thinking of creative ways of being mindful of this cost while still meeting the learning outcomes of the course. For example, faculty have used found objects as modelmaking materials, used limited large-scale plots, and had the media center purchase material and sell it to students at cost.

The Program also has opportunities to grow the M.Arch 3-year Program. This can be achieved by strengthening our marketing effort to UNL undergraduate students, specifically internal Interior Design and Landscape Architecture students. The latter group has a slightly lighter course load because of an overlap in course requirements during their undergraduate education.

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The Program continually develops opportunities to enhance the graduate experience, and has taken steps to strengthen our graduate Program by promoting faculty-led research foci in the M.Arch Design Research studios (Building-Design, History/Theory, and Computation). The Program is also investigating opportunities to run online and hybrid M.Arch courses with remote experts who might not typically be able to teach in our Program, bringing in new external voices to impact our students and the Program. Lastly, the University recently implemented a 3-week pre-session in January dubbed J-term, during which the Program offered two elective courses and sees opportunities to offer additional courses in the future.

5.2.5 Ongoing External Input

Ongoing outside input from others, including practitioners.

Program Response:

The Program continually seeks outside input to strengthen and improve. We have opportunities to dialogue with architectural professionals to continually improve our Program courses and student outcomes.

The Program has several faculty who serve in academic and professional leadership roles, including NCARB, NAAB Board, ACSA Board, ACSA TAD Editorial Board, SAH Archipedia/BUS, Magazine on Urbanism (MONU) Board, AIA-NE Board, AIA-DEI Committee member, State Board of Architects & Engineers, IES, ISO, Omaha by Design Advisory Committee, Partners for Livable Omaha Advisory Board, Design Alliance Omaha (daOMA) Board, and Rural Prosperity Nebraska. These membership roles allow our faculty to keep our Program updated on the most current knowledge and innovation in the architectural discipline.

Each semester the Program has 15-25 local architectural professionals teaching lecture courses and design studios, allowing them the opportunity to teach, reflect, and provide feedback to teaching teams on the Program, curriculum, and student abilities. Additionally, the Program has a strong tradition of inviting local and non-local professionals to our midand end-of-semester reviews, allowing them to bring their expertise into the classroom and share insights on connecting academia to professional practice.

Twice during an academic year, students and faculty share course approaches and outcomes with our Professional Advisory Council (PAC). The PAC constitutes 30 alumni and professionals with connections to the College and the Program. The PAC provides the dean and college leadership team with professionally focused feedback and insight each semester. with six working groups that provide feedback on key topics, including "Our Story," "Innovative Student Development," "Outreach & Impact," "Impactful Partnerships," "Philosophy of Design Informed by Technology & Data." and "Global Experiences & Opportunities." These working groups provide us with feedback from the profession in key areas to strengthen the College and the Program. The working groups have helped develop a framework for a historic preservation certificate (in progress), created a network of industry partners for engagement on topics to advance the profession and manufacture of built environment components, engaged faculty, made suggestions for the 1-credit hour CAFA courses, and supported students in research via a industry-engaged consortium (in process). It has expanded alumni to alumni and alumni to student networking and mentoring opportunities, including Huskers Helping Huskers (in progress). We also increased digital communications through a "Just Hired" map, various stories on social media, and the Community Engagement Map. This year's PAC meetings will include two in-person Fall/Spring meetings and two virtual winter/summer meetings. The virtual meetings will be formatted as a sharing of experiences between faculty and high-profile alumni or office colleagues, with students and other PAC and alumni invited to virtual sessions. Topics will

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include AI, healthy buildings, climate resilience, and other topics with an interdisciplinary focus.

Our Program embraces opportunities to seek external feedback from stakeholders and constituents, and Program faculty often present Scholarship of Teaching and Learning (SoTL) papers at conferences to share insights on pedagogical approaches and use student outcomes as evidence. This peer review feedback offers another opportunity for faculty to reflect on their teaching. This external feedback is often shared with the teaching team and considered for implementation during the next course offering. Other forms of feedback come from community engagement partners and public exhibitions of student and faculty work.

Additionally, the professionals of the College of Architecture Friends Association (CAFA), an expansion of the PAC, offer three one-credit courses per semester, allowing them to offer professionally relevant content and bridge the transition between academia and the profession. In dialogue with the Program director, the one-credit courses often identify opportunities in our curriculum to provide focused knowledge on a specific topic. Over the years, CAFA has taught numerous mini-courses, including "Drawing Workshops," "Community Facilitation," "Communication Skills," "The Construction Industry," and "Practice." In Spring 2023, the "Career Path" mini-course was taught for the first time, and consisted of three professional panel discussion class periods: "Leadership," "Non-Traditional Paths of Graduates from College," and "Life After College."

As mentioned, the Program includes strong engagement with local professionals, community leaders, and nonprofits within our courses and studios. This often results in semester or multi-semester partnerships where stakeholders provide insights for improvement to students and faculty members. The Program invites local, regional, and national professionals and academics to mid- and end-of-semester reviews, providing peer-review for our faculty and students. The Program has also initiated two novel student scholarships, with additional funding allocated to bring in an external jury (SGH Concepts and Dri-Design Scholarship/Award, and BVH Prize). The SGH Concepts and Dri-Design Scholarships/Awards was established in 2014 and brings aspiring architects together with nationally renowned architects and industry leaders to advance the learning of design materiality and innovation. These scholarships/awards recognize student projects that exemplify outstanding design investigation, resolution, and significance. The Program has garnered recognition for students, faculty, the College, and the University at both the state and national levels. To date the Program has engaged with twenty-seven jury members who have recognized over sixty student finalists and over forty student scholarships totaling \$45,000. The work produced by scholarship finalists has received sixteen state or national awards, two publications, one national conference, and was posted on five architecture websites. The outcomes of this Program received an 2021-2022 AIA/ACAS Practice and Leadership award.

The UNL Center for Transformative Teaching (CTT) provides resources to faculty on their teaching through a College-assigned instructional specialist who provides individual and course-specific feedback to improve instructional delivery, student engagement, and course assessment. Additionally, the UNL Peer Review of Teaching program allows our faculty to seek outside feedback on course structure and assessment. This program is often utilized by early career faculty members, who benefit from outside feedback on their course development and assessment process.

The College Career Fair is another chance for the Program to seek outside input on the quality of student work and skills. We annually seek feedback from attending professionals on the patterns and observations they find in student work and in their conversations with students.

The program must also demonstrate that it regularly uses the results of self-assessments to advise and encourage changes and adjustments that promote student and faculty success.

Program Response:

The Program actively engages in dialogue on both the curriculum and self-assessment at monthly faculty meetings, the start-of-semester retreat, the end-of-semester faculty review, Professional Program committee meetings, and teaching-team coordination meetings. During each assessment step, faculty consider adjustments to course content or their pedagogical approach, which often results in making small adjustments to improve faculty instruction and student learning. This process is essential for onboarding and supporting our part-time professional lecturer/T faculty, who participate in the process mentioned above.

The Program has a longstanding tradition of conducting a fall and spring end-of-semester allfaculty retreat to review semester courses. The courses covered typically rotate between studios and core courses, allowing faculty to observe patterns between studio sections and across the years of the curriculum. This is an opportunity for all faculty, including early career faculty, professionals, and established faculty, to learn from one another and provide feedback. The faculty conduct the three-step process of collecting, reflecting, and considering, individually and as a teaching team, before presenting their findings to the entire faculty. During the process, the faculty reflect on the outcomes of these meetings and consider the feedback for implementation into their courses to enhance student learning and outcomes.

In recent years, the Program has focused on discussing studios and courses that scaffold student knowledge toward the 2020 NAAB criterion. Additionally, in 2020, the Program added two additional steps to the end-of-semester all-faculty retreat, including individual faculty reflection and teaching-team reflection. This allows faculty to first reflect individually, then to reflect as a team. During the individual and teaching-team sessions, the faculty use the <u>Instructor Reflection</u> form produced by the UNL CTT instructional specialist. This document serves as a guide that asks faculty to reflect before the semester begins, guides them in accumulating evidence during the semester, and provides questions for reflection at the beginning, middle, and end of the semester. While reflecting, the faculty engage in a <u>three-step program-wide process</u> of "collecting, reflecting, and considering" changes to their courses. These reflections and notes are shared with the entire faculty during the end-of-the-semester review.

Many of the adjustments that faculty make based on the outcomes of these assessments are pedagogical to improve student learning, rather than necessarily changing the learning objectives for the course. As a part of this NAAB Accreditation review, faculty have gone through this assessment process and produced an executive summary for each PC and SC, which reflect on ways to improve the curriculum or course. For example, while reviewing the NAAB 2020 criterion, the Program noticed that we were not directly assessing Equity and Inclusion in our curriculum, although we covered the material in several courses. As a result, we selected ARCH 461: Urbanism to cover and assess this material more holistically. One other consequence of covering this material in ARCH 461 was the addition of readings and course assignments to enhance student learning on equity and inclusion. After the first revised course offering, the instructor reflected on the assessment results and plans to implement a pre-assessment of student knowledge at the beginning of the course and track the knowledge gained during and at the end of the semester. Additional information can be found in the PC.8 executive summary, and additional examples for faculty refection for each PC and SC can be found in their respective executive summaries: PC.1, PC.2, PC.3, PC.4, PC.5, PC.6, PC.7, PC.8 and SC.1, SC.2, SC.3, SC.4, SC.5, and SC.6.

As part of the promotion and tenure process, Assistant Professors are required to obtain two peer evaluations of teaching reports from Associate or Full professors. Peer observation of faculty teaching is an effective way to receive feedback on one's teaching and expand the teaching review beyond student evaluations alone. The College references the <u>Center for Transformative</u>

<u>Teaching Recommended Peer Observation Process</u> when conducting these reports. The Program encourages Assistant Professors to complete the Faculty-led Inquiry into Reflective and Scholarly Teaching (FIRST), formerly known as the Peer Review of Teaching Project. FIRST is a professional development program that provides a model for how to document, assess, and make faculty's teaching and student learning more visible. The Advanced Program provides faculty an opportunity to pursue their teaching from a Scholarship of Teaching and Learning (SOTL) approach with a close-knit community of inquisitive teaching scholars. Past participants have presented their projects at conferences, published manuscripts based on their projects, and won teaching innovation awards for their ideas.

In cases when a self-assessment reflection occurs that results in a desire to change the learning outcomes or scaffolding of knowledge between courses, the Professional Program Committee (Brian Kelly, Zac Porter, and David Newton) engages the entire faculty to consider the next best steps. When considering changes to an existing course or adding a new course to the curriculum, the teaching faculty and Professional Program Committee (PPC) conduct a review of the curriculum and student work at the end-of-semester review to ensure the scaffolding of knowledge is supported before and after the proposed course offering. Initially, the student learning objectives are identified through discussion with the thematic teaching team, an all-faculty review, and a vote led by the PPC. The PPC includes two student representatives, typically one from the undergraduate Program and one from the graduate Program. The College's Student Advisory Board (SAB) provides another important feedback loop, which is often more comprehensive than the feedback on an end-of-semester course evaluation form.

5.3 Curricular Development

The program must demonstrate a well-reasoned process for assessing its curriculum and making adjustments based on the outcome of the assessment.

Programs must also identify the frequency for assessing all or part of its curriculum.

Program Response:

As mentioned above, the faculty holds two end-of-semester reviews and two retreats each year, during which they also assess curricular alignment with the potential for making adjustments. During the 2021-2022 academic year, faculty assessed the Program mission statement and added a second sentence that describes how we define the first sentence of the mission statement. As a result, the revised language better reflects the current faculty and guides the Program into the future.

The first sentence of the mission statement discusses what we do. Our "educational foundation" is defined by the scaffolding of knowledge and approaches in the undergraduate Program. The phrase "intellectually aware" is defined by the history/theory courses within the disciplinary curricular strand that provide students with a broad perspective of the discipline relative to society. This and other curricular strands culminate in the required synthesis in the final year of the undergraduate and graduate programs. The phrase "self-realizing" is defined as allowing students to author their own educations through undergraduate and graduate elective courses. The second sentence of the mission statement describes how we define the first sentence of the mission statement. The phrase "collaboration and engagement" refers to the reciprocity between stakeholders, faculty, and students whereby knowledge is co-created to impact design, research, and innovation. The phrase "excellence in design research and creative scholarship" is defined by our faculty and students' ability to obtain external peer-reviewed outcomes from coursework and independent investigations.

In recent years, the Program has focused on discussing studios and courses that scaffold student knowledge toward the new 2020 NAAB criterion. For example, this resulted in our realizing that second- and third-year courses and design studios needed to better introduce and scaffold knowledge to prepare students for the ARCH 411: Integrate design studio in the final semester of the undergraduate degree. As a result, the ARCH 211: Ideate design studio now clearly

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addresses building structure and materiality through divergent and convergent approaches that focus on fundamental ways in which users, matter, and environment inform architecture. Although this language was already in the ARCH 211 course outcomes, both the full-time faculty and the part-time lecturing faculty teaching the studio opened discussion in their teaching team meetings to ensure the outcome is being met. A similar process has been put in place to scaffold knowledge across the curriculum for each PC and SC.

Another example of this review process that resulted in a curricular change was the faculty's desire to improve the year-long optional ARCH 613/614: Design Thesis. After the fall semester each year, faculty would assess student work and discuss strengths, challenges, and opportunities. After several semesters of these discussions the faculty identified the need for greater depth and focus to the projects and decided to add a new course to the curriculum, ARCH 544: Thesis Prep (2 CH), a thesis prep course that would better prepare students for the ARCH 613/614: Design Thesis. After three years of offering the course, the faculty agree that the course is improving students' ability to frame a thesis proposal. While this curricular change has been a positive one, the faculty continue to examine the thesis sequence to identify areas of success and improvement to best support our students. In Spring 2023, we agreed to slightly adjust the voting process for allowing students to continue into the spring semester to happen at one review instead of two, which eliminated redundancy in the pinup and review process for the students and faculty.

Another recent curricular change occurred while reviewing the ARCH 500 and ARCH 501 core design studios for the M.Arch 3-year (3M) Program, when faculty identified a need to scaffold knowledge during these foundational studios that would help students entering the fourth semester ARCH 511i: Integrate studio. To scaffold this knowledge, the Program director hired a professional to teach the third semester ARCH 510: Design Research Studio with the intent to bridge knowledge between the core studios and the Integrate studio. The 3M students were advised to take the design studio section taught by the professional before the start of the semester as preparation for ARCH 511i. This arrangement has proven to be successful for the last two years and the Program plans to continue offering the course.

The annual curricular review process also occurs for the common first-year curriculum with faculty who are teaching courses and serving on the d.ONE core team. This review includes two full-time architecture faculty members. This process ensures that the first-year curriculum meets expectations and transitions students into a design discipline in the second year.

In addition to the annual review process, faculty have also implemented equity measures in course syllabi. The UNL Syllabus Policy was developed with the UNL Faculty Senate and the Association of Students of the University of Nebraska (ASUN) and was first approved by the UNL Faculty Senate on April 3, 2007. It was later revised on March 7, 2017, again on April 7, 2020, and most recently on October 5, 2021. The policy lists the required information that must be on all course syllabi, including the <u>UNL Course Policies and Resources</u> link to the University-wide Attendance Policy, Academic Honesty Policy, Services for Students with Disabilities, Mental Health and Well-Being Resources, Final Exam Schedule, Fifteenth Week Policy, Emergency Procedures, Diversity & Inclusiveness, Title IX Policy, and other relevant University-wide policies. While the University states that it is optional to include learning outcomes in a syllabus, both the Program and the College show this material so that students and faculty can better work toward meeting the learning outcomes. We are also part of "digital accessibility training" for faculty this fall through a university-wide initiative. The training will consist of an online module, with questions and assistance covered by our instructional designer and the CTT.

5.3.1 Course Assessment

The relationship between course assessment and curricular development, including NAAB program and student criteria.

Program Response:

There is a direct connection between NAAB course assessment and incremental curriculum development, which occurs in the form of a curricular map (see the <u>2M flowchart</u> and the <u>3M</u> <u>flowchart</u>) where the Program incrementally scaffolds knowledge prior to assessment. Faculty have identified a course-by-course framework to achieve the NAAB program and student criteria that involves building knowledge through the introduction, repetition, and assessment of competency-level courses.

Faculty have identified courses that scaffold knowledge at three levels: Level 1–Introductory, Level 2–Repeat, and Level 3–Competency and Assessment. This ensures that students incrementally build knowledge across the curriculum to meet criteria in a single course or multiple courses. The assessed course(s) are often in the mid-and upper-years of the curriculum, allowing students ample time to comprehend the course material. Revisions to course learning objectives may be proposed at any time and further investigated by the Professional Program Committee (PPC) to ensure curricular alignment before being voted on by the faculty.

When appropriate, PC and SC assessment is conducted by the faculty member instructing the course. This is imperative to empower faculty to self-reflect on their teaching and ensure students meet the criteria. The Program uses a <u>faculty reflection process</u> following the recommendations of our College's instructional specialist. Having the expertise of an assessment expert allowed our Program to understand better and implement an assessment approach that is flexible for each faculty member and course. The faculty write the executive summaries to document the assessment process they used in their courses to meet the PC/SC. This helps the faculty have ownership in the assessment process and provides an opportunity for the Program director and teaching teams to have coaching moments with individual faculty.

5.3.2 Roles and Responsibilities

The roles and responsibilities of the personnel and committees involved in setting curricular agendas and initiatives, including the curriculum committee, program coordinators, and department chairs or directors.

Program Response:

Faculty can propose and discuss curricular agendas and initiatives at any time. These topics are often raised after the individual faculty-, teaching team-, or end-of-the-semester-review process. If necessary, the Professional Program Committee (PPC) (i.e., the curriculum committee), teaching team coordinators, and Program Director typically initiate curricular discussions. When these discussions occur, the full faculty review and discuss any changes prior to implementation. The Program consults the Student Success office and advising staff on student opportunities and concerns.

Students play a key role in these discussions by serving on the Professional Program Committee (PPC) and the Student Advisory Board (SAB). In these leadership roles, students can make suggestions to the PPC, the Program Director, or the Dean. The College Curriculum & Student Affairs Committee (CCSAC) oversees the College curriculum to ensure that there are no redundancies in courses, themes, or content. Committee members ensure that all College programs are made aware of all course changes, discuss them, and vote on them. The CCSAC has two student representatives that are voting members of the committee. The UNL Undergraduate Curriculum Council (UUCC) Review acts in a similar manner by overseeing the University curriculum. See the course and program proposal/change charts below for a full description.

Course Proposal or Change (timeline: 2-3 months)

r			
	Program Level:	College Level:	University Level:
I	Faculty, teaching team,	College Curricular & Student	UNL Undergraduate
	individual faculty members,	Affairs Committee (CCSA)	Curriculum Committee
	Professional Program	Dean Approval	(UUCC) Review.
	Committee (PPC), entire		
	Architecture Program faculty.	Roles and Responsibilities: Committee members review	Roles and Responsibilities:
	Roles and Responsibilities:	course proposal for course	Committee reviews for
	Faculty or PPC presents	content duplication at college	course content
	course change to faculty for	level.	duplication at university
	discussion, comments, and		level.
I	vote.		

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Program Level:	College Level:	University Level:
Facilitator	College Curricular & Student	UUCC Facilitator
Program Director / Chair	Affairs Committee (CCSA)	UUCC Committee Vote
	Dean Approval	Editor Approval
Roles and Responsibilities:		Graduate Approval
The facilitator or Director	Roles and Responsibilities:	Registrar Editor
develops required new	College committee reviews	Approval
program narrative and	proposal to consider synergies	PeopleSoft
justification for faculty	of courses and faculty among	EVC office approval
discussion and review.	the programs in the college.	Board of Regents
		review and vote
		Roles and
		Responsibilities:
		University committee
		reviews proposals and
		nominates them for
		approvai.

5.4 Human Resources and Human Resource Development

The program must demonstrate that it has appropriate and adequately funded human resources to support student learning and achievement. Human resources include full- and part-time instructional faculty, administrative leadership, and technical, administrative, and other support staff. The program must:

5.4.1 Workload Balance

Demonstrate that it balances the workloads of all faculty in a way that promotes student and faculty achievement.

Program Response: The College of Architecture uses a Full-Time Employment (FTE) chart that identifies the FTE percentages of a lecture, lab, seminar, or studio course. Typically, faculty members in the Architecture Program teach two courses a semester and mentor thesis students; their teaching includes a studio and a core course one semester and a studio and seminar course in another semester, consisting of a 70-75% teaching FTE. In some cases, adjustments are made to reflect administrative positions or an increase in faculty

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research efforts. Additionally, teaching schedules and service assignments are published to the faculty at the beginning of each semester.

The Program fosters a culture of work/school/life balance through the <u>Employment and</u> <u>Course Load Guidelines</u>. Architecture is a demanding discipline requiring significant commitment to succeed, and for this reason, the Program has adopted guidelines recommending that employed students not exceed the registration guidelines. In the M.Arch program, students holding teaching or research assistantships cannot exceed 12 credit hours per semester. Students holding these positions are prohibited from engaging in any other form of remunerative employment without the Program director's permission.

5.4.2 Architect Licensing Advisor

Demonstrate that it has an Architect Licensing Advisor who is actively performing the duties defined in the NCARB position description. These duties include attending the biannual NCARB Licensing Advisor Summit and/or other training opportunities to stay up-to-date on the requirements for licensure and ensure that students have resources to make informed decisions on their path to licensure.

Program Response:

The Program of Architecture has an active licensing advisor in place fulfilling the duties as prescribed by the National Council of Architecture Registration Boards. Brian M. Kelly, AIA, is an Associate Professor of Architecture and a licensed architect in the State of Nebraska who has served as advisor since 2018. Within the College, he serves in several capacities that link students with professionals and usher them through the licensure process. This involves coordinating the annual Internship and Career Fair, which brings between 60-70 regional and national firms into the College for a two-day event that contributes the Program's high placement rate for graduating students. Professor Kelly also teaches ARCH 695: Internship, which helps transition students into a professional environment and addresses the path to licensure through presentations and encouraging the initiation of an NCARB record.

Although annual meetings with students vary in type, the Program tries to ensure students are familiar with the process to becoming licensed professionals. In 2022, Professor Kelly helped organize a meeting with students and NCARB staff member Martin Smith at the College of Architecture with the annual AIA meeting. He attends the NCARB biannual summit, including the 2019 summit in Minneapolis, the 2021 summit in Miami, and the 2023 summit. In 2023, Professor Kelly sat on a panel discussion with licensure candidates organized by the UNL AIAS members, and invited the Executive Director of the Board of Engineers and Architects to attend as well. In addition to Professor Kelly's efforts, students are exposed to the licensure process twice in our curriculum: once at the undergraduate level in ARCH 262: Building Organization, and once at the M.Arch level in ARCH 680: Professional Practice.

Professor Kelly also serves on the Nebraska Board of Engineers and Architects (of which he is currently Chair) and NCARB national committees, including the Education Committee and the ARE 5.0 Item Writing Subcommittee. Through this engagement, he has several touchpoints with candidates moving through the licensure process and recognizes them when they achieve licensure through the annual ceremony at the Nebraska State Capitol. Combined, these activities represent both our Program and professional community from the local to the national level on issues impacting professional licensure.

5.4.3 Faculty Development

Demonstrate that faculty and staff have opportunities to pursue professional development that contributes to program improvement

Program Response:

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The UNL <u>Promotion and Tenure</u> site and the <u>College of Architecture Promotion and Tenure</u> <u>Guidelines</u> provide faculty with the expectations for scholarly and professional productivity. Faculty have the opportunity for a course buyout through the process indicated in the <u>Faculty</u> <u>and Staff Handbook</u>. Faculty sabbaticals are discussed in Section VI. Faculty Sabbaticals (Faculty Development Fellowships) of the <u>Appendix To The Bylaws Of The Architecture</u> <u>Program</u>.

The Program faculty remain current in their knowledge of the discipline, practice, and licensure through individual faculty attending national conferences, serving on the ACSA council, and serving as an NCARB board member, a State Board of Engineers and Architects board member, and a AXP licensing advisor.

Faculty receive dissemination and discretionary funding to support attending conferences to disseminate their work and receive peer feedback. Additionally, faculty can apply for competitive university funding: the University Office of Research and Economic Development Sponsored Programs office offers a tremendous amount of support and assistance, beginning with proposal preparation to closing an award. They offer tools such as grant-writing seminars and expert review of grant proposals by external peer review. <u>Their website</u> provides numerous links that can be helpful while searching for grant funding, while the Office of Research & Economic Development maintains <u>a table of internal funding opportunities</u>. These opportunities are facilitated by our Associate Dean of Research, Rumiko Handa, who also sends weekly research opportunities to our faculty.

In addition to the opportunities mentioned above, the Program seeks consultation from the UNL Center for Transformative Teaching. The mission of the Center is to collaborate with educators across departments and programs to promote evidence-based, inclusive, innovative, and effective teaching for all learners. Amy Ort, Ph.D., is an Instructional Designer who works with our faculty and specializes in <u>Inclusive Pedagogy</u>. She has developed resources for instructors on topics such as cultivating classroom equity and anti-racist teaching, and also works on projects related to <u>curriculum development</u> and <u>assessment</u>.

5.4.4 Student Support Services

Describe the support services available to students in the program, including but not limited to academic and personal advising, mental well-being, career guidance, internship, and job placement.

Program Response:

The College of Architecture Student Success office is dedicated to supporting students during the academic advising process, as well as in career choices, curriculum supervised internship credit, and professional practice. The Student Success office is operated by the Director of Advising and Student Success, one full-time Undergraduate Admissions Coordinator & Advisor staff to support recruiting and advising transfer students, one full-time undergraduate advisor, and one graduate and professional recruiter. Additionally, the College has an <u>Academic Navigator</u> and a <u>Global Experiences</u> staff member who are shared with two other colleges.

UNL has several units dedicated to student health and well-being: <u>Counseling and</u> <u>Psychological Services</u> (CAPS), <u>Services for Students with Disabilities</u> (SSD), <u>Big Red</u> <u>Resilience & WellBeing</u>, and the <u>UNL Health Center</u>. Students are made aware of these services during the University's first-year student orientation and the College's 0-credit DSGN 010: Smart Start course and are required elements of each course syllabus.

UNL <u>Career Services</u> supports students in career guidance and job opportunities and works directly with the Director of Advising and Student Success, the College Career Fair committee, the AXP/licensing advisor, and the internship coordinator to ensure students are

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supported and informed about career guidance, internships, and job placement. As mentioned above, the College sponsors a <u>Career Fair</u> and annually hosts between 60-70 firms each year. Student organizations support the career fair by offering pre-sessions in portfolio development, CV and resume writing, soft skills, and interview skills. The College also has representation on the UNL Career Leaders (CORE) and UNL Career Services Core.

5.5 Social Equity, Diversity, and Inclusion

The program must demonstrate its commitment to diversity and inclusion among current and prospective faculty, staff, and students. The program must:

5.5.1 DEI Resources

Describe how this commitment is reflected in the distribution of its human, physical, and financial resources.

Program Response:

The Program faculty and students have direct access to the University's Office of Diversity and Inclusion, which cultivates an inclusive mindset of excellence through inclusion and equity strategies to prepare students to become future leaders in design practice. The idea of inclusive excellence is essential to the University's mission as a flagship institution because of its geographic isolation and lower level of student diversity. The University's initiative builds upon the Association of American Colleges & Universities' idea of "Making Excellence Inclusive" and their notion of "Equity-Mindedness." To ensure this, the University requires all undergraduate students to take an Achievement-Centered Education (ACE) course where they must demonstrate an understanding of global awareness or knowledge of human diversity through analysis of an issue. Additionally, Marco Barker, the University's Vice Chancellor for Diversity and Inclusion, has initiated a "Path Towards Inclusive Excellence" and requested that all colleges within the University prepare diversity and inclusion plans to strengthen their impact. The University is also home to the Gaughan Multicultural Center. which continues the tradition of past UNL culture centers by providing a home away from home for underrepresented students while welcoming all UNL students, faculty, staff, alumni, and quests.

The Program faculty supported and helped develop the College's <u>Diversity and Inclusion</u> <u>website</u> and <u>College Diversity Plan</u>, which provide students direct access to resources and create an environment that fosters respectful learning and teaching. The website provides resources and opportunities for students and faculty, alumni spotlight features, and ways to get involved by attending a Nebraska Community of Learners session or the College's Hyde Lecture series. The College's diversity plan aligns with our <u>College Strategic Plan</u>, which identifies "Culture and Environment" as one of three core capacities that should lead the College into the future. The Strategic Plan includes strategies that allow us to leverage our existing strengths to invigorate and extend each of the three core capacities.

Engagement with disciplinary educational organizations is essential to both faculty growth and the reputation of the Program and the College. These organizations provide important avenues to network and build leadership skills. The following organization dues are paid by the College on behalf of our faculty: NOMA, ACSA, CELA, IDEC, ACSP, and ARCC.

The College encourages its faculty members to disseminate the outcomes of their teaching, research, creative, and engagement activities. Accordingly, the College provides financial support to carry some of the financial burden associated with faculty research publication in books or journal articles. In terms of faculty research, support covers the actual cost associated with dissemination, not actual teaching, research, creative, or engagement activities. See Section 5.7 for information on scholarship, fellowship, and grant funds available for students and faculty and 5.6.3 for information regarding faculty offices. As a

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College, we also have representation (Associate Dean for Faculty and Academic Programs) on the Council on Inclusive Excellence and Diversity.

To provide equity in financial support, students are provided funding during their third year to travel with a design studio for a few days or a long weekend. Registered Student Organizations (RSO) are supported by the College and receive \$200 in funding for their activities. Additionally, an RSO leader often serves on the College Student Advisory Board (SAB). Students enrolled in the second year of the Program through the M.Arch program have their own desk in Architecture Hall, with access to a 24-hour computer lab and printing stations.

5.5.2 Faculty & Staff Diversity Planning

Describe its plan for maintaining or increasing the diversity of its faculty and staff since the last accreditation cycle, how it has implemented the plan, and what it intends to do during the next accreditation cycle. Also, compare the program's faculty and staff demographics with that of the program's students and other benchmarks the program deems relevant.

Program Response:

As of Fall 2022, UNL has 469 female (38%) and 761 male (62%) assistant professors, associate professors, full professors, and professors of practice. The College of Architecture employs 25 assistant professors, associate professors, full professors, and professors of practice as faculty members, consisting of 24% faculty of color and 24% female faculty. Faculty of color and female faculty as a percent of the entire faculty has remained steady over the last five years. Faculty of color range between 33% and 24% (2016–2022), while the percentage of female faculty has fluctuated between 33% in 2017, 26% in 2018-2021, and 15% in 2022-2023. The decline in 2022 and 2023 is the result of one tenured and one tenure track faculty member leaving for other opportunities. The Program is highly committed to increasing the diversity among the faculty. In Spring 2024, the Program has two faculty searches occurring, and we see these as an opportunity to increase the diversity among our faculty to the benefit of all. The Architecture Program has three full professors, six associate professors, two tenure-track assistant professors, and 2023.

In comparison, the University has a 50% male and 50% female student breakdown. As of Fall 2022, the College of Architecture had 581 students enrolled, including 167 students of color (29%), 341 female students (59%), and 240 male students (41%). As of Fall 2022, the Architecture Program had 379 students enrolled, with 109 students of color (29%), 200 female students (53%), and 179 male students (47%) students.

FALL 2022							Eth	nicity	/ G	ende	r				
		ASI		BL	K	H	SP	N	RA	2	+	UNK	W	′H	
College	Major Name	М	F	М	F	М	F	М	F	М	F	F	М	F	Total
Architecture	BSD- ARCHITECTURAL STUDIES	7	8	4	9	28	23	5	5	2	4	1	114	97	307
	INTERIOR DESIGN	2	7			1	14	3	4	3	5		6	101	146
	LANDSCAPE ARCHITECTURE	1				1	1	1	2	1		2	12	9	30
	Total	10	15	4	9	30	38	9	11	6	9	3	132	207	483
Total		10	15	4	9	30	38	9	11	6	9	3	132	207	483

(see following pages for breakdown)

AI/AN: American Indian/Alaska Native, ASI: Asian, BLK: Black-Non Hispanic, HISP: Hispanic, NRA: Non-Resident Alien, PI: Pacific Islander, 2+: Two or More Races, UNK: Unknown, WH: White-Non Hispanic.

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FALL 2021								Ethni	city /	Gen	der				
		A	SI	BL	K	н	SP	N	RA	2	+	UNK	W	/Н	
College	Major Name	М	F	М	F	М	F	М	F	М	F	F	М	F	Total
Architecture	BSD- ARCHITECTURAL STUDIES	9	7	2	6	21	20	6	4	4	5	1	124	98	307
	INTERIOR DESIGN	2	6		1		9	4	6	2	3		10	116	159
	LANDSCAPE ARCHITECTURE						2	1	2	2			13	12	32
	Total	11	13	2	7	21	31	11	12	8	8	1	147	226	498
Total		11	13	2	7	21	31	11	12	8	8	1	147	226	498

AI/AN: American Indian/Alaska Native, ASI: Asian, BLK: Black-Non Hispanic, HISP: Hispanic, NRA: Non-Resident Alien, PI: Pacific Islander, 2+: Two or More Races, UNK: Unknown, WH: White-Non Hispanic.

FALL 2020								Ethni	icity /	Ger	nder					
		A	SI	BL	K	HI	SP	NF	RA	2	+	UN	١K	W	Ή	
College	Major Name	М	F	М	F	М	F	М	F	М	F	М	F	М	F	Total
Architecture	BSD- ARCHITECTURAL STUDIES	9	9	3	4	21	14	8	5	3	5	1		119	103	304
	INTERIOR DESIGN	2	4				7	2	5	1	3			6	101	131
	LANDSCAPE ARCHITECTURE	1				2		5	2				1	9	14	34
	Total	12	13	3	4	23	21	15	12	4	8	1	1	134	218	469
Total		12	13	3	4	23	21	15	12	4	8	1	1	134	218	469

AI/AN: American Indian/Alaska Native, ASI: Asian, BLK: Black-Non Hispanic, HISP: Hispanic, NRA: Non-Resident Alien, PI: Pacific Islander, 2+: Two or More Races, UNK: Unknown, WH: White-Non Hispanic.

The Architecture Program's ethnically diverse undergraduate student population is increasing, with the highest increase in Hispanic students. Over the last three years, the Architecture Program's undergraduate male-female ratio has remained approximately equal.

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M.Arch Ethnicity and Gender breakdown

FALL 2022								E	Ethnie	city ,	/ Ge	nder			
			A	SI	BL	ĸ	Ξ	SP	NF	RA	2	+	W	/Н	
College	Major Name	Deg ID	М	F	М	F	М	F	М	F	М	F	М	F	Total
Architecture	ARCHITECTURE	M.Arch	1	1	1	1	2	2	3	1	1	1	30	28	72
	Total		1	1	1	1	2	2	3	1	1	1	30	28	72

AI/AN: American Indian/Alaska Native, ASI: Asian, BLK: Black-Non Hispanic, HISP: Hispanic, NRA: Non-Resident Alien, PI: Pacific Islander, 2+: Two or More Races, UNK: Unknown, WH: White-Non Hispanic.

FALL 2021							E	thnici	ity /	Geno	der		
			A	SI	BL	K	HISP	NF	RA	2+	W	/H	
College	Major Name	Deg ID	М	F	М	F	М	М	F	F	М	F	Total
Architecture	ARCHITECTURE	M.Arch	1	1	2	1	2	3	1	1	32	19	63
	Total		1	1	2	1	2	3	1	1	32	19	63

AI/AN: American Indian/Alaska Native, ASI: Asian, BLK: Black-Non Hispanic, HISP: Hispanic, NRA: Non-Resident Alien, PI: Pacific Islander, 2+: Two or More Races, UNK: Unknown, WH: White-Non Hispanic.

FALL 2020							Eth	nnicit	y / (Geno	der			
			ASI	BLK	н	SP	NF	RA	2	+	UNK	W	/Н	
College	Major Name	Deg ID	М	М	М	F	М	F	М	F	М	М	F	Total
Architecture	ARCHITECTURE	M.Arch	2	1	2	1	4	2	1	2	2	30	19	66
	Total		2	1	2	1	4	2	1	2	2	30	19	66

AI/AN: American Indian/Alaska Native, ASI: Asian, BLK: Black-Non Hispanic, HISP: Hispanic, NRA: Non-Resident Alien, PI: Pacific Islander, 2+: Two or More Races, UNK: Unknown, WH: White-Non Hispanic.

The overall ethnic diversity in the M.Arch program has remained flat over the last three years, while the male-female ratio has been increasing. In Fall 2022, the M.Arch male-female ratio was approximately equal.

	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021	Fall 2022	Spring 2023
ARCH 1st Year	84	87	92	89	99	116	99	95	110	114	105	101
ARCH 2nd Year	57	51	46	67	44	49	70	50	76	73	61	58
ARCH 3rd Year	40	47	48	38	61	31	38	66	49	73	70	69
ARCH 4th Year	26	36	46	53	41	64	34	38	69	48	70	69
M1	25	18	26	31	30	28	29	18	20	23	35	34
M2	32	16	20	24	31	31	30	31	19	20	22	22
3M	4	8	17	19	22	19	26	25	28	21	17	17
Arch Subtotal	268	263	295	321	328	338	326	323	371	372	380	370

Overall enrollment chart for the Architecture Program.

CoA TOTAL ENROLLED	498	479	495	498	517	522	521	493	552	598	588	583

Overall enrollment chart for the College of Architecture.

In terms of undergraduate- and graduate-level students, as of Fall 2022, the College of Architecture consisted of approximately 83% undergraduate students (483) and 17% graduate/masters level students (98). Both levels had approximately 29% students of color. The undergraduate student population is 60% female and the graduate/master's level population 48% female. However, it should be noted that the percentages differ significantly when compared across undergraduate majors: Architecture consists of 48% female and 32% students of color, Interior Design consists of 89% female and 27% students of color, and Landscape Architecture consists of 43% female and 23% students of color. The College has set a goal of increasing student diversity by 1.5% and first-generation students by 7.5% by 2025, with specific steps for achieving these initiatives outlined in section 5.5.3 below.

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The Program is further committed to increasing the diversity among the faculty. During the last accreditation, the Program had ten male and two female full-time tenured, tenure track, or professor of practice faculty members. During the last few years, we have had four female full-time faculty members. As an interim solution, the Program strives to hire diverse lecturers. Annually, we have hired eight part-time female professionals to teach in our Program. In Spring 2024, the Program has two faculty searches occurring, and we see this as a crucial opportunity to increase the diversity among our faculty. Additionally, as of Fall 2023, all future tenure-track or professor of practice faculty searches are using the <u>BRIDGE:</u> <u>Breakthrough Recruitment for Inclusive Diversity Growth and Excellence</u> program during our search process to fulfill our desire for inclusive excellence.

5.5.3 Student Diversity Plan

Describe its plan for maintaining or increasing the diversity of its students since the last accreditation cycle, how it has implemented the plan, and what it intends to do during the next accreditation cycle. Also, compare the program's student demographics with that of the institution and other benchmarks the program deems relevant.

Program Response:

Building a diverse and inclusive culture is integral to recruiting exceptional faculty, staff, and students to the College. In the spring of 2019, the College of Architecture began developing a strategic plan, which specifies diversity and inclusion numerous times and includes creating a Diversity and Inclusion Recruitment and Retention Plan. In summer 2021, we charged the Dean's Diversity Commission to develop that plan, and one of the action items taken from that commission included the development of our <u>Diversity and Inclusion web page</u> aimed at fostering an environment that is welcoming to all who embrace diversity, equity, and inclusion. As part of building that environment, the website features outstanding students and alumni from diverse backgrounds.

Our strategic plan also aims to increase student diversity by 1.5% in our student demographics by making changes to our recruitment and enrollment strategies that allow for greater flexibility, accessibility, and recruitment of underserved populations to College of Architecture Programs. This recruiting strategy includes NOMA panel discussions, recorded webinars with Program alumni, and Instagram posts featuring "Who We Are Now" and "Where They Are Now."

The College also has a sponsored local student chapter of the National Organization of Minority Architects. This organization is active within the College, working continuously to enhance our students' quality of life. Its mission is to champion diversity within the design professions by promoting the excellence, community engagement, and professional development of its members.

Like all student organizations, NOMAS has a representative on the College's Student Advisory Board, which provides a conduit for students to voice their concerns and a place where students work collaboratively on solutions. It also is a forum where we build community and organize student body events that represent a diverse selection of interests and perspectives. We believe in supporting the professional development of all our students, and the College frequently sponsors student trips to attend NOMAS's national conventions. One of the College's student bloggers even shared his experiences from the last NOMAS national convention on his weekly social media blog.

NOMAS members have also assisted with national recruitment activities. NOMAS student members attended the National Career Fair in Chicago, where they answered questions from potential students at our recruitment table. Our recruitment and retention efforts have been expanded with financial support aimed at supporting a diverse array of students in the College as they pursue degrees in architecture, planning and design.

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Furthermore, the Hyde Lecture Committee incorporated diversity and inclusion into last year's lecture series theme: "Building Justice: Design and Planning for a Just Society." Knowing that our professions have long excluded people of color and underserved groups in both process and outcomes, the committee decided to confront many of the issues that have long plagued the industry by inviting a selection of lecturers who believe that design and planning should be explicitly engaged with fostering a just society. The College views engaging in dialog and exploring these issues as an act of hope requiring not only an awareness of true inequity, but the courage to refute it in its many forms.

The College of Architecture supports the diversity of our students and faculty. We continually looks for new ways to enhance and enrich the educational experiences we offer. We aim to promote equity in education where all of our students and faculty can thrive, prosper, and grow, regardless of their background. The College plans on continuing all the current initiatives listed above during the next accreditation cycle and focus on new initiatives led by the hiring of a staff graduate student recruiter.

			College Studen	t Demographics:	
			Year	Total Population	People of Color/Indigenous
Nebraska Pop	ulation Demographi	<u>cs:</u>	2014	382	24%
Year	Total Population	People of Color/Indigenous	2022	489	26% (125 students)
2014	1,826,341	22.6%			
2020	1,961,504	22.6%	Architecture Pr	ogram Student De	mographics:
			Year	Total Population	People of Color/Indigenous
University Stu	dent Demographics	1	2014	243	18.5% (45 UG studetns)
Year	Total Population	People of Color/Indigenous	2014	61	13% (8 M.Arch students)
2014	19,979	22%			
2021	20,652	24%	2022	307	27.7% (85 UG students)
			2022	72	13.9% (10 M.Arch students)

State, University, College, and Program demographics.

5.5.4 EEO/AA Policies

Document what institutional, college, or program policies are in place to further Equal Employment Opportunity/Affirmative Action (EEO/AA), as well as any other social equity, diversity, and inclusion initiatives at the program, college, or institutional level.

Program Response:

The University is an EEO/AA employer, and qualified applicants are considered for employment without regard to race, color, ethnicity, national origin, sex, pregnancy, sexual orientation, gender identity, religion, disability, age, genetic information, veteran status, marital status, and/or political affiliation. We use this approach during all hire processes including full-time and part-time faculty positions.

To foster an inclusive mindset that can create a more equitable hiring process, The University has initiated a program entitled, <u>BRIDGE: Breakthrough Recruitment for Inclusive Diversity</u> <u>Growth and Excellence</u>. The BRIDGE program supports search committees by defining the role of the hiring official, writing the position description and forming and equitable search committee, recruiting and building a diverse applicant pool, managing campus visits and making the final recommendation.

5.5.5 Accommodation Resources and Procedures

Describe the resources and procedures in place to provide adaptive environments and effective strategies to support faculty, staff, and students with different physical and/or mental abilities

Program Response:

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The University has several resources and procedures for students and faculty to be successful. Student support can be found with <u>Services for Students with Disabilities (SSD)</u>, <u>Laws and Rights</u>, and the <u>UNL Writing Center</u>.

Faculty support can be found at the <u>Center for Transformative Teaching (CTT)</u>. The CTT was instrumental in helping us adjust to post-pandemic teaching formats, assisting faculty who remained teaching online due to health restrictions, and supporting our preparation for this accreditation. Employee can access help at the <u>Employee Assistance Program</u>, which provides consultation and counseling to help with personal or work-related problems that can affect general well-being, work performance, or academic performance. Additionally, students and faculty have access to the <u>UNL Institute Equity and Compliance</u> and <u>UNL Counseling and Psychological Services</u>.

At the College level, because we are the second smallest college at UNL, we have a close relationship with all of our students, which builds community and allows for informal advising. The 0-credit DSGN 010: Smart Start course provides an introduction to University and College resources, and beyond this introduction, students are provided with individual support through the Learning Culture policy, the Advising and Student Success Office, and Peer Mentoring. Additionally, the College regulates building hours to better manage a healthy workplace.

At the Program level, individual one-on-one support for students and faculty is provided to cultivate a supportive and healthy teaching and learning environment. Syllabi for every course refer to student resources, provide appropriate channels for accommodations when adaptation is needed, and have clear attendance policies with built-in flexibility (including for ongoing COVID-19 cases). The faculty and Program director work directly with students to manage and accommodate unique situations that may include the death of a family member or friend, extended illness, or mental health crisis.

5.6 Physical Resources

The program must describe its physical resources and demonstrate how they safely and equitably support the program's pedagogical approach and student and faculty achievement. Physical resources include but are not limited to the following:

5.6.1 Studio-based Learning

Space to support and encourage studio-based learning.

Program Response:

The College of Architecture has three large multi-section studio-based learning areas that hold 34 sections of design studios. All three multi-section studio-based learning areas have formal and informal pin-ups along with larger collaboration desks and TVs on rolling carts. Currently, the 34 design studio sections are adequate for our current and near future needs. The College typically enrolls 15 students per studio section.

Architecture Hall Barn

The barn, located in Arch Hall West, provides a large open space for design studios. Through a variety of areas and pinup walls, it creates a flexible workspace where students can both work and interact between classes. The space has a pin-up area called the corral and large TV screens on rolling carts.

Architecture Hall Library Renovations (completed in Fall 2022)

All three floors of Architecture Hall East's north wing, where the library once stood, have been renovated into 12 new studio spaces. This project entailed consolidating and relocating the Architecture Hall Library to the first floor of Architecture Hall West and including a learning commons space. Study areas in the learning commons include open seating area for 30-40

students, two private study rooms, one consultation room, two large tables, several smaller tables, and soft seating.

Architecture Hall Addition

The HDR and NADAA design provides a new addition to the north side of Architecture Hall. When completed in Spring 2024, the addition will add 14 new studios, increase the size of the building's existing lecture hall, and include an entry with a lobby, a gallery, and flex space.

5.6.2 Teaching Spaces

Space to support and encourage didactic and interactive learning, including lecture halls, seminar spaces, small group study rooms, labs, shops, and equipment.

Program Response:

The College of Architecture building has eight learning spaces available for classroom instruction and informal areas to study or hold meetings. Room 127 is a large classroom outfitted with a lecturer station with dual projectors and a large screen. Room 211E – Main Gallery is a large open space with one ceiling-mounted projector, one lecture podium (with wall ports for the projector), and a 65' LED monitor with cart. Room 2W – New Crit Space has a 65' LED monitor with computer and cart. The Architecture Hall Link (atrium space) has moveable flexible furniture and an engaging social space for students. Room 115, Room 232, and Room 305 resemble more typical classrooms and all include an overhead projector or 65' LED monitor with cart.

Other spaces housing equipment available for students are described below.

Self-Service Printing (RM21)

Students can send prints from CoA Lab computers (RM23) and CoA Media Center computers (RM21) to Color and B&W 8 ½" x 11" / 11"x 17" printers, as well as large-format color inkjet and B&W laser plotters 24 hours a day, 7 days a week. A per-page or linear foot price is charged to the student's prepaid PaperCut account.

Media Center Printing (RM22)

The College operates the Media Center to provide large-scale plotting, scanning, and color printing. The Media Center is a nonprofit: it aims to pay for student workers, supplies, and to contribute a small amount to the necessary replacement of equipment. The Media Center (RM21) is typically open from 8:00am-8:00pm M-F and 1pm-5pm on Sundays and is staffed by student workers.

During MC open hours, students can submit their prints, plots, and 3D prints using a portable USB drive to the MC student worker on duty for printing. Prepaid PaperCut cards in \$1, \$5, \$10, and \$20 increments can be purchased for 24-hour self-service printing. Additionally, students can also purchase a limited supply of studio materials and model-making materials such as chipboard, museum board, and foam core, as well as MDF, OSB, and rigid foam insulation. All printing services, materials, and prepaid PaperCut cards can be purchased from the MC during open hours with an activated student University ID or personal check and can be picked up during Media Center open hours. During busy times, students can also submit large-format plot requests to the Media Center 24 hours a day using the CoA Media Center print order form. Both methods require that students pay for the plots at the Media Center desk, and they can only be picked up during normal Media Center hours.

Digital Fabrication

The Media Center also supports and gives students access to digital fabrication. Students must attend a 20-minute training session before using the laser cutters, and there is a 1-credit mini course dedicated to CNC Router training. 3D prints can be submitted during MC open hours (RM21) and can be picked up after models have been printed.

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5.6.3 Faculty Spaces

Space to support and encourage the full range of faculty roles and responsibilities, including preparation for teaching, research, mentoring, and student advising.

Program Response:

Each Program faculty member has a dedicated office space to prepare course material, grade, conduct research, mentor, and advise students. Part-time lecturer/T faculty have a secure space to store their personal materials and multiple desks at which to prepare course material, grade, conduct research, mentor, and advise students. This space is utilized by 5-10 lecturer/T faculty at various times of the day depending on class schedules.

The Student Success Office is centrally located in the College of Architecture, and all recruiting and advising staff are housed in Room 232 Architecture Hall West. The Student Success staff are responsible for the coordination of recruiting, retention, advising, and placement efforts with the Dean, Associate Deans, Program Directors, Faculty Coordinators, and the Communications Director. Faculty and Program Directors have access to a dedicated conference room to meet with current and prospective students.

5.6.4 Learning Support

Resources to support all learning formats and pedagogies in use by the program.

Program Response:

The Nebraska Innovation Campus and Nebraska Innovation Studio (NIS, described in the next section) are making and learning spaces for our faculty and students to teach and conduct research on materials and fabrication. Innovation studio is set up as a large maker space with numerous tools, equipment, and fabrication space to support student learning and teaching instruction.

If the program's pedagogy does not require some or all of the above physical resources, the program must describe the effect (if any) that online, off-site, or hybrid formats have on digital and physical resources.

Program Response:

While there are no fully remote students in the Program, the Program offers a select few courses online, which has no impact on digital or physical resources. The Program also offers a select few courses as web-conferencing/hybrid remote, with in-person instruction several times a semester. Web-conferencing/hybrid courses often require classroom or studio space in Architecture Hall for students to gather and work side-by-side or collaboratively on assignments. The Program requests that hybrid courses take place on campus at least once a semester.

In recent years, the Program has also offered an upper-level design studio at Nebraska Innovation Studio (NIS). NIS is a community-oriented makerspace that serves as a hub for innovators, artists, and entrepreneurs. NIS is one of the nation's top makerspaces, a 16,000square-foot facility with a full metal shop, wood shop, rapid prototyping room, art studio, ceramics studio, textiles equipment, and more. Several College of Architecture courses and design studios utilize this facility each semester, and the Program regularly schedules one or two courses at NIS to maximize use of and access to the equipment. This occurs mostly with the Design-Build studios.

5.7 Financial Resources

The program must demonstrate that it has the appropriate institutional support and financial resources to support student learning and achievement during the next term of accreditation.

Program Response:

The University of Nebraska-Lincoln has access to state-aided funds, grant-awarded F&A, and Foundation funds raised by each college. The state-aided funds include state appropriations and student tuition. F&A funds are distributed to colleges based on the grant awarded. The College of Architecture also receives differential tuition funding.

The College budget is comprised primarily of state-aided funds and differential tuition. The allocations in FY23 were approximately 80% state-aided and 20% differential tuition. The allocations in FY24 are approximately 78% state-aided and 22% differential tuition. Since FY19, the state-aided budget has had structural reductions of approximately \$700,000, representing approximately a 15% reduction. The College budget covers operating expenses for College functions, all staff salaries, all faculty salaries, and instructional costs, including PoPs, lecturer/T faculty, Graduate Teaching Assistants (GTA), Graduate Learning Assistants (GLA), and Undergraduate Learning assistants (ULA), and benefits associated with any salaries paid by differential tuition. For FY23, student teaching/learning support (GTA, GLA, ULA) totaled 5.75% of our College budget.

GTAs are responsible for most aspects of teaching sections of a course (e.g., instructing recitations, conducting lab sessions, teaching studio sessions, holding office hours, grading) and typically work under the mentorship and supervision of the Instructor of Record. Graduate Teaching Assistants are expected to work 15 hours per week and receive a stipend, tuition remission, and eligibility for health insurance. Under our current budget model, the tuition, remission, and health insurance are covered by the UNL general fund.

GLAs are graduate students who have previously excelled in their assigned courses. Their responsibilities may include assisting faculty in preparation for course delivery (e.g., visual presentations, assignment prep and review, objective assessment), providing supplemental learning for students in- or outside the classroom (e.g., skill building and tutorials, study skills, reviewing materials presented by a faculty member), or any combination thereof. GLAs are permitted to assist with grading, and it is highly recommended that faculty provide GLAs with a clear rubric for grading assignments. GLAs are expected to work up to 12 hours per week at an hourly rate.

ULAs are undergraduate students who have previously excelled in their assigned courses. Their responsibilities may include assisting faculty in preparation for course delivery (e.g., visual presentation, assignment prep and review, objective assessment), providing supplemental learning for students in- or outside the classroom (e.g., skill building and tutorials, study skills, reviewing materials presented by a faculty member), or any combination thereof. ULAs are expected to work up to 7 hours per week at an hourly rate.

The annual Program budget is established with the goal of supporting student and faculty needs. This includes funding to hire part-time faculty to teach in our Program. The Program typically hires 13-15 part-time faculty each semester to cover our required courses.

Due to an increase in student enrollment, the Program has asked for and partially received additional resources to assist with the hiring of recent full-time faculty. However, the Program still needs additional funding to support strategic hiring needs to teach design studio sections and core classes in building technology, structures, and computers.

Expense and revenue categories over which the program has either control or influence.

The Program also oversees a discretionary Program fund allocated by the College and \$50,000 of NU Foundation funds. These funds are prioritized by the Program to pay for external critics, public exhibitions, director travel, travel for faculty serving on editorial boards, and culture-building activities.

The Program can allocate a select amount of NU Foundations funds, and for the last several years, faculty have agreed to use these funds to support student travel in the third year of the Program. Since 2014, the Program has overseen and executed expendable NU Foundation funds for the SGH & Dri-Design student scholarship/competitions, and since Spring 2023, the endowed NU Foundation funds for the BVH & Norman Ochsner Competition. These funds are used to invite an external jury to review and award student scholarships.

Since 2022, the Program has overseen the use of the Nebraska Masonry Alliance and Timberlyne Design Research and Fabrication grants. These grant programs support the faculty's design and fabrication interests to create, develop, and communicate research that will contribute to academic and professional discourse. This initiative enables faculty to engage in architectural research and creative projects predicated on research and fabrication. Since the Program's inception, four faculty have received funding that has supported five courses and numerous student learning opportunities.

On a rotating basis, the Program oversees the Hyde Chair of Excellence funds, which are typically used to hire non-tenure track or general faculty for one semester or one year. This position is available to designers, architects, and educators from various backgrounds of national and international distinction with outstanding and unique credentials who share our aim to foster an inclusive culture with diverse perspectives.

Scholarship, fellowship, and grant funds available for students and faculty

<u>University</u>

The University of Nebraska Research Council is composed of twelve faculty members who have been appointed. They advise the Vice Chancellor for Research and Economic Development and review and award internal grants for research, scholarship, and creative activities with funds from the University of Nebraska Foundation. Grant opportunities such as Faculty Seed Grants and Grants-in-Aid, both of which provide a maximum award of \$10,000, are due in October. Interdisciplinary Research Grants are also due in October, and awards can be up to \$20,000 for one year. The University offers a Visiting Scholar program, which has deadline dates in March and October and will reimburse airfare, lodging, and meals for those who are recognized for excellence in their fields and whose research and scholarly activities are closely related to the faculty and students at UNL. Similarly, the Symposia/Distinguished Lecturers program has deadline dates in March and October and supports an honorarium up to \$3,000 to outstanding invited scholars who appeal to and interact with a large interdisciplinary segment of the University community. All internal applications are submitted through NUramp. More information is available on the Research Council website.

The University of Nebraska's Office of Research supports research, scholarship, and creative activities through annual university-wide competitions. The opportunities include Arts & Humanities Research Enhancement Program and Layman Awards (Seed Awards and New Directions). The University maintains <u>an updated list of funding opportunities</u>.

All faculty, staff, and administrators at the University have automatic access to the NUgrant secure electronic research administration system. Any external grant or project that has funds associated with it that are not Foundation Funds should be administered using NUgrant.

Students with a 32 ACT (or the SAT equivalent) and an outstanding high school grade point average or excellent class rank can obtain the Regents Scholar Tuition Commitment, which covers the cost of UNL tuition for up to 120 credit hours. The Nebraska Promise is another program that covers undergraduate tuition at the University of Nebraska's four campuses (UNK, UNL, UNMC and UNO) and its two-year technical college (NCTA). Tuition is covered for students who meet academic qualifications and have a family income of \$65,000 or less (Adjusted Gross Income/AGI) or are Pell Grant-eligible.

<u>College</u>

The College has an R/CA/Engagement Canvas page to assist faculty in their research, creative activity, and engagement. The site is structured into four modules: preparation, work, dissemination, and awards/recognitions. The following awards recognize excellence and exceptional accomplishment, and may or may not be awarded each year, depending on the quality and number of applications: the Outreach and Engagement Award, Teaching Award, Research and Creative Activity Award, and Staff Award for Excellence.

Recipients of College of Architecture professorships shall be full-time tenure-track and tenured faculty members, and each award will supplement the annual salary and/or reimburse project expenses, depending on what is allowable by the fund agreement. The amount will be determined in consideration of each fund's performance. Professorships within the College of Architecture include the Douglass Architecture Professorship, the W. Cecil Steward FAIA Chair of Architecture, the A. Leicester Hyde Architectural Chair/Professorship, and the Merle and Trula Bachman Professorship in Healthcare Design (approximately \$95,000 awarded annually). More about each of these professorships is included in the <u>College of Architecture Faculty-Staff</u> <u>Handbook</u>. The College financially supported faculty in two ways, through a small discretionary fund as well as a dissemination of research, scholarship and creative activity fund during the fiscal year 2023.

Availability of student funding is one the highest priorities of both the College and the Program. The College of Architecture awards more than \$190,000 in scholarships and awards annually to majors in Architecture, Landscape Architecture, Interior Design, and Community and Regional Planning. The College and these individual programs have, through the generosity of the alumni and friends of the College, developed a significant array of scholarship and award opportunities for students. While most scholarships are merit- or financial-need based, there are several scholarships that require additional application material. The majority of these scholarships (preprofessional, professional, and graduate) are awarded by the College and Program committees annually at the end of the academic year to be used for the following year.

College-level scholarships (\$140,000) and Program-level scholarships (\$53,000) totaling \$193,000 annually are awarded to students in academic year 2022-2023. The student teaching/learning support for undergraduate and graduate students (GTA, GLA, and ULA) totals \$223,000 annually.

The University Creative Activities and Research Experience (<u>UCARE</u>) program is another paid opportunity for undergraduate students to work one-on-one with a faculty research advisor in research or creative activities. Awards are available during the academic year or the summer. Applications are competitively reviewed and funded each year and are not automatically renewed.

Engagement with disciplinary educational organizations is essential for faculty growth, along with the reputation of the Program and the College. These organizations provide important avenues to network and build leadership skills. The following organization dues are paid by the College on behalf of our faculty: ACSA, CELA, IDEC, ACSP, and ARCC.

Pending reductions or increases in enrollment and plans for addressing these changes.

The College has seen a consistent yearly increase in enrollment resulting in an approximately 27% increase since the last accreditation report, moving from 495 students in 2014 to 628 students in Fall 2023. The Architecture Program has seen an approximately 38% enrollment increase since the last accreditation report, moving from 295 students in 2014 to 406 students in Fall 2022. The undergraduate Architecture enrollment (2nd year to 4th year) has seen an approximately 36% increase, moving from 140 in 2014 to 191 students in Fall 2023. The M.Arch

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enrollment (2M and 3M) has seen an approximately 30% increase, moving from 63 students in 2014 to 82 students in Fall 2023.

The College and Program have addressed the enrollment increase by hiring more faculty, including tenure-track positions, professors of practice, and part-time lecturers. Since the last accreditation visit, the Program has hired three more tenure-track faculty and two professors of practice (PoP). The two PoP positions are currently on "bridge loans" from the EVC's office, and the college will need to find a permanent funding source by May 2023 and May 2025 respectively. The Program is currently searching for a Building Technology faculty member, and still needs full-time faculty to cover the core curriculum design studios.

As a result of our aging building and the increased enrollment in the College and the Program noted above, the College secured \$4,256,150 in funding for Architecture Hall Library and Studio building renovations. The second phase secured \$19,325,000 in funding for a new addition.

Pending reductions or increases in funding and plans for addressing these changes.

During FY2021-2023, the College incurred a 9% reduction in state-aided funding. The College and Program have met this reduction while still providing quality education. Additionally, the College has incurred another 3.26% reduction in state-aided funding prior to the start of FY2024. The College continues to advocate our enrollment successes, with the College enrollment up 25% in the past three years. The College accommodated this budget reduction while still providing a quality education for our students and a supportive environment for our faculty and staff. With that said, establishing a sustainable budget reflective of Program growth is a high priority for ongoing Program excellence.

As part of the budget reductions, the Program was required to substantially reduce the number of Graduate Teaching Assistant (GTA) positions, which were later replaced with Graduate Learning Assistants (GLA). Additionally, financial cuts were made to operational expenses, including events, part-time student workers, and not rehiring a staff person to fill the Program administrative assistant position. The University centralized the business staffing to a business center, which streamlined operations for improved efficiency. Lastly, the faculty dissemination travel funding was reduced for all faculty, resulting in assistant faculty members receiving \$2,000, associate faculty members receiving \$1,000, and full faculty members receiving \$500). However, we were able to maintain a supportive teaching environment by hiring two assistant professors of practice faculty members in the Fall of 2022. One professor of practice position was hired on "bridge funding," in anticipation of future budget allocation methods reflective of enrollment growth.

<u>Changes in funding models for faculty compensation, instruction, overhead, or facilities</u> since the last visit and plans for addressing these changes.

The University initiated a faculty compensation review of their peers' salaries in FY21 and FY22, allocating state funds to elevate faculty salaries to be equitable and competitive on a national benchmarking level. As a result of the FY23 processes, \$5 million was allocated across 601 tenure-line faculty (56.9% of total tenure-line faculty), resulting in an average salary increase of 6.9% among those faculty whose salaries were adjusted. For 2022-23, \$5 million in total funding has been allocated to the University (UNL campus) to cover faculty salary and incremental benefits (13%) for tenure-line faculty. For FY24, the dean and business manager analyzed AY22-23 faculty base salaries to determine if any salaries would be considered outliers by rank (high or low), and it was determined that no salaries within the department that were considered low faculty outliers.

As noted in Section 5.6.1, all three floors of Architecture Hall East's north wing, where the library once stood, have now been renovated into 12 new studio spaces. This project entailed consolidating and relocating the Architecture Hall Library to the first floor of Architecture Hall West and included a learning commons space. Study areas in the learning commons include an open seating area for 30-40 students, two private study rooms, one consultation room, two large tables,

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several smaller tables, and soft seating. The HDR and NADAA design, to be completed in Spring 2024, also provides a 20,000 ft² new addition to the north side of Architecture Hall that will add 14 new studios, increase the size of the building's existing lecture hall, and include an entry with a lobby, gallery, and flex/crit space.

<u>Planned or in-progress institutional development campaigns that include designations for</u> <u>the program (e.g., capital projects or endowments)</u>

In November 2022, the University of Nebraska system entered the public phase of Only in Nebraska: A Campaign for Our University's Future, a historic initiative to engage 150,000 unique benefactors and raise \$3 billion. The three themes of the campaign are a relentless focus on student access and success; enhancing faculty, academic, and clinical excellence; and transformation research and innovation. Each campus and college within the University of Nebraska system has identified specific goals that fall within these three themes.

The College of Architecture has a goal of raising \$16 million during this effort, and given the progress already experienced, has set a stretch goal of \$20 million. Below is a breakdown of the stretch goal and the top priorities within each campaign theme:

Student Access and Success: \$11 million

- Endowed Undergraduate Scholarships and Graduate/Professional Fellowships
- Support for Study Abroad and Global Engagement programs
- Enhancement of Classroom and Studio Technology
- Faculty and Academic Excellence: \$6 million
 - Endowed Professorships and Chairs
 - Faculty Support Programs and Funds
 - Course/Studio Enhancement Funds

Research and Innovation: \$3 million

- Research Facilities/Equipment
- Future of Learning Facility Enhancements

5.8 Information Resources

The program must demonstrate that all students, faculty, and staff have convenient and equitable access to architecture literature and information, as well as appropriate visual and digital resources that support professional education in architecture.

Program Response:

Literature and Information Resources

The University Libraries support teaching, learning, and research activities of faculty and students. The University Libraries operate under a strategic plan, have oversight by a Faculty Senate University Libraries Advisory Committee, and foster a culture of innovation, assessment, and data-driven decision-making open to all students and faculty.

The Architecture Library was renovated and relocated in the Fall of 2022. In addition to its new location and smaller footprint, the major change was a core 9,200-volume print collection in the new space, along with learning and research collaborative spaces. The thoughtful curation was based on the teaching curriculum and research needs of the College, and the use of materials, reference needs, and course materials. The Architecture Library collection encompasses approximately 6,500 books, 2,200 journal volumes, and 430 media titles. The more expanded research collection contains 107,000 books, numerous ejournal packages, and multimedia collections. These materials are accessible from our main library and the Love Depository and Retrieval Facility, and can be requested and delivered within 24-48 hours. Faculty, staff, and students have access to over 88,000 electronic journals and over 1,200,000 electronic books. Approximately 20 electronic databases are listed on our research guides for all students to use for assignments and research. Major eBook publishers include Taylor & Francis, Project Muse Open, JSTOR Open, Springer, Elsevier, ProQuest, EBSCO, and Cambridge.

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The Architecture Library maintains extensive service hours during the academic year. Whenever possible, the Architecture Library attempts to provide the same services offered at Love Library, the University's main library. Circulation services such as course reserves, interlibrary loan, and electronic document delivery are identical. The Architecture Library is open 73 hours per week during the academic year, and 45 hours per week during the summer months. Full-time staff are available Monday-Friday, 8am-5pm. Student assistants operate the library during other hours.

Computing Resources

All students in the College's Architecture, Landscape Architecture, and Interior Design Programs are required to purchase, lease, or have ready access to a laptop computer that meets or exceeds the specifications listed in the <u>Computer and Software Requirements document</u>. Students can choose between a PC or Mac platform. The College also stocks several laptops that can be distributed to students through the Media Center IT personnel if a student's personal laptop is in need of repair. These laptops run the same software load as our labs. Laptops are loaned to students for 30 days, or within a reasonable timeframe for students to have their personal laptops repaired.

The College maintains two computer labs in Architecture Hall that are open to all students and faculty for education, research, and public service activities. The facility includes graphics and printer terminals, as well as numerous computers. Because digital technology is ubiquitous to contemporary design and planning processes and practices, it has been a priority of the College for many years. The College has a designated IT staff person who monitors the labs and maintains the <u>computer and software webpage</u> that provides resources information. The computer labs are used for both instructional purposes and individual student use. They are accessible from 7am to 9pm, 7 days a week, via the university's N-Card secure key system. All workstation computers in the computer labs are equipped with dual monitors or dual monitor capability. All computer workstations are equipped with the primary software used in all of the College's programs. Scanning workstations, located in the labs, can be used by students for general use.

Further, the program must demonstrate that all students, faculty, and staff have access to architecture librarians and visual resource professionals who provide discipline-relevant information services that support teaching and research.

Program Response:

The Architecture Library is overseen by the Architecture Library Staff and Operations Supervisor and staffed by student assistants. Daily library operations are managed by the Operations Supervisor, responsible for the circulation desk and supervision of student staff, as well as many operational functions. The Operations Supervisor at the Architecture Library is an experienced long-term employee who is available to work with students and faculty on projects, programming, instruction, and other activities.

Reference services are provided on both a formal and informal basis by full-time staff and trained student assistants. The Architecture Library staff is available to provide instruction in advanced library use and research methods upon faculty request. During the academic year, formal classroom instruction on use of the library system is presented in numerous sessions, reaching over 200 students. Informal instruction through one-on-one reference interaction takes place in the library nearly daily.



6—Public Information

The NAAB expects accredited degree programs to provide information to the public about accreditation activities and the relationship between the program and the NAAB, admissions and advising, and career information, as well as accurate public information about accredited and non-accredited architecture programs. The NAAB expects programs to be transparent and accountable in the information provided to students, faculty, and the public. As a result, all NAAB-accredited programs are required to ensure that the following information is posted online and is easily available to the public.

6.1 Statement on NAAB-Accredited Degrees

All institutions offering a NAAB-accredited degree program or any candidacy program must include the exact language found in the NAAB Conditions for Accreditation, 2020 Edition, Appendix 2, in catalogs and promotional media, including the program's website.

Program Response:

The "statement on NAAB-Accredited Degrees" can be found on <u>the university's undergraduate</u> <u>catalog webpage</u> and on <u>our college website</u>.

6.2 Access to NAAB Conditions and Procedures

The program must make the following documents available to all students, faculty, and the public, via the program's website:

- a) Conditions for Accreditation, 2020 Edition
- b) Conditions for Accreditation in effect at the time of the last visit (2009 or 2014, depending on the date of the last visit)
- c) Procedures for Accreditation, 2020 Edition
- d) Procedures for Accreditation in effect at the time of the last visit (2012 or 2015, depending on the date of the last visit)

Program Response:

The NAAB accreditation documents can be found on our Program accreditation website.

6.3 Access to Career Development Information

The program must demonstrate that students and graduates have access to career development and placement services that help them develop, evaluate, and implement career, education, and employment plans.

Program Response:

The Program is supported by the <u>University's Career Services</u>. The career services staff help students make academic and career decisions, gain experience, and pursue employment or further their education. Additionally, the College of Architecture's Director of Student Success participates on the <u>Career Team</u> and serves as a liaison between UNL, the College, and our students.

6.4 Public Access to Accreditation Reports and Related Documents

To promote transparency in the process of accreditation in architecture education, the program must make the following documents available to all students, faculty, and the public, via the program's website:

- a) All Interim Progress Reports and narratives of Program Annual Reports submitted since the last team visit
- b) All NAAB responses to any Plan to Correct and any NAAB responses to the Program Annual Reports since the last team visit

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- c) The most recent decision letter from the NAAB
- d) The Architecture Program Report submitted for the last visit
- e) The final edition of the most recent Visiting Team Report, including attachments and addenda
- f) The program's optional response to the Visiting Team Report
- g) Plan to Correct (if applicable)
- h) NCARB ARE pass rates
- i) Statements and/or policies on learning and teaching culture
- j) Statements and/or policies on diversity, equity, and inclusion

Program Response:

The NAAB accreditation documents can be found on <u>our Program accreditation website</u>. ARE pass rates by state are also posted on our site, and ARE pass rates by school can be found on this <u>page</u>.

6.5 Admissions and Advising

The program must publicly document all policies and procedures that govern the evaluation of applicants for admission to the accredited program. These procedures must include first-time, first-year students as well as transfers from within and outside the institution. This documentation must include the following:

- a) Application forms and instructions
- b) Admissions requirements; admissions-decisions procedures, including policies and processes for evaluation of transcripts and portfolios (when required); and decisions regarding remediation and advanced standing
- c) Forms and a description of the process for evaluating the content of a non-accredited degrees
- d) Requirements and forms for applying for financial aid and scholarships
- e) Explanation of how student diversity goals affect admission procedures

Program Response:

Application and instructions can be found at the <u>UNL Admissions</u> and the <u>College of Architecture</u> webpage. Admission requirements and the evaluation process can be found at the <u>College of</u> <u>Architecture Undergraduate Admissions</u> and the <u>Program of Architecture Admissions</u> page. Additionally, UNL Admissions, the <u>Office of Scholarships & Financial Aid</u>, and <u>Husker Hub</u> work together to provide students support and information regarding financial aid and scholarships.

The University believes that all students deserve to be here, to grow, invent themselves, or reinvent themselves, and offers prospective student resources at the Undergraduate Office of Admissions <u>Resources for Success</u>. The College hosts several recruiting events, including a <u>College Open House</u>, <u>Omaha Open House</u>, <u>Architecture Shadow Day</u>, <u>Admit Reception</u>, and <u>High School Camp</u>.

Students not admitted into the College of Architecture programs may elect to enroll in UNL's <u>Explorer Center</u>. After completing the first semester of university courses with the required GPA (3.0 cumulative), a student can transfer into the College and may elect to enroll in College of Architecture courses during the spring and summer sessions. This enables students to remain on track to apply to the Professional Program of their preference (Architecture, Interior Design, or Landscape Architecture).

6.6 Student Financial Information

6.6.1 Financial Resources

The program must demonstrate that students have access to current resources and advice for making decisions about financial aid.

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Program Response:

All students have access to advising staff at UNL and the College Student Success Office. UNL Admissions, the <u>Office of Scholarships & Financial Aid</u>, and <u>Husker Hub</u> work together to provide students support and information regarding financial aid and scholarships. The College encourages students to apply for internal scholarships annually and directs them to the <u>Collegewide Scholarships</u> website.

6.6.2 Estimate of Cost

The program must demonstrate that students have access to an initial estimate for all tuition, fees, books, general supplies, and specialized materials that may be required during the full course of study for completing the NAAB-accredited degree program.

Program Response:

The University, College, and Program are transparent with estimating tuition costs at the undergraduate and graduate levels. The College provides prospective students with an <u>Undergraduate Program – Cost Estimator</u> and directs students to the <u>Student Accounts</u> webpage for the most current tuition and fee rates. Additionally, the <u>Professional Program –</u> <u>Cost Estimator</u> and <u>Graduate and Professional Tuition</u> pages provide graduate students with current tuition and fee rates. The College of Architecture cost estimator webpages also provide an estimate for books, supplies, computers, and software.

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Faculty Resumés

Name: Jeffrey L. Day, FAIA, Douglass Professor of Architecture

Courses Taught (Four semesters prior to current visit): ARCH 410: FACTcollaborate, ARCH 411: Integrate, ARCH 510 Design Research Studio (FACT), ARCH 511 Design Research Studio (FACT), ARCH 680 Professional Practice

Educational Credentials:

Master of Architecture, University of California, Berkeley, 1995 A.B., Magna Cum Laude with Highest Honors in Visual and Environmental Studies, Harvard College, 1988

Teaching Experience:

University of Nebraska-Lincoln (2000-present), U.C. Berkeley (1993), Harvard College (1985)

Professional Experience:

Actual Architecture Co., Omaha, NE (founding principal), 2018-present Min | Day, Omaha, NE and San Francisco, CA (founding principal), 2003-2018 Jeffrey L. Day Architect, 1993-2003 Fernau & Hartman Architects, Berkeley, CA (project architect), 1996-2000 Lahn Architects, San Francisco, CA (project manager/designer), 1995 Burks-Toma Architects, Berkeley, CA (project manager/designer), 1989-1992 William R. Sepe, Camden, ME (intern architect), 1984 and 1988 Childs, Bertman, Tsekares, and Casendino, Boston, MA (intern architect), 1987 Chapman Lisle Mansfield, London, UK (architect's assistant), 1986 Robert Wilson (theatre artist), Cambridge, MA (design assistant), 1984 Architects Alliance, Camden, ME (high school intern), 1982-1984

Licenses/Registration:

Licensed Architect, California, 1996, C 26653, Nebraska, 2002, A-3278

Selected Awards, Publications and Recent Research:

- AIA/ACSA Housing Design Education Award, Hon. Mention (NEw Attainable House) 2023
- ACSA Design Build Award (Omaha Mobile Stage) 2023
- 23rd Annual ARCHITECT Residential Architect Design Awards, Honor Nov./Dec.2022
- The Plan Award 2021, Winner "House | Completed" category, The Plan Magazine, 2021
- Progressive Architecture Award, 66th annual P/A Awards, Architect Magazine, Feb. 2019
- Emerging Voices, The Architectural League of New York, 2016
- Architectural Record, Design Vanguard, December 2009
- 75 AIA National, Regional, and State design awards since 2000
- The Plan, Special Issue no.135, The Plan Award, "Wanaka Wedge House" Dec. 2021
- What Kind of Architect are You, by Udo Greinacher, ORO Editions, March 16, 2021

• "FLOCK \\ proof-of-concept" by Jeffrey L. Day, ACADIA 2019, Ubiquity and Autonomy, Projects Proceedings

Professional Memberships:

American Institute of Architects (AIA, elevated to Fellowship in 2019), National Council of Architectural Registration Boards (NCARB)

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Name: Jason Griffiths, Associate Professor

Courses Taught (Four semesters prior to current visit):

ARCH 614: Graduate Design Thesis; ARCH 613: Graduate Design Thesis; ARCH 511/611: DR Studio; ARCH 232: Materials and Assemblies; ARCH 410 Collaborate Studio: ARCH 492: Innovative Timber Construction;

Educational Credentials:

The Bartlett – University College London (UCL) Completed Diploma in Architecture. Awarded Distinction. RIBA Part 2 Kingston Polytechnic Awarded a BA (Hons) in Architecture RIBA Part II.

Teaching Experience:

University of Lincoln Nebraska - Associate Professor with tenure. NIRMA University, Ahmedabad, India - Visiting Faculty, Sharda University, Delhi, India - Visiting Faculty. School of Architecture at Taliesin - Professor for Summer Immersion. Architectural Association- Instructor – AA Visiting School, Chengdu, China, University of Lincoln Nebraska - 2015 Hyde Chair of Excellence, University of Arizona – Tucson AZ. - Lecturer – College of Architecture, Planning and Landscape Architecture. Arizona State University - Assistant Professor,

The Design School. Iowa State University, University of Nebraska - Lincoln, Nebraska, Florida Atlantic University, University of Texas at Austin, Texas A&M University - Visiting Assistant Professor, Department of Architecture.

Oxford Brookes University, Oxford, UK. University of Westminster, London, UK - Senior Lecturer, Bartlett School of Architecture - Diploma Unit 16 instructor. 1995-1997.Bartlett School of Architecture-M.Arch. instructor 1994-997

Professional Experience: Jason Griffiths Architecture, Wells Mackereth Architects. Orefelt Associates John Outram Associates. Stanton Williams Architects.

Licenses/Registration: Royal Institute of British Architects (RIBA) Part 3 professional examination. ARB member

Selected Publications and Recent Research:

Publications: Celebrating Excellence in Wood Structures. Manifest Destiny - A Guide to the Essential Indifference of American Suburban Housing. AA Publications. Published by Architectural Association Publications. Book. Loft Living - 306090 #14: Making a Case. - Book Chapter, Arid - 306090 #13: Sustain and Develop. Book Chapter. I on the streets - Character Issue - Mas Context August 2020, Taste is Law Volume Magazine # 38 The Law - Invited Journal: Author

Sponsored Projects: South Sioux Orchard Storage and Meeting Facility \$70,000, Baxa Family Cabin \$70, 000

Grants: Sand Creek Post and Beam Design and Fabrication Fund \$5,000, Sand Creek Post and Beam Design and Fabrication Fund \$2,500, Nebraska Environmental Trust - Eastern Redcedar Design-Build Microdwelling \$89,000, Great Plains CLT market Development through Architectural Education - U.S. Forest Service Wood Innovations May 2017n\$ \$189,000

Professional Memberships:

The Architects Registration Board (UK) 061324J

National Architectural Accrediting Board Architecture Program Report

NA/AB

Name: Rumiko Handa, Professor and Associate Dean for Research

Courses Taught (Four semesters prior to current visit):

ARCH/IDES/LARC 489: Design Research (BSd and M.Arch.); ARCH 4/592: Selected Topics – Architecture of the Incomplete (BSd and M.Arch.); ARCH613: Architectural Design Thesis I (M.Arch.); ARCH 341: Architectural Theory (B.Sd and M.Arch., Arch Minor); ARCH544: Design Thesis Prep (M.Arch.); ARCH614: Architectural Design Thesis II (M.Arch.)

Educational Credentials:

University of Pennsylvania (Ph.D. Architectural Theory, M.S.Arch., and M.Arch.); University of Tokyo (B.Arch.)

Teaching Experience:

University of Michigan (1991-1992); Texas Tech University (1992-1996); University of Nebraska-Lincoln (1996-present)

Professional Experience:

Nippon Steel Corporation, Tokyo (1990-1991); Square Inc., Tokyo (1988-1991); Arcom Architects and Planners, Tokyo (1979-1982)

Licenses/Registration: Architect (first class), Japan

Selected Publications and Recent Research:

- Handa, Rumiko. "建築のファイナリティ と適応 [Architecture: Finality and Adaptation]." 日常のか たち—美学・建築・文学・食 [The Form of the Everyday: Aesthetics, Architecture, Literature, and Food]. Tsukuba: Tsukuba University Press, 2023.
- Handa, Rumiko. "The Aesthetics of Imperfection and Architectural Design for Memory Places: Four Documentation Centers on National Socialism in Germany." In *Imperfectionist Aesthetics in Art and Everyday Life*. Ed. by Peter Cheyne. New York: Routledge, December 2022.
- Handa, Rumiko. Presenting Difficult Pasts through Architecture: Converting National Socialist Sites to Documentation Centers. London and New York: Routledge, 2021.
- Handa, Rumiko. "Japan 1334-1868," in Sir Banister *Fletcher's A History of Architecture*, Murray Fraser, gen. ed. London: Bloomsbury in partnership with RIBA and University of London, 2019.
- Handa, Rumiko. "W. G. Sebald's *Austerlitz*: Architecture as a Bridge between the Lost Past and the Present," *Reading Architecture: Literary Imagination and Architectural Experience*, edited by Angeliki Sioli and Yoonchun Jung. London and New York: Routledge, March, 2018: 72-83.
- Handa, Rumiko. Book Review. *Research Methods for Architecture* by Ray Lucas (Laurence King Publishing). In *TAD Journal* 1 (Spring 2017).
- Handa, Rumiko. Allure of the Incomplete, Imperfect, and Impermanent: Designing and Appreciating Architecture as Nature. London, New York: Routledge, January 2015.

Professional Memberships: Society of Architectural Historians; Architecture Culture Spirituality Forum; International Society for the Philosophy of Architecture

NA/AB

Name: Steven Hardy, Associate Professor

Courses Taught (Four semesters prior to current visit): ARCH 565: Configurational Formations, Fall '16 – Fall '23 DSGN 410: Design Studio: Collaborate, Fall '18 – Fall '23 ARCH 262: Building Organization, Spring '16 – Spring '23 ARCH 501: Incorporate, Spring '20 – Spring '23 ARCH 311: Situate, Spring '23 ARCH 613: Architectural Design Thesis, Fall '09 – Fall '23

Educational Credentials: University College London, the Bartlett School, M.Arch; University of Kansas, B.Arch Missouri State University, IET (partial)

Teaching Experience:

University of Nebraska Lincoln, College of Architecture, '08–current, Associate Professor; **Architectural Association**, '05–'08, Research Curator / Unit Master; **London Metropolitan University**, Department of Architecture & Spatial Design, '01–'08, Stand Leader, Co-Chair of Digital Design & IT/AV/CAD, Co-coordinator and operational Director MA in Architecture and Digital Design, Associate Professor (UK Senior Lecturer); **University of College London**, The Bartlett School, '04-'06, Associate Professor; **University of Westminster**, School of Architecture and the Built Environment, '04–'06; **University of Greenwich**, School of Architecture and Construction, '00-'04

Professional Experience:

Urban Future Organization, London, Founding Partner & Director '00-'10, Member '10-'18; RHWL Architects, London, UK, '00-'01; Studio E Architects, London, UK, '99-'00; BNIM Architects, Kansas City, MO, '96-'98; Peterson Freund Architects, Topeka, KS, '95

Licenses/Registration: N/A

Selected Publications and Current Research:

Layman, New Directions Award, \$10,000, "Architectural Programming's Potential for Beginning and Intermediate Design", Principal Investigator (with co-PI Nate Bicak), submitted March '23 – pending.

UNL Grand Challenges, Sustainable Food and Water Security, \$2,000,000, "DICE: Dairy Innovation Center for Engagement", co-PI EEI with Dr. Tami Brown-Brandl PI, MDR, EEI, Lol Feburary '23, proposal submitted April '23 – pending.

USDA Sustainable Agriculture Grant, \$10,000,000, "STAGE: Small Technology-Based Animal-Focused Green Center For Engagement", co-PI (contribution and award share \$450,000 of \$10,000,000), PI Dr. Tami Brown-Brandl, Lol March '23, proposal submitted June '23 – pending.

Bicak, Nate & Hardy, Steven, "Participatory Design Processes in the Education Environments Lab," Transform: Socially Embedded Collaborations, Spring 2020 International Environmental Design Research Association (EDRA) Conference, Tempe, Arizona

Hardy, Steven, Environmental Tectonics: Forming Climatic Change, (book editor & author), AA Publications, November 2008.

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Name: Michael Harpster, Assistant Professor of Practice

Courses Taught (Four semesters prior to current visit): ARCH 210: Represent ARCH 360: Site Context Issues ARCH 410: Collaborate ARCH 411: Integrate

Educational Credentials: University of Nebraska-Lincoln (B.A. and M.Arch)

Teaching Experience: University of Nebraska-Lincoln, Full-Time Faculty (August 2022-Present), University of Nebraska-Lincoln, Lecturer (Fall 2014, Spring 2016, Spring 2018, and Fall 2021)

Professional Experience: NeighborWorks Lincoln (2021-2022); BVH Architecture (2014-2021); Sinclair Hille Architects (2013-2014), Min I Day Architects (2012) Licenses/Registration: Licensed Architect in the State of Nebraska (License #A-4669) Selected Publications and Recent Research:

Harpster, M., "Rural Possibilities for Mass Timber Design: A Collaborative Design Research Partnership." UNL College of Architecture Sand Creek Post and Beam Design Research and Fabrication Fund (\$5,000). Role: PI (Co-PI Karle, S.). 2022-2023 AY.

Harpster, M., "The Ontological Performance of Sustainable Design," 2012 Association of Collegiate Schools of Architecture, 100th Annual Meeting, March 2012.

Professional Memberships: American Institute of Architects (AIA)

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Name: Mark Hoistad, Professor of Architecture

Courses Taught: ARCH 5/610, ARCH 5/611, ARCH 613, ARCH 614

Educational Credentials:

B.S. Architecture, Georgia Institute of Technology, 1977 M.Arch., University of Houston, 1983

Teaching Experience:

University of Nebraska-Lincoln; Assistant Professor 1989-1995, Associate Professor 1995-2001, Full Professor 2001-present Xi'An Jiaotong University; Adjunct Professor (2013-), Distinguish Foreign Expert (2019-23) Chongqing University; Invited Professor 2003-presentUniversity of Houston; Lecturer 1987-1989

Professional Experience:

Xi'An Jiaotong Design Institute, Xi'An, P.R. China, several projects (2013-) Shaaxi Chuan-Jia Architectural Design, Xi'An, P.R. China, urban design project, (2014) Winston Yan Architects, Shanghai, P.R. China, urban design project, (2013) KX International Design and Planning, Beijing and Tianjin, P.R. China, several projects (2009-) Davis Design, Lincoln, NE, (1996-2004) Mark Hoistad, Architect, Lincoln Nebraska, (1992-96) Tapley-Lunow Architects, Houston, TX, (1958-89) Mitchel Carlson & Associates, Houston, TX, (1984) Ceria Couple USA Inc. Houston, Tx/Paris France (1983) Llwelyn-Davies Sahni, Houston, TX, (1982) Bechtel, Inc., Houston , TX, (1978-81) Bechtel, Inc., Louisville, KY (1977-79)

License/Registration:

Texas, #11558, Sep. 25, 1986 Nebraska, #A2329, Jan. 2, 1992, emeritus Sep. 2022 NCARB #35,801, Nov. 20, 1987

Selected Publications and Recent Research:

New Neighborhood urban design, w/ Xi'An Jiaotong University Design Institute, Xinyang, Shaanxi, P.R. China, (2023-) Bamboo Street interpretative streetscape plan, w/ Xi'An Jiaotong University, (2020-22) Historic Chang'An Dongtang Market redevelopment plan, w/ Xi'An Jiaotong University, (2020) Historic bastion city renewal planning, w/ Xi'An Jiaotong University, Yulin, Shaanxi Province, P.R.

China (2018-2020)

Historic Sanxue District renewal plan, w/ Xi'An Jiaotong University, Xi'An, Shaanxi, P.R. China, (2016-18)

Professional Memberships:

American Institute of Architects Affiliate American Society of Landscape Architects
NAB

Name: David Karle, Associate Professor and Director of Architecture

Courses Taught (Four semesters prior to current visit): ARCH/LARC 4/5/861: Urbanism; ARCH 5/863: Project Territory

Educational Credentials: University of Michigan (BSd and M.Arch)

Teaching Experience: University of Michigan (2009-2010), The University of Nebraska (2010-present)

Professional Experience: Mack Scogin Merrill Elam Architects, Atlanta, GA (2006-2009); WETSU-Design Build, Ann Arbor, MI (2005–2006); Terroir Architects, Sydney, Australia (2003–2004); A.M.D.G. Architects, Grand Rapids, MI (2002-2003); and Integrated Architecture, Grand Rapids, MI (2001-2002).

Licenses/Registration:

None.

Selected Publications and Recent Research:

Karle, D., and Dana McIntyre, "Revealing Iowa 80: How Experience Economy Shaped the World's Largest Truckstop," 2022 AMPS | University of Calgary. June 28-30, 2022. Remote presentation.

Karle, D., and Bahe L., "Inclusive Mindset: Remote Professional Summer Experience," 2021 Association of Collegiate Schools of Architecture 109th Annual Meeting. March 24-26, 2021. Remote presentation due to COVID-19.

Karle, D., "Piggybacking Historic Architecture: Air Rights and the Subdivision of Space" ANUARI d'Arquitectura i Societat No. 1 (2021), Universitat Politècnica de València Press and the Borriana Cultural Association.

Karle, D., "Sandpit Lakes: Indexing a New Typology," 2020 *The International Seminar on Urban Form.* Remote presentation due to COVID-19, September 1, 2020.

Caitlin Tangeman, **Karle, D**., "Building Down: Temporal Strategies of Adaptation," *Transient Spaces*. Editors, Carla Juaçaba, Marina Correia, and Suzan Wines. City University of New York, The Bernard and Anne Spitzer School of Architecture. Fall 2019.

Karle, S.T., **Karle, D.**, "200 Million Trees: Fabricating a Rain-Making Scheme" *Journal of Architectural Education 69:1 Crisis*. Editors: Timothy Hyde and Amy Kulper. Taylor & Francis. pg. 54–57. March 2015.

Professional Memberships:

AIA Nebraska, Associate AIA; Member, Editorial Board, Magazine on Urbanism (MONU).

Name: Brian M. Kelly, AIA, Associate Professor of Architecture

Courses Taught (Four semesters prior to current visit):

DSGN 110: Design Thinking; DSGN 410: Collaborate; ARCH 511i/611i: Integrate; ARCH 543: Architectural Representations: Theory and Application (professional elective); ARCH 592: Agency and Authorship (professional elective); ARCH 592: Design and Making Traditions in Catalonia (study abroad); ARCH 695: Internship

Educational Credentials:

University of Nebraska-Lincoln (BS Architectural Studies, Master of Architecture)

Teaching Experience:

Drury University (202-2005), California Polytechnic State University (2005-2007), University of Nebraska-Lincoln (2009-present)

Professional Experience:

Avant Architects (1998), DLR Group (1999-2000), Holland Basham Architects (2001-2002), Randy Brown Architects (2007-2009), ATOM (2009-present)

Licenses/Registration:

Licensed Architect, State of Nebraska (A-3554)

Selected Publications and Recent Research:

• Kelly, Brian M. "SOIL/SILO" Dichotomy 25: SOIL (February 2022): 60-73.

• Kelly, Brian M.. "Wunderkammer-a." *INTERIORS: Design, Architecture, Culture* (Spring 2021): 63-76.

• Kelly, Brian M. Review of Copy Paste: The Badass Architectural Copy Guide, by Winy Maas and Felix Madrazo, eds. JAE Online. December 6, 2019. <u>http://www.jaeonline.org/articles/review/copy-paste#/</u>.

• Kelly, Brian M. "Shallow Space and Deep Fakes: The Accountability of the Image" Design Communication Association Biannual Conference Auburn University 10.2022

• Kelly, Brian M. 2018. "Research for Design: Mass Customized Dwelling" Paper presented at the *S.ARCH Conference*, Venice, Italy May 2018.

• Kelly, Brian M. 2018. "Open-Source Design" presented at the Association of Collegiate Schools of Architecture Annual Conference, Denver, March 2018.

• Kelly, Brian M. 2018. "Open Design: Shared Authorship in Mass Customized Design" presented at *Zero Energy Mass Customized House (ZEMCH) Conference,* Melbourne Australia, January 2018.

Professional Memberships:

National Council of Architectural Registration Boards (NCARB), American Institute of Architects (AIA)

Name: Sharon S. Baum Kuska, PhD, PE, LEED AP, Professor and Associate Dean for Faculty and Academic Programs

Courses Taught (Four semesters prior to current visit):

Minimal, due to administrative assignments and Faculty Development Leave. UGEP 250 Global Awareness

Prior to 2022, along with a couple of elective courses, I taught the following core courses:

ARCH 231: Structural Fundamentals;

ARCH 331: Structural Mechanics;

ARCH 332: Structural Optimization

Educational Credentials: University of Nebraska-Lincoln (BS Architectural Studies, MS Civil Engineering, PhD Engineering)

Teaching Experience:

University of Nebraska-Lincoln (1986-present) Professor Wuyi University, Wuyi, China (2013) Adjunct Professor Dublin Institute of Technology, Dublin, Ireland (Fall 1993) Visiting Faculty

Professional Experience:

Joslyn Institute for Sustainable Communities (2003-2022) non-profit, Vice-President (2003-2021) and Acting President (2022) Bahr, Vermeer and Haecker Architects (1984-1986) EIT/Graduate Architect

Office of Facilities Management and Planning, UNL, Lincoln, NE (1984) Aide to the Director

Licenses/Registration:

Registered Professional Civil Engineer, State of Nebraska (E-7460), 1992 LEED Accredited Professional, 2003

Selected Publications and Recent Research:

- Kuska, Sharon S. Baum, "Climate Change Facing Nebraska," AIA Nebraska Mid-Year Symposium, Kearney, Nebraska, 4 March 2020.
- Kuska, Sharon B. with W. Cecil Steward, "Sustainometrics Presentation," The Sustainability of Small and Mid-size Communities in coordination with the Association of B1G Ten City Managers and Sustainability Coordinators, Lincoln, Nebraska, 1-3 August 2018.
- Kuska, Sharon B. with W. Cecil Steward, "The City We Need, The City We Want," City and Borough of Juneau, Juneau, Alaska, 27 April 2017.
- Kuska, Sharon B. with W. Cecil Steward, "Food Security & Juneau," University of Alaska Southeast, Juneau, Alaska, 26 April 2017.
- <u>Sustainometrics: Measuring Sustainability</u>, W. Cecil Steward & Sharon B. Kuska, 2011, Ostberg Library of Design Management, Norcross, GA, ISBN: 978-0-9846136-5-6. Translation Copyright 2013 China Architecture & Building Press.

Professional Memberships: National Society of Professional Engineers (NSPE), American Society of Civil Engineers (ASCE), American Institute of Architects (AIA) Associate Member

Name: Matthew D.B. Miller, Assistant Professor of Practice

Courses Taught (Four semesters prior to current visit):

Arch 210: Represent Arch 222: BIM for Design Arch 310: Organize Arch 311: Situate Arch 327: Parametric Modeling for Design Arch 510/610: Architectural Design Research Studio Arch 526: Digital Fabrication

Educational Credentials:

University of Nebraska-Lincoln (BS Design); Texas A&M University (M. Arch); Columbia University GSAPP (MS AAD)

Teaching Experience:

Cooper Union (2014); University of Nebraska-Lincoln (2019-current)

Professional Experience:

Keith Dubas & Associates, Lincoln, NE (2007-2008); FTC Architects, Georgetown, TX (2011-2012); Situ Studio, Brooklyn, NY (2013-2014); Pelli Clarke Pelli, New York, NY (2014-2015); Franks Design Group, Glenwood, IA (2015-2018); HDR, Omaha, NE (2018-2019); Polynomial, Omaha, NE (2019-2020); Actual Architecture, Omaha, NE (2020-current)

Licenses/Registration:

Licensed Architect, State of Nebraska (A-4804)

Selected Publications and Recent Research:

Miller, Matthew D.B., "Computation Design for Existing Structures: Beyond the Rain-screen Façade." UNL Center for Transformative Teaching Incubation Fund (\$1,000). Role: PI. 2023-2024 AY.

Published Abstract - Glowacki, Kevin T., Leslie P. Day, Ryan R. Collier, and **Matthew D. Miller**, 2010. "Estimating Storage Capacity of Late Minoan Pithoi Using 3D Computer Modeling: A Case Study from Kavousi Vronda" (paper,112th Annual Meeting of the Archaeological Institute of America, San Antonio, TX, January 9, 2010).

Professional Memberships:

American Institute of Architects (AIA); Association for Computer Aided Design in Architecture (ACADIA)

Name: David Newton, Associate Professor of Architecture

Courses Taught (Four semesters prior to current visit):

ARCH 411: Integrate; Arch 310: Organize; DSGN 123: Computer Applications in Design; ARCH 5/892: Computational Design Processes

Educational Credentials: Arizona State University (BSD); Rice University (MArch); McGill University (MSc-Computer Science)

Teaching Experience: University of Minnesota (2007-2009); Arizona State University (2009-2013); McGill University (2013-2016); University of Nebraska-Lincoln (2017-present)

Professional Experience: Diller Scofidio + Renfro Architects (2006-2007); Schnieder Gadberry & Shae Architects (2001)

Licenses/Registration: None.

Selected Publications and Recent Research:

Newton, David. "Identifying Correlations Between Depression and Urban Morphology through Generative Deep Learning." *International Journal of Architectural Computing*, (May 2022). <u>https://doi.org/10.1177/14780771221089885</u>

Newton, David. "Generative Deep Learning in Architectural Design." *Technology* | *Architecture* + *Design*, 3(2) (2019):176-189. <u>https://doi.org/10.1080/24751448.2019.1640536</u>.

Newton, David. "Chapter 7: Deep Learning in Urban Analysis for Health." in *Artificial Intelligence in Urban Planning and Design*, edited by Imdat As and Prithwish Basu, 121-137. Amsterdam: Elsevier, 2022.

Newton, David. "Chapter 14: Dynamic and Explorative Optimization for Architectural Design." in *Routledge Companion to AI and Architecture*, edited by Imdat As and Prithwish Basu, 280-300. Amsterdam: Elsevier, 2021.

Newton, David. 2021. "Visualizing Deep Learning Models for Urban Health Analysis." In Proceedings of the *39th Annual Education and Research in Computer Aided Architectural Design in Europe (eCAADe) Conference: Towards a New Configurable Architecture, Faculty of Technical Sciences, Novi Sad, Serbia, September 8-10, 2021, Volume 1 527-536.*

Newton, David William. 2020. "Anxious Landscapes: Correlating the Built Environment with Mental Health through Deep Learning." In Proceedings of the 40th Annual Conference of the Association for Computer Aided Design in Architecture (ACADIA): Distributed Proximities, Virtual Conference, October 24-30, 2020, 130-139. Delaware: ACADIA.

Newton, David, Dan Piatkowski, Wes Marshall, and Atharva Tendle. 2020. "Deep Learning Methods for Urban Analysis and Health Estimation of Obesity." In Proceedings of the *38th Annual Education and Research in Computer Aided Architectural Design in Europe (eCAADe) Conference: Anthropologic - Architecture and Fabrication in the Cognitive Age, Technische Universitt, Belin, Germany, September 15-17, 2020*, Volume 2 297-304. Berlin: eCAADe.

Professional Memberships: Technology | Architecture + Design Journal editorial board member

Name: Peter Olshavsky, Ph.D., Associate Professor of Architecture

Courses Taught (Four semesters prior to current visit): ARCH 614: Graduate Design Thesis; ARCH 613: Graduate Design Thesis; ARCH 500: Project; ARCH 311: Situate; ARCH 241: Architectural History and Theory II; and ARCH 240: Architectural History and Theory I

Educational Credentials: McGill University (Ph.D., History & Theory of Architecture); McGill University (M.Arch.II, History & Theory of Architecture); and The Pennsylvania State University (B.Arch.)

Teaching Experience: University of Nebraska-Lincoln (2010-present); Temple University (2007-10); Philadelphia University (2007); and McGill University (2006-07)

Professional Experience: MGA Partners Architects, Philadelphia, PA (2002-04) and Daniel Willis, AIA, State College, PA (2001-02)

Licenses/Registration: None

Selected Publications and Recent Research:

Olshavsky, P., "Michael's Mouth," in LOG 55 (Summer 2022): 90–96.

Olshavsky, P., "Allure of Water: An Interview with Steven Holl" in Journal of Architectural Education, vol 74, issue 1 (2020): 149–53.

Olshavsky, P., "Reconfiguring Architectural Agency" in *Steven Holl: Making Architecture* (New York: SUNY, 2018).

Olshavsky, P., "The Untimely Thinking of Alberto Pérez-Gómez," in Alberto Pérez-Gómez, *Timely Meditations: Select Essays on Architecture* (Montréal: RightAngle International, 2016), xv–xxxvii.

Olshavsky, P. and H Keith Sawyers, "Nebraska," *SAH-Archipedia.org.* Society of Architectural Historians and The University of Virginia Press, http://sah-archipedia.org/essays/NE-01 (2016).

Olshavsky, P., "La Maison Suspendue: Imaginary Solutions for an Everyday Domestic Machine," *Designing the French Interior: The Modern Home and Mass Media,* Ed. Anca I. Lasc, Georgina Downey, and Mark Taylor (New York: Bloomsbury, 2015), 71–80.

Olshavsky, P., "Building Upon Love in the Age of Innovation," in *Architecture's Appeal: How Theory Informs Architectural Praxis*, ed. Marc J. Neveu and Negin Djavaherian (New York: Routledge, 2015), 272–82.

Professional Memberships: Society of Architectural Historians and AIA Associate

Name: Zachary Tate Porter, PhD, Assistant Professor

Courses Taught (Four semesters prior to current visit):

ARCH 210: Represent; ARCH 211: Ideate; DSGN 140: History of Design; ARCH 592/892: Groundforms; ARCH 613/614: Graduate Design Thesis

Educational Credentials: University of North Carolina at Charlotte (BA and M.Arch); Georgia Institute of Technology (PhD)

Teaching Experience: Georgia Institute of Technology (2013 – 2015); SCI-Arc (2015 – 2016); University of Southern California (2016 – 2018), University of Nebraska-Lincoln (2018 – current)

Professional Experience: Graham Group Architecture, Pawleys Island, SC (2009)

Licenses/Registration: None

Selected Publications and Recent Research:

Porter, Z., "Modeling Images / Imaging Models." In *Latent: Proceedings of the 37th Annual National Conference on the Beginning Design Student*, ed. S. Burns & K. Barry (2022).

Porter, Z., "House on a wash-tub-sized Eminence: Ellis Parker Butler's Critical Satire of Site-Specificity." In *Journal of Architectural Education* 75: 2 "Building Stories," ed. L. Findley & N. Wendl (Fall 2021).

Porter, Z., "Piles of Bits: Notes on the Virtual Grounds of Post-Digital Practice." In *Expanding the View: Prospect(s) for Architectural Education Futures: Proceedings of the 109th Annual ACSA Meeting* (2021).

Porter, Z., "Slabs, Piles, and Rocks: A Genealogy of Groundforms (After the Digital)." In *After From: Proceedings of the 36th Annual National Conference on the Beginning Design Student*, ed. W. He, J. Tate, & A. Tripp (2021).

Porter, Z., "Abstractions in Suburbia: The Pleasures of Quotidian Form." In *After From: Proceedings of the 36th Annual National Conference on the Beginning Design Student*, ed. W. He, J. Tate, & A. Tripp (2021).

Porter, Z., "Erasures, Transgressions, and Demarcations: Site Tactics for the Post-Internet City." In *Black Box: Articulating Architecture's Core in the Post-Digital Era: Proceedings of the 107th Annual ACSA Meeting*, ed. J. Ficca, A. Kulper, & G. La (2019).

Porter, Z., "Paradigms of Architectural Knowledge: What to do when Knowledge Becomes Data." In *The Site Magazine* 39: "Foundations and Disruptions," ed. A. O'Carrrol & M. Ho (2018)

Professional Memberships:

Global Architectural History Teaching Collaborative, Member.