Architecture Program Report

Institution
University of North Carolina at Charlotte
School of Architecture

Date
September 7, 2023

NAAB

National Architectural Accrediting Board, Inc

NAAB

Architecture Program Report (APR)

2020 Conditions for Accreditation
2020 Procedures for Accreditation

Institution	University of North Carolina at Charlotte
Name of Academic Unit	School of Architecture
Degree(s) *(check all that apply)* **Track(s)** *(Please include all tracks offered by the program under the respective degree, including total number of credits. Examples:* *150 semester undergraduate credit hours* *Undergraduate degree with architecture major + 60 graduate semester credit hours* *Undergraduate degree with non-architecture major + 90 graduate semester credit hours)*	□ Bachelor of Architecture Track: N/A ■ Master of Architecture 150 semester undergraduate credit hours Track 1: Undergraduate degree with non-architecture major + 96 graduate credit hours Track 2: Undergraduate degree with architecture major + 60 graduate credit hours Track 3: Undergraduate degree with architecture major from UNC Charlotte + 40 graduate credit hours □ Doctor of Architecture Track: N/A
Application for Accreditation	Continuing Accreditation
Year of Previous Visit	2016
Current Term of Accreditation *(refer to most recent decision letter)*	Continuing Accreditation (Eight-Year Term)
Program Administrator	Mona Azarbayjani
Chief Administrator for the academic unit in which the program is located *(e.g., dean or department chair)*	Blaine Brownell
Chief Academic Officer of the Institution	Jennifer Troyer
President of the Institution	Sharon Gaber
Individual submitting the APR	Blaine Brownell
Name and email address of individual to whom questions should be directed	Thomas Forget, tforget@charlotte.edu

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

INTRODUCTION

Progress since the Previous Visit (limit 5 pages)
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:

The School of Architecture at UNC Charlotte had its last NAAB Accreditation visit in the Spring of 2016. Both the Bachelor of Architecture and Master of Architecture degree programs were granted full 8-year terms of accreditation, effective January 1, 2016. The *2014 Conditions for Accreditation* were in effect for this visit. The full APR (Architecture Program Report), VTR (Visiting Team Report), and the NAAB Decision Letter are linked to the UNC Charlotte's School of Architecture website:
APR (Academic Program Report) UNC Charlotte School Architecture (2016)
NAAB Decision Letter and VTR (Visiting Team Report) (2016 Visit)

Synopsis
2 previously indicated Causes of Concern were MET, with no new Causes of Concern.
- 13.4 Accessibility (Met)
- 13.25 Construction Cost Control (Met)

2 Student Performance Criteria were MET with Distinction.
- A.8 Cultural Diversity and Social Equity
- B.10 Financial Considerations

4 of 26 Student Performance Criteria were NOT MET in the Bachelor of Architecture* and Master of Architecture Programs.
- B.2 Site Design (Not Met)
- B.4 Technical Documentation (Not Met)
- B.6 Environmental Systems (Not Met)
- D.4 Legal Responsibilities (Not Met)

In subsequent 2-year (2018) and 5-year (2021) Interim Progress Report (IPR) reviews, 2 of these 4 Student Performance Criteria were deemed to remain NOT MET.
- B.2 Site Design (Not Met)
- B.4 Technical Documentation (Not Met)

**NOTE: In 2022, the Bachelor of Architecture degree was terminated and has since been replaced by a 4-year Bachelor of Arts in Architecture + accelerated (12-month) Master of Architecture degree path. See Program Changes below for details.*

The following section includes:
- Text quoted from the Visiting Team Report for each Condition NOT MET
- Program Response to Conditions Not Met: Actions taken since the previous visit to address Conditions Not Met and Causes of Concern
- Comparison of previous 2016 Conditions to current 2020 Conditions for Accreditation
- Summary: Current Status of the Condition within the SoA

2016 Visiting Team Report (NAAB Visiting Team Report, September 20, 2016)

Progress in Addressing Not-Met Student Performance Criteria

Following receipt of NAAB's 2016 Visiting Team Report, the SoA Director charged a faculty subcommittee to establish recommendations for addressing SoA's four not-met SPCs. The subcommittee led a series of pedagogical conversations, discussing not-met topics across core design studios and select building technology courses, reviewing syllabi, lesson plans, assignments, quizzes, and exams. The result was a recommendation for adding specific strategic initiatives in various courses to address SoA's four not-met criteria. The subcommittee presented these recommendations to SoA's Curriculum Committee for their review, discussion, and approval. The subcommittee subsequently presented its findings and recommendations to the SoA Director. Recommendations were implemented beginning in the fall of 2017. Further curricular modifications were made to shift the focus to more advanced-level classes, and two new faculty hires have since provided fundamental expertise in these areas.

B.2 Site Design: *Ability* to respond to site characteristics, including urban context and developmental patterning, historical fabric, soil, topography, ecology, climate, and building orientation in the development of a project design.

***2016 Visiting Team Assessment*:** Evidence of student achievement at the prescribed level was not found in the areas of topography, ecology and soil.

University of North Carolina at Charlotte Response:
Site design is integral to core design studios in the undergraduate and graduate programs. Issues related to site and context, building-ground relationships, landscape, topography and soil, slope, and water run-off were given greater focus. In 2018, these topics were coordinated between two core studios and ARCH 4304/5304 (Materials and Assembly), taken simultaneously, with an additional assignment in structural systems added to address soils. However, by 2021 the curriculum committee decided that topography and ecology are best addressed at a more advanced level than the introductory M.Arch studio. Soil properties continue to be addressed in ARCH 4304/5304 Structural Systems.

Topography and Ecology: Assignments in ARCH 7103 (Graduate Integrated Studio) demonstrate student ability in site design, protecting natural vegetation/ biodiversity, and grading sites for appropriate drainage/stormwater management and rainwater collection. In addition, they enable students to design appropriate building foundations that transfer the structural loads from a building into the ground, including the insulation against the frost line and underground drainage pipe against groundwater seepage.

Soil: In ARCH 4304/5304 (Structural Systems–Undergraduate and Graduate), soils are discussed from a structural point of view. The angle of repose of soil is addressed with respect to lateral soil pressure on a retaining wall. Students learn to identify the range of bearing pressures of different soils and implications on foundation types, as well as resonance that may occur in a seismic event if the period of a soil is similar to the fundamental period of vibration of a structure.

NAAB Response to 5-year IPR (May 20, 2022):
"Student work submitted with the five-year IPR does not demonstrate achievement at the prescribed level for SPC B.2 Site Design and B.4 Technical Documentation."

Change in NAAB Conditions for Accreditation
PREVIOUS: NAAB 2014 Condition B.2 Site Design HAS CHANGED
CURRENT: NAAB 2020 Conditions (Equivalent):

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.

SC.5 Design Synthesis—How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating the synthesis of user requirements, regulatory requirements, site conditions, accessible design, and consideration of the measurable environmental impacts of their design decisions.

Summary
Required studio ARCH 7103 (Integrated Project Design) has been revamped to incorporate more robust skill-building in the areas of site analysis, topography, ecology, climate, and building orientation. ARCH 5304 (Structural Systems) has added course content related to soils, retaining walls, and failure modes. In addition, the 2021-2026 School of Architecture Strategic Plan includes several ecologically focused objectives, including a comprehensive curricular audit and a map of environmental learning objectives and literacies.

B.4 Technical Documentation: *Ability* to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

***2016 Visiting Team Assessment*:** Evidence of student achievement at the prescribed level for outline specifications.

University of North Carolina at Charlotte Response:
In the fall of 2016, the SoA hired Prof. Marc Manack, AIA, a new tenure-track faculty member, to teach Professional Practice. Prof. Manack has extensive professional experience, as well as past experience teaching in Professional Practice at the University of Arkansas. He engages a number of professional firms in his course, and his student course evaluations to date are excellent.

Outline Specifications: In ARCH 4206/5206 (Professional Practice–Undergraduate and Graduate), outline specifications are covered in a dedicated course lecture about construction documents and specifications where students are introduced to the types, structure, and development of specifications. To apply this knowledge, students are asked to review specifications and develop a table of contents for a previously completed studio project. Students are also quizzed on the distinctions between types of specifications.

NAAB Response to 5-year IPR (May 20, 2022):
“Student work submitted with the five-year IPR does not demonstrate achievement at the prescribed level for SPC B.2 Site Design and B.4 Technical Documentation.”

Change in NAAB Conditions for Accreditation
PREVIOUS: NAAB 2014 Condition B.4 Technical Documentation HAS CHANGED
CURRENT: NAAB 2020 Condition (Equivalent):
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.

Summary
ARCH 5206 (Professional Practice) has enhanced its focus on specifications and other skill areas related to Technical Documentation. Meanwhile, ARCH 5305 (Building Systems Integration) and ARCH 7103 (Integrated Project Design) are now the primary assessment points for the new SC.4 Technical Knowledge criterion, and ARCH 7103 includes an assignment on Outline Specs. These two courses now include more rigorous assessments of Technical Documentation.

B.6 Environmental Systems: *Understanding* of the principles of environmental systems' design, how systems can vary by geographic region, and the tools used for performance assessment. This must include active and passive heating and cooling, indoor air quality, solar systems, lighting systems, and acoustics.

***2016 Visiting Team Assessment*:** Evidence of student achievement at the prescribed level was not found in student work prepared with respect to indoor air quality, acoustics, and lighting systems.

University of North Carolina at Charlotte Response:
SoA's Building Technology (BT) faculty members, who teach an introductory course in environmental principles and an advanced course in building systems integration, reviewed their syllabi, course lectures, and notes, and developed new assignments in order to address an improved understanding of indoor air quality, acoustics, and lighting systems. As described in its 2019 report, the School of Architecture hired assistant professor Liz McCormick, a tenure-track faculty member with expertise in environmental building technology, who now teaches Building Systems Integration.

Indoor Air Quality: In ARCH 5305: Building Systems Integration, the second assignment asks students to consider several aspects of their fresh air approach - (1) How much fresh air are you considering and why? and (2) How are you providing it? This assignment demonstrates the student's ability to provide evidence of the appropriate type of air handling system in the context of human health and well-being, as well as heat recovery principles. Lab 5 addresses the energy implications (EUI) associated with enhanced ventilation (beyond code minimum). The emphasis of these two tasks is to articulate ways that buildings not only keep us from becoming unhealthy (sick building syndrome) but also make the occupants well.

Acoustics: In ARCH 4302/5302 (Environmental Principles–Undergraduate and Graduate), Acoustical design is introduced in a lecture, and in the assignment, students are asked to choose a room and study its acoustics quality. There are two major parts involved, Reverberation Time (RT) calculation and Ray-diagramming. In the first, the students are asked to estimate the reverberation time of the room using the Sabine equation. The assignment is designed to give students an understanding of the factors that influence the reverberation time in the room, which include the volume of the room and the material selection. In the second, the students use Ray diagramming to analyze the effectiveness of the ceiling and wall shaping as well as the locations of materials inside the room to enhance sounds from the sound source and to prevent any acoustical defects, such as echoes.

Lighting Systems: In ARCH 4302/5302 (Environmental Principles–Undergraduate and Graduate), students are introduced to daylighting and electrical lighting concepts. The students are asked to use the modified lumen method to determine the number of fixtures needed to illuminate a room of their choice to 50 fc. The room must have a window. Students diagram how they would lay out the electric lighting to complement daylight in the room. In the second part of the assignment, students are asked to find at least two fixture options for the ambient/general illumination layer

that they identified in their preliminary lighting layout and test the effectiveness of the two fixtures using the Visual Interior Tool.

NAAB Response to 5-year IPR (May 20, 2022):

This SPC is no longer characterized as being NOT MET.

Change in NAAB Conditions for Accreditation

PREVIOUS: NAAB 2014 Condition B.6 Environmental Systems HAS CHANGED

CURRENT: NAAB 2020 Condition (Equivalent):

SC.6 Building Integration—How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating the integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance.

Summary

ARCH 5305 (Building Systems Integration) has been enhanced to incorporate more robust skill-building in the areas of environmental building systems. In addition, the 2021-2026 School of Architecture Strategic Plan includes several ecologically focused objectives, including a comprehensive curricular audit and a map of environmental learning objectives and literacies.

D.4 Legal Responsibilities: *Understanding* of the architect's responsibility to the public and the client as determined by regulations and legal considerations involving the practice of architecture and professional service contracts.

***2016 Visiting Team Assessment*:** Evidence of student achievement at the prescribed level was not found in the student work in the area of professional service contracts.

University of North Carolina at Charlotte Response:

Understanding professional service contracts is key to building a successful, sustainable architectural practice. Prof. Manack reviewed not-met criteria associated with Legal Responsibilities and focused on developing an improved understanding of AIA Contract Documents with particular attention to B series - outlining terms and conditions, compensation details, and the responsibility of parties under agreements.

Professional Service Contracts: new assignment in ARCH 4206/5206 (Professional Practice – Undergraduate and Graduate) that reviews professional service contracts including AIA Document B-102 (formerly B-141): Standard Form of Agreement Between Owner and Architect with Standard Form of Architect's Services, followed with a quiz demonstrating understanding of this topic.

NAAB Response to 5-year IPR (May 20, 2022):

This SPC is no longer characterized as being NOT MET.

Change in NAAB Conditions for Accreditation

PREVIOUS: NAAB 2014 Condition D.4 Legal Responsibilities HAS CHANGED

CURRENT: NAAB 2020 Condition (Equivalent):

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.

Summary

ARCH 5206 (Professional Practice) has enhanced Professional Service Contract assignments to incorporate more direct measures of student learning in alignment with the new SC.3 Regulatory Context criterion.

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:

Three significant, related degree program changes have occurred since the last accreditation:

NEW DEGREE: The School of Architecture initiated a new 30-credit, 1-year Master of Science in Architecture degree program, approved by the General Administration of UNC System in Spring 2018. The School deactivated its post-professional M.Arch. III track in order to be compliant with NAAB guidelines on the use of Master of Architecture (M.Arch.) nomenclature. The M.S. in Architecture degree has multiple concentrations, including Design Computation (2018), Design Science and Building Technology (2018), and Critical Heritage Studies (2023).

NEW ACCELERATED PATH: The School of Architecture implemented a new Master of Architecture accelerated pathway for high-performing UNC Charlotte Bachelor of Architecture students. The M.Arch Track 3: “Undergraduate degree with architecture major from UNC Charlotte + 40 graduate credit hours” allows UNC Charlotte B.A. students to pursue a 12-month (3 semester) master’s degree program immediately after completing their undergraduate degree. These students must have completed eight architecture studios in their B.A. and must have fulfilled all course prerequisites required of external applicants who apply to the M.Arch Track 2: “Undergraduate degree with architecture major + 60 graduate credit hours.” The M.Arch Track 3 is referred to as the M.Arch Advanced Standing in the UNC Charlotte catalog and promotional material.

DEACTIVATED DEGREE: The School of Architecture deactivated the 30-credit, 1-year B.Arch. add-on to the 4-year B.A. degree program to be more effective and strategic with limited resources, focusing on the quality of the School’s pre-professional undergraduate degree: B.A. in Arch. (128 credits) and professional, NAAB-accredited graduate degree (M.Arch.). The adoption of the new accelerated M.Arch Track 3 path further motivated this change, given the close similarities and redundancies between a +2 semester B.Arch and a +3 semester M.Arch. In addition, offering one professional path is viewed as an equitable approach in that it provides all graduates with the same credentials, including opportunities to teach at the graduate level (which a B.Arch does not allow).

DEACTIVATED DEGREE: The School deactivated its post-professional M.Arch. III track in order to comply with NAAB guidelines on the use of Master of Architecture (M.Arch.) nomenclature. This degree was replaced by the abovementioned MS in Architecture degree launched in 2018.

Program changes in response to changes in the Conditions

The *2020 Conditions for Accreditation* represent a significant change from the *2014 Conditions*. The new Conditions include fewer performance criteria, which are now categorized according to Program and Student Criteria. In addition, the new Conditions represent a fundamental shift from prescriptive- to performance-based assessment.

Based on the Conditions’ emphasis on mastery, which must be demonstrated in SC.5 and SC.6 in particular, and the fact that UNC Charlotte has an M.Arch Advanced Standing (Track 3), the School of Architecture now focuses on the final two semesters to fulfill the bulk of the requirements. In addition, because the Conditions necessitate that all students participate in

activities that are measured by Program Criteria as well as Student Criteria, the School utilizes required coursework as much as possible to fulfill both requirements. The result is that the School's advanced core curriculum has become even more rigorous and demanding, with additional and altered assignments and assessment methods necessary to fulfill the new criteria. The following table compares the 2020 and 2014 Conditions and indicates the UNC Charlotte courses associated with each condition.

Comparison of 2020 and 2014 Conditions with Associated Courses

#	2020 Criteria	2020 Courses	#	2014 Criteria	2014 Courses
PC.1	Career Paths	ARCH 5206 Professional Practice			
PC.2	Design	ARCH 7104 Diploma Studio	A.2	Design Thinking Skills	ARCH 7101 Studio
			A.4	Architectural Design Skills	ARCH 7102 Studio
			A.5	Ordering Systems	ARCH 7101 Studio
			A.6	Use of Precedents	ARCH 7201 Design Methodology
PC.3	Ecological Literacy and Responsibility	ARCH 5305 Building Systems Integration	B.6	Environmental Systems	ARCH 4302/5302 Environmental System Principles
PC.4	History and Theory	ARCH 5203 History III	A.7	History and Global Culture	ARCH 4202/5202 History II
PC.5	Research and Innovation	ARCH 7201 Research and Design Methods	A.3	Investigative Skills	ARCH 7202 Thesis Document
			C.1	Research	ARCH 7202 Thesis Document
PC.6	Leadership and Collaboration	ARCH 5206 Professional Practice | ARCH 7101 Topical Studio	A.1	Professional Communication Skills	ARCH 7202 Thesis Document
			D.1	Stakeholder Roles in Architecture	ARCH 5206 Professional Practice
PC.7	Learning and Teaching Culture	ARCH 7201 Research and Design Methods | Non-curricular			
PC.8	Social Equity and Inclusion	ARCH 5203 History III | ARCH 7201 Research and Design Methods	A.8	Cultural Diversity and Social Equity	ARCH 4203/5203 History III
SC.1	Health, Safety, and Welfare in the Built Environment	ARCH 7103 Integrated Studio			
SC.2	Professional Practice	ARCH 5206 Professional Practice	B.10	Financial Considerations	ARCH 5206 Professional Practice
			D.2	Project Management	ARCH 5206 Professional Practice
			D.3	Business Practices	ARCH 5206 Professional Practice
			D.4	Legal Responsibilities	ARCH 5206 Professional Practice
			D.5	Professional Conduct	ARCH 5206 Professional Practice
SC.3	Regulatory Context	ARCH 7103 Integrated Studio	B.3	Codes and Regulations	ARCH 7102 Studio
SC.4	Technical Knowledge	ARCH 5305 Building Systems Integration	B.4	Technical Documentation	ARCH 7102 Studio
SC.5	Design Synthesis	ARCH 7103 Integrated Studio	B.1	Pre-Design	ARCH 7101 Studio
			B.2	Site Design	ARCH 7101 Studio
			C.2	Integrated Evaluations and Decision-Making Design Process	ARCH 7102 Studio
			C.3	Integrative Design	ARCH 7102 Studio
SC.6	Building Integration	ARCH 7103 Integrated Studio	B.5	Structural Systems	ARCH 4304/5304 Structural Systems
			B.7	Building Envelope Systems and Assemblies	ARCH 4301/5301 Materials and Assembly Principles
			B.8	Building Materials and Assemblies	ARCH 4301/5301 Materials and Assembly Principles
			B.9	Building Service Systems	ARCH 5305 Building Systems Integration

NAAB

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 University of North Carolina at Charlotte (UNC Charlotte): UNC Charlotte is a public, co-educational urban research university. It is one of the seventeen universities that comprise the University of North Carolina system. It was originally named "Charlotte College" and was created after World War II (1946) when the state established 14 evening college centers to serve returning veterans. In 1961, its first two buildings were constructed on newly acquired land nine miles from uptown Charlotte. In 1965, Charlotte College was renamed UNC Charlotte and became part of the state university system. UNC Charlotte is accredited by the Commission of Colleges of the Southern Association of Colleges and Schools (SACSCOC) to award Baccalaureate, Masters, and Doctoral degrees. In 2000, UNC Charlotte was designated a Doctoral / Research-Intensive Institution by the Board of Governors of the UNC system.

UNC Charlotte is currently the third-largest university in the 17-campus UNC system and the fastest-growing university in North Carolina. It is the largest institution of higher education in the Charlotte region, with nearly 30,000 students enrolled. During the 2022-23 academic year, students enrolled from close to all 100 counties in North Carolina, 49 of the 50 U.S. states, and 126 foreign countries. The University is comprised of seven colleges and over 3,700 permanent faculty and staff, offering 78 bachelor's degree programs, 64 master's degree programs, and 24 doctoral programs. As of the Fall 2022 semester, UNC Charlotte's faculty includes more than 1,100 full-time members—885 with doctoral degrees. During the 2021-22 academic year, the University conferred over 5,700 undergraduate degrees, 1,900 graduate degrees, and 800 certificates. In 2022, racially minoritized students comprised 42% of UNC Charlotte's student body, and international students comprised 6.5% of the student body.

In 2011, the UNC Charlotte Center City Building (CCB), now named the Dubois Center, opened in downtown Charlotte as a gateway between the city and the University. It provides vital learning opportunities for employees and residents of the city's urban center and houses programs that have an urban awareness and context, including the School of Architecture's Master of Urban Design (M.U.D.) program.

UNC Charlotte Mission Statement: "As North Carolina's urban research university, UNC Charlotte is a diverse and inclusive institution with local-to-global impact that transforms lives, communities and industries through access and affordability, exemplary undergraduate, graduate, and professional programs, scholarship, creative work, innovation and service."

College of Arts + Architecture (CoA+A): The CoA+A is the newest of the of seven colleges at UNC Charlotte. It was created in 2008 as the result of a merger between the College of Architecture (CoA) and the Departments of Art and Art History, Dance, Music, and Theatre (previously part of the College of Arts and Sciences). This merger was initiated by the CoA (which, as a result, became the SoA) to create a stronger cultural arts and design voice on campus and in the wider community. The CoA+A has a strong reputation in the university,

receives significant support from the UNC Charlotte administration, and garners widespread respect in the Charlotte region and beyond.

CoA+A Mission Statement: “The College of Arts + Architecture promotes the arts and design as engines of civic imagination and social equity through distinction in creative teaching and research, artistic performance, and community-driven work.” (CoA+A 2021-2026 Strategic Plan)

David R. Ravin School of Architecture (SoA): The College of Architecture was established in 1971, offering a preprofessional B.A. in Architecture and a professional B.Arch degree. The first cohort of B.Arch students graduated in 1975, and the program received its first NAAB accreditation in 1979. A post-professional M.S. in Architecture was started in 1992 and was converted to a professional M.Arch in 1997, offering a two-year path for non-pre-professional undergraduate degrees, and a three-year path for students with pre-professional architecture undergraduate degrees. The first cohort of M.Arch students graduated in 2000, and the program received its initial NAAB accreditation in 2001. A post-professional Master of Urban Design program was founded in 2009, followed by the post-professional M.Arch III / ITS dual degree in 2013 (the M.Arch III designation has since been revised to comply with NAAB guidelines). A new 30-credit, 1-year Master of Science in Architecture degree program was launched in 2018 with two concentrations: Design Computation and Design Science and Building Technology. A third concentration in Critical Heritage Studies was launched in 2023. The B.Arch degree was discontinued in 2022 in favor of the 4-year B.A. + 3-semester accelerated M.Arch path.

The architecture programs were originally housed within the lower levels of the University Library. In 1990, Storrs Hall (designed by Gwathmey Siegel) was completed and has since served as the primary campus home of the SoA (the program’s delivery format is on-campus). The SoA has also maintained an urban design studio near the Dubois Center in downtown Charlotte since 1999. With the opening of the Dubois Center, the SoA obtained a permanent urban location for the graduate Master of Urban Design (M.U.D.) program and the City Building Lab—the public outreach and research arm of the M.U.D. Program. Since 2014, capstone-level architecture studios have also been located in the Dubois Center to provide opportunities for engagement with community professionals and the urban environment. In 2022, Class of 1994 alum David R. Ravin established a naming gift for the School, which will provide financial support for students as well as visibility enhancements. The School of Architecture provides an on-campus delivery format.

SoA Mission Statement: “The mission of the David R. Ravin School of Architecture is to promote excellence in architecture and urban design education, scholarship, and practice in an inclusive and collaborative environment.” (SoA 2021-2026 Strategic Plan)

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 advancement of contemporary aesthetic, scholarly, and material practices presented in CoA+A’s 2021-2026 mission statement shapes SoA’s pedagogy with its emphasis on critical thinking and making across the curricula—from the formal, spatial, and material exercises in the undergraduate program to the advanced writing and design requirements at the graduate M.Arch diploma (capstone) level experience. The SoA’s long-standing investment in integrating its laboratories with teaching and research, its Faculty Research Grant program, and its expansion of graduate-level opportunities across campus, the city, and abroad, demonstrate its support of CoA+A’s mission.

The SoA regularly benefits from CoA+A and University interdisciplinary teaching and research initiatives. For example, the College awards Pedagogic Innovation grants to compelling interdisciplinary course proposals from faculty representing different disciplines. Examples of award recipients include “Sound, Body, and Space” (Architecture and Music) and “Art, Nature, and a Changing Climate” (Architecture and Engineering). Another interdisciplinary learning opportunity is the CoA+A annual Spring Break field trip, which has taken students from all College disciplines to New York—with future plans for Mexico City.

In terms of research, the UNC Charlotte Art and Science Initiative (ArtXSci) fosters collaborations between CoA+A faculty and scholars in STEM fields with the goal of cultivating active/intensive exchange and sustained dialogue among those engaged in artistic and scientific inquiry within the University and Charlotte. The project’s programs foster groundbreaking collaborations with UNC Charlotte faculty in the arts, design, and sciences—collaborative partnerships that aim to engage faculty, students, staff, and the public through novel opportunities for architecture, art, design, science, and technology to thrive as interrelated modes of inquiry, discovery, and research. Examples of award recipients include “Cultivating Sustainable Myco-Ceramic Materials for Applications in Art and Building Science” (Architecture, Art, and Mechanical Engineering) and “Extended Reality-Based Art Therapy and Cognitive Behavioral Therapy for Opioid Use Disorder and Recovery” (Architecture and Systems Engineering).

Activities and initiatives that demonstrate SoA’s benefit to the university include offering several large-enrollment General Education courses introducing architecture topics to non-majors; participation in Prospect for Success and Communication Across the Curriculum; initiatives led by the Division of Academic Affairs focused on extending the breadth and depth of students’ engagement, writing, and speaking in the disciplines; interdisciplinary teaching and research collaborations with faculty and students in the College of Engineering, the College of Computing and Informatics, and the College of Liberal Arts and Sciences; hosting public lectures and gallery exhibitions of interest to the university community; and participation in faculty governance at the university level.

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:
Learning Environment: The SoA is committed to creating an inspired educational environment, offering diverse learning opportunities, including lectures, exhibitions, field trips, professional societies and student organizations, honor societies, school events, and celebrations. Students are encouraged to take full advantage of learning within the classroom and studio settings as well as outside the classroom by participating in SoA’s and CoA+A’s many offerings.

SoA Convocation: The SoA Convocation is a “welcome” event on the first day of each fall and spring semester for all students, faculty, and staff. The program includes a lecture by a renowned individual, followed by the introduction of new faculty, staff, and incoming international students, announcements, and student organization presentations.

SoA Lecture Series: The SoA hosts 8-10 public Guest Lectures throughout the year in Storrs Hall and the Dubois Center. Recent lecturers have included: Jack Travis, Chris Cornelius, Theo Deutinger, Maryam Eskandari, Zena Howard, Jennifer Newsom, David P. Brown, Meejin Yoon, Billie Faircloth, Melissa Farling, Beatriz Colomina, Sylvia Lavin, Felecia Davis, Michelle Chang, K. Michael Hays, Mario Carpo, Jenny Sabin, Bryan Lee, and Mabel Wilson.

SoA / CoA+A Gallery Exhibitions: The SoA community has regular access to excellent exhibitions in two facilities: the Lambla Gallery in Storrs Hall on campus and the Projective Eye Gallery at the

Dubois Center. Gallery openings typically include a reception and exhibitor talk. Annually, the Lambla Gallery hosts a study abroad exhibition representing the work of students who have participated in international programs within the CoA+A, as well as students who have been on a semester exchange abroad. Recent shows specifically relating to architecture have included: “Migrating Borders,” “Michael Swisher, A Retrospective,” “SAY IT LOUD North Carolina,” “SoA—The First 50,” and “Close to the Edge: The Birth of Hip-Hop Architecture.”

Colloquia: The SoA hosts a series of “lunch hour” Colloquia each semester in which faculty present current research or a topic of interest to the SoA community. Events are held in the library and are typically well-attended by students and faculty.

SoA Graduation Reception: The School hosts an annual reception celebrating graduating students in Storrs Hall at the end of the Spring semester. This event includes the announcement of awards and special recognitions, with addresses by the Director, the Dean, and student speakers from each of the graduating cohorts, and an exhibition of design work by graduating students.

Field Trips: Field trips to notable cities are regularly scheduled for full cohorts of students in studios
(Core years 1st-3rd years for undergraduates and 1st year for graduate students). Field trips are also an aspect of Topical Studios (4th-year undergraduates and 2nd-3rd-year graduate students). The SoA designates a “Field Trip Period” when travel is scheduled to maximize coordination and minimize interference with other classes. Recent field trip locations have included: Washington, DC (1st year); Chicago, IL (2nd year); Seattle, WA (3rd year and M.U.D.); and New York, NY (M.U.D.).

Study Abroad: The SoA has a tradition of providing students with a variety of SoA Study Abroad Program options. The primary offering is the Rome Semester Program, which is currently offered every Spring semester to 4th year B.A. students, and which we are planning to expand to enable M.Arch students to participate in vertically integrated studios. We have partnered with the University of Waterloo to occupy a portion of their Rome program facility each year. In addition, the SoA offers 4-5 week study abroad/away programs each summer for graduate students. Recent destinations have included Japan, South Korea, Puerto Rico, and the Bahamas (remote format due to the COVID-19 pandemic).

SoA Semester Exchanges are also facilitated through the Office for International Programs for students to study architecture for one or two semesters at various institutions, including Delft University of Technology (Delft, Netherlands); the Henry van de Velde Institute (Antwerp, Belgium); Kingston University (London); the Lund Institute of Technology (Lund, Sweden); the Royal Danish Academy of Fine Arts (Copenhagen); the University of Copenhagen (Denmark); and the University of Applied Science (Aachen, Germany).

Facilities / Labs: The SoA is supported by extensive labs, specialized equipment, and lab-affiliated faculty and staff. Active laboratory facilities that encourage engaged, proactive learning include the Storrs Fabrication Lab (FabLab), Printing and Computer Labs, and the Charles C. Hight Architecture Library. The SoA is home to three research centers supporting undergraduate and graduate students in specialized coursework and research: City Building Lab (CBL), DesignLAB (DL), Integrated Design Research Lab (IDRL), and the College’s Digital Arts Center (D.Arts).

Student Organizations: Students are encouraged to develop their leadership skills and be engaged within the Charlotte community through their participation in activities and organizations.

American Institute of Architecture-Students (AIAS): The AIAS works with the local AIA and the SoA to provide seminars and social events. The SoA has an extremely active chapter with highly

motivated officers and competitive elections. Two of the SoA's past AIAS officers were later elected to national office, and the SoA chapter was named the National Chapter of the Year in 2009. AIAS hosts 20-30 events each year for architecture students, including their most ambitious event of the year, CareerEXPO. This event is a job fair that attracts large numbers of regional firms for a day of interviewing students for summer or full-time internships. This highly successful event is also a fundraiser for AIAS as firms pay for their interview tables, and is of clear value to the many students who learn about firms, make professional connections, gain interview experience, and often gain internship positions. In 2023, 55 firms spent the day conducting over 300 interviews with SoA students.

Freedom by Design (FBD): The AIAS community service program utilizes the talents of architecture students to influence the lives of people in their community through modest design and construction solutions. Freedom by Design teaches students how to resolve accessibility issues while simultaneously providing them with the real-world experience of working with a client, mentorship from an architect and constructor, and an understanding of the practical impact of architecture and design. The FBD organization recently hosted a series of mental health awareness workshops in collaboration with the UNC Charlotte Center for Counseling and Psychological Services (CAPS).

National Organization of Minority Architecture Students (NOMAS): NOMA's mission, rooted in a rich legacy of activism, is to foster justice and equity in communities of color through outreach, community advocacy, professional development, and design excellence. The NOMA Student chapter at UNC Charlotte has maintained an active presence within the SoA community, hosting a series of events and providing resources in order to raise awareness about issues of diversity, equity, and inclusion in architecture.

Master of Architecture Student Society (MASS): The Master of Architecture Student Society supports both academic and social events. A major initiative each year is hosting the annual Critical MASS event—a graduate thesis symposium for architecture graduate students from throughout the region. Started in 2002, UNC Charlotte architecture graduate students conceived an event to share thesis work with other graduate schools of architecture from the Southeast Region. Student organizers invite international and national architects and critics to discuss the work and give an evening lecture. Critical MASS has fostered a tradition of collaboration and exploration across schools of architecture, reaching across institutional boundaries. No other such forum for cross-institution student interaction and learning currently exists. Recent Critical MASS critics and speakers have included Mark Foster Gage, Charles Renfro, Anton Garcia-Abril, Jenny Wu, Patricia Patkau, Laurie Hawkinson, and Lydia Kallipoliti.

U.S. Green Building Council (USGBC): The student chapter of the USGBC supports the national organization's mission to transform the way buildings and communities are designed, built, and operated, enabling an environmentally and socially responsible, healthy, and prosperous environment that improves the quality of life. The student organization hosts a series of initiatives and events, including the USGBC Carolinas Gathering with Higher Education Stakeholders.

Women in Architecture Students (WiAS): WiAS (pronounced "wise") supports and creates a positive representation of women in architecture while building a strong community and advancing gender equity in design. The organization's mission is to increase the visibility and voices of women in architecture, bring awareness to the gender disparity in the profession, and empower women architects to grow, succeed, and become leaders in the industry. WiAS launched in the Fall of 2022 and has functioned as a student chapter for the AIA Charlotte Women in Architecture committee.

ΤΣΔ: Tau Sigma Delta is the national Architecture Honor Society that recognizes students with exemplary academic performance in architectural education. Students in the top 20% of their class (after they have completed 50% of their curriculum) are invited to membership.

Campus Life: Events on Campus are regularly available and can be searched from the UNC Charlotte Campus Life section of the web page. The site directs students to opportunities, including the Daily Calendar of Events, Arts and Culture, Recreation and Fitness, Health and Wellness, Housing and Residence Life, Food Services, Diversity, and Student Affairs. Students can choose from over 400 Student Organizations on campus. The Division of Student Affairs hosts a site where students can view these opportunities.

Summary Statement of 1 – Context and Mission

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

Program Response:

The David R. Ravin School of Architecture capitalizes on its location in one of the fastest-growing and most diverse cities in the United States, and as part of an urban research university with a strong public mission to bridge academic excellence and access. Founded in 1971, the SoA is characterized by a community of energetic, award-winning faculty and students who advance experimental and pioneering ideas freely in an open and collaborative environment. More than 2,500 alumni make significant contributions to architecture and related disciplines in nearly 700 cities worldwide.

In the SoA, over 380 enrolled students pursue one of four degree programs, and 30 full-time faculty lead applied research efforts that include the work of five labs: the City Building Lab (CBL), DesignLAB (DL), Fabrication Lab (FabLab), Integrated Design Research Lab (IDRL), and CoAA's Digital Arts (D.Arts). The SoA's academic home within a college of visual and performing arts offers exceptional opportunities to explore interdisciplinary connections between architecture and music, theater, dance, visual art, and art history.

SoA faculty and students are committed to creating an open-minded and creative atmosphere to pursue research, explore new forms of building, and discover collaborative practices that nurture human potential. SoA graduates understand the origins of knowledge and how to integrate their voices with others to influence the art and science of architecture. The SoA opens opportunities to students through interdisciplinary programs, close alliances with the profession, and active engagement with local and international communities.

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.

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 School of Architecture (SoA) recognizes the fundamental importance of design in the education and development of architects. Design is an integral part of teaching, research, and service in the School of Architecture. Students who are admitted to both the B.A. and M.Arch programs immediately begin taking design studio and skills-based classes in the first semester of their respective programs, and they begin to see the design opportunities that exist in everyday life. To ensure a coherent educational progression, the faculty actively engages in pedagogical discourse and careful coordination of teaching within the programs.

A critical aspect of this effort has been the evolution and development of the M.Arch Curriculum Map, which charts the course sequence by semester, and articulates the relationship between courses. Three primary types of relationships exist between the courses: *Progression* (building upon themes, skills, and methods from semester to semester), *Coordination* (relationships between concurrent and successive courses in different topics such as history, technology, and design), and *Integration* (seeking greater depth and breadth by relating concurrent courses). These relationships allow students to build upon themes, skills, and methods throughout their education, while also exploring interdisciplinary connections. The map articulates focal themes and a set of methods and skills to be taught and developed each semester within the studio, leading to a progressive maturation of design thinking and methods. The Design course sequence, outlining the dominant course relationships and assessment points, is as follows:

Pre-Assessment:
ARCH 6101 Design Studio: Fundamentals - Coordination
ARCH 6102 Design Studio: Fundamentals - Coordination
ARCH 6103 Design Studio Options (Summer) - Progression
ARCH 7101 Design Studio: Topical - Progression
ARCH 7102 Design Studio: Topical - Progression
ARCH 7103 Design Studio: Integrated Project - Integration

Assessment Point:
ARCH 7104 Design Studio: Diploma Project - Progression

See the M.Arch Curriculum Map for a representation of our intentional design education progression as well as 3–PC.2 Design for more information about assessment.

Both within and beyond the curriculum, the program recognizes the importance of design thinking and integrated design solutions in addressing contemporary challenges. Six interrelated themes have been identified within the SoA's teaching and research activities, each contributing to the future of the discipline and supporting our broader goals of linking academic excellence and access, preparing students to be entrepreneurial change agents, and expanding the disciplinary capacities of architecture in advancing social, technological, and environmental justice. The six themes are outlined here and described in further detail in subsequent sections of Section 2:

- Regenerative systems design aims to increase the environmental performance of the built environment by partnering with living systems and exploring architecture's role in the delivery and replenishment of ecosystem services.
- Social justice futures advance dimensions of diversity, equity, and inclusion through community partnerships utilizing speculative and projective design proposals.
- Emergent material practices focus on novel material ideas and applications, engaging both emerging materials and conventional products transformed via new uses.
- The computed environment considers the relationship between atoms and bits at all scales, developing design and experiential opportunities at the intersection of AR, VR, AI, IoT, and robotics.
- The engaged city explores a set of tactical urban design practices involving new approaches to community engagement, analysis, and the design of metropolitan regions.
- Applied critical history extends the role of history beyond the classroom, engaging fundamental contemporary issues of cultural and environmental importance.

By maintaining a strong focus on design education, coordinating course offerings, and nurturing a progressive design thinking approach, the program ensures that students develop the skills, knowledge, and mindset necessary to design better, safer, more equitable, resilient, and sustainable built environments. Furthermore, the program's commitment to the identified themes ensures that students are equipped to address the evolving challenges and opportunities within the discipline of architecture.

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:

To address the urgent global need for achieving zero emissions and sustainable practices in the building industry, the School of Architecture recognizes the imperative for a transformative curriculum. We are committed to promoting increased climate literacy and cultivating an engaged, civically active student body that understands its interdisciplinary responsibility within the global response to the climate emergency. In alignment with our 2021-2026 Strategic Plan, our faculty members are undertaking the following initiatives:

Interdisciplinary Studies: We are studying two overarching frameworks, namely the UN Sustainable Development Goals, and Architecture 2030, to inform the development of an interdisciplinary knowledge web around climate cascades. This approach will shape the future curricula, structures, content, methods, and modules within the School of Architecture.

Collaborations: We actively identify interdisciplinary collaborators within UNC Charlotte, the local community, and various institutions. By fostering these partnerships, we aim to create a network of expertise that can contribute to meaningful change in sustainable architectural practices.

Environmental stewardship and professional responsibility form a significant part of the SoA 2021 Strategic Plan, particularly through Goal 1: "Planet." This goal encompasses three objectives:

1. Increasing Environmental Literacy: We will enhance environmental literacy within our curriculum and provide professional development opportunities to equip our students with the knowledge and skills necessary for sustainable design practices.
2. Transforming Physical Resources: We are committed to transforming our physical resources and improving material streams, thereby reducing our environmental impact and promoting responsible resource management.

3. Contributing to Environmental Initiatives: We aim to actively contribute to city and regional environmental initiatives, leveraging our expertise to drive positive change beyond the boundaries of our academic institution.

In the M.Arch curriculum, environmental stewardship and professional responsibility are ingrained through required coursework. The primary courses addressing these values, with relevant assessment data, are:

- ARCH 5302 Environmental System Principles: This course provides a comprehensive understanding of the environmental impact of human habitation and practices on the natural world. It encourages the exploration of passive and active strategies to reduce energy consumption, carbon footprint, and embodied energy. (Pre-Assessment: PC.3)
- ARCH 5305 Building Systems Integration: As a capstone technology course, Building Systems Integration emphasizes the interplay of systems and their environmental outcomes. Students utilize computational analysis tools such as Ecotect, Vasari, and Revit plug-ins to analyze solar and wind loading, thereby informing sustainable design decisions. (Assessment Points: PC.3 and SC.1)
- ARCH 7103 Integrated Project Design: This penultimate studio course focuses on site-specific projects, emphasizing technological and systemic considerations to achieve comprehensive sustainable building designs. (Pre-Assessment: PC.3 and Assessment Points: SC.3, SC.6)
- ARCH 5206 Professional Practice: This final semester course instills an understanding of contemporary architectural practice; its procedures and responsibilities including public health, safety, and welfare; and emerging alternative forms of practice and roles of the architect. (Assessment Points: SC.2, SC.3)

See the M.Arch Curriculum Map for an illustration of this course sequence as well as Condition 3 for more information about the assessment related to these shared values.

In addition to these required courses, the design studios play a pivotal role in fostering environmental responsibility. First-year and second-year M.Arch students learn site analysis methods to assess solar, wind, thermal, topographic, and water conditions. Advanced students integrate site analysis into project parameters and design decision-making. ARCH 5206 Professional Practice also addresses sustainable practices, ensuring that students understand the ethical responsibilities of architects in promoting environmentally conscious design.

Both within and beyond the curriculum, the theme of regenerative systems design characterizes distinctive SoA contributions to teaching and research in environmental stewardship. This focus area consists of biologically attuned methods, substances, and assemblies that expand building construction's standard material palette and increase the environmental performance of architecture. Students gain exposure to this area in the courses outlined above and may expand their knowledge by pursuing the M.S. in Architecture—Design Science and Building Technology degree programs.

The regenerative systems design focus is evident in the work of the School's Integrated Design Research Lab (IDRL), which advances research in climate-responsive strategies that also improve human health. The lab serves as a research praxis where academia, industry, and the public community can freely engage, collaborate, and implement research toward climate change mitigation and social resilience. IDRL research fosters inter-/trans-disciplinary collaborations experimenting with new material cultures, technological innovations, health and wellbeing, and net-zero design. Lab activities consist of four primary areas: advanced environmental systems, advanced material and structural systems, re/generative design technology, and sustainable building system integration.

Overall, the UNC Charlotte School of Architecture is dedicated to incorporating environmental stewardship and professional responsibility into our curriculum, research, and outreach efforts. Our interdisciplinary approach, collaborations, and strategic objectives ensure that our students are well-equipped to address the pressing challenges of sustainable design and contribute to a more sustainable built environment.

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 School of Architecture values diversity and aims to acknowledge the many facets of human difference that contribute to inclusivity and excellence. Diversity, thus, encompasses a variety of characteristics and experiences that include, but are not limited to, ethnicity, race, gender, age, national origin, sexual orientation, physical ability, cultural identities, economic dimensions, and religious affiliation. Like UNC Charlotte, the SoA strives to build an inclusive environment representative of the community it serves through curricular, outreach, recruitment, enrollment, and hiring efforts. The School, therefore, is intentionally open to a variety of perspectives, approaches, and people engaged in the pursuit of excellence in the design and stewardship of the built environment. In the interest of serving the students, staff, and faculty, the SoA Diversity and Inclusion Committee provides a set of comprehensive resources on its Diversity and Inclusion webpage.

The SoA's Diversity and Inclusion Action Plan has the following six points: make diversity a central part of the School of Architecture's identity, emphasize diversity in the School of Architecture's promotional material, recruit and retain a diverse student body, recruit and retain a diverse faculty and staff, curricular initiatives, and community initiatives. The SoA Studio Culture Policy articulates the need for mutual respect, declaring that faculty or student harassment based on gender, race, ethnicity, sexual orientation, religious practice, and/or physical ability, either direct or indirect, will not be tolerated in the SoA community.

Equity, diversity, and inclusion are reflected in the SoA 2021 Strategic Plan, which devotes one of three primary goals to promoting social justice and community health (Goal 2: "People"). This goal includes four objectives: 1) Model diverse, inclusive, accessible, and antiracist practices in our curriculum, programming, and research; 2) Diversify our faculty, students, and staff; 3) Foster Health and Belonging; and 4) Strengthen Local and International Community Relationships. These aspirations will continue to shape SoA curriculum development, scholarship, service activities, and hiring practices.

In the curriculum, students develop knowledge and skills related to equity, diversity, and inclusion in the required history sequence courses as well as topical studios and seminars. Pre-Assessment courses include ARCH 5201 Architectural History I and ARCH 5202 Architectural History II. ARCH 5203 History III: Contemporary Architectural History addresses M.Arch accreditation requirements for student understanding according to PC.8: Social Equity and Inclusion (Assessment Point; see Condition 3). Topical courses offering additional knowledge-building opportunities in this area include the Community Planning Workshop; Dilemmas in City Planning: Equity in Design; Humanitarian Design; Hip-Hop Urbanism; Landscapes of Peacebuilding; and Museums, Memorials, and Race. See the M.Arch Curriculum Map for an illustration of the history course sequence as well as Condition 3 for more information about the assessment related to this shared value.

Both within and beyond the curriculum, the theme of social justice futures encapsulates SoA's contributions to teaching and research related to equity, diversity, and inclusion. This theme imagines design's capacity to support equity, inclusivity, and antiracism as an emboldened, speculative project. Courses such as Humanitarian Design, Hip-Hop Urbanism, and Topical Design Studios provide opportunities for developing knowledge in this evolving area. This focus is also evident in the work of the School's City Building Lab (CBL), which advances social and environmental justice initiatives in urban settings in collaboration with community partners. Located in UNC Charlotte's Center City Campus, the CBL is an interdisciplinary initiative that serves as the public outreach and research arm of the Master of Urban Design Program within the SoA. The lab focuses on design inquiry and action-based research as strategies for innovative city-building initiatives, including community design workshops, design toolkits for affordable homeownership, and food retail innovation initiatives.

SoA students are also involved in diversity- and equity-related projects and activities through the National Organization of Minority Architecture Students (NOMAS), Freedom by Design, and Women in Architecture Students (WiAS) student organizations. These student-based service programs utilize the talents of architecture students to elevate underrepresented voices, advocate for professional development and career support, and impact the lives of underserved people in our community.

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:

Knowledge and innovation are core principles embedded within our curriculum. Our commitment to these values is evident in the SoA 2021 Strategic Plan, where Goal 3: "Progress," is dedicated to designing for innovation. This goal encompasses three key objectives: instantiating a culture of innovation, enhancing curricula to anticipate future changes, and increasing our scholarly capacity and research profile. These objectives serve as guiding principles for the development of our curriculum, as well as shaping our scholarship, service activities, and the establishment of new programs.

In the M.Arch curriculum, knowledge and innovation are addressed through various courses and experiences that promote critical thinking, creativity, and the advancement of architectural practice. Here are some examples of how knowledge and innovation are integrated:

- ARCH 7201 Design Methodologies: This course equips students with the necessary tools, methodologies, and critical thinking skills to conduct research in architecture. It fosters a culture of inquiry, enabling students to generate new knowledge and contribute to the advancement of the field.
- ARCH 7104 Diploma Studio: As a capstone experience, the Diploma Studio challenges students to demonstrate their accumulated knowledge, innovation, and design expertise. It provides a platform for students to explore novel ideas, experiment with new design approaches, and push the boundaries of architectural practice.
- Interdisciplinary Collaboration: Our curriculum encourages students to engage with other disciplines, such as engineering, computer science, and environmental science. Collaborative projects and courses foster knowledge exchange, encourage innovative thinking, and broaden students' understanding of the interconnected nature of design and the built environment.
- Design-Build Programs: Through design-build programs (offered as design studios, including ARCH 6103 Design Studio: Options, or through our electives) and experiential learning opportunities, students have the chance to translate their knowledge into

tangible projects. These initiatives foster innovation by allowing students to apply their theoretical knowledge in practical contexts, addressing real-world challenges and creating meaningful impact in the built environment.

- Advanced Technology Courses: Courses focused on emerging technologies, such as computational design and digital fabrication, equip students with the skills to leverage new tools and methodologies in their design process. This integration of technology promotes innovation and prepares students to adapt to the ever-changing landscape of architectural practice.

Regarding curriculum assessment, this value is most relevant to PC.5 Research & Innovation. Pre-assessment for this criterion occurs in ARCH 5604 Computational Methods and ARCH 5304 Structural Systems, and the assessment point is ARCH 7201 Research & Design Methods. See the M.Arch Curriculum Map for the locations of these courses in the sequence as well as Condition 3 for more information about assessment.

Furthermore, our commitment to knowledge and innovation extends beyond the curriculum. We actively support and engage in research initiatives, scholarly activities, and professional development opportunities. These endeavors aim to advance the understanding of design and the built environment, drive innovation through collaborative research projects, and elevate the profile of our school in the broader architectural community.

Two themes, emergent material practices and the computed environment, embody the aspirations of this shared value in the advancement of technology and design integration in our teaching and research. Emergent material practices envision untapped possibilities for conventional building products and systems as well as potential applications for new ones, seeking to expand the design, function, and technical capacities of architectural materials. The School's Fabrication Lab (FabLab) operates as a center of creative experimentation, education, and leadership development regarding emergent materials knowledge. Courses such as Materials and Assembly Principles, Structural Systems, and Topical Design Studios, including summer design-build programs, offer in-depth opportunities to explore this area. The computed environment considers the relationship between atoms and bits at all scales, developing design and experiential opportunities at the intersection of AR, VR, AI, IoT, and robotics. The work of the College's Digital Arts Center (D+Arts) explores the possibilities of responsive environments, digital fabrication, and multidisciplinary performance. Courses in Computational Methods, Computational Practice, and Robotics provide meaningful forays into this area for students. In addition, the M.S. in Architecture—Design Computation degree, with dual degree options in Computer Science and Information Technology, provides an opportunity to gain advanced expertise in this area.

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:

Architecture students are creative individuals, and SoA faculty members continuously aim to foster the creation of excellent work. We believe that pride in individual achievement is not contrary to pride in the efforts of the collective. Students push their own boundaries when inspired by their peers' successes, and they also experience collective accomplishment as their creative cohort evolves. Faculty and staff are also routinely engaged in collaborative and engaged practices in their research and service activities.

Leadership, Collaboration, and Community Engagement are reflected in two of the three goals in the SoA 2021 Strategic Plan. In Goal 1 ("Planet"), to promote environmental justice and improve our use of physical resources, Objective 3 aims to contribute toward city and regional

environmental initiatives. In Goal 2 (“People”), to promote social justice and community health, Objective 4 aspires to strengthen local and international community relationships. These aspirations will continue to shape SoA curriculum development, community-engaged scholarship, and service activities.

In the M.Arch curriculum, collaboration begins in the first-semester studio, where students recognize that they belong to a natural learning community. The students are enrolled in coordinated studios, learning the same skills and lessons across the group. Students are encouraged to seek feedback from peers and engage in discourse beyond formal class hours. First-year M.Arch students learn to receive and give feedback. Upper-level students are regularly involved as critics in pinups, inculcating a strong sense of collective responsibility and demonstrating the necessity for collaboration in the creative process. These conditions support the development of mature communication and presentation skills. Faculty reinforce a culture of preparedness for reviews; students are expected to plan their presentations, publicly present their work using professional demeanor and language, and provide constructive feedback to others.

The SoA faculty promotes a collaborative work ethos. Student teams collaborate in research phases of studio projects as a regular practice. Shared site models are collaboratively built, and hands-on construction projects are team-based. The ARCH 7103 Integrated Project Design Studio is completed in two-person teams, with analysis phases pursued by four- to six-person teams. Topical studios are regularly organized around small design teams and are also often cross-disciplinary. Beyond the classroom, students regularly collaborate on research projects via the SoA research labs. Negotiations and collaborative decision-making are necessary skills that must be learned and practiced in all of these cases.

Preparing students to be active, engaged citizens begins at home in the SoA. Students who join the SoA become a part of a larger community for which they are responsible—and which is affected by their actions. The expectations for conduct are articulated at the university level in the UNC Charlotte Honor Code, which addresses student behavior with regard to Scholarship, Integrity, Respect, Accountability, Dignity, Honor, Compassion, Character, and Nobility. Collective responsibility within the SoA is articulated in the SoA Culture Policy. Responsible action and discourse are expected within the SoA community (faculty, staff, and students). Awareness and enforcement of this policy contribute to the civil maturation of students, bringing a sense of broader community responsibility to the larger collective. The principles embraced and articulated by the SoA policy are commitment and cooperation, respect for others and their behavior, and a commitment to excellence.

Regarding curriculum assessment, this value is most relevant to PC.6 Leadership & Collaboration. Pre-assessment for this criterion occurs in ARCH 7101 Topical Design Studio and the assessment point is ARCH 5206 Professional Practice. See the M.Arch Curriculum Map for the locations of these courses in the sequence as well as Condition 3 for more information about assessment.

Commitment to being part of a community is internally reinforced through shared experience; students are aware of the importance of being present and participating in courses, studios, student organizations, and governance and extracurricular events such as lectures, exhibits, fall and spring convocations, and social events. Committing their energy to the educational mission, M.Arch students are regularly involved as critics in pin-up reviews of undergraduate students. Students also participate in committees and play a key role in Admission Open House Events.

In the curriculum, students learn about the central role of the architect in responding to human needs and desires through design. From the first rudimentary exercises through developed program research in advanced integrated studios, the human dimension of architecture and the social responsibility to larger communities are emphasized. Students participate in community-based design initiatives in courses and studios located in and focused on the city;

these were first manifest in the Center City Design Studio, evolving into the Design and Society Research Center (with the origins of the M.U.D. program and move to the Dubois Center), and now transformed into the City Building Lab (CBL). The SoA faculty is committed to community design and has involved students as community liaisons, participant researchers, and pro-bono designers through courses and studios focused on community issues.

Many students in the SoA participate in student organizations, which provide opportunities for developing leadership skills and engaging local communities. Our AIAS organization continues to grow and develop excellent programming, including an annual job fair, portfolio preparation workshops, firm crawls, fundraisers, a T-shirt design competition and sale, social events, sketch auctions, and an art auction. Freedom by Design, the community service group within AIAS, is also active and successful, annually taking on responsibility for the design and construction of a project within the community each year. The SoA also has an active student chapter of the National Organization of Minority Architecture Students (NOMAS), which has mentorship projects, enters design competitions, and hosts a cross-disciplinary Artfest event in the CoA+A. The Master of Architecture Student Society (MASS) has organized a substantial multi-school symposium—Critical Mass—each year in the SoA since 2002. Student representatives also serve as leaders of their respective cohorts in the SoA. The students in these elected positions meet regularly with the SoA director and assist in communicating and engaging challenges and opportunities as they arise throughout the year.

Both within and beyond the curriculum, the theme of the engaged city embodies SoA's contributions to teaching and research related to local, community-based collaborations. This theme explores a set of tactical urban design practices involving new approaches to community engagement, analysis, and the design of metropolitan regions. The School's designLAB (dL) serves as a creative hub for imagining innovative models of future housing, schools, mobility networks, and other urban programs. Students may explore this area in courses such as Global Information Systems (GIS), Urban Analytics, and the Community Planning Workshop. They may also pursue a Master of Urban Design degree, which may be combined with a Master of Architecture or MS in Real Estate.

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 School of Architecture is committed to preparing students for rewarding careers in architecture and related fields, and the majority of our students share the career goal of practicing architecture. In 2015, we were selected by NCARB to be one of thirteen schools nationally to pilot an Integrated Path to Architectural Licensure (IPAL) program. The SoA benefits from strong local and state professional communities. The SoA actively involves practitioners in our educational efforts, from hiring adjunct faculty for courses and studios to regularly including professionals in studio reviews. The School hosts visiting critics from across the country for final studio reviews, introducing students to important and different professional perspectives. The SoA also hosts numerous public events, including guest lectures, special exhibits, and professional panels, exposing students to professional perspectives from around the globe. Practitioners regularly open their offices to SoA student groups for events such as an annual new graduate student reception (held at a different architecture firm each year). Firm crawls organized by AIAS give students the experience of belonging to a larger community of professionals. The AIA and the AIAS also collaborate on a mentorship exchange involving professionals and students. Each semester starts with a kick-off event where groups are formed to promote conversations about architecture and design. Mentor groups schedule subsequent meetings and events, forming

mutually beneficial relationships. Within the SoA, the AIAS also promotes interclass communication through events with this specific goal. One-on-one partnerships and group events have contributed to successful communication over the years.

Coursework supporting students' preparedness for the profession includes a robust Professional Practice course, which addresses alternative roles for architects in the building industry, the breadth of professional opportunities and career paths, stakeholder roles in architecture, project management and business practices, legal responsibilities, professional conduct, and financial considerations. Structural Principles includes an assignment entitled "Adopt a Site," in which each student is required to visit a construction site throughout the semester and document the progression of the building process. Topical Building Studios incorporate intensive pre-design and site design activities. The Integrated Project Design Studio often engages local sites using actual or probable building programs, such as two recent studio projects for a high-rise multi-use office / retail complex in uptown Charlotte. Students experience a range of professional responsibilities, including site, program, and environmental analysis—and design phases from concept generation through project development, technology and systems integration, and codes and accessibility compliance. The Computational Methods class prepares students to be leaders in the rapidly changing world of digital technology through exposure to base-level controls via computer scripting and programming. The Computational Practices class challenges students to develop Building Information Models for complex projects and their own designs with practice-based software (REVIT). Students enrolled in accredited programs are now permitted to document qualifying professional internship experiences through AXP from the beginning of their academic program. To ensure awareness of this program, the SoA Architect Licensing Advisor (in collaboration with the local AXP Professional Advisor) presents an AXP information session each year. Additionally, the final Diploma Studio provides an opportunity for students to develop an independent project within an established thematic framework, enabling them to implement advanced design methodologies and integrate interdisciplinary interests into a distinctive work that will shape their ensuing career interests.

Regarding curriculum assessment, this value is most relevant to PC.7 Learning & Teaching Culture. Pre-assessment for this criterion occurs in the non-curricular activities including Student Representative Leadership, the Lecture Series, and Social Engagement Activities. Assessment points include ARCH 7201 Research and Design Methodologies and non-curricular direct assessments related to the Studio Culture Policy and Faculty + Staff Culture. See the M.Arch Curriculum Map for the locations of ARCH 7201 in the sequence as well as Condition 3 for more information about assessment.

Both within and beyond the curriculum, lifelong learning is shaped by an appreciation of one's place in history, and how history shapes present and future actions. Explorations of histories, theories, and architecture's role in cultural, social, environmental, economic, and built contexts may be seen in the theme of applied critical history. This theme extends the role of history beyond the classroom, engaging fundamental issues of cultural significance via new critical interpretations and speculative design proposals. Courses such as Architectural History Criticism Methods, Landscapes of Peacebuilding, and Brave New Worlds: Utopian Thinking in Urban Planning offer in-depth explorations of these topics. Students can participate in the School's semester-long Rome Program, which explores both ancient and modern architectural history. Graduate students will also have the option to develop further knowledge via the newly launched M.S. in Architecture—Critical Heritage Studies degree in partnership with Geography and Public History.

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.

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:

Approach:

Our program instills an understanding of both established and emerging models of design practice through a range of curricular, extracurricular, and facilities-related efforts. In addition to providing our students with explicit training on this criterion in an innovative course that confronts the complexities of our evolving discipline (ARCH 5206 - Professional Practice), we offer a growing collection of dual degrees that underscores the range of career opportunities that may stem from an education in architecture. Our MArch/MSIT (Master of Science in Information Technology) dual degree, for example, is an innovative collaboration with UNC Charlotte's College of Computing and Informatics, and is emblematic of our approach to offering both a strong foundational understanding of the discipline through our accredited degree and simultaneous opportunities to specialize in areas of critical importance to the discipline's role in the greater professional community.

Our satellite facility at UNC Charlotte's Dubois Center in Charlotte's central business district is emerging as an important resource for this criterion. We recently moved all coursework associated with the final year of our program to this facility, so as to embed students in the lifeblood of one of the nation's fastest-growing metropolitan areas. The economic diversity of the region is on full display both within that facility, which houses a range of University programs engaged with the city, and around it. Furthermore, the location puts our students within close proximity to design firms working at various scales and for various types of clients, and we orchestrate engagements between our final-year students and local professionals of different ilks that are possible only through this proximity. We are shaping this facility as both a threshold into the discipline and an experiment in how to embed design education within a professional context.

Pre-Assessment Learning:

Our curricular commitment to building an understanding of licensure begins with program orientation sessions that introduce students to the basic logic of licensure: education, experience, and exams. These sessions also inform students that they may begin earning NCARB "AXP" hours as soon as they register with NCARB. We further elucidate the procedure for obtaining a license in our annual extracurricular Path Licensure Workshop, in which we communicate potential paths leading to licensure, AXP prerequisites, preparation for the ARE, relevant online resources, and contacts for inquiries. Our NCARB Licensing Advisors Professors David Thaddeus and Peter Wong lead these and other efforts related to how one becomes a licensed architect. Our team also tracks changes to work experience and examination requirements, as well as the unique and complex concerns facing our rich population of international students who seek to understand their opportunities to practice and become licensed in the United States.

Public events orchestrated by our nationally recognized AIAS chapter provide further exposure to the logic of the discipline. These include portfolio workshops led by recent alums currently working in the discipline and an annual Career Fair that brings local, regional, and even national professionals into our facilities to conduct interviews. Many students have multiple interviews in different types of firms, which leads not only to fruitful internships, but also to building their knowledge base of the diversity of the discipline.

Pre-assessment learning within the curriculum occurs through coursework associated with our dual degree offerings and with our faculty's robust participation in grant-funded research. Even students who do not pursue a dual degree benefit from opportunities to enroll in the course offerings associated with those degrees, all of which integrate professionally oriented design education with advanced research on computation, urban design, critical heritage, and a range of building technologies. Much of our facility's research activities, meanwhile, take place either within our own research labs or within our surrounding communities. Students literally see different types of researchers and practitioners at work, and many of their required technology courses and elective courses engage that work directly.

As they near graduation, many of our students have gained ample professional experience through summer internships and part-time jobs during the school year, giving them a firsthand familiarity with the path to licensure. The latter poses challenges to time management that we are seeking to address through proposed changes to our efforts to meet this criterion (see "Proposed Adjustments" below). Up until now, we have sought to leverage students' work experience as an additional resource in our education of aspiring architects.

Assessment Point: ARCH 5206 - Professional Practice

ARCH 5206 - Professional Practice is a required course for all students in the M.Arch. program (3 tracks: M.Arch. I, M.Arch. II, and M.Arch. AS). It is taken in the spring semester of the final year of the program. We began assessing this criterion in this course annually using our current assessment infrastructure in Spring 2023.

This course is the culmination of our efforts to instill an understanding of both the basic mechanisms of our discipline and its expanding boundaries. It involves a combination of workshops led by the instructor, a weekly series of guest lecturers, and assignments that both evaluate knowledge and inspire speculation. Topics of workshops and lectures range from the practical (NCARB requirements, jurisdictional distinctions at the state level, laws and regulations that impact the discipline, etc.) to the aspirational (practitioners of different generations and from different socioeconomic backgrounds sharing their career paths and leadership experiences in practices of varying scales and disciplinary foci, from traditional to experimental, including their engagement with professionals in construction and policy-related disciplines). Together, the collection of in-class experiences communicates historical, existing, and emerging understandings of the architectural practice.

Assessment Method:

ARCH 5206 - Professional Practice assesses this criterion through a Student Learning Outcome composed of two parts that combine to cover its extents:

- SLO P1: Professional Orientation–to instill in students an understanding of how to leverage an education in architecture to chart a professional trajectory.

    - Part 1: Paths to Licensure–to instill in students an understanding of the paths to becoming licensed as an architect in the United States.

- SLO P1 Part 2: Career Opportunities–to instill in students an understanding of the range of available career opportunities that utilize the discipline's skills and knowledge.

By assessing two distinct dimensions of this criterion separately, our program is able to better track students' distinct understandings of how to become licensed and how to consider their education as a foundation of career paths in professional communities more broadly.

- SLO P1 Part 1 is assessed through Quiz 2, Question 5, and the Next Ten (final) project.
- SLO P1 Part 2 is assessed through Quiz 3, Question 5, the Next Ten (final) project.

Quiz 2 follows a lecture dedicated entirely to paths to licensure, and Question 5 asks students both to demonstrate their knowledge of paths of licensure through a long-form response that requires an understanding of the three arms of licensure: education, experience, and exams.

Quiz 3, Question 5 asks students to analytically reflect upon the unconventional path of one of the non-traditional practitioners who gave a guest lecture during the semester, with a specific emphasis on how that practitioner engages the skills and knowledge of the discipline gained through their education.

The Next Ten project asks students to map a potential trajectory for the first decade of their professional careers, considering how licensure corresponds with their professional goals (which reinforces an understanding of SLO P1a), and analytically speculating on potential forks in the road that open different opportunities to them based on some common aspirations (so as to demonstrate an understanding of SLO P1b). The project is both creative, in that it asks students to "think big" about their careers, and rigorous, in that it asks them to identify specific disciplinary limitations and opportunities learned through various lectures and workshops.

Assessment Data & Analysis:

Our benchmark for this criterion is for 80% of students to score a 3 or 4 in our 4-point assessment rubric for each part of the SLO. In Spring 2023, students performed as follows:

- SLO P1 Part 1: 94% of students met our benchmark (89% scored a 4)
- SLO P1 Part 2: 72% of students met our benchmark (70% scored a 4)

Our assessment includes a distinction between students' meeting the benchmark and achieving the highest level of assessment, so as to better discern how to improve our program.

- Our benchmark for SLO P1 Part 1 was met, and an exceptionally high number of students (compared to other criteria) who met the benchmark were assessed at the highest level of "commendable."
- Our benchmark for SLO P1 Part 2 was not met, but a relatively high number of students (compared to other criteria) who met the benchmark were also assessed at the highest level of "commendable," meaning students either excelled or missed the minimum standard.

Spring 2023 assessment reports, including evaluation rubrics, will be included in the Team Room.

Despite the course's emphasis on expanding the established boundaries of the discipline through guest speakers who communicate a range of career paths, students struggle to see themselves as anything other than a traditional architect. They excel at understanding paths to licensure, but too many of them fail to think critically about their own career paths. While it is encouraging that a relatively high percentage of students excel at thinking critically about their careers, we strive to balance the disparity between the two assessment points covered by this SLO.

Proposed Adjustments:

Our curricular leaders are currently considering a new type of elective course relevant to this criterion. The proposed course would address our students' economic need to work during their education, but also preserve what we consider to be the sanctity of our academic credit hours, by integrating part-time internships and academic learning. Currently, our students' work experiences feel disengaged from their education, except for informal and serendipitous overlaps. Meanwhile, they often ask us to apply their work hours toward elective credit hours. Our goal is to meet them halfway by creating a new type of professional/academic relationship distinct from co-op models: an elective course that involves students sharing their professional experiences with each other and contextualizing them within historical and/or contemporary models of practice. We expect that it would be a popular offering and might even expand into a prerequisite for this assessed course. Regardless of that potential, this new course would help us to reframe and evolve how professional practice is woven into our curriculum, so as to better meet this program criteria in additional innovative ways.

Other proposed adjustments include:

- Further expand the array of guest speakers' backgrounds, profiles, and career paths to address the disparity between the success rates of the two parts of the SLO associated with this course. (To be enacted in Spring 2024)
- Include more explicit prompts related to Part 2 of the SLO; the high number of students receiving a "commendable" mark suggests that the instruction itself is already clear, but almost a third of the students are missing the opportunity afforded to them in this course to gain this understanding.
- Develop a new Student Learning Outcome (also a new type of SLO) that assesses recent graduates' progress on their paths to licensure. (In progress; update to be provided in Spring 2023 assessment reports included in the Team Room)
- Create a poll for incoming ARCH 5206 students to gauge their pre-course understanding of paths to licensure and career opportunities. (To be enacted in Spring 2024; update to be provided in Spring 2023 assessment reports included in the Team Room)
- Integrate the monitoring of changes to paths to licensure into course presentations and discussions. (To be enacted in Spring 2024)
- Develop further resources to address international students' needs. (In progress; update to be provided in Fall 2023 assessment reports included in the Team Room)

Supporting Materials in Team Room:

- ARCH 5206 Syllabus and Schedule.
- Relevant materials distributed through workshops and lectures.
- Assessed assignments: Quiz 2, Quiz 3, and Next Ten Project.
- Spring 2023 Assessment Reports (benchmarks, evaluation rubrics, and data analysis).
- Media on relevant public programming & extracurricular activities

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 NARRATIVE

Approach:

Our program instills in students an understanding of multiple interpretations of how design processes shape the built environment. The primary venue in which we interrogate design is the

required sequence of design studios; however, all of our courses (including required technology and history/theory sequences, and many of our electives) strive to foreground how built environments come to be and how they evolve over time, not merely what they are at any given moment.

Within our studio sequence, faculty work at different scales, with different tools, and from different social and aesthetic perspectives. As such, they produce different types of design outcomes, a multiplicity that demonstrates the breadth and depth of what design is and what it may achieve. An emphasis on process unifies our varied approaches, and those extend into our teaching. Throughout their education, our students conduct a wide range of methods that integrate multiple factors differently.

Whereas some methods are strictly procedural, others ask students to chart unknown territories between touchpoints. Similarly, different methods balance quantitative and quantitative research differently. Juxtapositions between the foci of different methods within our curriculum catalyze meta-discussions on how seemingly different processes share a common thread of synthesis and integration. We aim not to train a particular type of designer, or to create carbon copies of ourselves, but rather to instill in our students an intellectual agility to navigate different types of paths toward design outcomes.

The dynamism of our students' everyday built environment, manifested by the growth of the City of Charlotte, is a recurring theme in our public programs (lectures, colloquia, and special events) and teaching (studio sites, community engagements, etc). We live in a boomtown subjected to constant flux (building sites, infrastructural projects, neighborhood upheavals, adaptive reuses, etc.), and we take advantage of opportunities to learn from the colliding and overlapping forces that shape our built environment at multiple scales and affect both individuals and communities.

Pre-Assessment Learning:

Our two-semester sequence devoted to modes of communication (ARCH 6602 - Representation I and ARCH 6603 - Representation II) is the foundation of the learning that culminates in the assessment of this criterion. These courses run parallel to foundation-level studios, but they are taught by separate faculty and therefore play into our strategy of juxtaposing different but complementary perspectives on process. As a special effort to help students coming from different disciplines, we also require a two-week graphic skills program prior to the start of this sequence (just before the start of the semester), so that students begin our program with at least the basic principles of representation before they begin a five-semester journey to their Diploma Project, our point of assessment.

The sequencing of different types of processes within our studios is carefully considered, and we experiment with which types of design methods work best up front. In recent years, our foundation-level studios have followed tightly scripted processes that lead students through precise methods that produce deliverables throughout and culminating in prescribed deliverables. This procedural approach to design purposefully overcomes the limitations of traditional models of process, in which students develop a parti and then proceed through schematic design and design development. In these studios, students reach plateaus more routinely. Within the highly structured schedules, students identify (or select from) different themes that give their work a unique identity, but their processes are managed so as to produce work directly reflective of instructors' perspectives. That balance is an especially effective way to ensure the acquisition and development of representational skills within a venue that fosters creativity.

The methods of our mid-sequence studios (second year of the M.Arch I track and first year of the M.Arch II track) vary according to the topic of the studio. Whereas some embrace traditional models of process (progressing from parti, through schematic design and design development), others involve instructors' guiding students through phased investigations at different scales

(often involving lab experiments or real-world stakeholders or contexts). Still others involve different emphases on different types of analysis, be it material/assembly innovation, system performance, or cultural precedents. In one way or another, instructors integrate students' advancing knowledge of principles of technology, history, theory, and/or sociopolitical contexts. In many cases, these studios embody our program's commitment to "thinking-through-making" in our exceptional fabrication labs, where advanced fabrication technologies and performative systems meet critical thinking.

In addition, our mid-sequence studios inspire students to take a deeper degree of ownership of their processes than our foundation-level studios. Student work is more diverse (both within and between sections), and process is discussed and evaluated in different ways.

Students in our M.Arch AS track do not take our mid-sequence studios, but they have similarly diverse exposures to process in our undergraduate studios, and we recently began cross-listing our fourth-year undergraduate studios with our mid-sequence graduate-level studios. We will assess this change in Fall 2023 and consider how this "vertical studio" format impacts the experiences of our graduate students in the mid-sequence studios, and how proposed changes to one of the mid-sequence studios may affect our current strategy (see proposal in "Pre-Assessment Learning" and "Proposed Adjustments" under PC.6 Leadership and Collaboration).

In the final year of our program, students in all three of our degree tracks merge and participate in a tightly coordinated Integrated Design Studio, in which they follow a strictly defined set of methods leading to integration and synthesis. Cultural, aesthetic, and technological principles gained throughout the program are applied toward methods that realize a complex building project spanning multiple scales. Emphasis is placed on how a range of overlapping parameters directly influence outcomes from the beginning of and throughout the design process.

As they participate in that studio, all students also take ARCH 7201 - Design and Research Methods, which is a prerequisite for our assessment point of this criterion (ARCH 7104 - Diploma Studio). The section-selection process for ARCH 7104 is, in fact, embedded within ARCH 7201, where students do research related to the topic of the section of ARCH 7104 in which they are placed. This extension of the themes of the design studios into a research-based course underscores that design occurs not only through the production of representational materials, but also through a range of methods that fuel more immediate products of our efforts. This exchange between two courses in successive semesters promotes design as a mode of engagement, and helps us to overcome the outdated perception of design as an autonomous pursuit of pure form.

Assessment Point: ARCH 7104 - Diploma Studio

ARCH 7104 - Diploma Studio is a required course for all students in the M.Arch. program (3 tracks: M.Arch. I, M.Arch. II, and M.Arch. AS). It is taken in the spring semester of the final year of the program. We began assessing this criterion in this course annually using our current assessment infrastructure in Spring 2023.

This is a topical, section-based course that follows the collective experience of ARCH 7103 - Integrated Design Studio. The collection of sections offers a range of distinct design methods (one per section). As such, it is a synchronic microcosm of the diversity of methods experienced diachronically throughout the entire curriculum.

Students select their section based on presentations by the studio faculty and reviews of syllabi during the preceding semester. In each case, an instructor defines a design process that engages theoretical and/or practical questions of interest and relevance to the design of the built environment: the climate crisis, sustainability, public space, community, sociocultural phenomena, equity, housing, computation, artificial intelligence, advanced building systems and technologies,

material innovations, health, and well-being, etc. Methods vary, but all Diploma Studio sections strive to integrate conceptual thinking and practical training, and all enact a method that allows for an assessment of students' understanding of how processes shape the built environment.

Assessment Method:

ARCH 7104 - Diploma Studio assesses this criterion through a Student Learning Outcome composed of three parts that combine to cover its extents:

- SLO P2: Design–to instill in students an understanding of how design processes shape the built environment and affect positive change.

    - SLO P2 Part 1: Representation–to instill in students an understanding of how to represent the static and dynamic dimensions of existing and proposed built environments through established and emerging methods: drawings, models, diagrams, renderings, data visualizations, etc.
    - SLO P2 Part 2: Iteration–to instill in students an understanding of the value of iteration, analysis, and recalibration to design processes.
    - SLO P2 Part 3: Parameters–to instill in students an understanding of how to integrate multiple factors and coordinate multiple scales through the synthesis of discrete studies into a common goal.

By assessing three distinct dimensions of this criterion separately, our program is better able to track what it considers to be three primary components essential to the design process. These components are both general enough to be relevant to various types of methods offered in different sections of the studios, and specific enough to generate useful data on how the program is meeting its commitment to the extraordinarily complex nature of design.

The assignments used to assess this SLO vary between the four sections of ARCH 7104. Each section frames the assessment of this criterion through section-specific assignments that communicate how each part of the SLO is evaluated and assessed in that section.

Assessment Data & Analysis:

Our benchmark for this criterion is for 80% of students to score a 3 or 4 in our 4-point assessment rubric for each part of the SLO. In Spring 2023, students performed as follows:

- SLO P2 Part 1: 80% of students met our benchmark (29% scored a 4)
- SLO P2 Part 2: 67% of students met our benchmark (33% scored a 4)
- SLO P2 Part 3: 73% of students met our benchmark (23% scored a 4)

Our assessment includes a distinction between students' meeting the benchmark and achieving the highest level of assessment, so as to better discern how to improve our program.

In Spring 2023:

- Our benchmark for SLO P2 Part 1 was met, and a relatively modest number of students (compared to other criteria) who met the benchmark were assessed at the highest level of "commendable."
- Our benchmark for SLO P2 Part 2 was not met, and a relatively modest number of students (compared to other criteria) who met the benchmark were assessed at the highest level of "commendable."

- Our benchmark for SLO P2 Part 3 was not met, and a relatively modest number of students (compared to other criteria) who met the benchmark were assessed at the highest level of “commendable.”

Spring 2023 assessment reports, including evaluation rubrics, will be included in the Team Room.

Because this studio follows the rigors of ARCH 7103 - Integrated Design Studio in the fall semester and coincides with students’ searching for their post-graduation jobs, certain students struggled to meet the expectations of this studio, The course is envisioned as a capstone studio in which students channel their passions and curiosities through a given (and chosen) method toward the creation of a signature project shaped by their career aspirations. That premise of independently-driven work suffered from time-management challenges, distractions, and overall fatigue. Because the Spring 2023 cohort was especially affected by the learning perils of the pandemic, we do not interpret these challenges as insurmountable, though they do require precise adjustments.

Proposed Adjustments:

Our ability to assess this criterion through this course was by no means compromised by these circumstances, and we remain committed to the logic of our assessment strategy; however, in order to heighten the rigor of the design production in this course, we are proposing two adjustments and considering a more radical third adjustment.

The first adjustment is to coordinate the sections more closely, while allowing them to offer diverse methods, programs, and scales. Diploma Studio faculty should meet more regularly both in the fall semester, as they plan their sections and communicate their planning and objectives to students in ARCH 7201 - Design & Research Methods, and during the spring semester as the sections unfold and develop their methods. Joint reviews will both heighten the sense of community that suffers during section-focused semesters, and inspire students to produce work for a wider audience throughout the process.

The second adjustment is to formalize the final review format, elevating it to a school-wide event anchored by leaders in the discipline who fly in for the Diploma Review. Logistical challenges in Spring 2023 undermined our attempts to culminate the studio with a special event, and that shortcoming may have fueled some of the fatigue in the waning moments of the semester. Planning this event must occur in the fall semester and be prominently displayed on the school calendar well in advance.

The potential more radical adjustment may stem from our continual self-evaluation of the sequencing of our design curriculum: flipping the order of ARCH 7103 and ARCH 7104, so that Integrated Design Studio becomes the capstone of the program and Diploma Studio becomes a more rigorous venue of design experimentation. The point, of course, is not to lessen the rigor of Integrated Design Studio. We believe that that studio will be rigorous by default, and that the rigor of Diploma Studio will be heightened by placing it in the fall semester, perhaps as a parallel course with ARCH 7201 - Design & Research Methods, somewhat comparable to how ARCH 7103 Integrated Studio and ARCH 5305 Building Systems Integration are run as parallel courses. If that tandem were to move to the spring semester, the fall could become a vibrant laboratory of parallel design investigations in separate studios, united through a common academic course devoted to methodological research. Although this type of change has the potential to be a red herring, as simply shuffling things is never the answer, a thoughtful reorganization that involves more than just changing a sequence has the potential to strengthen our design culture.

Pre-assessment changes under consideration include:

- Reconsider the sequencing of specific methods deployed in foundation-level and mod-sequence studios, so as to discern how different sequences may better prepare students to confront the design challenges of the final year of the program. (In Fall 2023, we are experimenting with a more traditional method in our foundation-level studio, compared to the more procedural methods we conducted at that level in recent years, which will move into mid-sequence studios)
- Tighten the coordination of our two mid-sequence studios (Fall or Spring), including the development of common SLOs for all sections, with an intent to maintain the diversity of the sections, but also to draw connections between various methods by having them address similar themes and issues in different ways. (In Fall 2023, we are piloting an experiment to coordinate ARCH 7101 - Topical Studio to this end; see “Pre-Assessment Learning” and “Proposed Adjustments” under PC.6 Leadership and Collaboration)

Supporting Materials in Team Room:

- ARCH 7104 Syllabi and Schedules (all four sections)
- Assessed assignments (all four sections)
- Lectures to students during section-selection process
- Spring 2023 Assessment Reports (benchmarks, evaluation rubrics, and data analysis)
- Syllabi of courses where pre-assessment learning occurs

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 NARRATIVE

Approach:

Our program instills a holistic understanding of the dynamic between the built and natural environments through curricular and extracurricular means, and those efforts make clear that design professionals have both the ability and the responsibility to mitigate climate change. Since our last accreditation, ecological principles have emerged into the foreground of our thinking, as new faculty have framed them not as integral to aesthetic principles, not merely as compatible with them. Our curricular sequences introduce principles in foundational courses and develop methods that we assess in advanced courses.

Systemic thinking is a recurring theme in our curriculum, and it is especially relevant to understanding how and why to synthesize natural and built forces through design. Throughout our curriculum, we work to teach systems thinking both in the context of a specific agenda, such as this criterion, and more broadly as a way of thinking, so that students are better able to recognize the sometimes hidden systems (material and social) in which they live and to build a deeper understanding of how design is embedded within systems. An emphasis on complementary relationships between passive and active systems is one example of our commitment to holistic, systems-based design.

Pre-Assessment Learning:

Ecological principles, including those related to adaptation and resilience, are introduced in ARCH 5302 - Environmental Systems Principles (first year, spring semester) and ARCH 5203 - History III (second year, fall semester). That integrated approach (involving both technological and historical/theoretical perspectives on a central theme of practice) is typical of how we prepare

students to tackle more advanced methods and concepts later in the program. Similarly, building performance principles are introduced through a three-semester sequence: ARCH 5301 - Materials (first year, fall semester); ARCH 5303 - Structures I (second year, fall semester); and ARCH 5304 - Structures II (second year, spring semester). By the end of that sequence, principles have been applied to advanced methods of analysis and evaluation.

ARCH 5301 - Materials places emphasis on precedent analysis as a way to build a sociocultural understanding of building technology, and that strategy is also pursued in ARCH 5305 - Building Systems Integration, which is our assessment point for this criterion. Other pre-assessment courses include precedent analyses to varying degrees, and we are considering a formal and consistent approach to that method of knowledge building (see “Proposed Adjustments” below).

Our public programs (some of which are required for all students, and all of which are accessible to all students) buttress our curricular efforts. Every academic year, lectures by external guests (at which attendance is required for all students) speak directly to our discipline’s ability and responsibility to be a primary steward of the environment. We seek out practitioners who take for granted the principles we strive to communicate to our students as essential to the future of the discipline.Regular colloquia by faculty and alumni, as well as special events on campus and in the community, further integrate that message into the lifeblood of our program, albeit in venues that are optional for most students.

Assessment Point: ARCH 5305 - Building System Integration

ARCH 5305 - Integrated Building Systems is a required course for all students in the M.Arch. program (3 tracks: M.Arch. I, M.Arch. II, and M.Arch. AS). It is taken in the fall semester of the final year of the program. We began assessing this criterion in this course annually using our current assessment infrastructure in Fall 2022.

In this course, principles gathered throughout the curriculum are applied to advanced methods of simulation, evaluation, and analysis. Content relevant to ecological knowledge and responsibility is distributed throughout the semester in three types of deliverables: labs; a case study project that culminates in a schematic proposal for a net zero building; and a final project that involves further development and technical resolution of the principles explored in the case study. Four labs cover the following topics: Lab 1, Pedestrian comfort and climate analysis; Lab 2, Energy consumption, energy cost, & carbon footprint; Lab 3, Solar power potential; Lab 4, Daylighting performance. The Case Study Project includes the integration of the first two labs, and the Final Project includes the integration of all four labs.

Part of the success of ARCH 5305 with regard to this criterion stems from its integration with its corequisite course, ARCH 7103 - Integrated Design Studio. The instructor of ARCH 5305 is the coordinator of ARCH 7103, and reciprocity between research and design is a fundamental assumption of our program. Although ARCH 7103 - Integrated Design Studio is not an assessment for this criterion, some of its preliminary assignments, lectures, and TechSems are included in the Team Room because of their relevance to the continuous learning that culminates in the assessed assignment in ARCH 5305.

In Fall 2023, this course’s alignment with its corequisite (ARCH 7103) was adjusted from its configuration in Fall 2022 in an attempt to improve its already successful performance as a venue in which students gain knowledge and understanding of ecological principles and responsibility. This iteration of ARCH 5305 includes an extensive case study, as opposed to more sporadic precedent studies in the previous iteration of the course. Students have the option to execute their final project for the course either through a continuation of their case study or through their Integrated Design project in ARCH 7103, which was the only option for the final project in Fall 2023. This change is, in part, a response to some misperception of 5305 as “merely” a support course, but the introduction of a more extensive case study also allows us to address some of the

specific areas of knowledge in which students demonstrated less understanding, such as ecological site strategies. In addition, our hope is that discrete lessons from the Case Study will provide an additional layer of learning that students may apply to their own work indirectly, as opposed to treating this course as a literal tool meant only to help their work in ARCH 7103. Finally, as much as we value the deep integration between the two corequisite courses, we also value each course's opportunities to offer distinct lessons, and we strive to alleviate the pressures experienced by these intense corequisites. We will assess this change to gauge how it impacts broader goals to provide a venue in which students gain knowledge and understanding of ecological knowledge and responsibility.

Weekly topics and investigations especially relevant to this criterion include:

- Regenerative Design, Building Systems, Systems Integration
- Site Technology, Landscape
- MEP, IEQ, Health & Wellbeing
- Net Zero and Building Integrations
- Net zero design and technical resolutions of systems

Assessment Method:

ARCH 5305 - Building Systems Integration assesses this criterion through a Student Learning Outcome composed of three parts that combine to cover its extents:

- SLO P3: Ecological Responsibility–to instill in students a holistic knowledge of the dynamic between built and natural environments, so as to act on behalf of both types.

    - SLO P3 Part 1: Ecological Principles–to instill in students an understanding of how to leverage ecological principles, so as to mitigate climate change and realize symbiotic relationships between built environments and their contexts.
    - SLO P3 Part 2: Advanced Building Performance–to instill in students an understanding of how to leverage advanced building performance principles so as to mitigate climate change and realize symbiotic relationships between built environments and their contexts.
    - SLO P3 Part 3: Adaptation and Resilience Principles–to instill in students an understanding of how to leverage adaptation and resilience principles, so as to mitigate climate change and realize symbiotic relationships between built environments and their contexts.

By assessing these three dimensions of the criterion separately, our program is better able to track our students' understanding of different sets of principles.

In Fall 2022:

- SLO P3 Part 1 was assessed numerically through Lab 1 (Climate Analysis) and narratively through a collection of labs.
- SLO P3 Part 2 was assessed numerically through Lab 2 (Whole Build Energy Modeling) and narratively through a collection of labs.
- SLO P3 Part 3 was assessed numerically through Lab 3 (Energy Use Intensity Sensitivity Analysis and Reduction Strategy) and narratively through a collection of labs.

In Fall 2023:

- SLO P3 Part 1 is assessed through specific evaluation criteria within the Final Project deliverables assignment (see Notes I & II below).
- SLO P3 Part 2 is assessed through specific evaluation criteria within the Final Project deliverables assignment (see Notes I & II below).
- SLO P3 Part 3 is assessed through specific evaluation criteria within the Final Project deliverables assignment (see Notes I & II below).

Note I: The Final Project deliverables assignment assesses multiple SLOs, and the assessment of each SLO within it is based on unique evaluation criteria: different components of the deliverables are assessed independently, and those independent assessments are mapped onto unique SLOs. For clarity, a diagram explaining how evaluation criteria from the deliverables assignment are mapped onto specific SLOs is included in the Team Room folder associated with each SLO. To demonstrate the arc of continuous learning that culminates in the Final Project deliverables, preliminary assignments related to specific SLOs are included in the Team Room folder associated with each SLO.

Note II: Students work in pairs or groups of three on their Final Projects, and instructors conduct verbal interviews throughout the semester to evaluate how the team is delegating responsibilities and sharing acquired knowledge, so as to ensure that all team members are acquiring the understanding and abilities evidenced in the deliverables.

The primary evaluation criteria for the Final Project are:

- Resolution of Net zero design and technical systems integration
- Quality and comprehensiveness of representation of 3D Net zero building section
- Integration of lab activities, performance metrics, and research in the Final Project
- Quality of written and oral communications

Specific evaluation criteria for these SLOs are outlined in the Fall 2023 assessment reports in the Team Room.

Assessment Data & Analysis:

Our benchmark for this criterion is for 80% of students to score a 3 or 4 in our 4-point assessment rubric for each part of the SLO. In Fall 2022, students performed as follows:

- SLO P3 Part 1: 91% of students met our benchmark (74% scored a 4)
- SLO P3 Part 2: 76% of students met our benchmark (52% scored a 4)
- SLO P3 Part 3: 94% of students met our benchmark (65% scored a 4)

Our assessment includes a distinction between students' meeting the benchmark and achieving the highest level of assessment, so as to better discern how to improve our program.

In Fall 2022:

- Our benchmark for SLO P3 Part 1 was met, and an exceptionally high number of students (compared to other criteria) who met the benchmark were assessed at the highest level of "commendable."
- Our benchmark for SLO P3 Part 2 was not met, and a relatively high number of students (compared to other criteria) who met the benchmark were assessed at the highest level of "commendable."

- Our benchmark for SLO P3 Part 3 was met, and a relatively high number of students (compared to other criteria) who met the benchmark were assessed at the highest level of “commendable.”

Fall 2023 assessment reports, including evaluation rubrics, are included in the Team Room.

In Fall, 2022, Students completed the climate analysis enthusiastically and produced thoughtful analysis; however, they struggled to make connections between their massing choices and climate data. Similarly, they executed excellent preliminary energy models; however, those studies had less impact on their design choices than was intended. Students thereby are better at completing assignments related to this criterion than they are at applying their understanding to design processes.

We consider the assessment point itself (ARCH 5303) to be teaching our students the necessary skills and methods necessary for *understanding* ecological principles, and strive to improve students’ *ability* to apply that understanding to their design work. Modeling more pre-assessment semesters on the example of the assessment semester will help students to apply understanding toward ability.

Proposed Adjustments (from Fall 2022):

Our curricular development team recently completed an audit of our pre-assessment technology sequence, and our future planning involves major changes relevant to this criterion. An increasingly central aspiration of our pre-assessment technology sequence is to deepen the integration of technology into design studios. In our current assessment cycle, whereas some of our pre-assessment courses are loosely coordinated with a parallel design studio, our assessed technology and design courses manifest a more cohesive type of integration, and our curricular leaders are considering how to achieve that type of integration in our pre-assessment sequences. We push against the aging tradition of considering technology courses as secondary to design studios, and we strive to heighten our students’ understanding of our discipline’s responsibility to provide environmental stewardship.

We believe the success of the deep integration of our assessed courses is transferable to our pre-assessment semesters, and that transfer will help to prepare students for the rigors of the assessed courses, which many find overwhelming today. Our plans for future assessment cycles include more pre-assessment integration. In addition to changing the names of technology courses in our pre-assessment sequences, so as to better reflect their evolving content, we are planning a reallocation of credit hours to balance current disparities between studio and technology that fuel the misperception that studio is distinct from (and more important) technology courses. We envision design and technology modules fused together to help students both to understand the material better and to better manage their time and energy. (see Section 5.3 Curricular Development)

More specific proposed adjustments include:

- Create stronger integration between pre-assessment technology and design courses, modeled on the integration of ARCH 5305 - Building Systems Integration and ARCH 7103 - Integrated Design Studio in the assessment semester. (In progress)
- Develop a program-wide set of parameters for case Studies within the pre-assessment technology sequence. (In progress in ARCH 5305; update to be provided in Fall 2023 assessment reports included in the Team Room)
- Conduct review sessions on materials from pre-assessment learning at the start of the assessment semester, so as to remind students what they already know before the fast-paced studio begins. (Under consideration)

- Integrate an understanding of ecological principles more explicitly into the design process in ARCH 7103 compared to Fall 2022. (Enacted in Fall 2023)
- Place greater emphasis on stormwater control and site management, cut/fill, landscaping, and water management. (Case Study project in Fall 2023 addresses site)
- Create a new SLO part focused on the assessment of integrating passive and active ecological systems (Under consideration; update to be provided in Fall 2023 assessment reports included in the Team Room)
- Consider a new, pre-assessment SLO that addresses the basic principles of holistic environmental thinking, independent of actions rooted in design methods, so as to build a foundational understanding of the environment onto which advanced tools may be applied. (Under consideration; update to be provided in Fall 2023 assessment reports included in the Team Room)
- Create a new SLO focused on the assessment of systems thinking, especially relevant to this criterion and SC.4 - Technological Knowledge. (Under consideration; update to be provided in Fall 2023 assessment reports included in the Team Room)

Proposed Adjustments (from Fall 2023):

Further proposed changes will be included in the Fall 2023 assessment reports included in the Team Room.

Supporting Materials in Team Room:

- ARCH 5305 Syllabus and Schedule.
- Relevant preliminary assignments in ARCH 5305.
- Relevant lectures in ARCH 7103 & ARCH 5305.
- Assessed assignment in ARCH 5305: Final Review deliverables.
- Diagram mapping specific evaluation criteria of deliverables to relevant SLOs.
- Fall 2023 Assessment Reports (benchmarks, evaluation rubrics, data analysis, and additional proposed adjustments)
- Syllabi of courses where pre-assessment learning occurs
- Media on relevant public programming & extracurricular activities

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 NARRATIVE

Approach:

Our program instills an understanding of the histories and theories of architecture and urbanism primarily through a three-course sequence designed specifically to engage the relevance of history and theory to design education and practice. Guiding principles of that sequence include: foregrounding the impact of designers' positionality; interrogating contextual relationships (past/present/future) between architecture, culture, place, environment, and technology; modeling proper use of terminology relevant to the analysis of built environments; and building an understanding of how to evaluate and analyze sources (visual, primary, and secondary) critical to the discourse on the built environment. In addition to this required sequence, students in two of our three tracks (M.Arch. I and M.Arch. II) are required to take at least one elective seminar on a focused historical or theoretical topic. Students in our other track (M.Arch. AS) are encouraged to do so, and all students are allowed to substitute these electives for other general Architecture Topic electives.

Our commitment to history and theory, however, far exceeds these minimum curricular requirements, and they are integral to the identity of our program. Our historians are actively present in our everyday culture, not siloed as they are in some institutions. They regularly participate in studio reviews and coordinate their courses with those of design faculty teaching the same cohort in any given semester. They also participate in our new Master of Science program, which offers design students an opportunity to earn a dual degree in Critical Heritage or in other specialty areas related to history and theory. It is significant to us that the range of research and coursework associated with our M.S. program includes historical and theoretical inquiry. Our undergraduate program, meanwhile, includes a minor in Architectural History, which trickles up into the culture of our graduate programs through enrollment and overlapping coursework. In short, we value history and history as essential components of the education of future architects, and we shape our school to reflect that value.

Pre-Assessment Learning:

Students in our M.Arch I and M.Arch AS tracks are introduced to history and theory in ARCH 5201 - History I: Prehistory - 1950 and ARCH 5202 - History II: 1750-Present (a fall-spring sequence in the first year of the program for M.Arch I students, and in our undergraduate program for M.Arch AS students). Students in the M.Arch II track are excused from this sequence if they pass a rigorous evaluation process upon admission to the program. In each course of this sequence, students attend two lectures a week and one small group discussion section with the faculty member in which the themes of the week are explored in greater depth and additional exercises are assigned. This break-out session allows graduate students the opportunity to engage more actively in the material, serving our goal to improve our students' oral and written expression of ideas about architecture and its contexts and frames.

Precedent studies in concurrent studio and technology courses buttress this sequence, and are coordinated to resonate with themes and topics covered in history courses. These exchanges are facilitated by how our history courses strive to frame distant subjects through contemporary lenses, so that history is understood as a relevant partner in our students' design courses. Reciprocally, precedent studies in non-history courses underscore our message that history is an analytical endeavor that involves active interpretation, not passive accumulation.

All of our history courses confront questions of design by engaging an essential duality: how formal and spatial characteristics distinguish buildings within specific cultures and periods, and how environmental, material, social, political, economic, religious, and other forces are inseparable from those characteristics. In other words, form matters, but it is never innocent or disengaged from other phenomena. A special point of emphasis is instilling an understanding of the rich reciprocity between Western and non-Western traditions of building and planning.

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Assessment Point: ARCH 5203 - History III: Contemporary Theory

ARCH 5203 - History III: Contemporary Theory is a required course for all students in the M.Arch. program (3 tracks: M.Arch. I, M.Arch. II, and M.Arch. AS). It is taken in the fall semester of the penultimate year of the program (note that students in our M.Arch. AS track take this course in the final year of our undergraduate program). We began assessing this criterion in this course annually using our current assessment infrastructure in Fall 2022.

This course analyzes architectural theory from the 1950s to the present, its crucial debates, and its engagement with changing social, cultural, economic, and political realities. The semester is structured non-chronologically and thematically. The first nine weeks of the course are focused on rethinking the position of the architect in the contemporary world. Examples of thematic sessions include globalization, neoliberalism, gender, race, and the Anthropocene. The final weeks of the course are devoted to the analysis of historical concepts shaping architectural theory and practice in the second half of the twentieth century, from postmodernism to digital architecture. By starting with the analysis of contemporary positions and then moving onto historical concepts, students are encouraged to analyze the latter from the perspectives shaping the positions of today, and to reflect on how they are useful (or not) in solving most current architectural problems.

Readings analyzed in this class cumulatively provide an overview of topics crucial for understanding architectural discourse from the 1950s to the present (for example: postmodernism, deconstructivism, digital design, starchitecture, non-places and generic cities, global cities, gender, race, phenomenology, climate emergency, activist architecture). The course encourages students to regard buildings as social, political, cultural, and economic phenomena as well as architectural ones. Therefore, the reading list includes texts from various disciplines: architectural theory, anthropology, sociology, critical geography, philosophy, economics, etc. This range exposes students to different discourses and helps them see changes in architecture in the context of broader notions.

Over the past several years, students have produced three types of outcomes in this course: a series of periodic quizzes (short essays); a take-home essay in which they critically analyze an architectural project branded as sustainable; and a final research essay on a topic of their choice but related to issues discussed in class. In the wake of the emergence of Artificial Intelligence and recent student performance, we are currently reassessing the tradition of writing research papers in this course (see “Proposed Adjustments” section below).

Assessment Method:

ARCH 5203 - History III: Contemporary Theory assesses this criterion through a Student Learning Outcome that covers its extents:

- SLO P4: 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.

This SLO is assessed specifically through the aforementioned series of quizzes (4 total, occurring every 3-to-4 weeks depending on the length of a given thematic segment). Each quiz is based on a quote pulled from one of the assigned readings that frames the class discussions of that thematic segment, and involves students’ writing 2-page essays that analyze the quote in the context of both its immediate source and other texts analyzed in class. Essays are typically hand-written, and students are not allowed to use external materials or computers (except in cases involving disability accommodations).

Typical quiz prompt: “(a) Identify the source of the quote, (b) discuss its meaning in the broader context of the reading, and (c) relate this text to others analyzed in class.” Emphasis is placed on demonstrating an ability to find connections between multiple readings in one thematic segment. Strong responses show a comprehensive understanding of the concepts covered in the reading and an ability to situate its arguments in a broader context of contemporary architectural discourse.

Assessment Data & Analysis:

Our benchmark for this criterion is for 80% of students to score a 3 or 4 in our 4-point assessment rubric for the SLO. In Fall 2022, students performed as follows:

- SLO P4: 96% of students met our benchmark (74% scored a 4)

Our assessment includes a distinction between students' meeting the benchmark and achieving the highest level of assessment, so as to better discern how to improve our program.

In Fall 2022, our benchmark for SLO P4 was met, and an exceptionally high number of students (compared to other criteria) who met the benchmark were assessed at the highest level of "commendable."

Fall 2023 assessment reports, including evaluation rubrics, will be included in the Team Room.

The discussions of assigned readings ensure that students are prepared for the quizzes, which sets expectations that seem to inspire students to do the readings in advance of the discussions. Another incentive for students to complete the readings is that participation accounts for 35% of students' final grades. Compared to the traditional model of highly consequential midterm and final exams, furthermore, frequent quizzes (every few weeks) help students to learn steadily, so as to improve their time management skills and provide them with opportunities to improve their performance throughout the semester.

The rule against using external resources during the quizzes has the additional advantage of giving students confidence to exercise their own understanding of the topics and themes, and promotes the idea that the knowledge may be gained through their own cognitive activity. Because many students find academic readings drawing on concepts from social studies or economics unfamiliar and challenging to read and discuss, class discussions focus on helping them to understand and retain the material, as opposed to merely absorbing it.

A potential drawback of our assessment method is the compatibility of its relatively quick rhythm of evaluation with long-term retention, which is a pressing issue for contemporary students inundated with stimuli and information. To track this concern, we are considering how to assess this SLO in a secondary manner in ARCH 7201 - Research and Design Methods, which follows this course by one year and involves diagram-based precedent studies. A more deliberate linkage between these courses will help us to gauge the extent to which the understanding evident in our assessment method here is retained after the course is completed.

Proposed Adjustments (from Fall 2022):

A major adjustment stemming from our assessment of Fall 2022 is the elimination of the research paper component of the course. The reasons for this change are twofold. First, we believe that the classical model of the history/theory research paper no longer complements the learning of graduate students in architecture, and that history and theory can thrive outside of that paradigm. That is not to say that we are devaluing rigor, but rather that we are recalibrating how to achieve it in ways more helpful to students on the cusp of a career in practice. Second, the emergence of Artificial Intelligence (AI) demands our attention in every area of the curriculum, but nowhere more acutely than in the area of history and theory. Software like ChatGPT is inspiring us to shift writing instruction to new venues and to develop new ways to evaluate verbal skills.

In Fall 2023, for example, we are experimenting with a new type of writing assignment that aims to maintain an emphasis on analytical organization, argumentation, and writing skills in a format that is relatively AI-proof. The assignment involves students writing a polemical argument on an essay assigned in class that they find flawed or wrong. This will allow students to express their

opinions through critical writing, and to develop rhetorical skills more applicable to professional practice and design.

Another proposal that may be considered in the future, if we assess the loss of historical and theoretical research in this course to be unfortunate, is to assign an annotated bibliography, literature review, and an outline of a paper, rather than a completed paper itself. Although AI software may be used for this type of assignment as well, emphasis can be placed on analysis and curation, so that students learn the fundamental aspects of doing research and critically assessing resources for their specific needs.

Regarding verbal skills, complementary to the handwritten quiz format, we are considering new verbal types of instruction based on the tradition of oral exams. While the logistical hurdles of that model are significant, we are exploring how this type of exchange may buttress this as well as other verbal communication-based SLOs in our curriculum.

Proposed Adjustments (from Fall 2023):

Further proposed changes will be included in the Fall 2023 assessment reports included in the Team Room.

Supporting Materials in Team Room:

- ARCH 5203 Syllabus and Schedule
- Quizzes (includes assessed assignment)
- Take-home essay prompt
- Fall 2023 Assessment Reports (benchmarks, evaluation rubrics, data analysis, and additional proposed adjustments)
- Syllabi and materials of courses where pre-assessment learning occurs

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 NARRATIVE

Approach:

Our program creates a climate in which students are continuously exposed to and integrated within a culture of research. All faculty are actively engaged in research, either through one of our many research labs or through their own initiatives, and our monthly lunchtime colloquia series is an informal venue in which faculty regularly share their current work-in-progress and students are encouraged to ask questions. Our labs, furthermore, have open-door policies and invite students to meetings and events. Students literally see the fruits of our research unfolding and hear about various grant-funding activities that expose them to the broader mechanisms of peer-reviewed research. Our University's campaign to become a top-tier research institution adds another layer to the discourse on research that runs through nearly all aspects of our program.

Faculty also involve students in peer-reviewed research and research-engaged practice on many levels. Research labs regularly publish work that involves student assistance; required studio instructors publish student work; faculty co-publish peer-reviewed papers with students; faculty acquire research funding to hire students for extracurricular, paid internships; elective studios participate in research-based design competitions (and often win awards); and faculty encourage students to submit papers and projects executed in their courses to peer-reviewed conferences and publications. To encourage and support the latter, the SoA offers funding for students to attend conferences.

Pre-Assessment Learning:

Much of our faculty's research is also embedded into their teaching of elective studios and seminars. We treat our elective courses as venues not merely to disseminate our existing knowledge on specific topics, but also to generate new knowledge and to include students in that process. Different students are exposed to different types of research and their outcomes, depending on which electives they choose, but all students encounter research of some kind directly in their elective coursework. In addition to contributing to our overall research culture, this strategy helps faculty to integrate their teaching and research loads.

Many of our required courses, meanwhile, also involve research. In foundational courses, an understanding of research is initiated through precedent studies that include specific types of original analysis, as opposed to mere collections of graphic materials. As students advance through the program, research methods become more complex, such as scripting studies in ARCH 5604 - Computational Methods, material analyses in ARCH 5304 - Structures II, and eventually performance analyses in ARCH 7103 - Integrated Design Studio and ARCH 5305 - Building Systems Integration. We strive to communicate a broad understanding of research that includes (and where possible integrates) technical, aesthetic, and sociocultural criteria so that students understand that research has breadth as well as depth.

Assessment Point: ARCH 7201 - Research and Design Methods

ARCH 7201 - Research and Design Methods is a required course for all students in the M.Arch. program (3 tracks: M.Arch. I, M.Arch. II, and M.Arch. AS). It is taken in the fall semester of the final year of the program. We began assessing this criterion in this course annually using our current assessment infrastructure in Fall 2022 (with a modified SLO in Fall 2023).

This course introduces students to a variety of architectural research methods through a series of readings, lectures, and assignments. It asks students both to evaluate those strategies in relation to their own work and career aspirations and to situate themselves within a specific contemporary methodological discourse.

Readings draw from an overview of textbooks, Linda Groat & David Wang's *Architectural Research Methods* (2002) as well as others, including Ajla Aksamija's *Research Methods for the Architectural Profession* (2021) and Ray Lucas's *Research Methods for Architecture* (2016). Lectures are given by the instructors and by guest speakers (mostly other SoA faculty) who cover topics such as generating ideas, critique, design-as-research, experimentation, diagramming, logical argumentation, and performative design optimization.

Assignments include: comparative reflections evaluating the applicability of different research methods to current studio work; reflections on methods in past, current, and future studio approaches; a graphic and written precedent study; and an annotated bibliography and literature review for upcoming diploma research.

Assessment Method:

ARCH 7201 - Research and Design Methods assesses this criterion through a Student Learning Outcome composed of two parts that combine to cover its extents:

- SLO P5: Research and Innovation–to instill in students an understanding of how to conduct research, evaluate research, and apply research toward design.

In Fall 2023, the two parts of SLO P5 were framed as follows:

- SLO P5 Part 1 Precedent Research–to engage in architectural research within the context of a design process through graphic and written identification and analysis of precedents.
- SLO P5 Part 2: Research Methodologies–to recognize, understand, and employ modern and post-modern design theories/methods as they apply to an architectural design situation or problem.

In Fall 2023, the two parts of SLO P5 were framed as follows:

- SLO P5 Part 1: Research–to engage in architectural research through precedent analysis in relation to the design process.
- SLO P5 Part 2: Innovation–to comparatively evaluate research methods and innovations in the field within the context of a design process

In Fall 2022 and Fall 2023:

- SLO P5 Part 1 is assessed through a Graphic and Written Precedent Analysis project (revised SLO components led to revised project).
- Former SLO P5 Part 2 is assessed through a Comparative Reflection exercise (revised SLO components led to revised exercise).

The Graphic and Written Precedent Analysis project asks students to identify, diagram, and describe architectural projects that informed their own designs in the corequisite ARCH 7103 Integrated Studio. Through library and internet research, students were asked to find resources about architectural works and evaluate and extract the relevance of those precedents to specific categories related to their studio project. Instrumentalization of those models and lessons is meant to happen in the context of our design studios, specifically ARCH 7104 - Diploma Studio.

The Comparative Reflection exercise asks students to analyze two research methods described in the readings and lectures and to articulate how those approaches informed their own design process in the corequisite ARCH 7103 Integrated Design Studio.

Changes made between Fall 2022 and Fall 2023 are detailed in the analysis below.

Assessment Data & Analysis:

Our benchmark for this criterion is for 80% of students to score a 3 or 4 in our 4-point assessment rubric for each part of the SLO. In Fall 2022, students performed as follows:

- SLO P5 Part 1: 79% of students met our benchmark (63% scored a 4)
- SLO P5 Part 2: 100% of students met our benchmark (100% scored a 4)

- SLO P5 Part 1: part of revised SLO that will be assessed for the first time in Fall 2023
- SLO P5 Part 2: part of revised SLO that will be assessed for the first time in Fall 2023

Our assessment includes a distinction between students' meeting the benchmark and achieving the highest level of assessment, so as to better discern how to improve our program.

In Fall 2022:

- Our benchmark for SLO P5 Part 1 was not met, but a relatively high number of students (compared to other criteria) who met the benchmark were assessed at the highest level of "commendable."

- Our benchmark for SLO P5 Part 2 was not met, and an exceptionally high number of students (compared to other criteria) who met the benchmark were assessed at the highest level of “commendable.”

Fall 2023 assessment reports, including evaluation rubrics, will be included in the Team Room.

A specific weakness revealed in our assessment of SLO P5 Part 1 is a deficiency in how to use diagrams to study and interpret architecture, despite students’ extensive experience with diagramming in preceding coursework. This lack of retention is a common issue among students today, and it deserves program-level consideration, in addition to the course-level considerations noted in the proposed adjustments below.

A specific strength revealed in our assessment of SLO P5 Part 2 is an aptitude to evaluate different research methods and their applicability to students’ current design work in ARCH 7103 - Integrated Design Studio, and their potential applicability to future design work in ARCH 7104 - Diploma Studio; however, as issued in Fall 2022, the assignment insufficiently assessed the extent to which students understand the meaning and significance of innovation within a research method, which led us to revise this SLO for the current assessment cycle.

Proposed Adjustments:

In addition to addressing the general issue of knowledge and skill retention program-wide, proposed adjustments for this course in Fall 2023 include:

- Increase the number of students meeting the benchmark for SLO P5a, and to improve overall understanding and performance, add (1) direct instruction on the functions and strategies of diagramming by colleagues with expertise in this area, so as to reignite our students’ knowledge of researching specific conditions and performance criteria of architecture through graphic analysis in service of their designs; and (2) a draft graphic analysis submission with peer review to allow students to use an iterative process with feedback and a clearer relationship between written and graphic analysis in order to improve the clarity and content of their analytical research. (Enacted in Fall 2023)
- Address more specifically the question of innovation in approaching the design process, revised the Student Learning Outcome P5b that assesses research methods. (Enacted in Fall 2023)
- Modify the corresponding reflection assignment to meet the revised SLO P5b more explicitly by addressing the evaluation of the selected methodologies being compared not only for their application to the current design process in the corequisite studio but also for their potential to drive innovations in the field. (Enacted in Fall 2023)
- Create a more nuanced assessment measure for SLO P5 Part 2 that differentiates student understanding and ability, developed a rubric that allowed for evaluation and assessment that extended beyond completion of a thoughtful reflection. (Enacted in Fall 2023)

Proposed Adjustments (from Fall 2023):

Further proposed changes will be included in the Fall 2023 assessment reports included in the Team Room.

Supporting Materials in Team Room:

- ARCH 7201 Syllabus and Schedule
- Assessed assignment: Precedent Study Assignment prompt (Fall 2022 and 2023)
- Assessed assignment: Reflection Assignment prompt (Fall 2022 and 2023)

- Fall 2023 Assessment Reports (benchmarks, evaluation rubrics, data analysis, and additional proposed adjustments)
- Syllabi of courses where pre-assessment learning occurs
- Media on relevant public programming & extracurricular activities

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 NARRATIVE

Approach:

Our program instills in our students an understanding of the collaborative and interdisciplinary nature of the architectural field, as well as the importance of architects' assuming leadership roles in conversations that impact communities and environments, through a range of design-based and seminar-format learning. Numerous studios and other courses encourage group projects to build direct and soft skills involved in teamwork. In addition, our numerous extracurricular activities and especially student organizations involve opportunities for leadership and collaboration with partners.

Pre-Assessment Learning:

In our last assessment cycle (Spring 2022-Fall 2022), most of our pre-assessment learning occurred in optional venues open to voluntary participation for all students in the SoA: some Topical studios, some electives, and our active student chapters of AIAS, NOMAS, Freedom by Design, and the Master of Architecture Student Society (MASS), all of which foster student-led collaborative projects and are Freedom by Design demonstrates community leadership by seeking and completing a project for a client in need through a series of student collaborative design and build charrettes. Teams of students in NOMAS collaborate on design competition entries. The board of AIAS demonstrates professional leadership through the organization of the annual Career Fair and the MASS team demonstrates professional leadership by organizing and hosting CriticalMass, a national conference of graduate students from across the country who share diploma and thesis work with one another and invited critics.

For our current assessment cycle (Spring 2023-Fall 2023), we added a more cohesive and formal pre-assessment learning opportunity in ARCH 7101 - Topical Studio. As explained in "Proposed Adjustments" below, we are transitioning toward a new assessment method for this criterion, which we will formalize in our next assessment cycle (Spring 2024-Fall 2024), in which ARCH 7101 will be our primary assessment point.

We are treating Fall 2023 as a pre-assessment trial of this new method because the topics and syllabi for the Fall 2023 iteration of ARCH 7101 were determined prior to our decision to assign this course as our primary point, meaning it would have been difficult (and unfair to the assigned instructors) to require every section to be based on this criterion as will be required in Fall 2024. Many (but not all) sections of this course in Fall 2023 are already capable of serving as the primary assessment point for this criterion, and we are asking those sections of ARCH 7101 not already aligned with this criterion to develop some group activities for pre-assessment learning that help us to understand how to better this criterion moving forward. We will collect data in this course during Fall 2023 and share our analysis of that data in the Team Room.

Assessment Point: ARCH 5206 - Professional Practice

ARCH 5206 - Professional Practice is a required course for all students in the M.Arch. program (3 tracks: M.Arch. I, M.Arch. II, and M.Arch. AS). It is taken in the spring semester of the final year of the program. We began assessing this criterion in this course annually using our current assessment infrastructure in Spring 2023.

The relevance of collaboration, leadership, and interdisciplinarity is explored explicitly in the ARCH 5206 Professional Practice course, which addresses the stakeholders and teams that must come together to effectively produce architecture, and exposes students to examples and practices of leadership and collaboration through course lectures and guest speakers. Students learn best practices for team organization and leadership, clear communication, and effective projective management from leading professionals in the areas of entrepreneurship and business development, design excellence, and civic leadership. Students are taught not only how leading and collaborative work are pursued and executed, but also how practices are organized to operate collaboratively.

Assessment Method:

The SoA currently assesses this criterion through a Student Learning Outcome that covers its entire extents:

- SLO P6: Leadership and Collaboration–to instill in students an understanding of how to lead and collaborate with various stakeholders and consultants, so as to realize more effective and inclusive built environments.

In Spring 2023, the SLO is assessed through Quiz 3, Questions 1 and 3, which asks students through long-form responses both to demonstrate their understanding of established models of leadership and collaboration and to consider new models of collaboration in a design context. Question 1 focuses on the coordination of team members within a scenario imposed by an owner; Question 3 focuses more specifically on mediating the relationship between architect and owner. Though the latter question is less focused on team management, it touches upon aspects of leadership that complement the former question.

In Fall 2023, we are transitioning to a new method of assessment that addresses this criterion through a revised SLO composed of three new parts that combine to cover its extents and improve upon our current assessment strategy:

- SLO P6 Part 1: Multidisciplinary Leadership and Teamwork–to instill in students an understanding of how to work in and lead multidisciplinary teams.
- SLO P6 Part 2: Dynamic Practice–to instill in students an understanding of how to mediate diverse stakeholder constituents and negotiate dynamic physical and social contexts.
- SLO P6 Part 3: Collaborative Problem Solving–to instill in students an understanding of how to collaborate with others in order to solve a complex problem.

By assessing three distinct aspects of leadership and collaboration, our program is better able to track how students are gaining an understanding of the various facets of this criterion.

In Fall 2023, all three of the revised SLO will be assessed on a trial basis through studio-based work in ARCH 7101 - Topical Studio. Each section of this course is responsible for determining how best to assess the SLO. Lessons learned from this trial will be used to formalize the integration of the revised SLO into our assessment infrastructure in Fall 2024.

Assessment Data & Analysis:

Our benchmark for this criterion is for 80% of students to score a 3 or 4 in our 4-point assessment rubric for each part of the SLO. In Spring 2023, students performed as follows:

- SLO S6: 66% of students met our benchmark (53% scored a 4)

- SLO P6 Part 1: part of revised SLO that will be assessed for the first time in Fall 2023
- SLO P6 Part 2: part of revised SLO that will be assessed for the first time in Fall 2023
- SLO P6 Part 3: part of revised SLO that will be assessed for the first time in Fall 2023

Our assessment includes a distinction between students' meeting the benchmark and achieving the highest level of assessment, so as to better discern how to improve our program.

- In Spring 2022, our benchmark for SLO P6 was not met, but a relatively high percentage of students (compared to other criteria) who met the benchmark were assessed at the highest level of "commendable."

Spring 2023 assessment reports, including evaluation rubrics, will be included in the Team Room.

Our analysis of this result is two-fold: our program is providing an excellent opportunity for students to gain an understanding of leadership and collaboration (almost half of our students excel in this criterion), but not enough students are demonstrating that understanding through our current assignments. The current quiz format is less effective than a previous assessment tool (a project in ARCH 5206 - Professional Practice that asked students to create a Request-For-Proposals based on a previous studio project).

We believe our plans to transition our assessment of this criterion into a design studio (detailed above) will help students in ARCH 5206 - Professional Practice to better demonstrate their understanding of this criterion. We also believe that this criterion is better assessed within the context of a design studio, and we plan to apply our trial assessment in Fall 2023 onto a mid-sequence studio in our next assessment cycle, so as to formalize the transition of our assessment process.

Proposed Adjustments (from Spring 2023):

Our analysis of our students' performance at our current assessment point has led us to reenvision how to address and meet this criterion moving forward. As addressed above, in our current assessment cycle (Spring 2023-Fall 2023), we are transitioning toward a new method that assesses this criterion in one of our two mid-sequence Topical studios (ARCH 7101 - Topical Studio). Our new method involves a revised SLO composed of three parts (as opposed to one), which allows us to assess the extents of the criterion. It also occurs within a design studio, as opposed to a seminar course, which we believe allows us to better assess how our students understand leadership and collaboration within the context of a design process.

An additional proposal under consideration is a revival of the Request-for-Proposals project, in which students performed better than our current quiz method of assessment.

Proposed Adjustments (from Fall 2023):

Fall 2023 assessment reports, including evaluation rubrics and further proposed changes, will be included in the Team Room for the newly piloted SLOS.

Supporting Materials in Team Room:

- ARCH 5206 Syllabus and Schedule.
- Relevant materials distributed through workshops and lectures.
- Assessed assignment: Quiz 3
- Spring 2023 Assessment Reports (benchmarks, evaluation rubrics, and data analysis).
- Fall 2023 Assessment Reports for trial of revised SLO in ARCH 7101 (benchmarks, evaluation rubrics, data analysis, and additional proposed adjustments)
- Media on relevant public programming & extracurricular activities

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 NARRATIVE

Approach:

Our program fosters a positive and respectful learning environment that encourages optimism, respect, sharing, engagement, and innovation among all learning community members through a range of extracurricular activities. Our Studio Culture Policy (SCP), which we understand more broadly as a School Culture Policy, is our blueprint for achieving that environment. The SCP outlines expectations and values for faculty, students, and staff. It promotes a strong sense of community and shared responsibility within the SoA. It emphasizes mutual respect, academic excellence, and collegial behavior. The policy addresses various aspects of professional conduct, including being involved in the life of the school, contributing to the success of others, exhibiting a respectful and professional demeanor, and showing respect for people, facilities, and resources. It also emphasizes the importance of time management, general health and well-being, work-school-life balance, and respect for diversity, equity, and inclusion.

The SCP was collaboratively developed by faculty and students, with input from the Student Advisory Council and AIAS, and was initially adopted in 2009. It is readily accessible to students on the SoA website. To ensure understanding and awareness, the SCP is presented to the entire SoA student body at our annual convocation, allowing students and faculty to familiarize themselves with its content and purpose. The policy sets clear expectations for all members of the SoA community, creating a shared understanding of the values and behaviors that contribute to a positive learning environment.

The SCP is regularly evaluated and reviewed every three years to ensure its relevance and effectiveness, including in AY 2013-2014 with input from the Student Advisory Council, AIAS, and faculty. Its cross-disciplinary relevance was acknowledged when adopted as a model for the 2010 CoA+A Culture Statement, highlighting its significance in promoting a positive and respectful learning environment across creative disciplines.The College of Arts + Architecture, Culture Statement will be the theme around which the Fall 2023 college-wide convocation event is organized. By implementing the Studio Culture Policy, making it easily accessible, distributing it to all members of the learning community, and regularly evaluating and reviewing its content, the SoA demonstrates its commitment to fostering a positive and respectful learning environment that promotes optimism, respect, sharing, engagement, and innovation among faculty, students, administration, and staff.

Pre-Assessment Learning:

On a day-to-day basis, the SoA encourages students to raise concerns regarding potential breaches of the policy or any other concerns related to the respectfulness of the environment with their faculty, Academic Advisor, the SoA Director, and/or Associate Director. The SoA leadership has an open-door policy and makes itself available whenever anyone in the SoA wants to talk.

We seek to promote open communication and the opportunity for dialogue. One strategy the SoA uses is an advisory board with peer-selected representatives from each year level of the undergraduate and graduate programs. This group meets regularly with the Director to discuss concerns brought by their class as well as ideas, projects, and plans. Student Representatives have played a major role in revising and updating SoA's Studio Culture Policy and helping to facilitate an inclusive process between the students, faculty, and SoA administration.

UNC Charlotte more broadly has a robust administrative structure for supporting the students, faculty, and staff with clear, effective processes for addressing concerns about the inclusiveness of the environment. The Office of Civil Rights and Title IX is always available to support our community, a University Ombuds office was established in 2022 to support faculty and staff, and tall campus-wide student support was recently centralized into the Student Assistance and Support Services (SASS) office to simplify and clarify the first stop for any needs or concerns.

Within the SoA, the UNC Charlotte chapters of NOMAS and Freedom by Design have also provided leadership in recent years among our student body and have acted as an intermediary between students and the faculty and staff of the SoA. During the 2022-23 academic year, Freedom by Design championed mental health and organized a series of informational meetings that brought together representatives of campus services. NOMAS has helped facilitate conversations about difficult topics, for example when sites with deep and traumatic histories for African Americans were incorporated into studio assignments and raised questions.

In addition, during the 2022-23 academic year, the School of Architecture organized two or three School-wide coffee/tea hours per semester. These were social events in which students, faculty, and staff participated to build community and familiarity across the SoA. Faculty served coffee to students and staff organized games such as ping-pong and jenga to encourage students to pause and have fun in the building. In January 2023, the SoA partnered with the AIAS chapter to sponsor an international coffee hour potluck where students, faculty, and staff brought food and dressed in traditional clothing representing the many cultural backgrounds of members of our community. This well-attended and popular event will become a new tradition of celebrating our diversity and promoting inclusiveness and respect for others.

Regarding innovation, faculty are encouraged and given wide berths to experiment with innovative approaches to the methods and content of their elective courses and topical studios. In addition, small-group independent studies provide opportunities for students and faculty to pursue projects that don't fall neatly into our existing curricular structure. We approve proposals that are collaborative and engage the public, including public art installations, museum exhibitions, new material experimentations, and design-build opportunities in public spaces and community events.

Assessment Points: ARCH 7201 - Research and Design Methods and Non-Curricular Activities

ARCH 7201 - Research and Design Methods is a required course for all students in the M.Arch. program (3 tracks: M.Arch. I, M.Arch. II, and M.Arch. AS). It is taken in the fall semester of the final year of the program. We began assessing this criterion in this course annually using our current assessment infrastructure in Fall 2023.

This course introduces students to a variety of architectural research approaches with implications for the cultural aspects of practice. The class is strategically timed during the students' penultimate semester, before they complete their diploma projects and graduate, and this timing enables them to reflect upon their academic experiences as they contemplate their own imminent work and career opportunities.

Our non-curricular activities related to this criterion occur throughout the curriculum. We began assessing them annually using our current assessment infrastructure in the Fall of 2023.

Assessment Methods:

ARCH 7201 - Research and Design Methods assesses this criterion through two of the three parts of a Student Learning Outcome that cover most of its extent; Non-curricular activities assess this criterion through the third part of that SLO and through an additional Program Learning Outcome:

- SLO P7: Respect, Citizenship, and Innovation–to build a culture in which students respect others and feel respected, so as to inspire optimism, exchange, and creativity.

    - SLO P7 Part 1 (Non-Curricular): Student Culture–to foster a positive and respectful environment that encourages optimism, respect, and sharing among students and faculty.
    - SLO P7 Part 2 (ARCH 7201): Collective Engagement–to foster a school-wide environment of collaboration and interaction.
    - SLO P7 Part 3 (ARCH 7201): Innovation–to foster a school-wide culture of innovative thinking.

- Program Learning Outcome P7 (Non-Curricular): Faculty and Staff Culture–to foster a positive and respectful environment that encourages optimism, respect, and sharing among faculty, students, administration, and staff.

By assessing four aspects of this criterion separately, our program is better able to identify areas of strength and weakness.

In Fall 2023:

- SLO P7 Part 1 is assessed through a student survey on the SoA Studio Culture Policy.
- SLO P7 Part 2 is assessed through ARCH 7201 Engagement and Innovation Survey.
- SLO P7 Part 3 is assessed through ARCH 7201 Engagement and Innovation Survey.
- Program Learning Outcome P7 is assessed through a faculty and staff survey on the SoA Studio Culture Policy.

Note that the early time of our assessment points in Fall 2023 allowed us to report our assessment data in this APR (unlike all other Fall 2023 assessment points in Condition 3, which occur later in the semester).

The student, faculty, and staff surveys ask our community to evaluate: 1) the extent to which the SCP lays out a positive environment for learning and growing; 2) the extent to which SCP is manifested in our everyday lives; and 3) how our community might become more positive and fostering, either through revisions to the SCP or through better realization of its goals.

The assessed assignment in ARCH 7201, SoA Engagement and Innovation Survey, asks students to assess two primary areas of interest within this criterion: engagement and collaboration; and innovation. In addition, the survey asks students to consider both their educational environment and any professional environments they have experienced. Students are invited both to reflect on their experiences and to speculate upon aspirational models of engagement, collaboration, and innovation in architectural learning and practice. The resulting data forms the basis of a collective understanding of how students view the quality of interpersonal relationships within the School and in the profession, as well as how they define

cultural innovation in learning and practice environments. This information establishes a working context for the class, and instructors can choose to respond as needed—such as by addressing common problems, dispelling professional myths, or highlighting positive examples as case studies.

Assessment Data & Analysis:

Our benchmark for this criterion is for 70% of students to score a 3 or 4 in our 4-point assessment rubric for each part of the SLO and/or for the Program Learning Objective. In Fall 2023, students, faculty, and staff performed as follows:

- SLO P7 Part 1: 61% of students met our benchmark (43% scored a 4)
- SLO P7 Part 2: 88% of students met our benchmark (76% scored a 4)
- SLO P7 Part 3: 86% of students met our benchmark (61% scored a 4)
- Program Learning Objective P7: 60% of faculty and staff met our benchmark (50% scored a 4)

Our assessment includes a distinction between students' meeting the benchmark and achieving the highest level of assessment, so as to better discern how to improve our program.

In Fall 2023:

- Our benchmark for SLO P7 Part 1 was not met, but a relatively high percentage of students (compared to other criteria) who met the benchmark were assessed at the highest level of "commendable."
- Our benchmark for SLO P7 Part 2 was met, and an exceptionally high number of students indicated that they find the SoA to be a learning environment that promotes engagement and/or collaboration routinely.
- Our benchmark for SLO P7 Part 3 was met, and an exceptionally high number of students indicated that they find the SoA to be a learning environment that promotes innovation routinely.
- Our benchmark for Program Learning Objective P7 was not met, but a relatively high percentage of faculty and staff who met the benchmark were assessed at the highest level of "commendable."

Fall 2023 assessment reports, including evaluation rubrics, are included in the Team Room.

The SoA has been successful at introducing community-building initiatives fostering optimism, innovation, and inclusion as we have returned after the pandemic. To sustain this activity we need to maintain our commitment to prioritizing these efforts. SoA staff has met regularly with student organizations leading to numerous productive collaborations, and that should continue, as should SoA administrative regular meetings with year-level representatives, which helps the faculty and staff stay in tune with the concerns and ideas of the students. We have not been consistent with the introduction of our Culture policies to new students and reminding returning students of our collective commitment to and responsibility for a respectful learning environment.

While the results of the SoA Collaboration and Innovation Survey met our benchmarks and confirmed that our graduate students experience the SoA as a learning environment that promotes engagement and innovation, it also revealed some areas of potential improvement. Notably, only two thirds of students reported finding the SoA adaptable to new teaching methods and technologies. Further study is necessary to reveal whether the SoA is not adequately communicating innovations and adaptations, or whether the SoA could and should be doing more in this area. In addition, only two thirds of students reported feeling the SoA prepared them adequately for their future career in architecture. This may be an indication of a program shortcoming, or may be that we are assessing this too early in their curriculum, before they have

completed the core courses including research and design methods, integrated studio, building systems integration, and professional practice.

Proposed Adjustments (from Fall 2023):

- To complement the slides in the fall convocation presentation to the entire SoA, we aim to lead a more substantive discussion to remind/introduce students to the culture policy and to underscore its importance to our expectations and commitments regarding the fostering of a positive and respectful learning environment. (To be enacted in Fall 2024)
- To complement the slides in the fall convocation presentation to the entire SoA, we plan to lead a more substantive discussion on the importance of peer-elected representatives and formalize the selection process to make sure that all students have opportunities to serve and/or participate in the process. (To be enacted in Fall 2024)
- Continue to sponsor and expand coffee/tea hours and other social events that build community, especially the international coffee hour that explicitly encouraged learning about and appreciating the SoA's diversity. (In progress; update to be provided in Fall 2023 assessment reports included in the Team Room)
- To further understand our students' perceived readiness for their future career in architecture, we will survey the students again at the end of their final semester to assess whether the diploma year courses strengthen their professional growth and career readiness. Based on the results of the spring survey, we will assess whether changes are necessary or whether we were assessing this question too early in their course of study.
- To increase student awareness of ways in which the SoA seeks to provide an innovative learning environment and adapts to new teaching methods and technologies, we could create a task force of faculty and students to analyze and make recommendations based on the qualitative short answer responses to the survey questions seeking examples and feedback on the learning environment, adaptability to new methods and technologies, and resources provided by the SoA.

Supporting Materials in Team Room:

- SoA Studio Culture Policy
- CoA+A Culture Policy
- Assessed assignment: student survey on the SoA Studio Culture Policy
- Assessed assignment: faculty and staff survey on the SoA Studio Culture Policy
- Assessed assignment: ARCH 7201 Collaboration and Innovation Survey
- Media related to extracurricular activities and pre-assessment learning

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 NARRATIVE

Approach:

Our program furthers and deepens our students' understanding of diversity, equity, and inclusion, and helps them to translate that understanding into engaged practices through both curricular and extracurricular efforts. We both take for granted that everything we do is infused with questions concerning equity and inclusion and make sure to underscore that assumption in order to help students with less diverse life experiences become acclimated to our culture. To confront that duality requires a conscious effort. We must communicate that certain matters are non-negotiable tenets on which our program is founded, but also understand that not every student has been given the same opportunities to live and work with peers unlike themselves.

As a public institution in a large metropolitan region devoted to urban research, we benefit from one of the most diverse student populations in our region. At the same time, reflective of our discipline more broadly, our program is less diverse than the university as a whole. We are working to mediate that disparity because we aim not just to speak about equity and inclusion, but also to embody it. The racial and socioeconomic diversity of our student body varies from year to year, and we are taking steps to solidify our commitment to expanding the discipline through the education of students with traditionally marginalized, underrepresented, and/or resource-compromised backgrounds.

Two examples of our efforts are our transfer agreement with Central Piedmont Community College and our recruitment of local and regional high school students from diverse backgrounds through outreach and on-campus activities. In addition, our faculty and staff are increasingly diverse, and we foreground diverse hiring practices. In recent years, we have been especially proud of our efforts to recruit and hire a more diverse cohort of part-time teaching faculty, which have had a deep impact on our students' educational experiences. At the time of our accreditation visit, we will be managing between four and six full-time faculty searches, and we are excited by the opportunity afforded by this cluster hire to bring our students into direct contact with new voices and perspectives.

As much as the evolution of our demographic profile contributes to our goals for this criterion, we also acknowledge the need to be explicit in our curriculum and public programming about our commitments and values.

Pre-Assessment Learning:

Two lecture series overlap our current assessment cycle (Spring 2023 and Fall 2023), and both are dedicated to furthering our students' understanding of equity and inclusion within the context of practice. During the 2022/2023 Academic Year, our series "Curated Urbanisms in a Drawdown" assembled a range of topics focused on practices rooted in non-traditional economic and social models, as well as matters of ecological and environmental justice, such as urban water management. During the 2023/2024 Academic Year, our series "New South Meets Global South" highlights research and design practices working to reveal the colonial injustices of the New South and the Global South, as well as to celebrate their marginalized peoples and practices. Presenters are working to overcome social injustice by investigating topics including territory, housing, immigration, race, social inequity, and civil rights.

Whereas last year's lectures were held outside of class time and were therefore optional learning opportunities, this year's lectures are fully integrated into our studio meeting times, and attendance will be required for all our students.

Significant pre-assessment learning also occurs in our two-semester history survey that includes lectures and a discussion section in which much of the traditionally taught history of architecture is framed as a product of systemic inequalities rooted in labor practice and unjust political and economic structures. At the same time, the course expands the scope of the traditional survey to include examples of marginalized communities realizing vital buildings and built environments.

In addition, nearly every studio, technology, and elective course addresses matters of equity and inclusion in some way, for example through project programs, community engagement, performance analyses related to environmental justice, or critical case studies. These learning opportunities vary from student to student, but they permeate nearly every corner of the curriculum.

Assessment Points: ARCH 5203 - History III: Contemporary Theory & ARCH 7201 - Research and Design Methods

ARCH 5203 - History III: Contemporary Theory is a required course for all students in the M.Arch. program (3 tracks: M.Arch. I, M.Arch. II, and M.Arch. AS). It is taken in the fall semester of the penultimate year of the program (note that students in our M.Arch. AS track take this course in the final year of our undergraduate program). We began assessing this criterion in this course annually using our current assessment infrastructure in Fall 2022.

ARCH 7201 - Research and Design Methods is a required course for all students in the M.Arch. program (3 tracks: M.Arch. I, M.Arch. II, and M.Arch. AS). It is taken in the fall semester of the final year of the program. We began assessing this criterion in this course annually using our current assessment infrastructure in Fall 2023.

The syllabus of ARCH 5203 - History III: Contemporary Theory foregrounds questions of Social Equity and Inclusion, which underlie nearly every theme confronted in this class. For example, in week 9 (Architecture and the Senses), Bryan E. Norwood's article, "Disorienting Phenomenology," is discussed within the context of phenomenology as a perspective that often ignores questions of race, neurodiversity, and disability. Similarly, Gilpin Court in Richmond, VA, is a case study that illuminates how the climate emergency disproportionately affects people of color and intersects with the economic and social consequences of redlining. Discussions on the agency of architecture (week 4), meanwhile, focus on Robert Fitts' article "The Landscapes of Northern Bondage," which discusses the agency of architecture in the context of slavery in the American North, and on Eyal Weizman's "Hollow Land," which discusses how Israeli forces use architecture as a weapon against Palestinian populations.

Moreover, one week (week 5) is designated to specifically talk about how architecture engages with the conversations around race and gender, and another (week 7) deals with how architecture may be used as a form of social activism.

ARCH 7201 - Research and Design Methods includes a Public Interest Design charrette as part of its survey of the methods of engagement deployed by architects in the realization of built environments. Removed from the pressures and responsibilities of a semester-long studio project, this charrette allows students to understand how design operates at a different spatial and temporal scale. The charette is preceded by readings on case studies of Public Interest Design, facilitated by guest experts in the field and a local stakeholder with a real-world prompt, and then followed by a reflective analysis assignment.

Assessment Method:

ARCH 5203 - History III: Contemporary Theory and ARCH 7201 - Research and Design Methods assess this criterion through a Student Learning Outcome composed of two parts that combine to cover its extents (one part is assessed in each course):

- SLO P8: Social Justice–to develop, foster, and strengthen students' understanding of the necessity and value of diversity, and to train them to leverage that understanding into design that proactively supports all people equitably as its mission.

    - SLO P8 Part 1 (ARCH 5203): Cultural and Social Diversity–to further and deepen students' understanding of diverse cultural and social contexts.
    - SLO P8 Part 2 (ARCH 7201): Equitable Built Environments–to inspire and support students to realize built environments that equitably support and include people of different backgrounds, resources, and abilities.

By assessing our students' understanding of equity and inclusion in general separately from their understanding of how to apply their knowledge to a design process, our program is better able to track how knowledge translates into practice.

SLO P8 Part 1 is assessed through one of the four in-class quizzes in ARCH 5203 that students take over the course of the semester. For this quiz (Quiz 2), students receive a quote from one of the readings analyzed in the class and are asked to "(a) Identify the source of the quote, (b) discuss its meaning in the broader context of the reading, and (c) relate this text to others analyzed in class." Quiz 2 is focused on gender and asks the students to analyze the following quote:

Quiz 2 evaluates students' literacy in the dominant discourses around social and cultural diversity in architecture. The texts analyzed in the weeks preceding quiz 4 are focused on questions of gender and race. A successful response to Quiz 2 demonstrates that a student's understanding of: 1) the key argument of the reading (architecture is a tool that not only reflects but actively supports gender norms); 2) other arguments related to the question of gender (for example gender inequality within the profession); and 3) other aspects of diversity in architecture (for example, race).

SLO P8 Part 2 is assessed through the work produced during a three-week sequence of learning exercises centered on a Public Interest Design charette. The week before the charrette, students read critical essays on the development and current state of Public Interest Design. The charrette itself follows an in-class discussion on the readings (students prepare questions for the charrette participants). The charrette is led by an external facilitator with expertise in the process, and it is focused on a real-world design aspiration by a local client. After the charrette, students complete an analytical reflection assignment, which asks students to distill the lessons of the charrette, to assess the value of such charrettes, and to self-assess their own interest in and readiness for this type of design practice.

Assessment Data & Analysis:

Our benchmark for this criterion is for 80% of students to score a 3 or 4 in our 4-point assessment rubric for each part of the SLO. In Fall 2022, students performed as follows:

- SLO P8 Part 1 (ARCH 5203): 78% of students met our benchmark (41% scored a 4)
- SLO P8 Part 2 (ARCH 7201): part of revised SLO that will be assessed for the first time in Fall 2023

In Fall 2022, our benchmark for SLO P8 Part 1 was not met, but only by two percentage points, and a relatively modest number of students (compared to other criteria) who met the benchmark were assessed at the highest level of "commendable."

Fall 2023 assessment reports, including evaluation rubrics and our first instance of assessing SLO P8 Part 2, are included in the Team Room.

In Fall 2022, the in-class discussions were effective in helping the students to understand the readings and to develop meaningful ways to interact with the material and to relate it to their own experiences; however, some readings can be triggering for students due to their own experiences, identities, or backgrounds, particularly given that most of the issues discussed are parts of current heated political and social debates. This is especially true in discussions around race and gender identity. For example, Dianne Harris' "Race, Space, and Trayvon Martin" raised some difficulties, as some students were active participants in the Black Lives Matter movement while others believed that Trayvon Martin's death had nothing to do with racism. While

challenging, discussions of this sort are vital in making the students actively engage in the material being taught.

Proposed Adjustments (from Fall 2022):

It is pressing to reconsider the reading list every year, especially the material on gender and architecture, given the increasing number of openly trans/nonbinary students in our program. Foundational texts on gender and architecture (for example, Diana Agrest's works) operate, to a large degree, on an essentialized definition of gender and, as such, exclude the mere possibility of trans bodies. There are no readings that challenge this perspective, as scholarship on trans architecture is relatively limited, and it is problematic to analyze the environment through classic works on feminist theory that assume a biological definition of gender and rarely (if at all) define what it means to be a woman or man. Furthermore, gender identity questions are extremely polarizing, so discussing the ways in which gender is framed in these readings puts our trans students in an uncomfortable position, which suggests a need to develop new classroom techniques. While this issue may seem similar to discussing race in class, it requires a different approach. For example, students expressing opinions that racism doesn't exist in contemporary America (and then having their classmates challenge these views) is different from giving a voice to students who deny the gender identity of their fellow classmates and, as such, their personhood.

The quote that students analyze for Quiz 2 is pulled from a reading discussing gender (Annabel Wharton, "Gender, Architecture and Institutional Self-Presentation"). Students are free to discuss any readings that they see as good connections with the quote as long as they are able to build a convincing bridge between the readings, even if the texts they choose cover different topics. Therefore, in some cases, the responses for Quiz 2 depart from the questions of diversity, which is the focus of the quiz. This is reflected in last year's SLO scores for this assignment; some were in the 2 or 3 range even though, in many cases, the same responses were graded as "A" for their overall quality. To ensure that the goal of SLO P8 Part 1 is directly met, the prompt for Quiz 2 will be changed to one that asks the students to relate this quote to readings directly discussing gender and race.

Additional proposed adjustments include:

- Add a new SLO part to assess understanding of the application within a design context separately from discourse in history and theory. (Completed; SLO P8 Part 2 will be assessed in Fall 2023; update to be provided in Fall 2023 assessment reports included in the Team Room)
- Reevaluate readings in ARCH 5203 to ensure that the class is relevant to the present moment. (Not enacted in Fall 2023; to be considered for Fall 2024; update to be provided in Fall 2023 assessment reports included in the Team Room)
- Consider new classroom methods to address trans issues of theory and practice, perhaps using training by established organizations, such as PFLAG Charlotte; (Under consideration in Fall 2023; update to be provided in Fall 2023 assessment reports included in the Team Room)

Proposed Adjustments (from Fall 2023):

Proposed changes suggested by our assessment in Fall 2023 are included in the assessment reports included in the Team Room.

Supporting Materials in Team Room:

- ARCH 5203 & ARCH 7201 Syllabi and Schedules
- Assessed assignment: ARCH 5203 Quiz 2

- Assessed assignment: ARCH 7201 Charette three-week sequence
- Fall 2023 Assessment Reports (benchmarks, evaluation rubrics, data analysis, and additional proposed adjustments)
- Media on relevant public programming & extracurricular activities

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 NARRATIVE

Approach:

Our students gain an understanding of the impact of the built environment on human health, safety, and welfare through outcomes that span both regulatory and aesthetic-minded issues. Our courses and culture address mechanisms within the discipline that ensure certain standards of health, safety, and welfare, but also inspire students to consider health, safety, and welfare as central design objectives that may be pursued above and beyond minimum standards. Principles are introduced and methods are developed in foundational courses, and then assessed in advanced courses.

Pre-Assessment Learning:

In foundational levels, themes related to human health, safety, and welfare are woven into parallel studio and technology courses, and a range of electives offer students more optional opportunities to delve into specific topics.

Our pre-assessment technology sequence involves four courses: ARCH 5301 - Materials (first year, fall semester); ARCH 5302 - Environmental Systems Principles (first year, spring semester); ARCH 5103 - Structures I (second year, fall semester); and ARCH 5304 - Structures II (second year, spring semester). These courses include case studies that illuminate how spatial qualities, like daylighting and scale, and how material assemblies, like wall sections and contact surfaces, affect the well-being of both building occupants and site users.

Our public programming provides more pre-assessment learning. Every academic year, lectures by external guests (at which attendance is required for all students) speak directly to our discipline's ability and responsibility to promote well-being in the built environment. Regular colloquia by faculty and alumni, as well as special events on campus and in the community, further integrate that message into the lifeblood of our program, albeit in venues that are optional for most students.

Assessment Point: ARCH 7103 - Integrated Design Studio (Fall 2023)

ARCH 7103 - Integrated Design Studio is a required course for all students in the M.Arch. program (3 tracks: M.Arch. I, M.Arch. II, and M.Arch. AS). It is taken in the fall semester of the final year of the program. We began assessing this criterion in this course annually using our current assessment infrastructure in Fall 2022.

This course confronts this criterion through a set of considerations: the types of architectural and/or societal challenges addressed in a project; how a project provides innovative solutions for

climate extremes; to what extent a project provides inclusive spaces that contribute to social cohesion and positive change; how design premises and performance measures promote human health, well-being, and comfort; how conformance to zoning and building codes ensures building design with the safety, accessibility, and inclusivity of the public; how an architect's responsibility extends beyond the envelopes of their buildings, into the site, and into the city.

ARCH 7103 is structured as a sequence of overlapping assignments interspersed with Technique Seminars (TechSems), in which students delve deeply into specific methods and topics that support project progress, and periodic interim reviews, in which multiple assignments are synthesized and integrated. The use of discrete assignments within the design process gives structure to students' work, so as to benefit time management and ensure that the various complexities of the course are clearly organized into discrete deliverables, even as they must also be synthesized and integrated with each other.

Assignments especially relevant to this criterion include:

- Assignment 2: Site Analysis & Site Model
- Assignment 3: Programming & Massing
- Assignment 8: Facades & Materiality
- Assignment 9: Code Analysis & Life Safety
- Assignment 10: Accessibility

TechSem topics especially relevant to this criterion include:

- Zoning, Accessibility, Life Safety, and Occupancy
- Facades, Materiality, and Structure Integration

ARCH 7103 - Integrated Design Studio is a corequisite with ARCH 5305 - Building Systems Integration, the instructor of which is the coordinator of ARCH 7103, so as to promote and facilitate exchanges between research and design. Reciprocity between research and design is a fundamental assumption of our program. Although this criterion is not assessed in ARCH 5305, analyses conducted in this course address climate metrics, comfort metrics, and daylighting qualities that have an impact on well-being, and we considered our assessment of the SLOs associated with those analyses (which are affiliated with PC.3 - Environmental Knowledge and Responsibility) in our evaluation of our students' understanding of this criterion, and relevant assignments are included in the Team Room for reference.

Preliminary assignments in ARCH 5305 that contribute the learning demonstrated in the assessed assignment include:

- Lab 1, Pedestrian comfort and climate analysis
- Lab 4, Daylighting performance.

Assessment Method:

ARCH 7103 - Integrated Design Studio assesses this criterion through a Student Learning Outcome that covers its extents:

- SLO S1: Heath, Safety, and Welfare–to instill in students an understanding of how buildings impact human health, safety, and welfare at multiple scales, and how architects can take a leadership role to enhance sustainability in the built environment.

In Fall 2022, SLO S1 was assessed numerically through the final project and narratively through a collection of labs.

In Fall 2023, SLO S1 is assessed through specific evaluation criteria within the Final Project deliverables assignment (see Notes I & II below).

Note I: The Final Project deliverables assignment assesses multiple SLOs, and the assessment of each SLO within it is based on unique evaluation criteria: different components of the deliverables will be assessed independently, and those independent assessments will be mapped onto unique SLOs. For clarity, a diagram explaining how evaluation criteria from the deliverables assignment are mapped onto specific SLOs is included in the Team Room folder associated with each SLO. To demonstrate the arc of continuous learning that culminates in the Final Project deliverables, preliminary assignments related to specific SLOs are included in the Team Room folder associated with each SLO.

Note II: Students work in pairs or groups of three on their Final Projects, and instructors conduct verbal interviews throughout the semester to evaluate how the team is delegating responsibilities and sharing acquired knowledge, so as to ensure that all team members are acquiring the understanding and abilities evidenced in the deliverables.

Assessment Data & Analysis:

Our benchmark for this criterion is for 80% of students to score a 3 or 4 in our 4-point assessment rubric for each part of the SLO. In Fall 2022, students performed as follows:

- SLO S1: 84% of students met our benchmark (28% scored a 4)

Our assessment includes a distinction between students' meeting the benchmark and achieving the highest level of assessment, so as to better discern how to improve our program.

In Fall 2022, our benchmark for SLO S1 was met, but a relatively low number of students (compared to other criteria) who met the benchmark were assessed at the highest level of "commendable."

Fall 2023 assessment reports, including evaluation rubrics, will be included in the Team Room.

In Fall 2022, students successfully tracked building performance (EUI) through regular energy modeling exercises; however, tracking their impacts on human health in a similarly quantitative way was less successful. Unfortunately, this is a struggle that correlates with industry practices. To compensate, human health was addressed more specifically during the mechanical phase of the semester in the context of fresh air provisions. Students were asked not only how they would provide fresh air but also how much fresh air they would provide and why. Finally, they were asked to balance their increases in fresh air with their energy performance, understanding that health and performance goals are often not in alignment.

Environmental and human health were a primary focus of the studio project, emphasized across all four sections. Core design and egress were especially well-developed features in the final projects; however, students struggled with the integration of natural ventilation and outdoor space, particularly because it was difficult to integrate with traditional mechanical strategies.

Proposed Adjustments (from Fall 2022):

- Evaluate in Fall 2023 how the new emphasis on case studies in ARCH 5305 may open an opportunity for a new SLO in ARCH 5305 related to this criterion, and how it affects students' ability to apply acquired knowledge onto their projects. (Initiated in Fall 2023 and will be reassessed)
- Evaluate in Fall 2023 how SLOs associated with PC.3 in ARCH 5305 may overlap with our assessment of this criterion (Initiated in Fall 2023 and will be reassessed)

- Better integration of natural ventilation analysis tools. (TechSems and assignments in ARCH 7103 will be assessed in Fall 2023 on this point.)
- Closer alignment between fresh air/health strategy and design narrative. (To be assessed in Fall 2023)
- Better consideration for natural ventilation and outdoor space. (TechSems and assignments in ARCH 7103 will be assessed in Fall 2023 on this point.)
- Better integration of daylighting strategies to address dark projects in Fall 2022 (either through general “rules of thumb” or quantitative analysis in ARCH 5305 applied into this course. (TechSems and assignments in ARCH 7103 will be assessed in Fall 2023 on this point, and Labs in ARCH 5)

Proposed Adjustments (from Fall 2023):

Proposed changes suggested by our assessment in Fall 2023 are included in the assessment reports included in the Team Room.

Evidence in Team Room:

- ARCH 7103 Syllabus and Schedule
- Relevant lectures in ARCH 7103 & ARCH 5305
- Relevant preliminary assignments in ARCH 7103
- Assessed assignment in ARCH 7103: Final Review deliverables and Design Report.
- Diagram mapping specific evaluation criteria of deliverables to relevant SLOs
- Fall 2023 Assessment Reports (benchmarks, evaluation rubrics, data analysis, and additional proposed adjustments)
- Syllabi of courses where pre-assessment learning occurs

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 NARRATIVE

Approach:

Our students demonstrate their understanding of ethics, regulations, and business processes primarily through their work in our point of assessment, ARCH 5206 - Professional Practice. That strategy is rapidly evolving and expanding as we better leverage our location amid a vibrant community of practices, and as our faculty become increasingly engaged in practices of various types and scales. We strive to mediate the essential dialectic of professional education: its isolation from *and* engagement with the real world. As we inspire our students to take advantage of academic freedom to explore big ideas, we simultaneously encourage them to consider real-world limitations as creative catalysts.

We populate our studio reviews with non-academic voices drawn from the rich professional community of Charlotte, and we actively collaborate with local organizations to expose students to the inner workings of practice. Our faculty regularly secure building, urban design, installation, and exhibition commissions, all of which filter into their teaching, and some of which include paid internships for students. These professional pursuits increase our students' exposure to practice-related matters, albeit sporadically and unevenly depending on elective choices and opportunities to work with our practice-engaged faculty.

Pre-Assessment Learning:

Although the crux of the learning associated with this criterion occurs within a single course in the final semester, our foundational and mid-sequence studios typically impose some type of regulatory structure or macro-level system of thinking that limits and steers students' processes. A recurring theme of our curricular discussions is the balance between real-world engagement and academic speculation, as explained in

Most of our students obtain summer and part-time internships, both to help fund their education, but also to begin their professional training. In many cases, these internships expose them to some of the themes of this criterion. A major proposal under consideration is a new internship-based elective course to address the potential of this tendency to provide more explicit pre-assessment training in a manner that simultaneously crosses into the domain of the profession and upholds the academic boundaries we value. One of the proposed changes in our handling of this criterion is described below.

Assessment Point: ARCH 5206 - Professional Practice

ARCH 5206 - Professional Practice is a required course for all students in the M.Arch. program (3 tracks: M.Arch. I, M.Arch. II, and M.Arch. AS). It is taken in the spring semester of the final year of the program. We began assessing this criterion in this course annually using our current assessment infrastructure in Spring 2023.

The Professional Practice course involves a comprehensive grasp of 1) leadership, management, business, and legal contexts; 2) collaborative and communicative methodologies, utilizing design thinking as both a medium and process to achieve results; 3) contemporary topics of diversity, equity, inclusion, and access to the discipline along with the ethical, environmental, technological, and labor-related implications in architectural practice. To embody this, the course is designed to offer immersive experiences to students via case studies, expert panel discussions, office and job site visits, and interactions with those advancing the architectural field.

Students receive dedicated course lectures on professional ethics, legal issues, regulatory requirements relating to the business and practice of architecture, as well as the fundamental business processes integral to firm start-up and operations. Lectures are supported by guest speakers including leadership from firms of different scales, types, and expertise that share their experiences, case studies, best practices lessons learned, in relationship to the evolving nature of their firms. Students also learn the particularities of legal issues and risks from guest speakers including legal and insurance professionals. Student knowledge of fundamentals associated with these issues is assessed through quizzes and applied through their life map exercise.

Assessment Method:

ARCH 5206 - Professional Practice assesses this criterion through a Student Learning Outcome composed of three parts that cover its extents:

- SLO SC2: Professional Practice

    - SLO SC2 Part 1: Professional Ethics–to instill in students an understanding of the professional ethics currently relevant to practice in the United States, as well as emerging forces influencing them.
    - SLO SC2 Part 2: Regulatory Requirements–to instill in students an understanding of the regulatory requirements currently relevant to practice in the United States, as well as emerging forces influencing them.
    - SLO SC2 Part 3: Business Processes–to instill in students an understanding of the fundamental business processes currently relevant to practice in the United States, as well as emerging forces influencing them.

By assessing these three learning outcomes separately, our program is better able to track both how to modify the point of assessment, and how to build stronger pre-assessment learning opportunities to address weaknesses.

- SLO SC2 Part 1 is assessed through Quiz 1, Questions 1 and 3.
- SLO SC2 Part 2 is assessed through Quiz 1, Questions 2, 4, and 5.
- SLO SC2 Part 3 is assessed through Quiz 2.

Quiz questions require long-answer responses that assess both students' basic understanding of ethical, legal, and business parameters within the discipline and their ability to apply their understanding to particular cases and professional scenarios.

Assessment Data & Analysis:

Our benchmark for this criterion is for 80% of students to score a 3 or 4 in our 4-point assessment rubric for each part of the SLO. In Spring 2023, students performed as follows:

- SLO S2 Part 1: 79% of students met our benchmark (79% scored a 4)
- SLO S2 Part 2: 83% of students met our benchmark (53% scored a 4)
- SLO S2 Part 3: 97% of students met our benchmark (97% scored a 4)

Our assessment includes a distinction between students' meeting the benchmark and achieving the highest level of assessment, so as to better discern how to improve our program.

In Spring 2023:

- Our benchmark for SLO S2 Part 1 was not met, but only by a single percentage point, and an exceptionally high number of students (compared to other criteria) who met the benchmark were assessed at the highest level of "commendable" (in fact, all students who met the benchmark were assessed at the highest level of "commendable").
- Our benchmark for SLO S2 Part 2 was met, and an exceptionally high number of students (compared to other criteria) were assessed at the highest level of "commendable" (more than half of those who met the benchmark).
- Our benchmark for SLO S2 Part 3 was met, and an exceptionally high number of students (compared to other criteria) were assessed at the highest level of "commendable" (in fact, all students who met the benchmark were assessed at the highest level of "commendable").

Spring 2023 assessment reports, including evaluation rubrics, are included in the Team Room.

Students leave the course with a high-level knowledge of fundamental issues of Professional Practice. While ARCH 5206 does a good job introducing students to the current issues of Professional Practice, a bigger challenge is forecasting changes to the profession. To bridge that divide, ARCH 5206 has introduced to the speaker series recent graduates who have entered the profession to share their knowledge and experiences. Additionally, resources such as the annual NCARB by the Numbers, are presented to students to help them develop an understanding of the economic, demographic, and technological forces shaping the profession. A recent assessment of course evaluations identified the need for expanded content on DEI, accessibility, technology ethics, and environmental justice. Consequently, the course was updated to address these areas while ensuring a diversity of voices and perspectives.

Also, the benchmark for the part of the SLO associated with ethics was nearly met (and met to a high degree by a high number of students); however, a primary objective of those quiz questions was to solicit a more nuanced understanding of the difference between laws and ethics than

many of the students demonstrated. The mantra, “illegal actions are unethical, but unethical actions may not be necessarily illegal,” was basically understood, but not as well applied to specific scenarios.

Proposed Adjustments:

Our curricular leaders are currently considering a new type of elective course to address our students’ economic need to work during their education, but also to preserve what we consider to be the sanctity of our academic credit hours. The proposed course would integrate part-time internships and academic learning. Our goal is to meet our students’ need and desire to work during their education halfway, by creating a new type of professional/academic relationship distinct from co-op models: an elective course that involves students sharing their professional experiences with each other and contextualizing them within historical and/or contemporary models. We expect that it would be a popular offering and might even expand into a sort of prerequisite for this assessed course. Regardless of that potential development, this new course will help us to reframe and evolve how professional practice is woven into our curriculum, so as to better meet this program criteria in additional innovative ways.

- Incorporate emerging resources (databases, codes, social experiments) not currently in wide use or widely known, so as to inspire an expansion of the discourse on practice.
- Further diversify the speaker lineup regarding background, experience, and expertise to reflect the dynamic state of the profession.
- Develop a postgraduate evaluation system that allows interested alumni an opportunity to shape our learning outcomes through their reflections on their relevance to actual practice. (In progress;
- Rework the teaching of ethics to better prepare students to apply their understanding of ethics to specific scenarios. (To be enacted in Spring 2023)

Supporting Materials in Team Room:

- ARCH 5206 Syllabus and Schedule
- Assessed Assignments: Quizzes 1 and 2
- Spring 2023 Assessment Reports (benchmarks, evaluation rubrics, data analysis)
- Media related to relevant public programming & extracurricular activities

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 NARRATIVE

Approach:

Our students gain an understanding of professional regulatory principles through a two-course sequence that involves both the management of principles within the context of a design process and the analysis of principles outside the context of a design process. Together, the two courses provide complementary types of knowledge on life safety measures, land use, and current laws and regulations applicable to buildings and sites, as well as the evaluative process used by architects to comply with laws and regulations. Our assessment points include both design and seminar courses because we find that, whereas certain principles are best understood in a seminar format, evaluation is best understood within the context of a design project.

Pre-Assessment Learning:

Our Technology Topic electives provide some of our richest pre-assessment learning opportunities for this criterion. For example, ARCH 5050/6306 - The Structure of the Everyday is built around students' visiting construction sites and material fabrication facilities that fuel our region's construction industry, and then analyzing how design, regulation, and construction intersect to create architecture through those direct exposures. ARCH 5050/6306 - Mass Timber in Architecture: Strategy, Application, and Detailing for Designers, meanwhile, confronts the evolving regulatory structures of wood construction, specifically from the context of the design process. ARCH 5050/6306 - GIS & Urban Mapping, finally, decodes too often hidden layers of policy and analysis that steer design practices at multiple scales. Students in our M.Arch. II track are required to take two of these electives, and students in our other tracks tend to use these electives to fulfill their general architectural elective requirements. We continually add more options because of their popularity with all of our students.

Students in our M.Arch. AS track participate in another pre-assessment learning experience: ARCH 7101 - Real Project Real Client, which is a design-build studio rooted in the evolving policies and regulations of Accessory Dwelling Units in Charlotte. Students analyze codes and regulations, meet with clients to communicate what is (and isn't) possible, and then negotiate between the rules and the aspirations of the eventual inhabitants of the structure.

In addition to required and elective coursework, the SoA regularly offers an array of programs that tackle regulatory issues, including guest lectures, firm visits, elective courses, and other extracurricular activities, none more impactful than our thriving Freedom by Design chapter. Students involved in that organization design and fabricate small interventions (such as an accessibility ramp for a house or an outdoor garden for a school) that require understanding of and compliance with legal requirements and life safety concerns. Not every student engages in these opportunities to the same degree, but they are a prominent feature of everyday life in the School.

Assessment Point: ARCH 7103 - Integrated Design Studio

ARCH 7103 - Integrated Design Studio is a required course for all students in the M.Arch. program (3 tracks: M.Arch. I, M.Arch. II, and M.Arch. AS). It is taken in the fall semester of the final year of the program. We began assessing this criterion in this course annually using our current assessment infrastructure in Fall 2022 (with a modified SLO in Fall 2023).

This course exposes students to the regulatory environment and the architect's responsibilities concerning compliance and enforcement of relevant codes. Schematic design strategies are assessed against land use (zoning), life/safety (egress, vertical circulation), and accessibility regulatory standards. We assess life safety principles, land use principles, and various levels of code compliance within the context of a design project.

Assignments in ARCH 7104 especially relevant to this criterion include:

- Assignment 2: Site Analysis & Site Model
- Assignment 9: Code Analysis & Life Safety
- Assignment 10: Accessibility

TechSem topics especially relevant to this criterion include:

- Zoning, Accessibility, Life Safety & Occupancy

The first interim review in ARCH 7104 (Assignment 6) involves an evaluation of the quality and intent of schematic design objectives; objectives relevant to this criterion include:

- Site analysis, site design, and zoning & development plan

- Program analysis, distribution, circulation, and massing
- Spatial ordering and occupancy concepts
- Sustainability goals & building performance

The second interim review in ARCH 7104 (Assignment 12) involves an evaluation of the quality and intent of design development objectives; objectives relevant to this criterion include:

- Code analysis, compliance, life safety, and accessibility
- Wall section design and performance

The final review in ARCH 7104 (Assignment 15) involves an evaluation of the quality and intent of design projects, including their compliance with regulations and their understanding of how to evaluate that compliance.

Assessment Method:

ARCH 7103 - Integrated Design Studio assesses this criterion a Student Learning Outcome composed of four parts that combine to cover its extents:

- SLO S3: Regulation, Compliance, and Negotiation–to instill in students an understanding of regulatory structures confronted within the discipline, the methods through which architects evaluate their compliance with those structures, and the opportunities afforded by negotiating those structures against other criteria.

    - SLO S3 Part 1: Building Code and Life Safety Principles–to instill in students an understanding of the fundamental principles of life safety, including regulatory and evaluative processes relevant to those principles used by architects within the context of a design project.
    - SLO S3 Part 2: Land Use Principles–to instill in students an understanding of the fundamental principles of land use and zoning regulations, including evaluative processes relevant to those principles used by architects within the context of a design project.
    - SLO S3 Part 3: Laws and Regulations–to instill in students an understanding of current laws and regulations.
    - SLO S3 Part 4: Evaluation of Laws and Regulations–to instill in students an understanding of how to evaluate current laws and regulations, so as to apply them toward the design of a project.

In Fall 2022, the entire extents of this criterion were assessed through a former version of SLO S3, which was assessed numerically through the final project in ARCH 7103 and narratively through a collection of labs.

For our current assessment cycle, we revised our strategy to assess Life Safety and Land Use separately from each other, as well as broader layers of regulatory matters and evaluative processes, separately from each other, so that our program is better able to track the nuances of this complex criterion.

In Fall 2023:

- SLO S3 Parts 1-4 are assessed through specific evaluation criteria within the Final Project deliverables assignment (see Notes I & II below).

Note I: The Final Project deliverables assignment in ARCH 7103 assesses multiple SLOs, and the assessment of each SLO within it is based on unique evaluation criteria: different components of the deliverables will be assessed independently, and those independent assessments will be mapped onto unique SLOs. For clarity, a diagram explaining how evaluation criteria from the deliverables assignment are mapped onto specific SLOs is included in the Team Room folder associated with each SLO. To demonstrate the arc of continuous learning that culminates in the Final Project deliverables, preliminary assignments related to specific SLOs are included in the Team Room folder associated with each SLO.

Note II: Students work in pairs or groups of three on their Final Projects in ARCH 7103, and instructors conduct verbal interviews throughout the semester to evaluate how the team is delegating responsibilities and sharing acquired knowledge, so as to ensure that all team members are acquiring the understanding and abilities evidenced in the deliverables.

Assessment Data & Analysis:

Our benchmark for this criterion is for 80% of students to score a 3 or 4 in our 4-point assessment rubric for each part of the SLO. In Fall 2022, students performed as follows:

- Former SLO S3: 84% of students met our benchmark (28% scored a 4)

- SLO S3 Part 1: part of revised SLO that will be assessed for the first time in Fall 2023
- SLO S3 Part 2: part of revised SLO that will be assessed for the first time in Fall 2023
- SLO S3 Part 3: part of revised SLO that will be assessed for the first time in Fall 2023
- SLO S3 Part 4: part of revised SLO that will be assessed for the first time in Fall 2023

Our assessment includes a distinction between students' meeting the benchmark and achieving the highest level of assessment, so as to better discern how to improve our program.

In Fall 2022:

- Our benchmark for Former SLO S3 was met, but a relatively low number of students (compared to other criteria) who met the benchmark were assessed at the highest level of "commendable."

Fall 2023 assessment reports, including evaluation rubrics, are included in the Team Room.

In Fall 2022, a preliminary assessment of the IBC in ARCH 7103 asked students to define the use and occupancy classifications, height and allowable floor area, construction type, fire rating requirements, and number of restrooms they will need to accommodate in their design. This preliminary study illustrated the interrelated decisions related to design and regulatory contexts. Twelve weeks into the semester, students were given a more in-depth assignment that asked them to analyze the occupant loads throughout their building as well as the sizing requirements for egress systems to accommodate safe exiting in an emergency. As a deliverable of this assignment, students were asked to create an egress plan as well as the completed "Appendix B" from IBC. Finally, students were asked to consider the accessibility details of their project, both at the building scale and the site. There were two code-focused, studio-wide lectures (TecSem's) throughout the semester.

Addressing code analysis through multiple assignments helps students understand how the analysis of regulatory contexts is integral to different stages of project planning. Students were successful in applying the building codes and egress requirements to their specific site designs later in the semester. Because the spatial qualities of projects varied, the code and regulatory compliance analysis of each individual project was time-consuming, and it was beneficial to have a practitioner with expertise in building codes on our teaching team. The value of that inspired us

to add a new part-time member to the team for Fall 2023, who will float between all four sections and provide additional feedback on compliance and evaluation.

Although ARCH 5206 - Professional Practice is not an assessment point for this criterion, we consider it in our analysis because it instills in students a broader and more general range of regulatory structures and evaluative processes in a non-studio setting. This course underlines the architect's legal responsibilities to the public and the client, as dictated by the fundamentals of the legal and regulatory environment governing the practice of architecture and the execution of buildings including: Administrative Codes, Fundamentals of Criminal and Civil Law, Authorities Having Jurisdiction and when/where they apply, Zoning and Building Codes and how they apply to Design, Entitlement and Code Enforcement processes. Learning associated with much of that material is assessed in the SLO associated with SC.2 - Professional Practice, and the success of students in that class, which follows this assessment point, indicates to us a strong foundation of regulatory knowledge built in this assessment point.

At the same time, our assessment of ARCH 5206 through other SLOs also reveals that students' high level of understanding of regulatory issues does not always translate into students' speculative work on their future career paths. We therefore strive to better emphasize regulatory structures as an active agent in the career of an architect, rather than a perfunctory responsibility.

Proposed Adjustments (from Fall 2022 and Spring 2023):

- Develop more pre-assessment learning opportunities (and call attention to existing opportunities, as outlined above), so that students are less overwhelmed by their engagement with regulatory contexts in ARCH 7103, which has an intense pace. (Curricular planning underway; update to be provided in Fall 2023 assessment reports included in the Team Room)
- Develop more explicit coordination between ARCH 7103 and ARCH 5206, so that students draw clearer connections between their design and academic work in this area. (To be implemented in Spring 2023)
- Expand the teaching team in ARCH 7103 to include a consultant floating between all four sections, so that students can conduct code compliance analysis with an expert in a more focused and project-specific manner. (Implemented in Fall 2023; update to be provided in Fall 2023 assessment reports included in the Team Room)
- Include a requirement in the final project of ARCH 5206 to address regulatory contexts in students' speculative career paths. (To be implemented in Spring 2024)

Proposed Adjustments (from Fall 2023):

Proposed changes suggested by our assessment of the revised SLO in Fall 2023 are included in the assessment reports included in the Team Room.

Supporting Materials in Team Room:

- ARCH 7103 Syllabus and Schedule
- Relevant lectures in ARCH 7103
- Relevant preliminary assignments in ARCH 7103
- Assessed assignment: Final Review deliverables and Design Report.
- Diagram mapping specific evaluation criteria of deliverables to relevant SLOs.
- Fall 2023 Assessment Reports (benchmarks, evaluation rubrics, data analysis, and additional proposed adjustments)
- Syllabi of courses where pre-assessment learning occurs

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 NARRATIVE

Approach:

Our students gain technical knowledge through a rigorous five-semester sequence of technology courses and a parallel two-semester sequence of computation-centric courses. That learning is situated within a context that includes our extensive network of research and fabrication labs, and we are increasing the ways in which our technology courses and design studios engage our labs as a central learning space. Our students do not merely learn about technology. They use it throughout their education, both through advanced virtual simulation technologies and through hands-on making and testing.

An emerging curricular strategy in our program rooted in this criterion is an emphasis on systems thinking. In our pre-assessment technology sequence, we introduce principles and address the qualitative impacts of technological systems on architecture and the city before moving on to quantitative analysis in more advanced courses. Our intent is to build a foundational layer of thinking onto which more intricate methods may be layered and to train students to think systematically by drawing connections between multiple sets of principles, as opposed to just supplying them with rote “problem-solving” skills.

Pre-Assessment Learning:

Our pre-assessment building technology sequence involves four courses: ARCH 5301 - Materials (first year, fall semester); ARCH 5302 - Environmental Systems Principles (first year, spring semester); ARCH 5103 - Structures I (second year, fall semester); and ARCH 5304 - Structures II (second year, spring semester). Our computational technology sequence involves two courses: ARCH 5604 - Computational Methods and ARCH 5605 - Computational Practice. As students progress through the program, they acquire a deep understanding of material and structural systems, building construction, environmental systems, and computational modes of simulation and fabrication. Our pre-assessment sequences teach principles as well as their applications to design projects. Case studies that demonstrate established and emerging types of applications are a prominent feature in our teaching. For example, lessons learned from case studies of material assemblies and daylighting have been applied to studio projects in our foundation and mid-sequence studios.

An increasingly central aspiration of our pre-assessment technology sequences is to deepen the integration of technology into design studios. In our current assessment cycle, whereas some of our pre-assessment courses are loosely coordinated with a parallel design studio, our assessed technology and design courses manifest a more cohesive type of integration, and our curricular leaders are considering how to achieve that type of integration in our pre-assessment sequences. We push against the aging tradition of considering technology courses as secondary to design studios, and we strive to heighten our students’ awareness of the degree to which design and technology are inseparable.

We believe the success of the deep integration of our assessed courses is transferable to our pre-assessment semesters, and that transfer will help to prepare students for the rigors of the assessed courses, which many find overwhelming today. Our plans for future assessment cycles include more pre-assessment integration. In addition to changing the names of technology courses in our pre-assessment sequences, so as to better reflect their evolving content, we are planning a reallocation of credit hours to balance current disparities between studio and

technology that fuel the misperception that studio is distinct from (and more important) technology courses. We envision design and technology modules fused together to help students both to understand the material better and to better manage their time and energy. (See Section 5.3 Curricular Development.)

Our growing collection of Technology Topic electives is another pre-assessment learning opportunity that has the potential to become a more impactful component of our curriculum. Currently required in only one of our three tracks, these courses are popular with all of our students and are often taken in place of general architectural electives. As part of our long-term planning, we are considering how to expand our students' access to these electives.

Assessment Point: ARCH 5305 - Building Systems Integration

ARCH 5305 - Building Systems Integration is a required course for all students in the M.Arch. program (3 tracks: M.Arch. I, M.Arch. II, and M.Arch. AS). It is taken in the fall semester of the final year of the program. We began assessing this criterion in this course annually using our current assessment infrastructure in Fall 2022 (with a modified SLO in Fall 2023).

This course is both where students demonstrate their understanding of technological principles and methods (including their application and evaluation), and where they realize a fully integrated approach to design and technology. Part of its success stems from its integration with its corequisite course, ARCH 7103 - Integrated Design Studio, and the success of the deep reciprocity between these two courses inspires us to consider how to emulate it in our pre-assessment curricular sequences as described above in "Pre-Assessment Learning." The instructor of ARCH 5305 is the coordinator of ARCH 7103, and reciprocity between research and design is a fundamental assumption of our program. Although ARCH 7103 - Integrated Design Studio is not an assessment for this criterion, some of its preliminary assignments, lectures, and TechSems are included in the Team Room because of their relevance to the continuous learning that culminates in the assessed assignment in ARCH 5305.

As much as we value the deep integration between the two corequisite courses, we also value each course's opportunities to offer distinct lessons, and we continue to consider how to improve upon the success of this assessment point. This iteration of ARCH 5305 focuses more than its previous iteration on a case study. Students have the option to execute their final project for the course either through a continuation of their case study or through their Integrated Design project in ARCH 7103, which was the only option for the final project in Fall 2023. This change is, in part, a response to some misperception of 5305 as "merely" a support course, but the introduction of a more extensive case study also allows us to address some of the specific areas of knowledge in which students demonstrated less understanding, such as innovative applications of technological knowledge. We will assess this change to gauge how it impacts broader goals to provide a venue in which students gain knowledge and understanding of technological performance and evaluation.

More specifically, the course involves three types of deliverables: lab assignments that cover a range of technological principles and methods; a Case Study Project that culminates in a schematic proposal for a Net zero building; and a Final Project that involves further development and technical resolution of the principles explored in the Case Study. Four labs in this course cover the following topics: Lab 1, Pedestrian comfort and climate analysis; Lab 2, Energy consumption, energy cost, & carbon footprint; Lab 3, Solar power potential; Lab 4, Daylighting performance. The Case Study Project includes the integration of the first two labs, and the Final Project includes the integration of all four labs.

Weekly topics and investigations especially relevant to this criterion include:

- Regenerative Design, Building Systems, Systems Integration

- Site Technology, Landscape
- Enclosure, Structure
- MEP, IEQ, Health & Wellbeing
- Net Zero and Building Integrations
- Net zero design and technical resolutions of systems

Assessment Method:

ARCH 5305 - Building Systems Integration assesses this criterion through a Student Learning Outcomes composed of two parts that combine to cover its extents

- SLO S4: The Parameters of Technology–to instill in students an understanding of the impact of technology on design, and to develop their methods of assessing specific architectural technologies within the context of other design criteria.

    - SLO S4 Part 1: Established and Emerging Technical Knowledge–to instill in students an understanding of established and emerging systems, technologies, and assemblies of building construction.
    - SLO S4 Part 2: Technological Assessment–to instill in students an understanding of methods and criteria used to assess established and emerging technical knowledge against design, economic, and performance objectives.

In Fall 2022, the entire extents of this criterion were assessed through a former version of SLO S4, which was assessed numerically through the final project in ARCH 7103 and narratively through a collection of labs in ARCH 5305 - Building Systems Integration.

For our current assessment cycle, we revised our strategy to assess technological knowledge and technological assessment separately through different parts of the SLO, so as to better track how our students both build knowledge and apply it, and entirely within ARCH 5305, so to assess this focus the assessment of this criterion more acutely technological knowledge and application in a context free of the pressures of the final project in ARCH 7103.

In Fall 2023:

- SLO S4 Part 1 is assessed through specific evaluation criteria within the Final Project deliverables assignment (see Notes I & II below).
- SLO S4 Part 2 is assessed through specific evaluation criteria within the Final Project deliverables assignment (see Notes I & II below).

Note I: The Final Project deliverables assignment assesses multiple SLOs, and the assessment of each SLO within it is based on unique evaluation criteria: different components of the deliverables are assessed independently, and those independent assessments are mapped onto unique SLOs. For clarity, a diagram explaining how evaluation criteria from the deliverables assignment are mapped onto specific SLOs is included in the Team Room folder associated with each SLO. To demonstrate the arc of continuous learning that culminates in the Final Project deliverables, preliminary assignments related to specific SLOs are included in the Team Room folder associated with each SLO.

Note II: Students work in pairs or groups of three on their Final Projects, and instructors conduct verbal interviews throughout the semester to evaluate how the team is delegating responsibilities and sharing acquired knowledge, so as to ensure that all team members are acquiring the understanding and abilities evidenced in the deliverables.

The primary evaluation criteria for the Final Project are:

- Resolution of Net zero design and technical systems integration
- Quality and comprehensiveness of representation of 3D Net zero building section
- Integration of lab activities, performance metrics, and research in the Final Project
- Quality of written and oral communications

Specific evaluation criteria for these SLOs are outlined in the Fall 2023 assessment reports in the Team Room.

Assessment Data & Analysis:

Our benchmark for this criterion is for 80% of students to score a 3 or 4 in our 4-point assessment rubric for each part of the SLO. In Fall 2022, students performed as follows:

- Former SLO S4: 91% of students met our benchmark (31% scored a 4)

- SLO S4 Part 1: part of revised SLO that will be assessed for the first time in Fall 2023
- SLO S4 Part 2: part of revised SLO that will be assessed for the first time in Fall 2023

Our assessment includes a distinction between students' meeting the benchmark and achieving the highest level of assessment, so as to better discern how to improve our program.

In Fall 2022, our benchmark for Former SLO S4 was met, and a relatively modest number of students (compared to other criteria) who met the benchmark were assessed at the highest level of "commendable."

Fall 2023 assessment reports, including evaluation rubrics, are included in the Team Room.

Proposed Adjustments (from Fall 2022):

In Fall 2022, the fast pace of the course seemed to preclude innovative design and creative risk-taking. Additionally, students did not have (or take) the time to significantly research new technologies and fully understand how to integrate them into their projects. Students tended to focus on renewable energy production instead of load reduction.

- Create design + technology integration in pre-assessment sequences based on the successful methods of our assessment point, so that that approach is more embedded throughout the program. (In progress)
- Reconsider the relationship between building technology courses and computational technology courses, including how to fuse the latter into the former for better learning. (In progress)
- More presentation of innovative case studies during lectures along with the corresponding technical details, as opposed to just pictures. (Introduction of Case Study Project in Fall 2023 course addresses this suggestion explicitly)
- Greater emphasis on passive design and load reduction (supplemented by tangible quantitative data) instead of relying on renewable energy to get to Net zero. (The Final Project in Fall 2023 addresses Net zero strategies specifically)
- Create a new SLO focused on the assessment of systems thinking, especially relevant to this criterion and SC.4 - Technological Knowledge. (Under consideration; update to be provided in Fall 2023 assessment reports included in the Team Room)

Proposed Adjustments (from Fall 2023):

Proposed changes suggested by our assessment in Fall 2023 are included in the assessment reports included in the Team Room.

Supporting Materials in Team Room:

- ARCH 5305 Syllabus and Schedule
- Relevant preliminary assignments in ARCH 5305
- Relevant lectures in ARCH 7103 & ARCH 5305
- Assessed assignment in ARCH 5305: Final Review deliverables
- Diagram mapping specific evaluation criteria of deliverables to relevant SLOs
- Fall 2023 Assessment Reports (benchmarks, evaluation rubrics, data analysis, and additional proposed adjustments)
- Syllabi of courses where pre-assessment learning occurs

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 NARRATIVE

Approach:

Our students develop an ability to synthesize multiple variables into a cohesive design response through our general philosophy toward design, which involves a synthesis of six areas of knowledge:

- Aesthetics: collective generative impulses that catalyze the design of built environments, above and beyond mere styles.
- Historical, Theoretical, and Critical Inquiry: acts of positioning our aesthetic impulses within a broader cultural context.
- Technology: building and material systems interacting at multiple scales, passively and actively.
- Urban and Regional Systems: inevitable contexts of architectural design.
- Ecological Thinking: the built environment's responsibility to act as a steward of the natural environment.
- Representation: tools (analog, digital, and computational) that productively limit and expand what and how to design.

Design parameters within these areas of knowledge are investigated both in isolation from each other and in communication with each other throughout the curriculum. Technology, computation, and even history and theory courses touch upon the ways in which design negotiates dynamics between multiple variables. Acts of synthesis are a primary objective of all design studios.

Pre-Assessment Learning:

Our foundational and mid-sequence design studios ask students to synthesize a distinct set of variables with the potential to impact design, and then analyze the realization of that potential. As students progress toward our assessment point, their acts of synthesis increase in complexity. Foundational studios introduce fundamental concepts of formal order, light, scale, proportion, materials, structure, environment, and context alongside questions concerning human occupation, activity, and perception.

Mid-sequence studios delve deeply into more specific cultural, technological, and contextual scenarios, and involve more complex programming, systems integration, and building

performance challenges. Different students practice different types of synthesis depending on their chosen topics.

In all studios, we introduce and manage tools and modes of representation not as neutral transcriptions of design processes that happen elsewhere, but rather as variables that contribute to the acts synthesis that design inherently involves.

Assessment Point: ARCH 7103 - Integrated Design Studio

ARCH 7103 - Integrated Design Studio is a required course for all students in the M.Arch. program (3 tracks: M.Arch. I, M.Arch. II, and M.Arch. AS). It is taken in the fall semester of the final year of the program. We began assessing this criterion in this course annually using our current assessment infrastructure in Fall 2022.

Students enter the final year of our program prepared to apply their pre-assessment learning toward the design of a sophisticated building that synthesizes a far more complex range of parameters: user requirements, programming, sociocultural parameters, site challenges (at both architectural and urban scales), regulatory requirements, sustainable principles, environmental control systems, accessibility, primary and secondary structural systems, material properties and performance, and a range of project-specific aesthetic and functional considerations. That synthesis includes the use of new tools of representation, visualization, and simulation.

ARCH 7103 is structured as a sequence of overlapping assignments interspersed with Technique Seminars (TechSems), in which students delve deeply into specific methods and topics that support project progress, and periodic interim reviews, in which multiple assignments are synthesized and integrated. The use of discrete assignments within the design process gives structure to students' work, so as to benefit time management and ensure that the various complexities of the course are clearly organized into discrete deliverables, even as they must also be synthesized and integrated with each other.

The coordinator of our assessment point (ARCH 7103) is also the instructor of ARCH 5305 - Building Systems Integration, a corequisite course that contributes to the continuous learning that culminates in the assessed assignment for this criterion. Some of the knowledge and skill that is synthesized in the assessed work is first introduced in ARCH 5305, but synthesis occurs in ARCH 7103.

Assignments especially relevant to this criterion include:

- Assignment 2: Site Analysis & Site Model
- Assignment 3: Programming & Massing
- Assignment 5: Building Performance
- Assignment 7: Structure Integration
- Assignment 8: Facades & Materiality
- Assignment 9: Code Analysis & Life Safety
- Assignment 10: Accessibility
- Assignment 11: Wall Section
- Assignment 13: Mechanical System

TechSem topics especially relevant to this criterion include:

- Adaptive Reuse and Development Plan
- Zoning, Accessibility, Life Safety & Occupancy
- Building Performance
- Facades, Materiality, and Structure Integration
- Wall Section Details

Two interim reviews in ARCH 7103 (Assignments 6 & 12) act as preliminary assessment points of design synthesis, and the final review (Assignment 15) formally assesses design synthesis.

The first interim review (Assignment 6) involves an evaluation of the quality and intent of schematic design objectives, specifically:

- Project statement: architectural inquiry and position
- Site analysis, site design, and zoning & development plan
- Program analysis, distribution, circulation, and massing
- Spatial ordering and occupancy concepts
- Sustainability goals & building performance
- Clarity and resolution in drawings, models, and verbal presentation

The second interim review (Assignment 12) involves an evaluation of the quality and intent of design development objectives, specifically:

- Structural logic and system
- Enclosure strategy, materiality, and tectonic logic
- Code analysis, compliance, life safety, and accessibility
- Wall section design and performance
- Clarity and resolution in drawings, models, and verbal presentation

The final review (Assignment 15) involves an evaluation of the quality and intent of design integration and synthesis, specifically:

- Development since previous assignments
- Technical Integration
- Focus area development
- Relationships between existing & new construction
- Mechanical Systems Integration
- Clarity and resolution in drawings, models, verbal presentation, and Design Report

Assessment Method:

ARCH 7103 - Integrated Design Studio assesses this criterion through a Student Learning Outcome that covers its extents:

- SLO S5: Design Synthesis–to instill in students 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.

In Fall 2022, SLO S5 was assessed numerically through the final project and narratively through a collection of labs.

In Fall 2023, SLO S5 is assessed through specific evaluation criteria within the Final Project deliverables assignment (see Notes I & II below).

Note I: The Final Project deliverables assignment assesses multiple SLOs, and the assessment of each SLO within it is based on unique evaluation criteria: different components of the deliverables will be assessed independently, and those independent assessments will be mapped onto unique SLOs. For clarity, a diagram explaining how evaluation criteria from the deliverables assignment are mapped onto specific SLOs is included in the Team Room folder associated with each SLO. To demonstrate the arc of continuous learning that culminates in the Final Project

deliverables, preliminary assignments related to specific SLOs are included in the Team Room folder associated with each SLO.

Note II: Students work in pairs or groups of three on their Final Projects, and instructors conduct verbal interviews throughout the semester to evaluate how the team is delegating responsibilities and sharing acquired knowledge, so as to ensure that all team members are acquiring the understanding and abilities evidenced in the deliverables.

Assessment Data & Analysis:

Our benchmark for this criterion is for 80% of students to score a 3 or 4 in our 4-point assessment rubric for each part of the SLO. In Fall 2022, students performed as follows:

- SLO S5: 97% of students met our benchmark (38% scored a 4)

Our assessment includes a distinction between students' meeting the benchmark and achieving the highest level of assessment, so as to better discern how to improve our program.

In Fall 2022, our benchmark for SLO S5 was met, and a relatively modest number of students (compared to other criteria) who met the benchmark were assessed at the highest level of "commendable."

Fall 2023 assessment reports, including evaluation rubrics, are included in the Team Room.

In Fall 2022, preliminary investigations were not tied to hard deadlines, and students tended to use the synthesis phase of the semester to backfill some of the incomplete work in those investigations, which somewhat compromised the integrity of the synthesis phase. Similarly, some struggled with the intended balance between passive and active systems, leaning heavenly toward high-tech energy solutions that, while compelling, were not as complementary to their broader design premises as other solutions could have been. Additionally, the fast pace of the studio made it difficult for students to synthesize some of their simulation data from preliminary exercises. Finally, design synthesis, while demonstrated to a satisfactory degree of ability by all students, was not as well understood as a type of "technical storytelling" that translates the mediation of complex parameters into compelling architectural narratives, which we consider to be a commendable level of ability. Students produce well-synthesized work but often struggle to present synthesis in a compelling and concise way.

Proposed Adjustments (from Fall 2022):

- Consider a new SLO devoted to design synthesis storytelling (ultimately perceived as redundant and unnecessary, and better addressed through clarifying and reiterating the nature of synthesis).
- Conclude preliminary assignments with more concrete due dates, but also emphasize continuities between assignments. (Enacted in Fall 2023)
- Include more explicit instruction and guidance on presentations. (Greater emphasis in syllabus and assignments has been enacted in Fall 2023.)
- Create a better balance between generating metrics and translating/communicating data analysis. (Greater emphasis in syllabus and assignments has been enacted in Fall 2023.)
- Place greater emphasis on environmental site design and water mitigation strategies. (Addressable in ARCH 5305 labs and Case Study project)

Proposed Adjustments (from Fall 2023):

Proposed changes suggested by our assessment in Fall 2023 are included in the assessment reports included in the Team Room.

Supporting Materials in Team Room:

- ARCH 7103 Syllabus and Schedule
- Relevant preliminary assignments in ARCH 7103 & 5305
- Relevant lectures in ARCH 7103 & ARCH 5305
- Assessed assignment in ARCH 7103: Final Review deliverables and Design Report.
- Diagram mapping specific evaluation criteria of deliverables to relevant SLOs
- Fall 2023 Assessment Reports (benchmarks, evaluation rubrics, data analysis, and additional proposed adjustments)
- Syllabi of courses where pre-assessment learning occurs

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.

Approach:

Our students develop an ability to make design decisions through the integration of multiple building systems and measurable outcomes of building performance in the final year of our program. Our approach involves a tight coordination between our technology sequence and our design studio sequence, so as to introduce and reinforce an *understanding* of the basic principles of integration before we assess our students' *ability* to apply that understanding toward a precise design outcome.

Our assumptions regarding the inherent interconnectedness of technology and culture underlie our approach. Building systems and technologies are framed as drivers of aesthetic and social goals, not as functional add-ons separate from the meaning of a building. Building performance, likewise, is understood as a central contributor to the design process whose parameters steer the generation of formal and spatial compositions. Measuring building performance is considered as a mode of inquiry from which to learn, not as a test by which to justify. The close relationship between these two courses furthers our goal to integrate performance and design.

Pre-Assessment Learning:

Our coordinated technology and studio sequences provided a layered approach that exposes students to a series of narrowly defined instances of how technological investigations may be integrated into their design decisions. Each instance of the strategy couples an immediate societal or cultural question with the design of a comprehensive building. Whereas one semester may focus on how principles of sustainability and daylighting may steer a design premise, another may focus on how material choices and properties may affect design development. By aligning these studies and lessons in technology courses with concurrent design studios, students gain an understanding of the integral relationship between design and technology. These instances of synergy prepare students for a more robust interrogation of building integration at our point of assessment, where multiple layers of technology are coordinated both with each other and with the design of a complex building.

Assessment Point: ARCH 7103 - Integrated Design Studio

ARCH 7103 - Integrated Design Studio is a required course for all students in the M.Arch. program (3 tracks: M.Arch. I, M.Arch. II, and M.Arch. AS). It is taken in the fall semester of the final year of the program. We began assessing this criterion in this course annually using our current assessment infrastructure in Fall 2022.

The coordinator of ARCH 7103 is also the instructor of ARCH 5305 - Building Systems Integration, a corequisite course that contributes to the continuous learning that culminates in the assessed assignment for this criterion. Reciprocity between research and design is a fundamental assumption of our program, and the coordination between these courses is our most fulsome realization of that reciprocity. Students investigate an array of building systems through advanced methods of simulation and analysis in ARCH 5305 - Building Systems Integration, first through a case study and then, in the final project for ARCH 5305, through either a continuation of the case study or a direct application onto their design project in ARCH 7103. Regardless of that decision, all students demonstrate their abilities with respect to building integration in the final project for ARCH 7103.

Assignments in ARCH 7103 especially relevant to this criterion include:

- Assignment 5: Building Performance
- Assignment 7: Structure Integration
- Assignment 8: Facades & Materiality
- Assignment 11: Wall Section
- Assignment 13: Mechanical System

TechSem topics in ARCH 7103 especially relevant to this criterion include:

- Zoning, Accessibility, Life Safety & Occupancy
- Building Performance
- Facades, Materiality, and Structure Integration
- Wall Section Details
- Mechanical Systems Integration
- Revit Workshop

The first interim review in ARCH 7103 (Assignment 6) involves an evaluation of the quality and intent of schematic design objectives, specifically:

- Project statement: architectural inquiry and position
- Site analysis, site design, and zoning & development plan
- Program analysis, distribution, circulation, and massing
- Spatial ordering and occupancy concepts
- Sustainability goals & building performance
- Clarity and resolution in drawings, models, and verbal presentation

The second interim review in ARCH 7103 (Assignment 12) involves an evaluation of the quality and intent of design development objectives, specifically:

- Structural logic and system
- Enclosure strategy, materiality, and tectonic logic
- Code analysis, compliance, life safety, and accessibility
- Wall section design and performance
- Clarity and resolution in drawings, models, and verbal presentation

The final review in ARCH 7103 (Assignment 15) involves an evaluation of the quality and intent of design integration and synthesis, specifically:

- Development since previous assignments
- Technical Integration
- Focus area development
- Relationships between existing & new construction
- Mechanical Systems Integration

- Clarity and resolution in drawings, models, verbal presentation, and Design Report

Preliminary assignments in ARCH 5305 especially relevant to this criterion include the Case Study Project, which involves comprehensive analyses of building systems and building systems integration, and the Final Project, which involves a comprehensive three-dimensional representation of a net zero building section and supporting performance evaluation.

Assessment Method:

ARCH 7103 - Integrated Design Studio and ARCH 5305 - Building Systems Integration assess this criterion through a single Student Learning Outcome:

- SLO S6: Building Integration–to instill in students 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

In Fall 2022, SLO S6 was assessed numerically through the final project and narratively through a collection of labs.

In Fall 2023, SLO S6 is assessed through specific evaluation criteria within the Final Project deliverables assignment (see Notes I & II below).

Note I: The Final Project deliverables assignment assesses multiple SLOs, and the assessment of each SLO within it is based on unique evaluation criteria: different components of the deliverables will be assessed independently, and those independent assessments will be mapped onto unique SLOs. For clarity, a diagram explaining how evaluation criteria from the deliverables assignment are mapped onto specific SLOs is included in the Team Room folder associated with each SLO. To demonstrate the arc of continuous learning that culminates in the Final Project deliverables, preliminary assignments related to specific SLOs are included in the Team Room folder associated with each SLO.

Note II: Students work in pairs or groups of three on their Final Projects, and instructors conduct verbal interviews throughout the semester to evaluate how the team is delegating responsibilities and sharing acquired knowledge, so as to ensure that all team members are acquiring the understanding and abilities evidenced in the deliverables.

Assessment Data & Analysis:

Our benchmark for this criterion is for 80% of students to score a 3 or 4 in our 4-point assessment rubric for each part of the SLO. In Fall 2022, students performed as follows:

- SLO S6: 91% of students met our benchmark (44% scored a 4)

Our assessment includes a distinction between students' meeting the benchmark and achieving the highest level of assessment, so as to better discern how to improve our program.

In Fall 2022, our benchmark for Former SLO S6 was met, and a relatively modest number of students (compared to other criteria) who met the benchmark were assessed at the highest level of "commendable."

Fall 2023 assessment reports, including evaluation rubrics, are included in the Team Room.

In Fall 2022, students were engaged with the lectures and enjoyed seeing ‘real world’ examples like construction photos and professional drawing sets. The remote format of the labs (recordings, asynchronous replays, etc.) supports different types of learning.

Workshops were a great benefit to the students, and invited guests were enthusiastic about the learning environment we provided. It was also beneficial to mix students between each of the different studio sections so that they could be exposed to different perspectives.

Assignments were thorough and comprehensive, and student submissions were generally good, though there were typically 1 or 2 submissions per assignment that completely missed the mark. Those who were struggling to make decisions in ARCH 7103 had a hard time keeping up in ARCH 5305.

In Fall 2022, the building program was reduced in scale compared to years past, so as to address some of the issues with our previous office tower programs. Those programs afforded a degree of clarity from a systems-design standpoint, but they encouraged students to rely on systems engineers to do the bulk of the performance work, and the architectural moves were limited mostly to form extrusion and space-planning within parts of a tower.

Our intention with a lower/smaller building was to inspire students to think more precisely about the role of architectural design and spatial/formal organization in building performance, and to provoke a more progressive approach to sustainable design; however, although students produced an impressive amount of quality work, they still tended to be risk-averse and suffered from a lack of innovative ideas, presumably because of the intense pace of the semester. Assignment 8 in Fall 2022 (focus area/wall section) was the most successful aspect of the semester, in terms of demonstrating an ability to create an integrated building design.

Proposed Adjustments (from Fall 2022):

In Fall 2023, we have changed the scale and program again, so as to evaluate how an adaptive reuse project may help to mediate some of the continuing issues in this otherwise very successful area of our curriculum.

Other reflections and proposed changes include:

- Consider a slower pace to the semester, as the quick pace worked well in certain circumstances, such as integrating structural and mechanical systems into the design process earlier than students had ever done before, but our goal of provoking more novel strategies (particularly concerning fresh air and passive strategies) may benefit from a slower pace. (Sequence of assignments adjusted in Fall 2023 and will reassess)
- Streamline the deadlines and overlaps between the two corequisite courses to address student concerns and struggles to manage their time; our overlapping and cross-pollinating strategy was intended to emphasize the codependence of the two courses on each other and to simulate the rhythms of practice, but synergies between assignments need to be more closely correlated and/or assignment deadlines need to be more spaced out. (Sequence of assignments adjusted in Fall 2023 and will reassess)
- Limit the scope of lab assignments to be completed during class unless they directly contribute to the three main assignments. There was the illusion of too much ‘busy work’ from class to class. (TechSems offer a new model that will be assessed in Fall 2023.)
- Better coordinate content and expectations of lectures and labs taught by different faculty, so as to explain and/or eliminate perceived and real discrepancies between different perspectives on the team of faculty. (TechSems offer a new model that will be assessed in Fall 2023.)
- Develop better tools for analyzing the energy implications of a mechanical system; Climate Studio seems to be developing this component of the tool, but this area is a

weakness in the semester, and more emphasis on carbon accounting would integrate nicely with the structural-focused portion of the semester. (TechSems in ARCH 7103 and the new lab sequence in ARCH 5305 offer a new model that will be assessed in Fall 2023.)

Proposed Adjustments (from Fall 2023):

Proposed changes suggested by our assessment in Fall 2023 are included in the assessment reports included in the Team Room.

Supporting Materials in Team Room:

- ARCH 7103 & ARCH 5305 Syllabi and Schedules.
- Relevant preliminary assignments in ARCH 7103 & 5305.
- Relevant lectures in ARCH 7103 & ARCH 5305.
- Assessed assignment in ARCH 7103: Final Review deliverables and Design Report.
- Diagram mapping specific evaluation criteria of deliverables to relevant SLOs.
- Fall 2023 Assessment Reports (benchmarks, evaluation rubrics, data analysis, and additional proposed adjustments)
- Syllabi of courses where pre-assessment learning occurs

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:

UNC Charlotte is accredited by the Commission on Colleges of the Southern Association Colleges and Schools (SACSCOC) to award baccalaureate, master's, and doctorate degrees. (SACSCOC Web Page)

Regional accrediting bodies such as SACSCOC conduct comprehensive reviews of institutions of higher education. This review ensures that "the institution (1) has a mission appropriate to higher education, (2) has resources, programs, and services sufficient to accomplish and sustain that mission, and (3) maintains clearly specified educational objectives that are consistent with its mission and appropriate to the degrees it offers and that indicate whether it is successful in achieving its stated objectives" (Principles of Accreditation: Foundations for Quality Enhancement). The accreditation granted encompasses the entire institution, including all degree programs, instructional sites, and online programs. (Academic Affairs Assessment: Accreditation Web Page)

UNC Charlotte meets the NAAB Condition for the Institutional Accreditation requirement. In 2013, UNC Charlotte was successfully granted a full ten-year term of accreditation. "In December 2013 at the Annual Meeting of SACSCOC, the University of North Carolina at Charlotte received reaffirmation of accreditation for the next ten years." The institution is currently undergoing the 2023 review for its next reaffirmation. The letter indicating the 2023 reaffirmation is expected in January 2024.
(Academic Affairs Assessment: SACSCOC Reaffirmation Web Page)

The official letter of re-accreditation: SACSCOC Accreditation 2013 Reaffirmation Letter

The University will continue to conduct institution and program assessments in an effort to enhance student success. For more information, visit the Academic Affairs site on the process of Accreditation.

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:

The following architecture courses are considered to be the core of the Professional Studies referenced in this section. A full explanation of the M.Arch curriculum may be found here. Courses required of our students vary depending on their enrollment in one of our three M.Arch tracks. The details of the three tracks may be found at the following links: M.Arch I; M.Arch II; M.Arch AS. Curricular maps for each track are included in the Team Room.

The following Professional Studies courses are required of M.Arch students in the M.Arch I track (96 credits); see below for course variables in other tracks:

Studio
ARCH 6101 - Design Studio: Fundamentals - 6 credits
ARCH 6102 - Design Studio: Fundamentals - 6 credits
ARCH 6103 - Design Studio: Options (Summer) - 6 credits
ARCH 7101 - Design Studio: Topical - 6 credits *
ARCH 7102 - Design Studio: Topical - 6 credits *
ARCH 7103 - Design Studio - Integrated Project Design - 6 credits *^
ARCH 7104 - Design Studio: Diploma Project - 6 credits *^

Architectural History and Theory
ARCH 5201 - Architectural History I - 3 credits
ARCH 5202 - Architectural History II - 3 credits
ARCH 5203 - Architectural History III - 3 credits *^^
ARCH 5204 - Architectural History Topics - 3 credits *^^
ARCH 7201 - Design Methodologies - 3 credits *^

Building Technology
ARCH 5301 - Materials and Principles - 3 credits
ARCH 5302 - Environmental Systems Principles - 3 credits
ARCH 5303 - Structural Principles - 3 credits
ARCH 5304 - Structural Systems - 3 credits
ARCH 5305 - Building Systems Integration - 3 credits *^

Representation and Computation
ARCH 6602 - Representation I - 3 credits
ARCH 6603 - Representation II - 3 credits
ARCH 5604 - Computational Methods - 3 credits *^^
ARCH 5605 - Computational Practice - 3 credits *^^

Professional Practice
ARCH 5206 - Professional Practice - 3 credits *^

Electives
ARCH 5050 - Architectural Electives (3 required) - 9 credits total *^

Key
* Courses designated with an asterisk are required of students in the M.Arch II track (60 credits). In addition, students in this track are required to take two additional electives designated as Technology Topic electives.
^ Courses designated with a caret are required of students in M.Arch AS tracks (40 credits). In addition, students in this track are required to take a 6-credit studio and a 4-credit document course in the summer semester prior to the academic year of graduation.
^^ Courses designated with a double caret are taken by M.Arch AS students while enrolled in our 128-credit Bachelor of Arts in Architecture program.

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.

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

Program Response:

All graduate program applications are adjudicated by the Graduate School at UNC Charlotte. All undergraduate degrees, both domestic and international, are evaluated based on a rigorous set of admissions requirements. These requirements are based on the undergraduate degree standards required by the University of North Carolina system. The general studies requirements of all incoming graduate students to the M.Arch program are met through their undergraduate institution's general education requirements and are rigorously evaluated by the Graduate School at UNC Charlotte.

General Studies Requirement for Baccalaureate Degree:
All baccalaureate degrees require completion of 120 credit hours (except for programs that have applied for and received a waiver to exceed 120 credit hours from the UNC Charlotte Board of Trustees), including all requirements for a major field of study. (UNC Charlotte's B.A. in Architecture degree is 128 credit hours.) Specific requirements for degrees and programs are presented under the college and departmental sections of the Catalog.

UNC Charlotte General Education Requirements
The General Education Program is central to UNC Charlotte's basic mission of providing all of its undergraduates with a liberal arts education. It provides all undergraduate students, regardless of their majors, with the foundations they will need to be informed people who have the ability to act thoughtfully in society, the ability to make critical judgments, and the ability to enjoy a life dedicated to learning and the pleasures of intellectual and artistic pursuits.

For Fall 2023, the General Education Program at UNC Charlotte was overhauled to explore an integrative vision engaging ways of knowing across a diverse range of disciplines focused on core competencies of communication, quantitative/data, critical thinking, and intercultural. The General Education Program is administered by the University College, but courses are taught by faculty from across the University.

The General Education program requires 37 to 41 credit hours of coursework, as outlined below. Students do not typically take all of these courses in their first year.

I. Communication Competency (3-4 credits)
II. Quantitative/Data Competency Courses (6 credits)
III. Critical Thinking Competency (3 credits)
IV. Global and Local Themes (12 credits)
- Global Social Science
- Global Arts/Humanities
- Local Social Science

- Local Arts/Humanities

V. Natural Sciences (7 credits)

Information about the specific courses that meet each of these requirements can be found on the University College General Education website and in the University Catalog. See 4.3 Evaluation of Preparatory Education below for a summary of how the SoA addresses applicants' prior academic experience.

SACSCOC General Education Requirements

The Southern Association of Colleges and Schools Commission on Colleges, UNC Charlotte's institutional regional accreditor, stipulates the following general education requirements:

Core Requirement 9.3 reads:
The institution requires the successful completion of a general education component at the undergraduate level that:
(a) is based on a coherent rationale.
(b) is a substantial component of each undergraduate degree program. For degree completion in associate programs, the component constitutes a minimum of 15 semester hours or the equivalent; for the baccalaureate programs, a minimum of 30 semester hours or the equivalent.

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:

All M.Arch students have at least three elective courses within their degree plan, which may be seen here. Students in the M.Arch II track have five electives, two of which are designated as Technology Topic electives. Our elective offerings are constantly changing, giving students opportunities to select from many options during the course of their studies. In addition, our two mid-sequence studios are topic-based, and students can select among multiple opportunities between the sections (in our most recent lottery in Fall 2023, 80% of students received their first choice of studio topics, and the rest received their second choice).

We also work with students interested in fulfilling their elective requirements outside of our department, in departments as varied as Art, Geography, Business Management, and Computer Science. In a growing number of cases, our faculty members are collaborating with faculty in other departments to offer interdisciplinary cross-listed courses, which automatically count as architecture electives and provide different types of learning opportunities than our regular electives. Our response to Section 5.3 - Curricular Development below includes more information on how we are working to increase opportunities for our students to study outside of our department.

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:
In addition to the M.Arch degree, the following additional degree programs are offered within the David R. Ravin School of Architecture:

Undergraduate
Bachelor of Arts in Architecture (B.A. in Arch.)

Graduate
Master of Science in Architecture (M.S.)
Master of Urban Design (M.U.D.)

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:

The B.Arch degree at UNC Charlotte was deactivated. NAAB confirmed this degree phase-out in 2022 (see Introduction, Program Changes for details).

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.

Program Response:

The M.Arch program at the David R. Ravin School of Architecture is exclusively a graduate program. All admitted students must have an undergraduate degree from an accredited institution of higher learning. This prerequisite undergraduate degree must include a minimum of 128 semester credit hours. UNC Charlotte requires a minimum of 30 semester credit hours in general studies for an undergraduate degree. The M.Arch program requires a total of 96 graduate credit hours above the required undergraduate degree. Together, the number of credit hours for the combined undergraduate (128) and graduate (96) degrees for graduation is 224 semester credits. See below for a list of all required course numbers, titles, and credits. An overview of the M.Arch program may also be found here.

Master of Architecture program course list

Master of Architecture							
Undergraduate courses if preparatory							
Required Prof Courses		Elective Prof courses		General Studies		Optional Studies	
Course #s & titles	crds	Course #s & titles	crds	Course #s & titles	crds	Course #s & titles	crds
ARCH 6101 - Design Studio: Fundamentals	6	ARCH 5050 - Architectural Elective	3				
ARCH 6102 - Design Studio: Fundamentals	6	ARCH 5050 - Architectural Elective	3				
ARCH 6103 - Design Studio: Options (Summer)	6	ARCH 5050 - Architectural Elective	3				
ARCH 7101 - Design Studio: Topical	6						
ARCH 7102 - Design Studio: Topical	6						
ARCH 7103 - Design Studio - Integrated Project	6						
ARCH 7104 - Design Studio: Diploma Project	6						
ARCH 5201 - Architectural History I	3						
ARCH 5202 - Architectural History II	3						
ARCH 5203 - Architectural History III	3						
ARCH 5204 - Architectural History Topics	3						
ARCH 7201 - Design Methodologies	3						
ARCH 5301 - Materials and Principles	3						
ARCH 5302 - Environmental Systems Principles	3						
ARCH 5303 - Structural Principles	3						
ARCH 5304 - Structural Systems	3						
ARCH 5305 - Building Systems Integration	3						
ARCH 6602 - Representation I	3						
ARCH 6603 - Representation II	3						
ARCH 5604 - Computational Methods	3						
ARCH 5605 - Computational Practice	3						
ARCH 5206 - Professional Practice	3						
Total req prof	87	Total elec prof	9	Total gen stud	0	Total Opt'l st	0
Total # of degree credits							**96**

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 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:

Admission to the M.Arch program is competitive and requires two separate admission processes: 1) admission to The Graduate School at UNC Charlotte, and 2) admission to the School of Architecture (SoA).

All application materials are due in mid-January. Early Priority Deadlines are strongly considered for financial assistance. Applications received later are considered only if space is available. Required application materials include:

- Graduate School application
- Official transcripts from all previous, college-level institutions
- Official GRE test scores (TOEFL if applicable)
- Statement of Purpose (approximately 500 words)
- Resume (educational and professional experience)
- Portfolio (PDF document upload)
- Three recommendations referencing personal and professional qualifications

All applicants to the M.Arch Track 2 must complete a B.A. or B.S. in Architecture from a NAAB-accredited institution prior to enrollment (with the exception of Early Entry students who are completing final B.A. in Architecture requirements simultaneously). UNC Charlotte students who have earned the pre-professional B.A. in Architecture are automatically recommended for admission to the M.Arch Track 2 if they have earned an architecture / major GPA of 3.25. UNC Charlotte students who do not meet this requirement may submit a full application for admission to the M.Arch Track 2.

<u>Evaluation of Applicants' Prior Academic Experience</u>
For the Master of Architecture (M.Arch), we have established a comprehensive process for evaluating applicants' prior academic experience to confirm their readiness for advanced architectural studies. Our evaluation criteria encompass:

- Transcript analysis: Our evaluation criteria include a thorough analysis of applicants' transcripts, conducted by both the Graduate Admission Committee at the School of Architecture and the Graduate School. We specifically focus on their undergraduate coursework to assess their completion of prerequisite courses in the humanities, fine arts, mathematics, natural sciences, and social sciences, in accordance with our General Education Program's content and credit-hour requirements.
- Prerequisite courses: We ensure that applicants have fulfilled the necessary prerequisite courses within these disciplines, confirming their possession of a foundational knowledge base consistent with our baccalaureate general studies requirement.
- Transfer Students: For transfer students from other institutions, we maintain documented criteria and processes to verify their compliance with the general education requirement set by our General Education Program. This involves a meticulous review of their transcripts and course histories to ensure alignment with our standards.

4.3.2 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:

Applicants who completed a qualifying preprofessional B.A. or B.S. from another institution: To ensure that incoming students qualify for the M.Arch Track 2 (2-year curriculum), the M.Arch Admissions Committee and Academic Advisor carefully review all prior architectural coursework and official transcripts to determine if an applicant meets the required entry-level competencies.

The Admissions Committee completes a Core Competency Evaluation Form to assist in evaluating whether an applicant has completed each of the required prerequisite courses in their pre-professional coursework. In order to qualify for the standard M.Arch curriculum, applicants from other (Non-SoA) pre-professional architecture programs must have completed the following Entry Level Competencies:

- Minimum of 6 semesters of architecture design studio
- Minimum of 2 semesters of architecture history/theory
- Minimum of 4 semesters of building technology equivalent to:
    - Material and Assembly Principles (ARCH 4301 / 5301)
    - Environmental Systems Principles (ARCH 4302 / 5302)
    - Structural Principles (ARCH 4303 / 5303)
    - Structural Systems (ARCH 4304 / 5304)
- Minimum of 1 architecture computation course (average 3 credit hours/course).

Missing prerequisite courses can often be completed in the process of the M.Arch Track 2 curriculum, often without extending the time-to-degree.

The process of evaluating Preparatory Education includes:

1. The Admissions Committee completes a Core Competency Evaluation Form through transcript review.
2. The Academic Advisor further investigates missing prerequisite courses for provisionally admitted Applicants, which can include online research of courses. The Academic Advisor evaluates whether the applicant is qualified to complete the standard, or a modified version of, the M.Arch Track 2 curriculum. At this time, it may be recommended that the candidate be considered for the longer M.Arch Track 1 path if substantial deficiencies exist.
3. If there are doubts regarding the necessary content of a prerequisite course taken at a different institution, the applicant must supply course materials (e.g., syllabus, calendar, assignment statements, and faculty teaching the required course in the SoA to ensure parity).
4. The Academic Advisor communicates with the committee and the applicant if any prerequisites must be completed prior to entering the program, or if there are substitutions that can be made to rectify the deficiencies.
5. The Academic Advisor will communicate the findings and requirements to the applicant by letter at the time of admission.

Applicants with modest deficiencies in prerequisites may complete missing requirements during the 2-year M.Arch Track 2 program. An applicant with substantial prerequisite deficiencies will be redirected to the M.Arch Track 1 program.

4.3.3 A program must demonstrate that it has clearly articulated the evaluation of baccalaureate-degree 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:

When there are doubts about the equivalency of an applicant's prerequisite course, the applicant is asked to supply course materials (syllabus, calendar, assignment statements, student notebook, exams, projects, etc.). These materials are then reviewed by the faculty teaching the required course in the SoA to ensure parity.

Evaluation of Preparatory Education for M.Arch Track 1:
Application to the M.Arch Track 1 program is straightforward. Applicants must have completed a 4-year undergraduate degree from a regionally accredited college or university. It is not assumed that M.Arch Track 1 students have completed any formal architectural education or coursework, and the curriculum is designed to present a full range of beginning to advanced studies. Prior to enrollment, students must have completed the following basic undergraduate requirements:

- Physics I
- Pre-Calculus

NAAB

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:

For clarity, the administrative structure of the University is presented below hierarchically from the statewide level to the University, College, and School of Architecture.

UNC University System Leadership and General Administration
The University of North Carolina is a seventeen-campus university system, serving more than 240,000 students across North Carolina in 16 university campuses and one Math / Science focused residential high school. The UNC system is headed by a President, who is the system's chief administrative and executive officer. The President is subject to the direction of the Board of Governors, which serves as the policy-making body for the University of North Carolina system. The Board of Governors has 24 voting members, elected by the Senate and House of Representatives of the North Carolina General Assembly, to staggered four-year terms. Additionally, the president of the UNC Association of Student Governments serves as a nonvoting, ex officio member of the Board. No person may be elected to more than three full four-year terms. The President and Board of Governors are supported by a staff within the UNC General Administration. (UNC System Web Page)

Each campus is headed by a Chancellor who is chosen by the UNC Board of Governors and is responsible to the system President. Each campus has its own Board of Trustees with delegated powers (from the Board of Governors) over the academic and other operations of its campus.

"UNC operates under an arrangement of shared governance that leverages the collective strengths of its campus chancellors and administrators, local boards of trustees, and the UNC President and Board of Governors. The University also honors the important traditional role of the faculty in the governance of the academy." (UNC System Web Page)

UNC System Current Administration
UNC System President, Peter Hans, 2020 - Present
UNC Charlotte Chancellor, Sharon Gaber, 2020 - Present (Chief Executive Officer)
UNC Charlotte Interim Provost, Jennifer Troyer, 2023 - Present (Chief Academic Officer)

University of North Carolina at Charlotte
UNC Charlotte's Chancellor is Sharon Gaber. Seven individuals under her leadership (the Provost and Vice Chancellor for Academic Affairs, four Vice Chancellors, and two Directors) manage the following areas of university administration: Academic Affairs, Student Affairs, University Advancement, General Counsel, Internal Audit, Business Affairs, and Athletics. (UNC Charlotte Leadership Web Page)

UNC Charlotte Governance Organizational Chart

A Board of Trustees is the governing body for UNC Charlotte. Eight of its thirteen members are elected to four-year terms by the UNC Board of Governors, four are appointed by the Governor, and the Student Body President serves as an ex-officio member.

The University of North Carolina at Charlotte is composed of seven academic colleges: the Belk College of Business, the College of Arts + Architecture, the College of Computing and Informatics, the College of Education, the College of Health and Human Services, the College of Liberal Arts and Sciences, and the William States Lee College of Engineering, as well as the University College, which "serves all undergraduate students at UNC Charlotte through the General Education program" (UNC Charlotte, University College Web Page). Each College is led by a Dean.

College of Arts + Architecture
The administrative structure for the College of Arts + Architecture, including the School of Architecture is illustrated in the College of Arts and Architecture Administration / Staff Organizational Chart.

Current Administration / Leadership in the CoA+A
Jose Gamez, Interim Dean
Delia Neil, Interim Associate Dean for Academic Affairs
Evelyn Orman, Interim Associate Dean of Research
Jae Emerling, Interim Director of Graduate Programs
Dean Adams, Senior Associate Dean for Performing Arts
Erica Andrews, Assistant Dean for Advising and Assessment
TBD, Assistant Dean for Inclusive Excellence
Rose Diaz, Director of Information Technology
Wendy Fishman, Director of Collaborative Works
Adam Justice, Director of Galleries
H. Tesh Ramey, Arts Education Specialist
Kaustavi Sarkar, Director of the Arts + Architecture Honors Program
Mary Welsh, Director of Business Affairs
Meg Freeman Whalen, Director of Communications and External Relations

Current Administration / Leadership in the SoA
Blaine Brownell, Director
Thomas Forget, Associate Director
Greg Snyder, Undergraduate Program Director
Mona Azarbayjani, Graduate Program Director–M.Arch
Sekou Cooke, Graduate Program Director–Master of Urban Design
Emily Makas, Graduate Program Director–M.S. in Architecture

College Dean: The Interim Dean of the College of Arts + Architecture, Jose Gamez, is the chief academic, planning, and operations officer for the college, which is composed of the School of Architecture, and the departments of Art and Art History, Music, Dance, and Theater. The Dean is responsible for the management of operations, the initiation of new programs, managing existing programs to achieve their potential with the resources provided, maintaining relations with the professional community, fundraising, and other activities as designated by the University Administration. The Dean's responsibilities also include Reappointment, Promotion and Tenure (RPT) reviews, budget overview and prioritization, and addressing student and faculty needs and concerns.

College Associate and Assistant Deans: In the next administrative tier are three Associate Deans. The Interim Associate Dean of Academic Affairs, Delia Neil, works with the Director and Chairs in the development and implementation of their academic programs and missions, oversees advising and assessment, assists students, and represents the College on a diverse set of university committees that address academic and operational matters. The Interim Associate Dean for Research, Evelyn Orman, establishes College-wide research initiatives and support mechanisms in coordination with the University's research office, oversees the utilization of College facilities and resources, and conducts regular

assessments for analysis and reporting purposes. The Senior Associate Dean for the Performing Arts, Dean Adams, oversees the College's Performing Arts Services Unit and works with the Departments of Dance, Music, and Theatre on the implementation of the production and performance aspects of their programs. The Interim Director of Graduate Programs, Jae Emerling, oversees graduate student education, enrollment, advising, and support throughout the College. The Assistant Dean for Advising and Assessment, Erica Andrews, is responsible for evaluating student access, retention, and success metrics, including student learning objectives and program accreditation requirements. The Assistant Dean for Inclusive Excellence (currently unfilled) is responsible for supporting diversity, equity, and inclusion initiatives throughout the College.

School Director and Department Chairs: Whereas each of the four constituent Departments—Art and Art History, Music, Dance, and Theatre—are headed by Department Chairs, the School of Architecture is headed by a Director. The Director of the School of Architecture is responsible for Reappointment, Promotion and Tenure (RPT) reviews, coordinating teaching, advancing the School through admissions, recruitment, assessment, and accreditation, managing the School's financial and human resources, working with professional organizations and state/regional agencies to advance the SoA's mission, and representing the School to professional organizations.

SoA Associate Director: The Associate Director of the School of Architecture, Thomas Forget, provides coordination and oversight of advising, admissions & recruitment, graduation audits, student records, course scheduling, promotional materials, and the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and NAAB Accreditations.

Program Directors / Coordinators: Within the School of Architecture, Program Directors are appointed by the SoA Director for each of the degree programs—an Undergraduate Program Director, a Graduate Program Director–M.Arch, a Graduate Program Director–Master of Urban Design, and a Graduate Program Director–M.S. in Arch. These individuals have an overview role in their programs, advise the Director and the Curriculum Committee (of which they are members), and work with faculty on logistical and curricular matters.

Studio Coordinators: There are also assigned semester-level coordinators for fundamental studios in the undergraduate program and the Integrated Studio in the M.Arch program. Ensuring alignment with SoA's Curriculum Map, Studio Coordinators host pre-semester planning meetings and coordinate regularly with all faculty teaching sections in the studio to maximize productive integration.

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:

Faculty Committees and Governance: UNC Charlotte

The Faculty Council is a policy-making and consultative body, responsible for the quality of instruction and scholarship at the University as outlined by the Board of Trustees of the University of North Carolina at Charlotte and the Board of Governors of the University of North Carolina. (UNC Charlotte, Faculty Governance Web Page)

The Faculty Council is composed of an elected voting member from each academic unit. Ex-officio members include: the Faculty Executive Committee, the Chancellor, the Provost and Vice Chancellor for Academic Affairs, the Vice Chancellor for Student Affairs, the Vice

Chancellor for Development and Public Service, the Dean of the Graduate School, the University Librarian, and the Deans of each of the Colleges of the University.

University-level committees are typically open to tenure-stream faculty and are typically appointed by election of the university faculty or the CoA+A faculty. University-level faculty committees have either an “Advisory Responsibilities” or “Policy Making Responsibilities.” The SoA has an elected representative on each of the following committees:

- Faculty Executive Grants Committee
- Faculty Employment Status Committee
- Faculty Honorary Degree Advisory Committee
- Faculty Information and Technology Services Advisory Committee
- Faculty Research Grants Committee
- Faculty Scholarship of Teaching & Learning Grants Committee
- Graduate Council

A full list of University Level committees can be viewed online on the Faculty Governance Site of the Division of Academic Affairs.

Faculty Committees and Governance: CoA+A

The COA+A adopted its inaugural by-laws in December 2008 (during its first academic year of establishment). Revisions are frequently considered, proposed, and adopted. The most recent revisions were distributed to (and approved by) faculty in the five units in May 2023. The focus of the most recent revision was the Review, Tenure, and Promotion policies of the College, with a special emphasis on equity-related and practice-based research activities. Current COA+A by-laws are included in the Team Room.

SoA faculty are involved and active in the evolution of the CoA+A programs and operations.A description of the charge for each of the committees can be viewed in the Team Room.

- CoA+A Faculty Council
- CoA+A Curriculum Committee
- CoA+A College Review Committee
- CoA+A Reassignment of Duties Committee

Faculty Committees and Governance: SoA

The SoA first considered devising its own set of by-laws distinct from, but also complementary of, COA+A by-laws in 2016. The process culminated in May 2019 with the adoption of the SoA’s inaugural by-laws. Revisions were made in May 2021 and May 2023. The more recent revisions were in response to the reorganization of leadership roles in the SoA to comply with the policies of The Graduate School. Current SoA by-laws are included in the Team Room.

SoA faculty are involved and active in the evolution of the SoA programs and operations. All faculty are expected to participate in Leadership and Service. A description of the charge for each of the committees can be viewed in the Team Room.

- SoA Personnel Committee
- SoA Program Directors
- SoA Curriculum and Pedagogy
- B.A. in Arch Admissions
- M.U.D. Admissions
- M.Arch Admissions
- SoA Strategic Plan Working Group
- SoA Traveling Fellowships
- SoA Scholarships

- SoA Diversity and Inclusion
- SoA NCARB Integrated Path to Architectural Licensure (IPAL)
- ACSA Faculty Councilor
- SoA Public Lecture Series
- SoA International Education Committee
- SoA Summer Design Discovery Camp
- SoA Safety
- SoA Design Computation Group
- SoA Design Science and Building Technology Group
- SoA Urban Design Group

Staff Committees / Governance
SoA staff also have opportunities for involvement in governance, leadership and service at both the university and state system level.

University Staff Council
The Staff Council is the elected representative body delegated the authority and responsibility to bring matters of staff concern to the attention of the administration. The Staff Council is authorized to enact by-laws as needed to conduct its affairs.

UNC State System Staff Assembly
The UNC Staff Assembly is the state system level "elected body of representatives of the staff of the seventeen campuses of the University of North Carolina, General Administration, and affiliates." Its goal is "to improve communications, understanding, and morale throughout the whole of our respective communities, and to increase efficiency and productivity in campus operations."

Student Committees / Governance
Student governance and representation included several elected bodies including the Student Government Association and the Resident Students Association. Undergraduate students at all levels may run for elected office to serve on the Freshman Class Council, Sophomore Class Council, Junior Class Council, and Senior Class Council. The corollary organization for graduate students is the Graduate and Professional Student Government which is designed to meet the academic, social, and logistical needs of graduate and post-baccalaureate students.

Students can choose from over 400 Student Organizations on campus. The Division of Student Affairs hosts a website where students can view these opportunities.

5.2 Planning and Assessment

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

5.2.1 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:

The development of multi-year Strategic Plans is mandatory for all units at UNC Charlotte. UNC Charlotte, the CoA+A, and the SoA are on 5- or 10-year planning cycles (see below). To promote integrated plans, the assessment of academic units is measured by the alignment of their activities with their college strategic plans and the alignment of these plans with the UNC Charlotte Institutional Mission. The University, College, and School of Architecture Strategic Plans in effect during the period under review are:

2021-2031 UNC Charlotte Strategic Plan
2021-2026 College of Arts + Architecture Strategic Plan
2021-2026 School of Architecture Strategic Plan

The SoA 2021-2026 Strategic Plan was developed by the Director of the School of Architecture and a Strategic Planning Workgroup with input and continual feedback from School faculty, staff, and students.The development of the plan began in Spring 2021 with an environmental scan that collected feedback from the entire School community. The Strategic Planning Workgroup subsequently held multiple work sessions and shared iterative plan drafts with the School community for additional feedback. Further refinement of the plan occurred during the summer of 2021, and the plan was officially launched in Fall 2021: School of Architecture Strategic Plan (2021-2026):

The plan consists of three primary objectives, which are focused on the environment, society, and advancement. A top-level overview is as follows:

GOAL 1: [planet]
Promote environmental justice and improve our use of physical resources.
- Objective 1.1: Increase environmental literacy in our curriculum and professional development opportunities.
- Objective 1.2: Transform our physical resources and improve material streams.
- Objective 1.3: Contribute toward city and regional environmental initiatives.

GOAL 2: [people]
Promote social justice and community health.
- Objective 2.1: Model diverse, inclusive, accessible, and antiracist practices in our curriculum, programming, and research.
- Objective 2.2: Diversify our faculty, students, and staff.
- Objective 2.3: Foster Health and Belonging.
- Objective 2.4: Strengthen Local and International Community Relationships.

GOAL 3: [progress]
Design for innovation.
- Objective 3.1: Instantiate a culture of innovation.
- Objective 3.2: Enhance our curricula to anticipate future change.
- Objective 3.3: Increase our scholarly capacity and research profile.

The requirement to meet the NAAB Conditions is one of the main performance targets of Objective 3.2 (above):
“Develop plan to satisfy new NAAB conditions of accreditation in alignment with AIA Framework for Design Excellence and SoA areas of strategic distinction.”

The following table indicates the connections across the 2021 strategic plans of the School, College, and University.

School	College	University
GOAL 1: Promote environmental justice and improve our use of physical resources. [planet]	**Goal 4. Model environmental, economic, and social sustainability**	**Goal D1. Foster a thriving culture based on integrity and respect that values all people and the planet.**
Objective 1.1: Increase environmental literacy in our curriculum and professional development opportunities.	Obj 4.2. Develop curricula and advance research, creative practices, and projects that address the 17 United Nations Sustainable Development Goals.	Objective D1.2. Make the University a national leader in sustainability.
Objective 1.2: Transform our physical resources and improve material streams.	Obj 1.2. Improve financial stewardship to best support the mission of the CoA+A;	Objective B1.3. Enhance University infrastructure (including shared equipment

	mindfully and transparently employ resources in support of College and unit priorities.	and facilities) for research, scholarship and creative discovery.
	Obj 4.1. Demonstrate social and environmental sustainability in College operations.	Objective D5.2. Enhance reputation, bolster engagement, and contribute to enrollment through the promotion of the University's arts, design, performing arts, library, gardens and beautiful campus.
Objective 1.3: Contribute toward city and regional environmental initiatives.		Objective B5.2. Grow national and global collaborations to expand UNC Charlotte's ability to address complex global challenges.
GOAL 2: Promote social justice and community health. [people]	**Goal 3. Build a college community where equity, inclusion, diversity, anti-racism, and access are evident in our policies and practices**	**Goal D2. Demonstrate leadership in diversity, equity and inclusion.**
Objective 2.1: Model diverse, inclusive, accessible, and antiracist practices in our curriculum, programming, and research.	Obj 3.1. Revise curricula to increase diversity, equity and inclusion to prepare students to thrive and create in a global society.	Objective D2.1. Create a culture that embraces diversity, equity and inclusion.
		Objective D2.2. Cultivate leadership that demonstrates a commitment to diversity, equity and inclusion.
Objective 2.2: Diversify our faculty, students, and staff.	Obj 3.2. Recruit, hire, retain and mentor diverse faculty and staff; support initiatives that enable intellectual leadership in matters of equity, diversity, inclusion, anti-racism, and access.	**Goal B2. Advance the research mission by recruiting, nurturing and retaining world-class, diverse faculty, staff and students.**
		Objective B2.1. Increase and retain research-engaged faculty (tenure and nontenure), postdoctoral trainees and expertly trained staff to support research, scholarship and creative expression.
		Objective B2.2. Prepare undergraduates and graduate students for careers involving research, scholarship, creative discovery and entrepreneurship.
Objective 2.3: Foster Health and Belonging.	Obj 3.3. Attract and nurture a diverse student body and promote openness and respect for and understanding of others.	Objective A4.1. Develop students' resilience, self-confidence, leadership and desire for lifelong learning.
		Objective A5.2. Support the success and well-being of graduate students and postdoctoral trainees through appropriate resources, policies and practices.
Objective 2.4: Strengthen Local and International Community Relationships.	**Goal 2. Cultivate a thriving network of sustained, trust-based partnerships that build CoA+A's identity as a respected collaborator in the cultural landscape**	**Goal C2. Support the improvement of educational and socioeconomic outcomes for the Charlotte region by mobilizing University resources and community collaborations.**
	Obj 2.2. Increase community-centered research and learning.	Objective A4.2. Connect the educational experience with the University's urban mission to increase student involvement in experiential learning and community engagement.
		Objective C2.2. Foster community collaborations to address socioeconomic outcomes for the region and its populations.
		Objective C5.2 Engage with traditionally underserved communities in Charlotte and the surrounding region to advance educational success in culturally relevant ways.

		Objective A3.2. Broaden opportunities for students to gain international exposure and experiences.
GOAL 3: Design for innovation. [progress]	**Goal 1. Advance the College of Arts + Architecture as a robust organization in a post-pandemic reality**	**Goal B4. Enhance the academic reputations of all colleges and foster signature areas of research, scholarship and creative discovery.**
Objective 3.1: Instantiate a culture of innovation.	Obj 2.1. Increase interdisciplinary research and study opportunities at UNC Charlotte.	**Goal B5. Bolster interdisciplinary, intra-institutional and inter-institutional, and global collaborations to address complex challenges.**
		Objective B5.1. Foster and grow collaborations across disciplines within UNC Charlotte.
		Objective B4.2. Celebrate faculty, staff and student successes (grants, fellowships, honorific awards, commissions, publications, etc.) of all sizes and from all disciplines.
Objective 3.2: Enhance our curricula to anticipate future change.		**Goal B3. Expand post baccalaureate education, doctoral studies and postdoctoral training and achieve the highest recognition for exemplary programs.**
		Objective B3.1. Grow and expand key graduate programs that contribute to top-tier research university metrics.
		Objective B3.2. Improve recruitment strategies and financial support for graduate students.
		Objective B4.1 Develop world-class signature research areas and academic programs that advance the University's mission to address urban challenges.
Objective 3.3: Increase our scholarly capacity and research profile.	Obj 1.1. Build the CoA+A's visibility, reputation, and strength as a college of visual arts, performing arts, design, and history.	**Goal B1. Achieve national prominence as an emerging, top-tier research university.**
		Objective D4.2. Expand outreach and build institutional branding and visibility through a unifying, comprehensive communications plan.

5.2.2 Key performance indicators used by the unit and the institution

Program Response:

The University uses a dashboard of targets to measure progress toward the accomplishment of its 2021-2031 Strategic Plan. The Board of Trustees uses the following metrics to understand overall success.

Transform Students' Lives Through Educational Opportunity and Excellence:
- 6-Year Graduation (Year 1 69.9%, Goal 78%)
- Average Federal Indebtedness of Graduating Class (Year 1 $21.5k, goal $23.9k)
- Studnet Satisfaction (Seniors) (Year 1 83.1%, goal 88%)
- National University Ranking (Year 1 219th, goal 175th)
- Public National University Ranking (Year 1 112th, goal 87th)

Power the Future Through Inquiry, Research, and Creative Discovery:
- Federal + Other Research Expenditures (Year 1 $51.9M, goal $125M)
- Annual Research Awards (Year 1 $57.33M)

- Top 50 Program (Graduate) Rankings (Year 1 7 programs, goal 32 programs)
- Total Tenure Track Faculty and Non-Faculty Researchers (Year 1 808, goal 1065)
- Tenure Track Faculty (Year 1 790, goal 1000)
- Non-Faculty Researchers (Year 1 18, goal 65)

Drive Progress for North Carolina and Beyond:
- Experiential Learning (Year 1 50.8%, goal 65%)
- Service Hours on Engagement Activities (Year 1 7,070, goal 20,000)
- Total Undergraduate and Graduate Enrollment (Year 1 29,551, goal 33,024)
- Undergraduate Enrollment (Year 1 23,461, goal 25,411)
- Graduate Enrollment (Year 1 6,090, goal 7,613)

Live Our Guiding Commitments by Leading in Equity and Engagement:
- Alumni Giving (Year 1 3.7%, goal 10%)
- Director's Cup Annual Final Ranking (Year 1 Top 100-0x, Top 75-0x, goal Top 100-5x, Top 75-1x)
- Endowment per Student (Year 1 $11.1k, goal $15.3k)

Additionally, various management levels within the University, including the SoA, use additional data to determine the impact of implementation efforts as the plan progresses so that adjustments may be made to improve results. The following SoA KPIs are organized according to the 2021 SoA Strategic Plan:

Objective 1.1: Increase environmental literacy in our curriculum and professional development opportunities.
- Percent of syllabi including environmental literacy content
- Percent of faculty and staff who have completed environmental literacy training

Objective 1.2: Transform our physical resources and improve material streams.
- Measure of resource utilization and waste production
- Master plan for growth and space occupation

Objective 1.3: Contribute toward city and regional environmental initiatives.
- Co-hosting environmental summit

Objective 2.1: Model diverse, inclusive, accessible, and antiracist practices in our curriculum, programming, and research.
- Percent of elements in course syllabi that reflect diverse models
- Intercultural competency survey

Objective 2.2: Diversify our faculty, students, and staff.
- Demographic representation
- North Carolina architecture student transfer facilitation plan

Objective 2.3: Foster Health and Belonging.
- Mental health survey
- Number of faculty with mentors

Objective 2.4: Strengthen Local and International Community Relationships.
- Percent of course syllabi that include opportunities for community engagement

Objective 3.1: Instantiate a culture of innovation.
- Communication and dissemination of faculty and staff contributions

Objective 3.2: Enhance our curricula to anticipate future change.

- NAAB accreditation
- Demand analysis of new programs

Objective 3.3: Increase our scholarly capacity and research profile.
- National and international school rankings

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

Program Response: FY23 progress toward 2021 Strategic Plan performance targets

Goals	Goals and objectives	Performance targets (w/updates)	Progress %
GOAL 1: Promote environmental justice and improve our use of physical resources. [planet]	Objective 1.1: Increase environmental literacy in our curriculum and professional development opportunities.	Establish a curricular map outlining environmental learning objectives and literacies.	10%
		By the end of a five-year period, all full-time faculty and staff will have had sustainable design training equivalent to introductory LEED coursework.	20%
	Objective 1.2: Transform our physical resources and improve material streams.	Reduce the Storrs Hall dumpster volume by half over a five-year period.	20%
		Create a sustainable master plan that accommodates planned enrollment growth.	50%
	Objective 1.3: Contribute toward city and regional environmental initiatives.	Partner with local collaborators to host an environmentally focused summit, symposium, or lecture series within the next five years.	100%
GOAL 2: Promote social justice and community health. [people]	Objective 2.1: Model diverse, inclusive, accessible, and antiracist practices in our curriculum, programming, and research.	30% of course precedents, case studies, models shown or assigned to students to reflect diverse designers, clients, or contexts in three years' time.	20%
		Implement, conduct, and assess the results of a School-wide intercultural competency survey.	20%
	Objective 2.2: Diversify our faculty, students, and staff.	Aim for faculty composition (full-time + part-time instructors) to mirror U.S. demographics (40% BIPOC including MENA, 50% women) in five years' time.	80%
		Develop an architecture student transfer facilitation plan with regional community colleges.	20%
	Objective 2.3: Foster Health and Belonging.	Implement, conduct, and assess the results of a School-wide mental health survey.	40%
		All tenure-track faculty members to have a faculty mentor.	40%
	Objective 2.4: Strengthen Local and International Community Relationships.	Develop a curricular map that establishes strategic opportunities for community engagement.	20%
GOAL 3: Design for innovation. [progress]	Objective 3.1: Instantiate a culture of innovation.	Highlight faculty and staff research and teaching according to strategic areas of distinction and catalyze new interdisciplinary connections and support opportunities.	50%
	Objective 3.2: Enhance our curricula to anticipate future change.	Develop plan to satisfy new NAAB conditions of accreditation in alignment with AIA Framework for Design Excellence and SoA areas of strategic distinction.	70%
		Establish new MS concentration in critical heritage studies.	100%
	Objective 3.3: Increase our scholarly capacity and research profile.	Survey established architecture school assessment rankings and increase year-over-year performance based on selected criteria.	30%
Summary			**43.13%**

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

Program Response:

Strengths

SoA strengths include measures of student success, advances in research, a growing reputation, and supportive infrastructure.

- Access + excellence: The UNC Charlotte community believes that access and excellence are not contradictory, but complementary. We aim to deliver a first-rate educational experience in an inclusive way for the North Carolina population and beyond.
- High student performance: The SoA student tends to outperform the average student on campus.
- Focus on teaching: Based on our roots as a teaching institution, faculty have a passionate dedication to teaching. Furthermore, the average SoA faculty member typically receives higher student evaluation scores than the average faculty member on campus.
- Student-to-full-time-faculty ratio: The SoA has about 30 full-time faculty members (tenure-stream faculty and visiting fellows) for roughly 360 students, or a 1:12 faculty-to-student ratio. This is a better-than-average ratio for an urban university, as institutions in metropolitan regions often have a lower tenure density.
- Strong travel programs: The SoA prioritizes travel as a learning experience. Our Rome semester program attracts an ever-increasing number of students, as do our Istanbul and Tokyo programs. Domestic field trips to Washington, DC, Chicago, Seattle, New York, and San Francisco are also highlights of the student academic experience.
- Student body diversity: The SoA student population is currently over 40% non-white and about half male, and this diversity enhances the student experience.
- Community college student access: In 2022, the SoA welcomed its first cohort of transfer students from Central Piedmont Community College, the result of a multi-year effort to develop a robust articulation agreement.
- Design Computation Dual Degree Program: This joint Computer Science and Architecture program offers a unique opportunity for students to develop the knowledge to lead the integration of computation in architectural practice and research.
- Strong student organizations: The SoA has very active student-led organizations, including AIAS, NOMAS, Freedom By Design, MASS, USGBC, and Women in Architecture Students (WiAS). Student leadership is especially strong.
- Enrollment growth: In keeping with UNC Charlotte's strategic aims, the SoA has grown its enrollment by 12% in the last three years without relaxing admissions standards.
- Faculty research and teaching distinctions: SoA faculty members are leading advances on many scholarly fronts, with award-winning research and increasing reputations as a result.
- Research funding growth: A priority on research productivity has motivated an increase in both external and internal research funding. SoA research funding has more than quintupled in the past three years.
- Research connections to teaching: Faculty members routinely bring their research to the classroom, and topical studios and seminars enable students to enjoy immersive experiences focused on topics of faculty expertise.
- Strong architecture community: Charlotte is home to a growing number of architecture firms and allied disciplines, and the SoA takes full advantage of the expertise of local practitioners in the classroom and on design reviews.
- Positive relationships with other CoAA units: The five units in the College are physically situated in close proximity to one another and maintain a supportive and collegial relationship. Interdisciplinary teaching opportunities have strengthened intercollegiate connections.

- Supportive alumni network: Now 52 years old, architecture at UNC Charlotte is proud to have over 2,500 alumni. The 50th-anniversary celebration in 2021-2022 rekindled positive alumni sentiment about the SoA and its future.
- Healthy budget: The SoA is fortunate to be in a good financial position with sufficient resources for high tenure density in faculty positions, adequate staff positions, and basic operations infrastructure.
- Supportive facilities and physical resources: The SoA benefits from a well-equipped and supportive collection of workshops, labs, spaces, and other physical infrastructure serving the study and advancement of architecture.

Challenges

- Mental health: Mental health remains an ongoing concern, particularly among students, that intensified during the pandemic. Students continue to face challenges in reacclimating to an in-person culture of learning and community-building.
- Academic dishonesty: Evidence of student cheating has increased since the pandemic and has been exacerbated by readily available access to ChatGPT and other artificial intelligence tools.
- Part-time employment: The downside of a healthy job market in a growing city is that local firms place excessive demands on student employees, and many students are working at least 20 hours or more per week. Although part-time jobs provide welcome financial support for students, faculty members complain that students' academic performance has declined due to their divided attention. Students' full schedules also result in underwhelming attendance of extracurricular events, such as the lecture series and colloquium talks.
- Space limitations: The SoA's growth in student enrollment, and the increased utilization of the SoA's physical facilities for other College functions (such as College staff offices), have greatly reduced the available space for student instruction, faculty research, and other functions.
- Curriculum-packing: Increased specialization and growth in recent educational architectural trends have resulted in more curricular additions than subtractions, limiting opportunities for elective and interdisciplinary courses.
- Design Computation: What was recently an area of research and teaching distinction in the SoA is now challenged by faculty attrition, as we have lost four full-time faculty members with expertise and interest in digital fabrication, robotics, computer programming, and visualization.
- Visibility and reputation: Given the SoA's relative youth and small size compared with more established architecture programs nationally, there is a concern that our national rankings are unjustifiably low given the quality of our program.

Opportunities

- Climate adaptation: The University has recently engaged a planning firm to develop a new campus master plan, which raises the possibility of addressing environmental concerns in our physical facilities and operations in measurable ways.
- New technologies: The AEC industry continues to experience significant technological changes with the growth of spatial computing, artificial intelligence, robotic manufacturing, and other trends. Students should be given more opportunities to engage in such technologies in their coursework and the support of faculty research.
- Interdisciplinary opportunities: The SoA has collaborated with other units in the College and University episodically, such as targeted interdisciplinary courses. There is potential to expand interdisciplinary collaborations into more significant educational opportunities.
- Future faculty hires: Recent faculty attrition has created the opportunity for several additional faculty hires, which we hope to pursue this coming year.
- Alumni partnerships: A school's alumni base is often an untapped resource for productive partnerships and collaborations beyond the typical institutional requests for financial support.

- Student travel participation: We aspire to achieve 100% student participation in study abroad and field trip opportunities. Although not every student is able to travel, we aim to remove the financial and other barriers to participation in faculty-led travel programs.
- Diversify homogeneous areas: Subdisciplinary subjects such as building science and computation are some of the most white male-dominated areas of knowledge within architecture. The SoA's expertise in these areas, coupled with our relatively diverse student body, suggests an opportunity to help diversify these areas in the profession and academia through recruiting, retention, and career development support.
- Visibility and reputation: The high quality of the SoA's curriculum, research, and student performance highlights an opportunity to elevate our national reputation beyond our current status.

5.2.5 Ongoing outside input from others, including practitioners.

Program Response:

The School of Architecture benefits from its location in a fast-growing urban area with a large number of architecture firms and practicing alums. Like many urban universities, UNC Charlotte regularly finds opportunities for practitioners in the classroom, and each semester includes five to eight studios led by local practicing architects.

Pinups and design critiques also provide routine opportunities for practitioners to be involved in the review of student work, and our graduates benefit from a high job placement rate—in part because local firms become apprised of students' abilities while they are in school.

Local practitioners and other stakeholders are also regularly involved in SoA governance as well as community-building activities. All active faculty and staff members—including part-time and Emeritus faculty—are invited to participate in faculty meetings, brown bag lunch discussions, lectures, exhibitions, and other events.

The SoA regularly partners with AIA Charlotte, AIA North Carolina, and NC NOMA to host events and activities such as jointly sponsored lectures, symposia, and exhibits. A recent example was the 2022 SAY IT LOUD! North Carolina exhibition, the largest yet of its kind, which was jointly organized by AIA NC and NC NOMA and hosted by the SoA.

The SoA Director also functions as an Ex Officio member of the AIA NC Board of Directors and provides updates and solicits feedback regarding important issues and events.

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:

Assessments influence all facets of the operations of the SoA. They take different formats and arise in response to different mandates, inputs, information, and data from a range of sources. Regular assessments completed in the SoA include:

- Data Development & Analysis: Student retention and time-to-degree (annual)
- Data Development & Analysis: Admissions Data Analysis (academics, gender, etc.) (annual)
- Data Analysis: Student academic progression through Advising procedures (every semester)
- Student Learning / Success: Course performance indicated in grades (two times every semester)

- Student Learning / Work Quality: Panel review of student work in studios/courses (every semester)
- Student Learning / Work Quality: End of year curriculum discussions (annual)
- Conditions for Accreditation: NAAB Annual Reporting (annual)
- Conditions for Accreditation: NAAB Accreditation Continuation Reviews (multi-year intervals)
- Student Learning: SACSCOC Accreditation Student Learning Objectives (all terms, every program)
- Student Learning / Education Experience: On-line Course Evaluations (all courses, all terms)
- Student Learning / Education Experience: End of Year Student Surveys (annual)
- Student Learning / Education Experience: Student Representative advisory to the Director (twice a semester; more frequently with important matters arise)
- Curricular Planning: Program and year level coordination (all terms)
- Curricular Planning: Curriculum Committee research, projects, initiatives (+ monthly)
- Departmental Activities and Progress: SoA reporting to the University (annual)
- Faculty / Administrator Performance: Performance Reviews (annual)

The below sections provide more detail on our efforts regarding specific types and areas of self-assessment.

Student Learning Assessment
Our program's assessment of Student Learning has a robust and increasingly sophisticated infrastructure of self-assessment, the details of which are outlined in Section 5.3.1 below.

Annual Reporting
Unit Strategic Plans typically establish long-term goals, which are assessed annually for progress and relevance to the broader missions of the College and University. Since 2003, the University has used a comprehensive assessment process rooted in the University's Institutional Mission, extending that mission into each college and department/school through the Strategic Plans. This leads to an integrated institutional plan. SoA performance is measured by the alignment of its activities with the CoA+A Strategic Plan and the alignment of the CoA+A Strategic Plan with the Institutional Mission.

The Director of the School of Architecture develops an Annual Report that is submitted to the Dean of the College of Arts + Architecture, highlighting School, faculty, and student accomplishments, new action steps planned to achieve strategic goals, examples of data-driven decisions and improvements, and progress/performance outcomes made toward SoA Strategic Plan goals and objectives.

Faculty Assessment
Data is collected annually from the Faculty for personnel reviews, including:
1) Faculty C.V.
2) Faculty Teaching Portfolio with samples of student work
3) Faculty Professional Development Portfolio
4) Service Portfolio
Faculty are assessed in the form of annual letters of evaluation, which takes into account the materials submitted as well as course evaluations submitted by students, and other relevant materials. Submitted materials and the Annual Review play an important role in Reappointment, Promotion and Tenure (RPT) reviews.

Administrator Assessment
The Dean of the College and the Director of the School are both evaluated annually. The faculty and staff play an active role in providing confidential feedback through surveys administered by the School Review Committee (for the Director's evaluation) or the College Review Committee

(for the Dean's evaluation). These are the same committees that review candidates for Reappointment, Tenure and Promotion in the SoA and the CoA+A.

Advising
The SoA has thorough and engaged student advising processes, informed by substantial assessment efforts that inform individual student communication directly, and broadly influence SoA programming, recruitment, curriculum, and resources. The SoA uses standard indicators—grades, retention, and time-to-degree—and individualized assessments to address each student's particular needs.

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:

The SoA is committed to continuous curricular improvement, and commits substantial resources (human resources, time, and energy) to these efforts. To say our efforts are conducted annually is to understate the frequency with which we propose, consider, and debate curricular changes; however, changes are formalized on an annual basis according to the policies and procedures of the University's registrar and course catalog. Our Curriculum Committee meets monthly and tends to call faculty votes on proposed changes at the end of every semester. The Associate Director manages the procedures necessary to enact approved changes.

Our efforts are primarily charted through our Curriculum Map, which is a dynamic planning document that visualizes relationships between courses and the progression of learning throughout our undergraduate and graduate programs. The document articulates the conceptual framework for the curriculum, including concurrent and consecutive learning foci. The content of this document has been expanded to include the coordinated learning objectives between the simultaneous required classes, and the sequential thematic lines that run through the curricula from semester to semester. At any given time, the document is solidified for public consumption and communication, but behind the scenes, it is a working document that steers the mechanisms of our curricular development outlined below.

Recent highlights of our curricular development include both major and minor adjustments. The biggest change since our last accreditation was the deactivation of our Bachelor of Architecture and the activation of our M.Arch AS track, specifically catered to students who complete the full pre-professional requirements of our Bachelor of Arts in Architecture degree. This accomplishment is a direct result of our culture and assessment and change. Considering the scale of the change, we deliberated and researched options over the course of several academic years, and eventually took action that benefitted all of our degree programs and tracks.

A more modest but still substantial change involved a transition from a thesis-based capstone project to a design research-based capstone project, alongside moving our Integrated Design Studio (now ARCH 7103) into the final year of the program (from its former position in the penultimate year), which both facilitated our M.Arch AS track and allowed for more robust integration with our Building Systems Integration course (now ARCH 5305).

Technology and design integration is a major focus of current curricular discussions, and we are using the rich integration of Integrated Building Design and Building Systems Integration to devise new instances of deep integration between other design studios and their parallel/corequisite technology courses. More broadly, we are envisioning our technology sequence to reflect the growing importance of technology to the design process. Our plans include small changes, such

as new names to better reflect content, and big changes, such as realigning credit hours to better reflect the importance of technology to design studios.

A complementary change under consideration is the elimination of one or both of the computation courses in order to embed that area of learning more directly into our design studios. These courses were developed when computation was an emerging phenomenon in our discipline, and we are considering how to adjust to its ubiquity, perhaps again through a realignment of credit hours and a fuller integration into design courses. A primary motivation for this change would be to increase opportunities for our students to take elective courses in other disciplines, such as Geography, Computer Science, Art, and Business Management. We work with students seeking these opportunities and make special exemptions, but more elective opportunities would facilitate more interdisciplinary studies, which we consider to be essential to the education of an architect today.

Those and other proposals currently being enacted and/or considered are documented in more detail in the “Proposed Adjustments” sections related to each criterion in Condition 3 - Program and Student Criteria. The extensiveness of those sections is emblematic of our ethic of assessment and change.

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

Program Response:

Our program’s assessment of our coursework has a robust and increasingly sophisticated infrastructure of self-assessment, conducted annually. Our assessment cycle is based on the calendar year (as opposed to the academic year). Assessment occurs in all three semesters (Spring, Summer, and Fall), but mostly in Spring and Fall semesters.

The origins of our system lie in our responsibilities related to the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) accreditation of the University. Prior to distilling the impact of NAAB’s 2020 Conditions and Procedures for Accreditation, we worked within an infrastructure that measured fifteen SLOs outcomes in different parts of the curriculum each year: 1) five outcomes in the Bachelor of Arts in Architecture, 2) five outcomes in the Master of Architecture, 3) three outcomes in of the Master of Urban Design, and 4) two outcomes in the post-professional Master of Science in Architecture program. In most cases, our infrastructure assessed multiple aspects of learning associated with the parent outcome.

When we began to build an assessment infrastructure for the 2020 Conditions and Procedures for NAAB Accreditation, we adopted the assessment infrastructure we were already using for SACSCOC. We then expanded and modified the infrastructure to meet the specific criteria required by NAAB. That new infrastructure assesses fourteen SLOs within our accredited graduate program, one derived from each of the fourteen Program and Student Criteria of Condition 3. Some SLOs are divided into parts that assess different aspects of an outcome separately from each other, as needed to address the nuances and layers of the Program and Student Criteria, so as to hone our perception of how we meet the criteria.

An important next step in the evolution of our assessment infrastructure is to revise the infrastructure we had been using for SACSCOC assessment to match the logic (and in some cases the precise SLOs) used in the new infrastructure built for NAAB assessment. Some SLOs may be used for both assessments. Others will be used for only one of the two assessments. In all cases, the logic of the assessment infrastructure will be the same, which will facilitate both processes.

Another pending change is linking our assessment processes to Canvas, our online course management and grading platform. Dr. Erica Andrews, our Assistant Dean for Advising and Assessment, is piloting an innovative project to embed our assessment of SLOs within our Canvas grading matrices, thereby eliminating the need for faculty to complete assessment matrices and streamlining data collection, so that we can focus more on data analysis and curricular and cultural responses to the data.

Our assessment infrastructure, of course, is a dynamic one. As the assessment reports in the Team Room demonstrate, we are continually evaluating and modifying our SLOs in response to our assessments. In some cases, new or modified SLOs will be assessed for the first time in Fall 2023, and our alignment of our NAAB and SACSCOC infrastructures is facilitating our growth and development. The pending alignment with Canvas promises to facilitate our efforts to improve even further.

The integration of assessment into Canvas will be especially helpful to our efforts to fuse assessment with curricular development. As we assess, our assignments will evolve within the same platform, and our regular curricular discussions in committee meetings and more informal venue can utilize on our Canvas sites, which are easily shared. We envision a platform that becomes a working hub for curricular assessment *and* development.

At the time of this report, we are in the middle of our second assessment cycle using our rebuilt infrastructure, which is proving effective. Updates on the second half of the current assessment cycle, including updates on the next steps in the evolution of our infrastructure outlined above, are included in the Team Room.

5.3.2 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:

Curriculum Committee

The SoA has an active Curriculum Committee that meets at least once per month during the academic year. The charge of the committee is to continuously evaluate and propose revisions to the curriculum. Per the SoA's by-laws, committee members represent diverse faculty and administrative perspectives. Members include: Graduate and Undergraduate Program Directors; representatives elected from within focus-area subcommittees composed of faculty associated with building technology, urban design, computation, and history and theory; and at-large representatives elected by the entire faculty. In addition, the agendas of meetings are shared with all faculty and staff in advance, and all faculty and staff are welcome at any and all meetings. Depending on the agenda, the committee may invite specific faculty and staff to gain their insights and expertise on important matters.

Program and Year-Level Coordination

Each of the programs has an appointed Director who manages planning processes for the program and serves as a liaison between the SoA Director, the Curriculum Committee, the faculty, and the students. Undergraduate year-level Coordinators work on organizational matters at a finer scale. Prior to each semester, the Program Directors and Year Level Coordinators meet with all faculty teaching required courses for a given student cohort to coordinate shared curricular objectives, calendars, and deadlines.

Assistant Dean of Advising and Assessment

The CoA+A has an Assistant Dean of Advising and Assessment. This full-time administrator provides support to all five college units through leadership and support for student academic

services (including academic advising), student learning outcomes assessment, and other data-related initiatives to inform and advance the CoA+A and SoA's strategic goals.

Faculty Input: Curriculum Committee
Faculty have the greatest level of involvement in influencing Curriculum Assessment and Curriculum Development. The Curriculum Committee (CC) has a broad faculty constituency (described in the previous section) and is responsible for developing and assessing proposals. Meetings are always open to the whole faculty who advise the process. The CC reviews syllabi, program and course change proposals, has developed policies related to study abroad, and the guiding Curriculum Map which was also fully vetted with faculty input.

Faculty Input: SACSCOC Assessments
SACSCOC Assessments directly focus on student learning, and thus can inform teaching and coursework. Each of the degree programs in the SoA completes a set of assessments each semester to measure identified Student Learning Objectives (SLOs). This assessment is required by UNC Charlotte's regional SACSCOC accreditation processes.

Student Input: Student Surveys
Student surveys have been used over the course of many years. In the past, they were conducted biannually to provide data from a large cross-section of graduate and undergraduate students on issues such as time spent in the studio, time spent on outside employment, economic need and its effects on student performance, demographics, etc. Over the past two years, the SoA has increased the frequency of the surveys and has sought feedback from all graduating students. The data helps the SoA to understand the experience of its students

Student Input: Course Evaluations
Online course evaluations are completed every semester for every course. These evaluations are accessible to the faculty, who can use this information to make appropriate modifications to improve courses and learning. The data is used by the Director in the Annual Faculty Reviews in order to reflect on the quality and effectiveness of teaching.

Student Input: Student Representatives
The SoA has a student body of peer-selected representatives from each year level of the undergraduate and graduate programs. This group meets regularly with the Director to discuss ideas, projects, and plans, and to advise on matters of importance to students. Student Representatives have also played a major role in revising and updating SoA's Studio Culture Policy and helping to facilitate an inclusive process between the students, faculty, and SoA administration. Student Representative meetings generally occur twice a semester.

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

Program Response:

School of Architecture Faculty
Each year, SoA courses are taught by a combination of full-time faculty, teaching fellows, and part-time lecturers. In AY 2022-23, the roster of full-time faculty includes twenty-one tenured faculty, five tenure-track faculty (with full teaching, professional development, and service

loads), one Research Fellow (full-time with a 50% teaching load), and one Visiting Lecturer (full-time); part-time faculty includes one Teaching Fellow and seven part-time Lecturers. Two tenured SoA faculty members currently serve in College leadership positions—the Interim CoA+A Dean (not carrying a teaching load) and Associate Dean for Research and Graduate Programs (50% teaching load); two others currently serve in SoA leadership positions—the SoA Director and SoA Associate Director, both of whom teach a partial load. Of the remaining seventeen tenured faculty members, four are Professors and thirteen are Associate Professors.

Faculty Workload Conditions and Policies

Typical Teaching Loads

The typical full-time teaching load for SoA faculty members at UNC Charlotte is two classes per semester. For most full-time faculty, this includes one 5- or 6-credit hour studio (undergraduate or graduate) and one 3-credit hour course (lecture or seminar format, typically cross-listed for undergraduates and graduates). Studios are 10.5 contact hours per week, while lectures and seminars are typically 3 contact hours per week. Consequently, most full-time faculty are scheduled with approximately 14 course contact hours per week. By credit hour, the SoA teaching load is typically 15-18 credit hours taught per academic year (which is consistent with the UNC System Policy Manual for Doctoral University I Institutions). The SoA also works to develop a teaching schedule that allows a dedicated non-teaching day for professional development.

College of Arts and Architecture Workload Policy
School of Architecture Workload Policy
UNC Charlotte Academic Procedure: Teaching Load

Teaching Environment/Enrollment Management:

The SoA is committed to providing students with an excellent learning environment. Part of this commitment includes controlled admissions and enrollment practices that optimize the availability of teaching/learning spaces (classrooms and studios), labs and equipment, and appropriate student-to-teacher ratios. The SoA makes careful admission decisions with planned enrollment numbers that are appropriate to our faculty, space, and facility resources. For more information, see APR 4.3 Evaluation of Preparatory Education, which includes a description of admissions processes for all accredited programs in the SoA.

The School of Architecture recognizes the influence of teaching and classroom conditions on the learning experience. A tutorial exchange between the student and teacher is possible in smaller classes. SoA students benefit from a large number of full-time teaching faculty, and a talented group of part-time lecturers and adjuncts who teach required and elective course offerings.

Managed course sizes create a beneficial teaching and learning environment for both students and faculty. The average enrollment in courses (calculated for the past three academic years) is documented in the Team Room. Below is a summary of the different environments encountered by our students.

Studio enrollments are managed with an average of 12-16 students, allowing individualized instruction and design feedback. Seminars adhere to the same target number of students (12-16 on average) to ensure direct engagement and discussion.

Seven of our course requirements in our M.Arch I track (fewer in the other tracks) are large lecture-format courses cross-listed with undergraduate courses (enrollments between 80 and 90 students total); three of those courses include graduate-only discussion sections (12-32 students on average) that facilitate graduate-level learning; one other has built-in lab sessions that facilitate take-home work and allow for informal exchanges with the instructor.

Five of our required courses in all three of our M.Arch tracks are larger-format, graduate-only courses. Enrollment in these midsize courses varies between 32-50 students on average because students in the M.Arch AS track take two of them as undergraduates in our Bachelor of Arts in Architecture program.

Staff Support
The staff of the School of Architecture is experienced, highly coordinated, and accessible to both students and faculty. Staff members work closely with the administration, faculty, and students of the School of Architecture and also with the staff of the College of Arts + Architecture. All staff positions are full-time and 100% administrative in nature unless otherwise indicated.

5.4.2 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 SoA is committed to providing programming that informs students about the processes and requirements for becoming a licensed architect. Three Faculty members have leadership roles related to professional internship and preparation:

- David Thaddeus, FAIA: Architect Licensing Advisor
- Liz McCormick, AIA: AIA Charlotte Liaison
- Marc Manack, AIA: Current AIA Charlotte President

Architect Licensing Advisor
The Architect Licensing Advisor serves as a resource for students as they transition from the academy into practice by mentoring students and sponsoring activities. During the Academic Year 2022-23, the SoA had one Architect Licensing Advisor (ALA), Professor David Thaddeus, FAIA. He is a full-time faculty member and full professor who is licensed to practice architecture in the United States. Professor Thaddeus mentors students regarding the AXP program, the ARE, and eventual licensure.

Students are annually updated on pending or enacted changes related to AXP and the specific requirements necessary for licensure. The SoA hosts an annual AXP/ARE meeting for all students, typically at the beginning of the Spring Semester. Cathe M. Evans, the AXP State Coordinator, is an alumnus of the SoA and presents with the ALA primer on the AXP and the ARE. The presentation is followed by a “question-and-answer” session. In addition to this annual event, Professor Thaddeus has individual meetings with students throughout the year that address the AXP and ARE.

Integrated Path to Architectural Licensure (IPAL)
The SoA was one of the 32 Schools of Architecture that submitted a Request for Information (RFI) in response to NCARB’s call for interest in pursuing an Integrated Path to Architectural Licensure. Selected in 2016 as one of thirteen schools nationally to pilot the IPAL initiative, the SoA’s IPAL program has institutionalized a structured internship experience for participating students as part of a combined academic / internship path. The iPAL program now has 20 partner firms and has graduated several students as licensed architects at the time of graduation.

CareerEXPO

The SoA chapter of the American Institute of Architecture Students (AIAS) is active in promoting AXP, job placement, and licensure. With the SoA, the AIAS co-sponsors an annual CareerEXPO; in 2023 this event had over 55 firms participating and over 100 students were interviewed. While the majority of the firms were from North Carolina, firms from as far north as Baltimore and as far South as Miami also participated. The CareerEXPO is instrumental for students attaining summer and full-time internship opportunities.

In preparation for the CareerEXPO, the AIAS also sponsors a resume/portfolio workshop in which faculty members consult with small groups of students and review their portfolios and resumes. In collaboration with AIA Charlotte, the AIAS also conducts an annual firm crawl.

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

Program Response:

The faculty is committed to creating a collegial community with a diverse range of architectural interests and expertise. The SoA offers equal opportunities for all faculty, regardless of rank, and is supportive of non-tenured faculty as they develop teaching and research expertise.

Faculty Professional Development
Professional Development is an expectation of tenure-track faculty. In addition to their teaching duties, faculty members are expected to pursue professional development in their areas of expertise as outlined in the University, College, and School of Architecture Reappointment, Promotion and Tenure Documents. Annual Reviews by the Director, Reappointment Promotion and Tenure reviews, and Tenured Faculty Performance reviews ensure that all faculty are pursuing their professional development agendas in a timely and meaningful way. The School supports these efforts in several ways.

Teaching Load
A typical teaching load of two courses (typically 15 contact hours) per semester allows time for teaching preparation, service, and professional development.

Reassignment of Duties (University and SoA)
Time-Reassignment of Duties: UNC Charlotte does not have a universal sabbatical program. Instead, it supports a “Reassignment of Duties” program which allows faculty to submit proposals/requests for dedicated time to pursue professional development projects. The SoA also provides SoA Reassignment of Duties (ROD) for SoA faculty engaged in significant research projects or grants. Both Reassignment of Duties programs have been important to SoA faculty members working on books, research projects, and grants.

Teaching Buy-Outs
Faculty members engaged in funded research can request to “buy-out” their teaching commitments in order to focus on those research responsibilities.

Faculty Professional Development Support
Faculty have a range of resources available to support their Professional Development. Every full-time faculty member receives annual funding that can be used for research or creative practice. Eligible items include travel for conference participation, attendance, or research; materials, books, software, memberships, subscriptions, and equipment purchases; and hiring research assistants. Tenure-track faculty members receive $3,000 per year and tenured faculty members receive $2,000 per year in professional development funding.

Faculty Research Grants

The SoA Faculty Research Grant (FRG) Program was established in 2012 to award competitive research proposals submitted by SoA faculty members on an annual basis. These grants are aligned directly with the SoA Strategic Plan objectives and range from $5,000 to $7,500.

Travel for Research Dissemination
In addition to the annual professional development support outlined above, more funding can be granted to support travel, depending on available financial resources.

Other Support
Other sources of support for faculty research and professional development include SoA dedicated funding to support the Directors of Research Labs, funding for Research Assistants and Teaching Assistants, and funding for software and hardware specific to faculty research and teaching.

Financial Resources: University Grants for Faculty
The University offers several grant programs related to Faculty Development: Faculty Research Grants, Scholarship of Teaching and Learning Grants, and the Chancellor's Diversity Challenge. A Research and Economic Development site for UNC Charlotte also includes tools and links to resources such as Funding Sources Databases, the UNC Charlotte Grants Resource Center, and Foundation Directory. Administrative offices to assist with Grants include:

- Center for Research Excellence (CRE): Professional development opportunities for faculty seeking external funds to support their research and creative activity
- Charlotte Research Institute (CRI): Facilitating business-university partnerships
- Grants and Contracts Administration: Provides transactional support to college-based post-award staff and is responsible for overall sponsored program financial reporting and compliance.
- Office of Research Services (ORS): Supports the University's mission by promoting research and assisting faculty with the pursuit, acquisition, and management of extramural funding
- Office of Research Protections and Integrity (ORPI): provides oversight, education, and support for integrity and compliance issues related to research at UNC Charlotte.
- University Faculty Development Programs: The Office of the Provost provides a number of other Faculty Development resources, including support for participation in programs off-campus (such as Bridges Leadership Program for Women), and on-campus such as development programs offered through the ADVANCE Programs.

Leadership and Service
The faculty members of the SoA have a long tradition and strong commitment to active faculty governance. In this governance, there is no formal hierarchy between tenured and tenure-track faculty. The School's philosophy has always been that the junior faculty have the same rights and responsibilities as the senior faculty (within the limits of University policy). Many of the School's activities and programs are those initiated by faculty. The School is a grassroots organization, and faculty participate in the governance of the SoA through service on numerous committees that support the key operations of the SoA. Many also serve on committees at the University level.

5.4.4 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:

Academic and Personal Advising, Career Guidance, and Internship

The SoA offers a wide variety of resources for students seeking academic and professional guidance. These resources include professional academic advisors, program Directors, year-level Coordinators, faculty mentors, and student organizations.

Professional Academic Advisors

The SoA provides one full-time, professional Academic Advisor to work directly with undergraduate and graduate students throughout the academic year. The Associate Director and Graduate Program Directors also serve academic advising roles. Students are assigned to one of two primary advisors based on degree track and year level: 1) undergraduate students and graduate students who studied in our BA program (Academic Advisor, plus the relevant Graduate Program Director at the graduate level) and 2) graduate students from other undergraduate institutions (Associate Director plus the relevant Graduate Program Director).

SoA Advisors are available on a daily basis to advise students in regard to degree progression and course selection, academic deadlines and policies, identifying pertinent resources, problem-solving, and strategic planning to reach academic goals, promoting study abroad, and choosing a professional degree path.

There are a variety of “best practices” in advising. Biannually, SoA Advisors meet with each cohort of students in a Group Advising Session with a tailored presentation addressing an overview of where students are going and common questions. Students are encouraged to subsequently meet individually with their SoA Advisor to discuss their specific needs. This approach is effective, addressing general information as a group while providing individuals with an SoA Advisor at a student’s convenience. The process ensures that the SoA Advisors can deliver important, cohort-specific information in person. During the group advising sessions, each student receives an Individualized Advising Packet, including their Individualized Advising Sheet charting academic progress. The individual advising sheet shows vital academic information (credit hours earned and needed, GPA, courses completed and needed) and reminders regarding auto-admission to the professional degree program and study abroad. Finally, the SoA Advisors recommend and promote resources available to students, such as tutoring, counseling, financial services, etc.

While the SoA Advisors are available to meet with students as needed, they also continue to work behind the scenes tracking student performance and progress and analyzing data from student records. SoA Advisors are proactive with this information and routinely communicate with students when an unsatisfactory midterm grade, a withdrawal, or other situation is discovered. Upon receipt of unsatisfactory grades (midterm or final), an individualized letter is sent to the student with information about policies, consequences, and an invitation to meet for discussion and assistance.

Program Directors

Each degree program in the SoA is assigned a Program Director from the Faculty. Each Director oversees the curriculum, admissions, and resources for their assigned degree program. This ensures that any curriculum and admission changes are communicated clearly to all faculty, students, and applicants, and that changes are implemented successfully in relation to the other degree programs.

Faculty Mentors

The Faculty is readily involved and engaged with the student body. Faculty members serve as liaisons for various student organizations and various student committees. The Director of the SoA meets twice each semester with peer-elected student leaders from each cohort to address issues important to students, such as studio culture and environment, resources, special events, and generating new ideas and plans.

AIA Charlotte Mentorship Program
For several years, AIA Charlotte and the SoA's AIAS have collaborated on a mentorship exchange involving professionals and students. Each school semester starts with a kick-off event in which groups are formed in an effort to promote conversation about architecture, design, or other topics of interest. The groups schedule subsequent discussion sessions or events during the year, and the exchange fosters mutually beneficial relationships for both parties. In addition to this professional mentorship, the AIAS also promotes "internal mentorship," encouraging students to communicate across year levels and programs. Annually, the AIAS creates an event where upper-year students and lower-year students gather and meet. One-on-one partnerships and collective group gatherings have created positive community and communication across the years.

University Career Center (UCC)
The University Career Center (UCC) at UNC Charlotte is dedicated to helping students with a comprehensive approach to career preparation and development, with experiential learning as a key component. The UCC provides advising and counseling related to self-assessment, career exploration, internships, and interview preparation. Frequently the UCC hosts workshops to develop skills related to interviewing and creating a resume. The SoA has a dedicated liaison in the UCC who specifically works with architecture students. Additional information can be found on the University Career Center website. The Liaison also works with architecture firms to communicate internships and full-time positions to students. Faculty regularly assist students in refining resumes and portfolios, including advice and recommendations for professional and post-professional degree programs, including participation in the AIAS-organized portfolio workshop.

Center for Counseling and Psychological Services (CAPS)
The Christine F. Price Center for Counseling and Psychological Services, along with the Student Health Center and the Center for Wellness Promotion, provides wellness-related programs and services to all Architecture Students. CAPS has a full-time staff of licensed psychologists and social workers who are available for on-demand appointments. In addition to individual appointments, they offer group counseling, consultation, outreach, and training. Additional information can be found on the Counseling Center website.

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

Program Response:

UNC Charlotte is committed to equality of educational opportunity and does not discriminate against applicants, students, or employees based on race, color, national origin, religion, sex, sexual orientation, age, or disability. UNC Charlotte actively seeks to promote diversity in its educational environment through its recruitment, enrollment, and hiring practices.

UNC Charlotte Diversity Web Site
The UNC Charlotte Diversity Web Site is hosted online by the Division of Academic Affairs. This web page links to diversity resources at the university and beyond. UNC Charlotte has several policies, initiatives, and guiding documents that address social equity on campus. Key documents are referenced below, with links to the related sites and documents.

Community Engagement Advisory Council (CEAC)

UNC Charlotte's Community Engagement Advisory Council is a network of faculty and staff that champions community-engaged research and teaching. The CEAC promotes community-campus partnerships, and advocates for resources to cultivate a culture of engagement and create a community of engaged practice.

Progress Report on DEI (2019)
This Progress Report for the UNC Charlotte Plan for Campus Diversity, Access, and Inclusion describes progress toward seven specific objectives of the UNC Charlotte Plan for Campus Diversity, Access, and Inclusion. Data illustrate work in progress, achievements, and areas for improvement as we strive to create a strong, diverse, and inclusive campus that is responsive to the needs of our region and state.

UNC Charlotte Inclusive Excellence Plan (2021)
In the spring of 2021, Dr. Cheryl Waites Spellman, then Special Assistant to the Chancellor for Diversity and Inclusion, organized a core team of UNC Charlotte's faculty and staff to develop our campus-wide Inclusive Excellence Plan. The purpose of this plan is fourfold: (1) to create and promote a campus culture of inclusive excellence through shared language, inquiry, expectations, and institutional narratives in our everyday communications, processes, actions, and goals; (2) to serve as a roadmap for defining, advancing, assessing, and ultimately sustaining inclusive excellence across the entire campus; (3) to serve as an overarching framework for colleges, departments, and units to identify goals, develop and implement specific objectives to address the plan's key priorities; and (4) build capacity to achieve and continuously improve upon the goals outlined by the University's Strategic Plan (2021-2031).

Innovation in Inclusive Excellence Grants
The Innovation in Inclusive Excellence Grants (formerly known as the Chancellor's Diversity Challenge Fund) is a funding opportunity to support innovative University-level activities, events, or projects that have the potential to enhance diversity, promote equity and foster inclusion throughout the Charlotte campus. Open to faculty and staff, these grants provide modest resources with a preference for projects that are rooted in high-impact, evidence-based practices; involve cross-cultural collaborations; hold the most significant potential for sustainable success; and align with the strategic mission, vision, and goals of the Office of Diversity and Inclusion.

UNC Charlotte Office of Identity, Equity, and Engagement
This office educates, develops, and engages students regarding their various intersecting identities (gender identity, socioeconomic status, race, ethnicity, religion, sexual identity, etc). The mission is to provide students with an affirming and equitable environment committed to fostering a campus community that celebrates and supports the expansion of identities.

College of Arts + Architecture—Diversity & Inclusion
The arts and design have a significant role to play in igniting the civic imagination, finding meaning, telling the truth, touching our emotions, challenging our assumptions, and ushering in positive change. As a college in a university with an urban research mission, the CoA+A is dedicated to working toward an anti-racist society while providing perspectives on the challenges and injustices of our current moment.

The School of Architecture—Diversity and Inclusion
The School of Architecture values diversity, aims to acknowledge the many facets of human difference, and strives to build an inclusive environment representative of the community it serves through curricular, outreach, recruitment, enrollment, and hiring efforts. The School is intentionally open to a variety of perspectives, approaches, and people engaged in the pursuit of excellence in the design and stewardship of the built environment.

The SoA established a Diversity and Inclusion Committee in 2010 to proactively educate faculty and students within the department, programs, institutes, and centers about "issues related to diversity and inclusion. This committee is responsible for aiding efforts to recruit, retain, and support diverse students, staff, and faculty in order to expand and enrich the School of Architecture, its research centers, and its academic programs."

The SoA models its commitments and supports student groups that represent typically underrepresented minorities in architecture—specifically the National Organization of Minority Architecture Students—or groups that take advocacy positions related to underrepresented communities, such as Freedom by Design.

Student Diversity Initiatives

There are many diversity initiatives at the University, College, and School levels; information on these initiatives can easily be viewed online. Many of these are centrally located on the SoA Diversity and Inclusion Web Page. This page directs students to other initiatives and resources, including:

- The CoA+A Student Equity Council: The students of the Student Equity Council represent their academic units as equal partners in the discussion around College efforts to improve and support all students on micro and macro levels. These leaders bring forward student concerns, inspire faculty and staff to do more, and work to create a sense of community across the College.
- SoA Studio Culture Policy: Addressed in detail in the introduction to the SoA, this plan calls upon all parties in the SoA to contribute to a culture of mutual respect and responsibility, regardless of differences.
- Freedom by Design: A community-service subsidiary organization of the AIAS, that utilizes the talents of architecture students to impact the lives of people in their community. (FBD) teaches students how to resolve accessibility issues while simultaneously providing them with the real-world experience of working with a client, mentorship from a local architect and constructor, and an understanding of the practical impact of architecture and design. More information on the group and its projects can be viewed on the Freedom by Design Facebook Page.
- National Organization of Minority Architects (NOMA): The mission of NOMA is "building of a strong national organization, strong chapters and strong members for the purpose of minimizing the effect of racism in our profession." The SoA has a student chapter, NOMAS, and the members participate in design competitions and organize student events.

5.5.2 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:

The SoA is committed to a culturally and intellectually diverse environment with a broad range of opportunities for professional development and creative work and to an academic climate in which the dignity of every individual is respected. We celebrate diversity that includes, but is not limited to, ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status. We strongly encourage applications from women and minorities.

The 2021 SoA Strategic Plan focuses one of its three goals on the promotion of social justice and community health. Objective 2.2 under this goal is: "Diversify our faculty, students, and staff." This objective includes the following tactics related to faculty and staff:

- Establish aspirational personnel representation based on local or regional demographics.
- Increase targeted recruitment of faculty candidates of color.
- Increase targeted recruitment of staff candidates of color.
- Increase targeted recruitment of BIPOC part-time instructor candidates.
- Increase targeted recruitment of diverse external studio review juror candidates, including women and individuals of color.

The objective aspires to fulfill the following performance target for faculty:

- Aim for faculty and staff candidate pools (full-time + part-time instructors) and student applications to more closely mirror U.S. demographics (40% BIPOC including MENA, 50% women) in five years' time.

The SoA has consistently sought to attract and shortlist well-qualified faculty and staff candidates who have increased the diversity of the School. This is a particularly important goal, given the fact that the student body is consistently more diverse than the faculty and staff (see student statistics under 5.5.3).

Faculty Diversity

This focus has yielded positive results in hiring, retaining, and promoting underrepresented faculty. Since 2018, the SoA has hired ten full-time faculty, seven of whom are faculty of color: Sekou Cooke (Master of Urban Design Program Director), Julio Diarte (Visiting Professor), Matthew Gin (Assistant Professor), Ok-Kyun Im (Research Fellow), Elena Vazquez (Research Fellow), Chengde Wu (Research Fellow), and Catty Zhang (Assistant Professor). By the end of FY23, the SoA full-time faculty demographics were: 11 faculty of color, including MENA (37% of the total) and 12 women faculty (41% of the total).

Since the last accreditation, eight faculty members of color and/or women have successfully been promoted via Reappointment, Tenure, and Promotion process: Mona Azarbayjani (Professor), Sekou Cooke (Associate Professor with Tenure), Rachel Dickey (Associate Professor with Tenure), Jose Gamez (Professor), Kyounghee Kim (Professor), Lidia Klein (Reappointment), Liz McCormick (Reappointment), and Catty Zhang (Reappointment). Four faculty members (all women) have also been successfully retained during this time.

Part-time faculty of color who have been recruited to teach regularly since the last accreditation visit include: Kuniko Bufford, David Harrison, Manoj Kesavan, Arturo Lujan, Rick Luu, Sarika Merchant, Devanne Pena, Melanie Reddrick, Noushin Radnia, Fernando Claudio Rodriguez, Milad Rohga, and Weiti Wang.

Staff Diversity

The SoA has seven dedicated staff members, and we have made a small improvement in diversity since the last accreditation. The years 2021-2022 witnessed significant on-campus staff turnover due to the "great resignation" phenomenon, and the SoA lost and rehired five of these staff positions during this time. As a result, diversity increased modestly, with one new staff member of color. During the staff recruiting and hiring process, the SoA devoted significant energy to recruiting underrepresented staff members and offered three full-time positions to candidates of color (two positions were filled, one offer was declined, and one position has since been vacated and replaced).

5.5.3 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:

The 2021 SoA Strategic Plan focuses one of its three goals on the promotion of social justice and community health. Objective 2.2 under this goal is: “Diversify our faculty, students, and staff.” This objective includes the following tactics related to students:

- Establish aspirational personnel representation based on local or regional demographics.
- Increase targeted recruitment of diverse student applicants, including women and individuals of color.
- Change or eliminate potential structural barriers—such as standardized tests or specific types of portfolios—in degree admissions processes.
- Increase transfer options through Community College articulation agreements.
- Increase scholarship opportunities to increase the diversity of our student body.
- Increase student scholarship opportunities for individuals who have demonstrated an interest in/ability to work in the DEI space.

The objective aspires to fulfill the following performance targets for students:

- Aim for faculty and staff candidate pools (full-time + part-time instructors) and student applications to more closely mirror U.S. demographics (40% BIPOC including MENA, 50% women) in five years’ time.
- Develop an architecture student transfer facilitation plan in coordination with regional institutional partners in five years’ time.

Given UNC Charlotte’s longstanding mission of uniting access and excellence, the SoA has benefited from a more diverse student body than that of the average PWI architecture program. (According to the 2014 ACSA “Ethnicity and Gender of Graduates” study, 36% of architecture graduates from non-HBCUs were non-white, compared with over 40% non-white at UNC Charlotte.) That said, we continue to work toward the goal of representing the general population in our student body.

The diversity of the SoA’s student body has seen a slight gain since the last accreditation (see table below). We have begun to attract and admit a greater number of students from populations that are underrepresented in architecture, particularly students with African-American and Hispanic/Latinx origins. We support qualifying SoA minority students through two local scholarships supported by AIA Charlotte—one undergraduate scholarship, and one graduate scholarship—as well as the national Gensler Diversity Scholarship.

Table: SoA Student Demographics (%) based on IPED Classifications

Demographic	FY19 %	FY20 %	FY21 %	FY22 %	FY23 %
Asian	4	5	5	3	5
Black	12	13	11	13	10
Hispanic	11	12	12	10	13
2+ Races	3	3	4	4	5
Other	12	8	8	11	11
White	58	60	61	59	56

Since the last accreditation, student demographics have remained fairly consistent with slight gains in the overall percentage of non-white students. Using IPEDs classifications, UNC Charlotte’s SoA has 44% of non-white students enrolled as of FY23. The catch is that the category “Other” includes “American Indian, Pacific Islander, Non-resident aliens, and *unknowns*”—and the unknowns make accurate calculations difficult. A continuing challenge concerns the representation of various ethnicities within underrepresented populations: for

example, African American students comprise 10% of the SoA enrollment, whereas African Americans comprise 21.5% of the North Carolina population (according to 2019 U.S. Census data). Thus, we continue to invest in student recruiting and retention, and the establishment of a culture of belonging, to make the UNC Charlotte SoA an attractive and desirable community for underrepresented students.

5.5.4 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:

UNC Charlotte Equal Employment Opportunity and Affirmative Action Plan: All hiring, promotion, and advancement decisions and other personnel actions shall be made in accordance with the principles of equal opportunity. The University's philosophy concerning equal employment opportunity is affirmed and promoted in the University's Affirmative Action Plan.

UNC Charlotte EEO/Non-Discrimination Policies: UNC Charlotte has the following EEO/non-discrimination policies: University Policy 101.5 - Equal Employment Opportunity and Affirmative Action Plan; University Policy 501 - Nondiscrimination; University Policy 501.1 - Nondiscrimination on the Basis of Disability; University Policy 502 - Sexual Misconduct and Interpersonal Violence; and Personnel Information Memo (PIM) No. 50 - Reasonable Accommodation.

Please see **Section 5.5.1** for other social equity, diversity, and inclusion initiatives at the program, college, and institutional levels.

5.5.5 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:

Students
The Office of Disability Services: The Office of Disability Services is the University office designated to determine reasonable accommodations for students with different physical and/or mental abilities. The office works to ensure programs, services, and campus facilities are accessible in accordance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA), and the ADA Amendments Act.

The office also works to ensure that students with disabilities have access to education and campus life at the University. Through collaboration with the institution's diverse community, the office facilitates accommodations, discourse, and engagement to promote a universally accessible learning environment for all.

Students who need accommodations follow the process to get connected to Disability Services. The office's documentation forms and detailed information on how to register for services can be found on its website. Students new to the office are encouraged to submit their documentation through the secure DS Student Portal.

Access at Public Campus Events
Students or visitors to campus who need accommodations for a public campus event are encouraged to contact Disability Services at 704-687-0040 or disability@charlotte.edu. More information may be found on the University's Campus Accessibility website.

Students Honoring Individual Experiences and Learning Differences (SHIELD)
SHIELD is a UNC Charlotte program designed to support new neurodiverse students with ADHD, ADHD-like symptoms, and/or executive functioning skills challenges. SHIELD is an intensive transitional program offered to students prior to the beginning of their first fall semester. Students in the program receive structured advising, an array of support services, and college engagement activities designed to promote a successful transition into UNC Charlotte. More information may be found on the Academic Support Services website.

Faculty and Staff
Faculty and staff members who have a physical or mental impairment, whether temporary or permanent, may request a reasonable accommodation by submitting an Accommodation Request Form to the University ADA Manager in the Human Resources Department. Reasonable accommodation requests are reviewed and processed in accordance with University's Reasonable Accommodation Policy and Procedure, and applicable law.

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 Space to support and encourage studio-based learning.

Program Response:

The School of Architecture operates in two locations: Storrs Hall, on the main UNC Charlotte campus, and the Dubois Center, 320 E. 9th Street in Uptown Charlotte. The majority of architecture courses for the Master of Architecture and other programs are offered in Storrs Hall. The Dubois Center is home to the Master of Urban Design program as well as the Diploma (final) year of the Master of Architecture program.

Storrs Hall, Main Campus, UNC Charlotte
Storrs Hall 80,240 sf (net) / 88,000 sf (gross)
Studios 16,800 sf
Critique Space 8,500 sf
Classrooms: 4,400 sf
Labs 8,900 sf
Storage 1,300 sf
Gallery 2,000 sf
Library 5,200 sf
Administration 4,100 sf
Faculty Offices 2,000 sf

The Dubois Center, Uptown Campus, UNC Charlotte
Dubois Center 10,425 sf (net) / 11,700 sf (gross)
Studios 2,720 sf
Classrooms 3,040 sf
Labs 840 sf
Gallery 1,240 sf
Faculty Offices 220 sf

The SoA takes pride in its building(s), extensive labs, and specialized equipment. Storrs Hall is a well-planned and well-maintained facility, with dedicated desks for every student, dedicated offices for every full-time faculty member, and dedicated individual workspaces for every staff member.

Studio-Based Learning: Design Studios and Review Spaces
Storrs Hall is a 2-story structure with five parallel zones of space. The largest of these layers is dedicated to studio instruction and occupies over 20% of the building's square footage. The studio area is divided into 10 bays on each floor, each the size to accommodate a studio section. Reviews are conducted in several spaces throughout Storrs Hall. The central parallel zone Hall is known as the Salon. It is regularly used for large design reviews, as are the Storrs Gallery, the "student lounge", the 1st-floor lobby, and the 2nd-floor lobby. Between the studios and the central Salon is a zone of critique spaces, easily accessed from the studio.

5.6.2 Space to support and encourage didactic and interactive learning, including lecture halls, seminar spaces, small group study rooms, labs, shops, and equipment.

Program Response:

Didactic Learning: Auditoriums, Classrooms, and Seminar Spaces
Storrs Hall has a large 300-seat and smaller 100-seat auditorium (Rooms 110 and 290) which are used by the SoA and other departments with high enrollment courses. Storrs Hall has one general-use classroom (± 30 seats), one specialized classroom with high-drawing tables for particular course needs (± 24 seats), and a digital teaching classroom (21 seats). The general-use classroom and the Auditoriums are shared with the larger University community, bringing students and faculty from other departments into the building, and exposing the work of the SoA. With classroom space at a premium on the UNC Charlotte campus, the SoA's control over the large 300-seat auditorium (110) has decreased; this valuable space is needed for high-enrollment courses in other departments. The large auditorium is reserved for use for large SoA events, such as guest lectures, during studio hours (MWF 2:00-5:15). Outside of studio hours, the critique spaces are used for teaching small-scale seminar courses.

Interactive Learning: Research and Making Laboratories, Computer Labs, and Library
Opposite the studio spaces, the other outer space zone is dedicated to labs that support interactive learning. Woods, Metals, Digital Fabrication, and Integrated Design Research Labs support student and faculty teaching and research; these labs overlap with three research centers which are also crucial to student learning and faculty research and teaching. (Additional detail regarding the equipment in these laboratories, and the work of the Research Centers follows in this chapter). Also serving students with hands-on resources is the Charles C. Hight Architecture Library in Storrs Hall, which is the only branch library on campus, and houses architecture books, references, periodicals, and a drawing archive. (See Information Resources for more information on the SoA Library). Computer Labs and Print Shops are central educational resources in the SoA (Additional detail regarding digital resources follows in this chapter).

Spaces for Public Interaction
Several spaces within Storrs Hall are used for hosting public events. This includes the Lambla Gallery, which regularly presents exhibitions, programmed by the College of Arts + Architecture Galleries Director, Adam Justice. Exhibitions, which often showcase professional and student work relating to the curriculum in the School of Architecture, are open to the public and are often accompanied by opening receptions and lectures. Other hosted and catered events are regularly scheduled in this space. The central Salon space is also regularly used for large-scale gatherings and events, including the SoA spring graduation ceremony, exhibitions, and special events.

Laboratories
The Labs of the SoA have been developed over forty years to advance research and teaching. The School of Architecture has a large wood lab, a metal lab, a digital fabrication

lab, and dedicated research spaces for the D.Arts Center and Integrated Design Research Lab, all of which support the making and research activities of faculty and students. Each lab of the School of Architecture is equipped with the necessary tools and appropriately scaled machines to support creative design development, from the product- to the building- scale. Emphasis is placed on safety, material awareness, creativity, precision, accessibility, common sense, and learning support.

The labs are an integral component of the SoA teaching mission and afford qualified users access to the machines, tools, and assistance necessary to complete an array of work. The SoA strives to create a flexible and supportive learning environment. Activity within the Labs is coordinated with faculty to complement studio objectives, and foster creative making; the labs also support SoA activities, events, and spatial needs. Though rooted in the traditional principles of quality craftsmanship and material physics, the Labs continue to evolve in response to the changing methods, materiality, and practices that are taking place in the current building environment. Network access within the Labs has been upgraded to enable users to integrate digital design with real-time production.

Students who use the facilities are required to complete a basic orientation once they enroll in an architecture degree program. Hours of operation are posted on the entry door to each lab, and at least one university employee is present during all operating hours. Working with machinery and tools is inherently dangerous and can pose personal injury and limited environmental risks. Every user is required to responsibly familiarize themselves with all safety policies and procedures.

Lab use and objectives vary with individual students and faculty. Although lab users are expected to provide their own materials, lab managers also provide surplus and recycled materials at no cost. Labs purchase disposable materials from operating budgets, such as adhesives, fasteners, abrasives, gasses, welding rods, etc.

Wood Lab (Rm 130), 2400 sf
The Wood Lab utilizes the full complement of milling, sawing, and joining tools supported by benches, clamps, and required supplies. Additional resources of note are a vacuum table, abrasive thickness planer, and precision mortising machinery. The wood shop tool room is stocked with all appropriate routers, drills, sanders, biscuit jointers, and other portable power tools necessary for the successful completion of furniture and other projects. In addition, the lab is also equipped with all necessary hand and measuring tools. Within the shop is a full complement of stationary power equipment.

Wood Lab: SawStop table saw, miter saws, jointer, planer, drill press, bandsaws, DeWalt pack-out tools for design/build

Metals Lab (Rm 140), 750 sf
The Metals Lab is a comprehensive facility equipped to enable sawing, grinding, cutting, and fabrication of ferrous and non-ferrous metals. Capabilities include MIG, TIG, spot and stick welding, as well as oxyacetylene and plasma cutting. Additional resources include equipment for cutting, forming, stamping, and sandblasting. The tool room is stocked with the appropriate complement of portable power tools, protective equipment, and tooling necessary to support a range of typical metalworking needs. Use of the Metal Lab also requires orientation and tool education prior to use. The lab is supervised during all periods of operation. Metal Lab: DoAll bandsaw, drill presses, mill, lathe, break, shear, roller, cold saw

Safety and Use Policy
Expectations for safe use of the Labs are addressed in the UNC Charlotte David R. Ravin School of Architecture lab use orientation, which outlines access, rules and guidelines,

general safety, first aid, machines and tools for the Wood Lab, Metal Lab, Digital Fabrication Lab, and Laser Lab.

5.6.3 Space to support and encourage the full range of faculty roles and responsibilities, including preparation for teaching, research, mentoring, and student advising.

Program Response:

Space for Faculty and Staff Roles and Responsibilities
All SoA full-time faculty have a dedicated private office; the majority of these offices are in Storrs Hall, but faculty teaching primarily in the Dubois Center have their offices in that location. Storrs Hall also houses two administrative office suites: one for the staff members of the College of Arts + Architecture and one for the staff of the School of Architecture. The SoA office suite houses the Director, Associate Director, Administrative Support Associate, Academic Advisor, Executive Assistant, Office Manager, and a group of work-study assistants.

Research Facilities
The SoA / CoA+A is home to four research labs (one College-based) that enable collaborative research initiatives of faculty and students. Two are located in Storrs Hall, and one is located in the Dubois Center.

Technology (IDRL) (Storrs Hall)
The Integrated Design Research Laboratory (IDRL) consists of the Daylighting + Energy Performance Laboratory and the Environmental Systems Testing Laboratory. The labs focus on architectural technologies and building performance issues, particularly related to sustainability, energy use, lighting technology, and material systems development. Courses and research in this area focus on emerging issues of sustainable design and the development of innovative building envelopes and systems that utilize both new and traditional materials, technology, and construction methods. Students can engage in projects that explore the historical and contemporary realms of thermal, tactile, and visual issues of technology, materiality, daylighting, and passive and active systems with consideration of both qualitative and quantitative outcomes. Specialized equipment in the Daylighting + Energy Performance Laboratory includes performance and analysis computation banks and simulation software.

Computation (D.Arts) (Storrs Hall)
The Digital Arts Center focuses on digital methods in architecture, examining new technologies related to Fabrication, Interactive Architecture, and Visualization, which increasingly influence architectural design and practice. Through the Center, students network with institutions globally, developing analytic and visualization capacity and collaborating with the profession at a national level.

Digital Fabrication Lab (Storrs Hall)
Specialized equipment in the Digital Fabrication Lab includes: 5 Laser Cutters (3 in Storrs / 2 in Dubois Center), 4 Makerbot 3D Printers (2 in Storrs / 2 in CCB), a KUKA KR-60 Robotic Arm with Gripper, router spindle and extruder, a 4’ X 8’ CNC Plasma Cutter, a 5’ X 8’ 3-Axis CNC Router, and a 4’ X 4’ Vacuum Former.

Urbanism (Dubois Center)
For over two decades the School has maintained an off-campus location dedicated to community involvement in Charlotte and the 14-county metropolitan region surrounding the city. The City Building Lab (CBL) is an interdisciplinary center engaged in public outreach and research related to community development and empowerment through a wide range of advocacy-based practices and strategic partnerships. Formerly known as the Design and

Society Research Center, CBL foregrounds common research interests of its affiliated faculty members, often related to the ways that cities are shaped over time. The CBL simultaneously engages in a wide range of initiatives while also supporting the University's urban research mission. The CBL is a resource for students and faculty in the Dubois Center, housing a Master of Urban Design reference library, providing meeting and workspace for the Director of the CBL, faculty, and graduate research assistants, and supporting interactive learning through applied research assignments and community-engaged learning opportunities.

5.6.4 Resources to support all learning formats and pedagogies in use by the program.

Program Response:

Information Technology, Computation & Digital Technology Resources (Storrs)
The School of Architecture is committed to teaching students how and when to use digital technology to their advantage. Computers are viewed as an integral tool that can be utilized to gather information, analyze problems, and formulate solutions.

The School of Architecture offers several high-end computer lab options to students, faculty, and staff. The SoA fully maintains a wide variety of software and hardware that ensures students have all of the necessary resources to engage in their work. Most computers have the ability to run either the Windows or Macintosh operating systems. This allows students to run any software necessary, no matter what computer they are using. Whether the need is 3-D modeling, image manipulation, video editing, CAD, GIS, BIM, or high-quality, large-format printing, the IT infrastructure in the SoA can support many varied student assignments. All of the labs, classrooms, and production facilities are tightly integrated with the curriculum and updated annually to ensure that the SoA is using the latest in digital architectural technology.

The SoA maintains 75 computers that are available to SoA students in computer labs and research centers in Storrs Hall (an additional 120 computer stations host SoA software in the Dubois Center building. Every studio bay and critique room in Storrs Hall has a 55" digital monitor for presentations, lectures, critiques, or other digital media. The internet is available in all studios with both wired and wireless connections. SoA File Server access from off-campus locations is available through VPN. The computer labs are available with 24-7 card access for currently enrolled CoA+A students.

- Storrs 285 (Computer Classroom) 21 PCs - Win 11
- Storrs 148c (Digital Arts Center) 8 Mac OS X
- Storrs 230B (Computer Lab) 12 Mac OS X and large scanner. 5 large format scanners, 1 production printer
- Storrs 222 (Computer Lab) 5 Mac OS X and 7 Win 11
- Large scale scanner and Ricoh printer
- Storrs 200 (Library) 5 Mac OS X and Win 11
- Storrs: (Digital Fabrication Lab) 3 laser cutters, 2 plasma cutter, 1 CNC router, 1
- 3-D Printer, 7 computers integrated with each of those devices
- Storrs: Daylighting / Energy Lab 15 computers

Print Labs
The SoA has a dedicated Print Labs in Storrs Hall and the Dubois Center. The Storrs Hall Print Labs (Rm 230C and Rm 222) have 5 plotters, 1 color production printer, as well as 1 large format scanner and 1 laser Ricoh printer (with Wi-Fi printing capability) on the 2nd floor of Storrs. The Print Lab is staffed with 8-10 student assistants who are trained and managed by the CoA+A IT department. The Print Lab is available from 9am-9pm Monday through Thursday and limited hours on Fridays and Sundays (9am-3pm; 4pm-9pm respectively throughout the academic semester). The Print Lab offers students varied paper types, sizes, quality, and printing at prices that are discounted in comparison to typical commercial prices.
Storrs Print Lab (Storrs 230B/C):

- 1- HP DesignJet T7100 Printer (24”-42”)
- 1- HP DesignJet T7200 Printer (24”-42”)
- 1 - Canon iPF8300S Large Format Printer (36”-44”)
- 1- OCE Plotwave 340 Wide Printer (36”) & 1- OCE Colorwave 650 Large Format Printer (36”-42”)
- 1 - Canon C710 Production printer (8.5 x 11, 11 x 17 color + b&w printing)
- 1 - 42” Wide Format Scanner

CoA+A IT Department / Support
In addition to the university IT support, the CoA+A has an IT department comprised of a Director and two Advance Technology Support Analysts, each with over fifteen years of experience in IT. They assist SoA faculty and staff, update hardware and software, and maintain all computers in Storrs Hall and the Dubois Center. IT staff members also serve as the CoA+A’s IT voice across campus, coordinate the historically Mac-based system of the School with University IT, and keep the School abreast of any changes in University IT.

Student Laptop Recommendations
Every Spring, the CoA+A IT staff coordinates with SoA faculty and OneIT to determine the most recent and appropriate laptop hardware and software requirements for incoming students. This is articulated on the university website under the Niner Ready Laptop Requirement. Students begin with a preliminary suite of programs and add additional programs as they progress through the curriculum and engage higher-level computer needs. These recommendations are available online, and equipment is easily available for purchase at the campus university NinerTech store. Technical support is also available to students through the on-campus NinerTech store.

Software Available in SoA Computer Labs
In addition to the primary software requirements that students maintain on their individual computers, the SoA provides a wide array of software on its computer stations in Storrs Hall and the Dubois Center labs; software is chosen to support the instruction, research, and analysis, making, design and creative activities of the faculty and students.

Other Resources Available to Faculty and Students
Other equipment is available for checkout to faculty and enrolled students:
- 8 DSLR (Nikon D-60) Cameras
- 3 Video Cameras
- 3 Projectors with MacBooks attached
- 2 HDTVs with Mac Minis

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:

Remote Learning
Students have access to a wide variety of course-specific software and online tools. Students currently enrolled in a future term (not graduated) can find software available to them at software.charlotte.edu. Students registered for classes and faculty can access course-specific virtual apps at apporto.charlotte.edu.

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 overall fiscal operation of the David R. Ravin School of Architecture (SoA) with regard to its financial appropriateness to support student learning and achievement relies on three basic types of fiscal resources:

1. Direct Funds (recurring budgets allocated by the University);
2. Indirect Funds (non-recurring allocations from the College of Arts + Architecture (CoA+A) as well as from external grants and contracts);
3. Supplemental Funds (one-time allocations from the CoA+A and University)

Current fiscal resources are sufficient to support student learning and achievement. The following explains trends in the three areas of funding identified above since the establishment of the CoA+A in the fall of 2008: Direct Funds, Indirect Funds, and Supplemental Funds.

Direct Funds

University resources are allocated through a financial planning and budget process on a biennial basis. This well-structured sequence begins with the State Legislature and is also evaluated through the UNC General Administration, which determines campus resources. A budget cut in 2020-2021 resulted in a net across-the-board reduction. This shift was offset by increases in the financial resources that the University, through the Office of Academic Affairs, allocates to the SoA from general student fees, major fees, the approval by the State Legislature of a “tuition increment” for graduate study in the SoA, which has provided needed funds to support student scholarships and program enhancements, and a commitment of funds which provide graduate assistantships through the Graduate Assistantship Support Program (GASP). It is worth noting that CoA+A funding consistently supplements the Direct Funding the SoA receives from the University. The result is an annual budget that is relatively stable.

Indirect Funds

The SoA regularly benefits from one-time funding from the CoA+A for faculty research and educational purchases (instructional equipment, supplies, software, and lab instruments). The SoA consistently awards an average of $35,000 per year in student scholarships to provide tuition assistance, student research, and study abroad opportunities. External grants vary year-to-year, but over the past three years have increased based on awards from NSF and other major granting agencies. More information regarding SoA Faculty involved in grants solely within the SoA or collaboratively with other departments can be found in department reports from Research and Economic Development.

Supplemental Funding

In addition to Direct and Indirect Funds, the SoA often benefits from one-time funding from both the University and the CoA+A:

- To support building renovations and repairs (i.e., renovation of the Dubois Center FabLab, three faculty offices, as well as renovation of Storrs FABLab with the purchase and installation of a Robotic Arm);
- To support faculty research (specifically for collaborative projects and research development);
- To meet the instructional, administrative, and operational needs of the SoA. Efforts in community engagement have resulted in monetary sponsorship by several architectural firms of integrated design research studios within the SoA.

Direct, indirect, and supplemental funding allocations all contribute to the overall fiscal operation of the SoA and provide the required financial appropriateness to support student learning and achievement. Since SoA’s 2016 NAAB accreditation visit, several significant changes have occurred both in the SoA and at the level of University Administration that affect the context for understanding SoA’s financial resources.

Human Resource Development
Since 2012, the SoA has provided funding toward a new annual, peer-reviewed “faculty research grant” program to support faculty research and development ($15,000). The SoA continues to increase funding for faculty/student research support.

External/Community Engagement
The Director of the SoA works with the CoA+A Development Officer and the Dean of the CoA+A on development and fundraising initiatives. These efforts have resulted in external funding of several integrated research design studios as well as new scholarships in practice, which provide selected students with full-time internships in the summer, followed by a part-time internship during their last academic year of study.

Research Laboratory Support
Financial resources were redirected as well as secured through the University to support the City Building Lab (CBL) with the addition of a FabLab at the Dubois Center. The SoA continues to have increased financial needs due to the expanding scope of graduate education and research (SoA’s three self-funded research centers) and the addition of the Dual M.Arch/MS in Computer Science (CS) or Information Technology Systems (ITS) program.

General Education Program Participation
The Architecture faculty’s teaching in the University’s General Education program has continued to be an important component of School growth and expansion. The SoA also serves both College and University Honors classes, in addition to general education classes.

Finance and Accounting Management System Changes
The University-wide finance and accounting system known as ‘Banner’ continues to add modules to provide accounting and budget comparisons over multiple years which allows for better historical data and more accurate budget projections. The financial leadership team in the CoA+A supports well-established lines of communication, responsibility, and protocols. The addition of a dedicated Business Services Coordinator (BSC) in the SoA ensures clear budgetary record-keeping, planning, and year-end financial solvency.

College Transitions and Operating Funding
Since the restructuring of the CoA+A and SoA, College leadership continues to demonstrate a commitment to the SoA with full budget control and program planning to the SOA Director, and actively seeks to support its programming and professional development trajectory. The SoA has developed its own independent strategic plan, financial and staff planning, and operational methods.

University Shifts
University resources are allocated through a financial planning and budget process on a biennial basis. This well-structured sequence begins with the State Legislature and is also evaluated through the UNC General Administration, which determines campus resources. The factors that affect the financial planning of the SoA include:

External Factors
- The NC State Legislature has taken steps to integrate “productivity metrics” as a potential substitute for enrollment increases as a major determinant of fiscal resources allocation. Studies are underway to factor in progression and graduation rates, SCH production, and alumni placement as tools to evaluate resource efficiencies.
- Workload factors (the normative 3/2 teaching load is determined by the University’s classification and is reported via the annual “Delaware Study”) are expected to be part of the annual budget hearings conducted by the Provost and Office of Academic Affairs.
- Following the renewal of regional accreditation (SACSCOC), the implementation of the required Quality Enhancement Program (Prospect for Success), along with potential

changes to the General Education program and University Honors College will affect the availability of general funds for specific unit allocation.
- New 2021 Strategic Plans (CoA+A and SoA) were developed in the spring of 2020, in conjunction with a new Campus Capital Campaign, which includes a major Student Scholarship Goal Component.

Planning Factors
- Enrollment changes and degree production;
- Total SCH production for all faculty, inclusive of Honors, General Education, and Interdisciplinary teaching;
- Total faculty at rank (Professor, Associate Professor, Assistant Professor, Lecturer (contract/renewable), and Part-Time (by course).
- The CoA+A currently has a “fixed” allocation of space and the creation of additional office and teaching spaces primarily relies on remodeling and/or rethinking the current use of CoA+A buildings. Many factors will determine final resource allocations but with a more stable State economy and having outlined a clear budget process, fiscal planning can be projected with modest increases in faculty salaries. Needs in the area of student scholarships will be integrated into the campus capital campaign.

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:

The information resource needs of the SoA are fully supported by the collections in the Charles C. Hight Architecture Library and Visual Resources Collection (in Storrs Hall), and the J. Murrey Atkins Library—the main campus library for UNC Charlotte. They offer over 3 million volumes, including 1.4 million ebooks, over 450 databases, and approximately 212,000 journals. These spaces provide approximately 285,000 square feet with over 2,000 seats and more than 300 computers.

J. Murrey Atkins Library
J. Murrey Atkins Library is centrally located on campus, and operates seven days a week on a 24-hour, 5 days-a-week schedule, providing students and faculty with computers, study rooms, a wide variety of audio-visual equipment, and a large collection of print and online resources. For print materials located in offsite storage, the library strives to retrieve and make materials available within 24 hours of a request during regular business hours. Further expanding available resources, the library offers Interlibrary Loan services to request print materials and media held in other collections for all members of the university. Faculty are also supported by a library resource delivery service for requested items. Library staff with subject specializations are available to assist the UNC Charlotte community with research needs.

Charles C. Hight Library
The Charles C. Hight Library is located on the second floor of Storrs Hall and is a branch of the main J. Murrey Atkins Library. The collections are administered by staff and faculty of the Atkins Library, with the support of the SoA faculty representative. The library’s location on the second floor of Storrs Hall makes a large collection of books, journals, videos, and equipment readily available to SoA students. All materials with an NA Library of Congress classification are located in the Charles C. Hight Library. The Hight Library also houses materials related to the subject area, such as design, engineering, and urban planning. Materials from both Atkins and Hight are available to all members of the UNC Charlotte community. Moreover, these materials may be put on course and permanent reserve in the architecture library.

The architecture library is open all year round with a 6-day-a-week schedule during the school year. The hours are: Sunday, 1 pm to 9 pm; Monday to Thursday 9 am to 9 pm; and Fridays, 9 am to 6 pm (as of spring 2023). During the summer, the library operates on a modified Monday to Friday-only schedule from 11 am to 3 pm.

Technology and Equipment

Atkins Library lends technology and equipment at three service points: the Atkins Library Information and Research Desk, the Area49 Technology Support Desk in the J. Murrey Atkins Library Building, and the Architecture Library. Faculty, students, or staff in the College of Arts and Architecture (CoA+A), may borrow equipment ranging from SmartTVs to portable projectors to digital cameras to lighting at the Architecture Library for reviews, presentations, and performances. In 2019-2020 alone, the library supported the School of Architecture curriculum with equipment checkouts for 52 undergraduate and 42 master's level reviews.

Several stakeholders are responsible for providing the equipment and technology available to faculty, staff, and students. These include the School of Architecture, Atkins Library, the College of Arts and Architecture IT, D+ARTS, and the Visual Resources Collection of the College of Arts and Architecture. (D+ARTS) was originally called the Digital Design Center and was founded by Professor of Architecture Eric Sauda. The Architecture Library desk staff manages the storage and maintenance of fixed assets (1 printer, scanners, desktops, etc.), tools (self-healing cutting mat, paper cutters, etc.), and circulating equipment.

Electronic and Physical Resources

The library has several relevant electronic resources including the subject databases Avery Index to Architectural Periodicals, Art & Architecture Complete, ProQuest's Arts Premium Collection, Arts & Humanities Databases, and Art, Design & Architecture Collection. Resources specifically related to urban design include SimplyMap, the Sanborn Maps for North Carolina, GeoRef, GreenFILE, and Environment Complete. The library also provides access to the image database Artstor, which includes over 772,000 images related to architecture and city planning from a variety of countries. Future access to these images and other visual resources will continue through the interdisciplinary database JSTOR. In addition, there are several relevant interdisciplinary databases such as ProQuest Central and Academic Search Complete. The library also provides access to graduate research through ProQuest Dissertations and Theses Global and ProQuest Dissertations and Theses at the University of North Carolina Charlotte. In addition, there are databases in related subjects like science and engineering, including Web of Science, Science Direct, and Engineering Village.

The following table shows relevant books, e-books, and journals offered by the library.

Relevant Architecture Terminology & Library Holdings

LC Subject Heading	Print Books	E-Books	Journals	E-Journals (subset of Journals)	Videos
Architecture	10212	2412	567	282	468
Architecture, Modern	1447	45	42	9	159
Architecture, Modern 20th century	1064	35	32	6	34
Architecture, Greek	38	4			2
Architecture, Roman	101	11	3	2	3
Architecture, Ancient	50	41			47
Architecture and science	53 (18 in Computer	445 (280 in Computer			

	Science; 17 in Architecture)	Science; 19 in Architecture)			
Geographic Information Systems	279	461	51	37	
Regional Planning	1210	532	122	78	3
Regional planning -- Environmental aspects	64	52			
Sustainable development	527	510	40	39	20
Sustainable design	90	69	5	5	15
Sustainable architecture	185	119	6	5	26
City planning	3209	714	229	136	39
Urban renewal	620	218	23	10	18

Budget

The College of Arts + Architecture is allocated a yearly budget of $15,050. This allocation allows for the purchases of print and electronic books for the School of Architecture. The larger Collection Services budget is used to purchase ongoing resources like journals and databases. Faculty input is also sought when purchasing new book titles and recommending ongoing subscriptions as needed.

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:

Librarian

The full-time Arts + Architecture Librarian supports the learning and research endeavors of the SoA. This person holds office hours, arranges individual meetings with students and faculty, holds drop-in study sessions, and provides classroom instruction. Sessions with students concentrate on source discovery and evaluation. The librarian also creates library research guides to curate and disseminate relevant resources to students based on course topics. The librarian holds an ALA-accredited master's degree in library and information science degree, a master's degree in art history, and a graduate certificate in digital public humanities. The librarian also has extensive experience in library instruction and reference/research experience. Professional memberships include the Association of Architecture School Librarians, the Art Libraries Society of North America, and the Association of College and Research Libraries (part of the American Library Association).

Visual Resources Collection

The Visual Resources Collection is an independent entity of the College of Arts & Architecture (CoA+A), which has been maintained solely from College funding and staffing for 40 years. The Visual Resources Collection has no operational connection to the Architecture Library or the Atkins Library but is physically located within the Architecture Library in the Storrs School of Architecture Building. One full-time Visual Resources Lecturer manages the Visual Resources Collection. The Visual Resources librarian holds an ALA-accredited master's degree in library and information science degree, and a master's degree in history. Professional memberships include the Visual Resources Association. The College Associate Dean of the CoA+A, to whom the Visual Resources Lecturer reports, directly oversees the collection. The Visual Resources Collection has holdings of approximately 56,000 analog images and more than 144,000 digital items, including images, sound, and video.

Space Utilization

School of Architecture faculty, staff, and students have worked closely with library staff to use the space in innovative ways that showcase the talent and ingenuity of the community. The library staff coordinates with both CoA+A and SoA faculty to install student work for rotating or permanent exhibits in the library. Student group meetings, lectures, and other collaborative experiences in the space fulfill Atkins Library, SoA, CoA+A, and university-wide strategic planning goals to increase research experiences for undergraduate and graduate students.

Examples are:

- ARCH Seminars: A limited number of semester-long classes are held in the library to facilitate access to library resources and equipment for students and faculty.
- SoA Colloquium: Faculty of the UNC Charlotte School of Architecture (SoA) and guest experts present current research and trends in architecture and design. All of the university community is invited to attend these bi-monthly, hour-long presentations that spotlight a different topic at every meeting.
- AIAS CareerEXPO: The Architecture Library in 2020, 2022, and 2023 hosted architectural firms in the library for this annual student-run career fair which helped to increase SoA alumni engagement and outreach. University alumni have lifetime borrowing privileges of selected library materials.

With the heavy use of social media and other electronic communications, the Arts and Architecture Librarian sends out an e-newsletter to faculty about resources for teaching and research, while the Architecture Desk Supervisor and Visual Resources Librarian also use Google group listservs dedicated to faculty/staff and students for periodic updates about services and collections. Atkins Library leadership also installed digital signage through Appspace in the Architecture Library to promote services and events of interest to patrons. The library website also includes a webpage for the architecture library that provides additional resources.

NAAB

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 SoA meets this requirement. The Statement on Accredited Degrees appears in the Graduate and Undergraduate UNC Charlotte Catalogs, on the SoA website, and in both the Undergraduate and Graduate Program Guides which are promotional documents for the SoA. The statement reads as follows:

"The SoA maintains accredited status through the National Architectural Accrediting Board, which reviews the curriculum, facility, faculty, and program resources annually. In addition, the NAAB conducts an intensive site visit every eight years. The School has maintained full accreditation standards as prescribed by this board and includes the following required statement:

"In the United States, most registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit professional degree programs in architecture offered by institutions with U.S. regional accreditation, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted an eight-year term, an eight-year term with conditions, or a two-year term of continuing accreditation, or a three-year term of initial accreditation, depending on the extent of its conformance with established education standards.

Doctor of Architecture and Master of Architecture degree programs may require a non-accredited undergraduate degree in architecture for admission. However, the non-accredited degree is not, by itself, recognized as an accredited degree."

The UNC Charlotte David R. Ravin School of Architecture offers the following NAAB-accredited degree program(s):

- M. Arch. (Non-preprofessional degree + 96 graduate credits)
- M. Arch. (Preprofessional degree + 60 graduate credits)
- M. Arch. (Preprofessional degree from UNC Charlotte + 40 graduate credits)

"Next accreditation visit for all programs: 2024"

This statement is published in several locations:
UNC Charlotte Undergraduate Catalog Web Link
UNC Charlotte Graduate Catalog Web Link
SoA Web Link
Undergraduate Program Guide Web Link
M.Arch Program Guide Web Link

NAAB

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, 2014 Edition 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, 2015 Edition in effect at the time of the last visit (2012 or 2015, depending on the date of the last visit)

Program Response:

The SoA meets this requirement. The last NAAB Accreditation visit to UNC Charlotte's SoA in 2016 was subject to the 2014 Conditions for Accreditation and 2015 Procedures for Accreditation. The 2014 Conditions for Accreditation and the 2015 Procedures for Accreditation are linked to UNC Charlotte's SoA website.

Conditions for Accreditation, 2020 Edition

Conditions for Accreditation in effect at the time of the last visit (2014)

Procedures for Accreditation, 2020 Edition

Procedures for Accreditation in effect at the time of the last visit (2015)

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:

University Career Center
The University Career Center (UCC) at UNC Charlotte is dedicated to helping architecture students with a comprehensive approach to career preparation and development, with experiential learning as a key component.

The UCC provides advising and counseling related to self-assessment, career exploration, internships, and interview preparation. It frequently hosts workshops to develop skills related to interviewing and creating a resume. It also works directly with architecture firms to communicate internships and full-time positions to students. The SoA has a dedicated liaison in the UCC who specifically works with architecture students. Additional information can be found at the University Career Center website.

Internships
Each year, the SoA and AIAS host the Career EXPO. This is a day-long event when architecture firms throughout the region interview students for internships and full-time positions. The SoA also has dedicated faculty liaisons for the SoA to NCARB and AIA Charlotte.

- David Thaddeus, FAIA: Architect Licensing Advisor
- Marc Manack, AIA, AIA Charlotte President
- Liz McCormick, AIA: AIA Charlotte Liaison

Annually they update all students on the upcoming changes related to AXP and the specific requirements necessary for licensure. Links to the AXP website of NCARB can be found on the SoA Web Page.

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
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 SoA meets this requirement. Links to the relevant documents published on the SoA website are listed below.

- All Interim Progress Reports and narratives of Program Annual Reports submitted since the last team visit - 2017, 2018, 2019, 2020, 2021, 2022
- All NAAB responses to any Plan to Correct - *Not Applicable based on the 2015 Procedures*
- Any NAAB responses to the Program Annual Reports since the last team visit
- The most recent decision letters from the NAAB - 2019, 2022
- The Architecture Program Report submitted for the last visit - 2016
- The final edition of the most recent Visiting Team Report, 2016 Edition - including attachments and addenda
- The program's response to the Visiting Team Report - 2017
- Plan to Correct (if applicable) - *Not Applicable according to the 2015 Procedures*
- NCARB ARE Pass Rates
- Statements and/or policies on learning and teaching culture: Studio Culture Policy
- Statements and/or policies on diversity, equity, and inclusion: SoA Diversity Statement

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:

SoA Graduate Admission Policies and Procedures: Our admission policies and procedures are thoroughly outlined and available to the public via the SoA website. Admissions to our graduate programs follow a dual-process system. Initial applications are made through The Graduate School at UNC Charlotte– See the UNC Charlotte Graduate Admissions web portal. For detailed admissions information specific to the SoA graduate programs, including requirements and processes, prospective students are directed to the SoA Graduate Programs Application / Admission Processes section on our website—see SoA Graduate Programs Application / Admission Processes.

An overview of the M.Arch Track I program, its curriculum, and admission application requirements are detailed on a separate subpage—see SoA M.Arch Track I Application / Admission Processes.

An overview of the M.Arch Track II program, its curriculum, admission application requirements, and dual degrees are detailed on a separate subpage—see SoA M.Arch Track II Application / Admission Processes.

An overview of the M.Arch Track III program, its curriculum, admission application requirements, and dual degrees are detailed on a separate subpage—see SoA M.Arch Advanced Standing Application / Admission Processes.

Financial Aid and Scholarships
The SoA offers several scholarships that are exclusively available to SoA students. Qualification for the individual scholarships varies—some are need-based, some merit-based, others dedicated to year levels—but there are scholarships available to all level students. Students may begin applying online for the available awards in November each year, and awards are applied to the spring semester term. For more information on the process, see the Niner Scholars Portal. For information on the available scholarships in the SoA, see SoA Scholarship Opportunities.

Student Diversity Goals and Admission Procedures
Our School of Architecture (SoA) is deeply committed to fostering a diverse and inclusive environment that represents a broad spectrum of backgrounds, perspectives, and talents. Our commitment to diversity informs our admission policies and procedures, ensuring a comprehensive and holistic review of all applicants.

Following the recent Supreme Court affirmative action ruling, our admission procedures remain steadfast in upholding a comprehensive and unbiased evaluation of all applicants. While we may not operate under specific quotas or benchmarks, our dedication to creating a diverse student body is undeterred. Our holistic admissions process assesses each applicant on various factors: academic achievements, personal experiences, potential contributions to the SoA community, and a demonstrated passion for architecture. By doing so, we ensure that we are not just selecting students based on numbers or checkboxes but on their unique potential to contribute to and benefit from our academic community. This multifaceted approach has naturally resulted in a student body that reflects a wide spectrum of backgrounds, perspectives, and experiences. Through targeted outreach programs, partnerships with diverse professional organizations, and active participation in community events, we continually strive to engage with a broad range of prospective students. We believe that a diverse student body enriches the educational experience for everyone, promoting understanding, respect, and collaboration among all students.

In conclusion, the SoA is dedicated to upholding the highest standards of transparency, inclusivity, and excellence in its admissions processes. We remain committed to nurturing a diverse student community that reflects the myriad backgrounds, ideas, and visions of our society at large.

6.6 Student Financial Information

6.6.1 The program must demonstrate that students have access to current resources and advice for making decisions about financial aid.

Program Response:

Student Financial Information for students attending UNC Charlotte is widely available on the web, and centrally organized in two locations—the UNC Charlotte Financial Services site and the Admissions & Financial Aid website. Basic information on applying for Financial Aid can be found at UNC Charlotte's Four Steps to Financial Aid. A general estimate sheet that includes tuition, fees, housing, books, transportation, and miscellaneous costs of attending the university is covered in the UNC Charlotte Estimating Costs document, linked from the Admissions & Financial Aid website. For official costs for tuition and fees by semester, see UNC Charlotte Tuition and Fees.

Fees and tuition vary for undergraduate and graduate students. Graduate students can view the UNC Charlotte Graduate Cost of Attendance, and search for funding resources through UNC Charlotte Funding Sources for Graduate Students. A price calculation tool that can use variables to estimate costs for students can be accessed through the Financial Aid website at UNC Charlotte Net Price Calculator and additional information for parents of UNC Charlotte students can be found at UNC Charlotte Parents & Family.

Frequently asked questions regarding student accounts and financial aid can be found at UNC Charlotte Your Aid and Your Bill, and consumer information about financial assistance, tax information, and FAFSA can be viewed at UNC Charlotte Consumer Information.

6.6.2 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 SoA provides financial information regarding the student's cost of attendance. Incoming students should purchase a computer that meets the specifications provided by the SoA to meet the needs of the major. The specification assists students with this fundamental expense associated with the major—SoA Computer Purchasing Guide.

Graduate students in the SoA have an additional "tuition surcharge" each semester. This fee can be viewed in the SoA Graduate Student Tuition and Fees. To offset these costs, there are several sources of funding for graduate students, including: Graduate Assistance Support Plan (GASP) awards, Research and Teaching Assistantships, Tuition Awards, and Tuition Assistance Grants (TAG) awards. Approximately 40% of our current graduate students benefit from these awards, which can be viewed at SoA Funding Sources for Graduate Students.

SACS COC

SOUTHERN ASSOCIATION OF COLLEGES AND SCHOOLS
COMMISSION ON COLLEGES

January 13, 2014

Dr. Philip L. Dubois
Chancellor
The University of North Carolina at Charlotte
9201 University City Boulevard
Charlotte, NC 28223-0001

Dear Dr. Dubois:

The following action regarding your institution was taken by the Board of Trustees of the Southern Association of Colleges and Schools Commission on Colleges during its meeting held on December 9, 2013:

> The SACSCOC Board of Trustees reaffirmed accreditation. No additional report was requested. Your institution's next reaffirmation will take place in 2023 unless otherwise notified.

Please submit to your Commission staff member, preferably by email, a **one-page** executive summary of your institution's Quality Enhancement Plan. The summary is due **February 14, 2014**, and should include on the same page the following information: (1) the title of your Quality Enhancement Plan, (2) your institution's name, and (3) the name, title, and email address of an individual who can be contacted regarding its development or implementation. This summary will be posted to the Commission's Web site as a resource for other institutions undergoing the reaffirmation process.

All institutions are requested to submit an "Impact Report of the Quality Enhancement Plan on Student Learning" as part of their "Fifth-Year Interim Report" due five years before their next reaffirmation review. Institutions will be notified 11 months in advance by the President of the Commission regarding its specific due date.

We appreciate your continued support of the activities of SACS Commission on Colleges. If you have questions, please contact the staff member assigned to your institution.

Sincerely,

Belle S. Wheelan

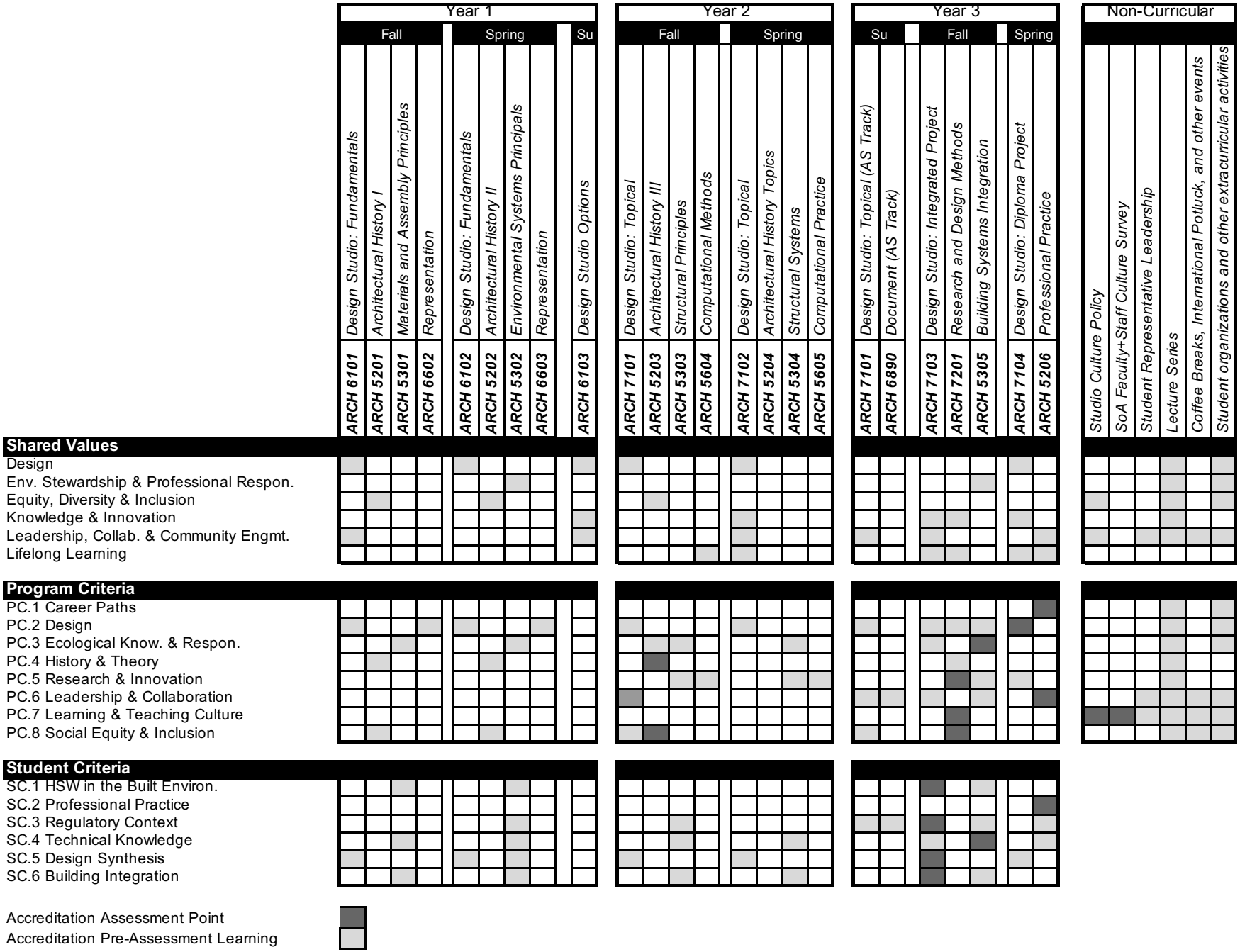
Belle S. Wheelan, Ph.D.
President

BSW:cp

cc: Dr. Mark V. Smith

1866 Southern Lane • Decatur, Georgia 30033-4097 • Telephone 404/679-4500 • Fax 404/679-4558
www.sacscoc.org

PROGRAM AND STUDENT CRITERIA MATRIX



Nadia M. Anderson, Associate Professor of Architecture + Urban Design, City Building Lab Director

Courses Taught

Summer 2023:	MUDD 6100: Directed Independent Study
Spring 2023:	MUDD 5601/ARCH 4050/5050: Community Planning Workshop
Fall 2022:	ARCH 7101: Design Studio: Topical
	MUDD 6205/ARCH 5050: Modern City: Theories and Forms
Summer 2022:	MUDD 7120: Graduate Summer International Study: Puerto Rico
Spring 2022:	MUDD 5601/GEOG 6501/ARCH 4050: Community Planning Workshop
	ARCH 6890: Directed Independent Study
	ARCH 6890: Directed Independent Study

Educational Credentials:

Diversity, Equity and Inclusion Professional Certificate; UNC Charlotte School of Professional Studies
Master of Architecture, University of Pennsylvania
Bachelor of Arts, Yale University

Teaching Experience:

2016-Present	Associate Professor, Architecture + Urban Design, UNC Charlotte
2014-2016	Associate Professor, Architecture, Iowa State University
2009-2014	Assistant Professor, Architecture, Iowa State University
2005-2009	Lecturer, Architecture, Iowa State University
2001-2002	Visiting Assistant Professor, Illinois Institute of Technology

Professional Experience:

2003-2005	Waagner-Biro Stahl-Glas-Technik; Vienna, Austria
1999-2003	Epstein International; Chicago, IL; Warsaw, Poland
1996-1999	Morgante-Wilson Architects; Chicago, IL
1994-1996	Rugo/Raffensperger Architects; Chicago, IL

Licenses/Registration:

State of Illinois, Licensed Architect No. 001-017755

Selected Publications and Recent Research:

Browne's Ferry Stories: Historical research and mapping, oral histories, music composition, dance composition, performance, film collaboration with music and dance faculty, local artists. Funded by School Faculty Research Grant, College New South Global South Grant, Arts and Science Council Grant, City of Charlotte Opportunity Fund Grant.

Neighborhood Visioning Workshops Addressing Housing, Transportation, and Public Space: Funded by National Endowment for the Arts Grant.

Design Toolkit for Affordable Housing: Funded by Gambrell Foundation Grant.

Community Innovation Incubator: Multidisciplinary, multi-institutional project working with West Boulevard Corridor Coalition to develop a locally owned food co-op. Funded by Mecklenburg County. Impacts include creation of 501(c)3 food co-op organization, $3 million county funding for co-op design and construction, funding from Bank of America to UNC Charlotte to pursue incubators in other City Corridors of Opportunity.

"Engaging Co-Creation: A case studio of participatory urban design in the U.S." in *The City as Common Space: Experience from publicly design and public space planning,* eds. M. Spilackova, E. Spackova, K. Glumbikova. Ostrava, Czech Republic: University of Ostrava Press, 2021.

"Evaluating Student Learning: Engaging experience to create agents of change" in *Public Interest Design Education Guidebook* eds. L. Abendroth and B. Bell. New York: Routledge, 2019.

Professional Memberships:

Association of Collegiate Schools of Architecture; Environmental Design Research Association; Society of Architectural Historians; Social, Economic, Environmental Design (SEED) Network

Name: Mona Azarbayjani, Ph.D., Professor, Graduate Program Director

Courses Taught:

- ARCH 7103- Comprehensive Studio, 6 credits, Fall 2022, Fall 2021
- ARCH 4302-5302- Environmental System Principles, 3 credits, Spring 2022, Spring 2021
- ARCH 7201, Architectural Research Method, Fall 2022

Educational Credentials:

University of Science and Technology	Architecture	B.Arch	2003
University of Science and Technology	Architecture	M.Arch	2006
University of Illinois at Urbana- Champaign	Building Technology	Ph.D.	2010

Teaching Experience:

2023- Present	Full Professor
2019- Present	Graduate Program Director 2019- Present
2016- 2023	Associate Professor, Architecture, UNC-Charlotte
2010- 2016	Assistant Professor, Architecture, UNC-Charlotte
2006- 2010	Graduate Research Assistant and Teaching Assistant, UIUC

Professional Experience:

2020 - Present	ForeSightCares, Founder and CEO
2003 - 2006	Project Designer- Naghshe Jahan Pars Engineering Consultant Company

Licenses/Registration:

2009- Present	LEED AP
2010- Present	American Institute of Architecture, International Associate

Selected Publications and Recent Research:

2022 Mona Azarbayjani, “High Performance Double Skin Façade, Climatic-Based Exploration” 2022, Routledge Publishing, London.

2021 Amirazar, A., **Azarbayjani, M.**, et al. (Dec 2021). A low-cost and portable spectrometer for measuring light spectrum using artificial neural networks. *Energy and Buildings*, 252**. Impact Factor: 6.33**

2019 Day, J., et al., **Azarbayjani, M.** (May 2019). “*Blinded by the light: Occupant perceptions and visual comfort assessments of three dynamic daylight control systems and shading strategies.*” Building and Environment. Volume 154, May 2019, P. 107-121. **Impact Factor: 6.9**

Professional Memberships:

2012- Present Member of Façade Tectonic Institute
2006- Present Member, Phi Kappa Phi Honor Society by election- University of Illinois
2010- Present Member American Society of Heating, Refrigerating and AC Engineers (ASHRAE)
2007- Present Member SBSE, Society of Building Science Educators
2007- Present IBPSA, International Building Performance Simulation Association

Name: Jeff Balmer

Courses Taught (Four semesters prior to current visit)**:**

ARCH2101 -- 2nd Year Fall semester undergraduate design studio
ARCH4102 -- 4th Year Spring semester topical studio in Rome
ARCH4050 -- Modern & Contemporary Architecture in Rome
ARCH4050 -- Istanbul Program design workshop
ARCH4601 – Rome Program preparatory course
ARCH4204 – Architectural history elective (*A-Z: from Auschwitz to Zapruder*)

Educational Credentials:

Bachelor of Environmental Studies (University of Waterloo, 1989)
Bachelor of Architecture (University of Waterloo, 1992)
Master of Architecture (Iowa State University, 1998)

Teaching Experience:

University of Waterloo (1993)
Iowa State University (1998 – 2006)
Woodbury University (2007)
UNC Charlotte (2006 – present)

Professional Experience:

NORR Architecture & Engineering (Toronto, 1986)
Robbie, Young & Wright Architects (Toronto, 1987)
Baldwin & Franklin Architects (Toronto, 1988)
Fletcher Priest Architects (London UK, 1989)
Barton Myers Associates (Los Angeles CA, 1990-91)
WZMH Partnership (Toronto, 1992-93)
Baird Sampson Architects (Toronto, 1993-95)
Larkin Architects (Toronto, 1995-96)
JB/RS Architecture Urban Design Planning (Athens GA, 2003-04)

Selected Publications and Recent Research:

Diagramming the Big Idea, first edition (Routledge, 2012, co-authored by Michael Swisher)
Diagramming the Big Idea, second edition (Routledge, 2019, co-authored by Michael Swisher)

Marble & Lead: Aldo Moro, Luigi Moretti and the 'Bunker Courthouse' of the Foro Mussolini (ACSA, 2021, 'Best Paper', ACSA 109 Annual Meeting)

Luigi Moretti: Roman Architect (current book project, publication pending)

Name: Blaine Brownell, FAIA

Courses Taught (Four semesters prior to current visit)**:**

ARCH 4050/5050: The Material Landscape. Undergraduate and graduate seminar, elective BA/M.Arch course (3 credits), 8 students, 15 weeks, Fall 2021.

Educational Credentials:

Master of Architecture, Rice University, 1998

Bachelor of Arts in Architecture + Certificate in East Asian Studies, Princeton University, 1992

Teaching Experience:

Professor and Director, 2020–present
University of North Carolina at Charlotte Ravin School of Architecture, Charlotte, North Carolina

Professor, 2019-2020; Associate Professor, 2013-2019; Assistant Professor, 2008–2013 +
Interim Head, 2019-2020; Director of Graduate Studies, 2014-2019; Co-Director, Master of Science in Architecture–Sustainable Design Program, 2010-2014
University of Minnesota School of Architecture, Minneapolis, Minnesota

Visiting Professor in Sustainable Design, 2007–2008
University of Michigan College of Architecture + Urban Planning, Ann Arbor, Michigan

Professional Experience:

Architect, Associate, NBBJ Seattle, 1999–2006

Intern Architect, Associate, Willis Bricker + Cannady Architects, Houston, 1998–1999

Intern Architect, Takenaka Komuten, Nagoya, Japan, 1997

Licenses/Registration:

Registered Architect, State of Washington, 2003–present
National Council of Architectural Registration Boards

Selected Publications and Recent Research:

Book: *The Pandemic Effect: Ninety Experts on Immunizing the Built Environment*. New York: Princeton Architectural Press, 2023

Book Chapter: “Divergent Matter: The Manifold Material Nature of Contemporary Architecture.” Duanfang Lu, ed. *The Routledge Companion to Contemporary Architectural History*. Routledge Press, 2023

Book Chapter: “How New Materials Speak: Analyzing the Language of Emerging Materials in Architecture.” Elvin Karana et al, eds. *Materials Experience 2*. Elsevier, 2021

Book: *Examining the Environmental Impacts of Materials and Buildings*. Hershey, PA: IGI Global, 2020

Professional Memberships:

Advanced Materials Council (AMC), Founding Member
American Institute of Architects (AIA) North Carolina Board of Directors, Member, Ex Officio (2020–)
Fulbright Academy of Science & Technology (FAST)
Journal of Contemporary Architectural Education (CAE), Editorial Board Member (2019–present)
National Certification of Architectural Registration Boards (NCARB)

Name: Kelly Carlson-Reddig, Associate Professor

Courses Taught (Four semesters prior to current visit)**:**

ARCH 7103: Design Studio: Comprehensive
ARCH 3102: Architecture Design Studio
ARCH 6602: Representation I: Fundamentals
ARCH 4050 / 5050: Architecture Topics (MARK)

Educational Credentials:

Yale Univerisity, New Haven, CT, Master of Environmental Design 1992
Texas Tech University, Lubbock, TX, Bachelor of Architecture 1986

Teaching Experience:

UNC Charlotte, 1992-Present
Associate Director, UNC Charlotte, School of Architecture, 2008-2016
Advanced Program Coordinator, UNC Charlotte, School of Architecture, 1998-2002, 2006-08
Associate Professor, UNC Charlotte, School of Architecture, 1998-Present
Assistant Professor, UNC Charlotte, School of Architecture, 1992-1998
Graduate Faculty, UNC Charlotte, School of Architecture,1992-Present

Professional Experience:

Independent Practice, 1992-Present
Jung / Brannen Associates, Inc., Boston, Massachusetts, 1987-1990
Benjamin Thompson and Associates, Cambridge, Massachusetts, 1986-87

Licenses/Registration:

1990 Massachusetts; Registered Architect #8484, 1992-Present

Selected Publications and Recent Research:

Margin & Text: Expanding Narratives in Architecture, 2024
Co-Editor (with Betsy West & Jose Gamez)
Under contract with Princeton Architectural Press

"Aggregation Transformation"*, 2012 - 2013*
Cross-Disciplinary Grant, Collaboration and Exhibit (with Ryan Buyssens, Heather Freeman, & Eric Waterkotte)

"Critical Regionalism Revisited", 2011
ACSA Fall Conference, Houston, Texas

"Souped-Up" and "Un-Plugged": Perspectives on Architectural Technology"*, 1998*
Conference Chair and Technology Editor: ACSA Technology Conference, Cleveland, Ohio

"Students Consider Architecture's Materiality", 1997
Journal of Architectural Education, "The Pedagogy of Architectural Technology:

Professional Memberships:
NA

Name: Sekou Cooke

Courses Taught (Four semesters prior to current visit)**:**

MUDD 6101
MUDD 6050
MUDD 7102
ARCH 7104

Educational Credentials:
B. Arch, Cornell University – 1999
M. Arch, Harvard University – 2014

Teaching Experience:
California College of the Arts, 2006 – 2009
Syracuse University, 2010 – 2012, 2014 – 2021
UNC Charlotte, 2021 - present

Professional Experience:
sekou cooke STUDIO - Principal Jan 2008 – present
slap.ink Design Collective - Founding Partner Jul 2004 - Jan 2008
Seidel/Holzman - Project Manager Aug 2006 - Dec 2007
Michael R. Davis Architects, PC - Junior Architect, Design Associate Jan 1999 - Dec 2004

Licenses/Registration:
Registered Architect – New York, North Carolina

Selected Publications and Recent Research:
Book:
“Hip-Hop Architecture” Apr 2021
Bloomsbury Publishing, London, UK (peer-reviewed academic title)

Exhibitions:
“Close to the Edge: The Birth of Hip-Hop Architecture”
June 2023**:** Helms Design Center, Los Angeles, CA
Oct 2022: Museum of Design Atlanta (MODA), Atlanta, GA
Mar 2022: Projective Eye Gallery, Charlotte, NC
“Upside, Downside” Mar 2023**:** Solo Exhibition - University of Tennessee, Knoxville, TN
“Sekou Cooke: 15-81” Apr 2022

Book Chapters:
“The Architecture of Hip-Hop” in “The Culture” May 2023
Baltimore Museum of Art, Baltimore, MD
“Occupy Studio: Blackness, Protests, and Dirty Pinups” Oct 2021
Mas Context, Volume 33, “Vigilantism”
“Reconstructions: Architecture and Blackness in America” Feb 2021
Museum of Modern Art, New York, NY

Design Award:
Architectural League Emerging Voices Award Mar 2022

Professional Memberships:
None

Name: Jonathan Dessi-Olive

Courses Taught (Four semesters prior to current visit)**:**

Sp 2023	ARCH 4102/7211/7212, 4th Year +Vertical Studio: “How to Grow a House”, 12 students (course release from seminar)
F 2022	ARCH 3101, 3rd Year Architecture Design Studio, 15 students ARCH 3403 / 5303, Structural Principles, 79 students
Sp 2022	**ARCH 304, ADS2 Architecture Design Studio II, 17 students **ARCH 715 J, MycoMatters Seminar, 3 students
F 2021	**ARCH 403, ASD3 Architecture Design Studio III, 16 Students **ARCH 448, Structural Systems in Architecture II, 128 Students (** indicates course taught at K-State University, prior to arrival at UNCC)

Educational Credentials:

2017	Master of Science in Design and Computation (SMARCHS) Massachusetts Institute of Technology, School of Architecture
2014	Master of Architecture, The University of Pennsylvania School of Design
2010	Bachelor of Science in Architecture, University of Minnesota, College of Design

Teaching Experience:

2022 – Pres.	Assistant Professor (Tenure Track) in Building Technology and Design Integration The University of North Carolina at Charlotte | School of Architecture
2019 – 2022	Assistant Professor (Tenure Track), Kansas State University | Department of Architecture
2017 – 2019	Visiting Assistant Professor, Ventulett NEXT Generation Visiting Fellow Georgia Institute of Technology | School of Architecture

Selected Publications and Recent Research:

(1) Dessi-Olive, J. (2022) “Strategies for Growing Large-Scale Mycelium Structures”. Biomimetics 2022, 7(3), 129; https://doi.org/10.3390/biomimetics7030129

(2) Dessi-Olive, J. and Hsu, T. (2022) “A Simulation-Validated Shape Grammar for Architectural Acoustics”. Nexus Network Journal 24 (1): 55-73. https://doi.org/10.1007/s00004-021-00583-8

Professional Memberships:

Association for Computer Aided Design in Architecture (ACADIA), Building Technology Educators Society (BTES), Materials Research Society (MRS), Acoustical Society of America (ASA), International Association for Shell and Space Structures (IASS).

Name: Jefferson Ellinger

Courses Taught (Four semesters prior to current visit)**:**

Fall 2023	
Arch 5611	Research Methods
Arch 7101	Grad Topic Studio/Studio Lab
Arch 7900	Thesis(2)
Spring 2023	
Arch 2102	Design Studio
Arch 4605/560	Computational Practice
Arch 7213	Thesis (2)
Fall 2022	
Arch 7210	Thesis Prep
Arch 7101	Grad Topic Studio
Arch 7211/Arch 7212	Studio Lab
Spring 2022	
Arch 2102	Design Studio
Arch 5050	Architectural Topics
Arch 5611	Research Methods I
Arch 5612	Research Methods II
Arch 6890	Independent Study

Educational Credentials: Master of Architecture, Columbia University, New York
Bachelor of Science in Architecture, The Ohio State University

Teaching Experience: UNCC, SOA 2013-Present
RPI, SOA 2001-2013
Columbia University, GSAPP 1997-1999

Professional Experience: StudioLNGR 2018-present, Founding Partner
FABS, 2103-present, Partner
E/Ye Design, 2001-2018, Founding Partner
Reiser + Umemoto, 1999-2000
Greg Lynn Form, 1994-1998
Eisenman Architects, 1993-1994

Licenses/Registration: RA NYS 035439

Selected Publications and Recent Research:

Philosophical Difference and Advanced Computation in Architectural Theory: From Less to More, Routledge, **Jefferson Ellinger** New York, NY 2022

"AMPS", The Pandemic Effect: 60 Experts on Immunizing the Built Environment, Princeton Architectural Press, Blaine Brownell Editor. 2022

Professional Memberships: NCARB, ACSA

Name: Thomas Forget

Courses Taught (Four semesters prior to current visit)**:**

Fall 2023: ARCH 4101/7101 Design Studio (graduate and undergraduate)
Spring 2023: ARCH 7104 Diploma Studio; ARCH 1602 Modes of Communication
Fall 2022: ARCH 4101 Design Studio; HONR 3700 Honors Seminar (Media and Society)
Spring 2022: ARCH 1102 Design Studio; ARCH 1602 Modes of Communication

Educational Credentials:

Princeton University, Master of Architecture, 1998
Yale University, Master of Environmental Design, 1995
Columbia University, Bachelor of Arts (History of Art), 1993

Teaching Experience:

University of North Carolina at Charlotte, Associate Director, 2023-present
University of North Carolina at Charlotte, Associate Professor, 2014-present
University of North Carolina at Charlotte, Assistant Professor, 2008-2014
Bauhaus Summer Academy, Weimar, Germany, 2008, Coordinator and Instructor
New Jersey Institute of Technology, Adjunct Professor, 2006-2008
Roger Williams University, Adjunct Professor, 2003-2006

Professional Experience:

Ciotat Studio, principal and founder, 2002-present
Barkin & Associates, architectural designer and project manager, 2001-2002
Solomon Architecture & Urban Design, architectural designer, 1999-2000
Kevin Roche, John Dinkeloo & Associates, architectural designer, 1998
Gilroy McMahon Architects, designer & project manager, 1997

Selected Publications and Recent Research:

Forget, Thomas, “The Rules of the Game,” 4500-word book review and critical essay in *Journal of Urban History*, 2023, Vol. 49(5), pp. 1183–1190.

Forget, Thomas, “Linear City I,” July, 2021, 5-minute video submitted to Transfer Architecture Video Awards 2021 competition, shortlisted as a finalist, and exhibited at: "Atmosphérique, filming architecture" at arc en rêve in Bordeaux, June 29 to October 29, 2023; Écrans Urbains 2021, Musée Cantonal des Beaux-Arts, Le Cinéma Bellevaux, Lausanne, Switzerland, October 27-November 2, 2021.

Forget, Thomas, “Off the Map,” in *Architecture and Culture*, Volume: 7, Issue: 03, 2020, pages 383 - 397. Online edition includes a peer-reviewed 25-minute video.

Forget, Thomas, “Deeper into Projection: Spatiotemporal Design Inquiry Through Digital and Computational Methods,” in *Architecture Filmmaking*, edited by Hugh Campbell and Igea Troiani, pp. 277-297. Chicago: Intellect, The University of Chicago Press, 2020.

Ciotat Studio (Thomas Forget), “Urban Chiasmus,” five-channel media installation in First Street Green, part of the New Museum’s 2013 IDEAS CITY Festival, New York, NY, May 4, 2013.

Forget, Thomas, *The Construction of Drawings and Movies: Models for Architectural Design and Analysis* (London and New York: Routledge, 2013).

Name: José L.S. Gámez, Professor and Interim Dean, College of Arts +

Architecture **Courses Taught** (Four semesters prior to current visit)**:**

CoAA 1101 Prospect for Success in the College of Arts + Architecture (3 Cr.). Fall 2022
MUD 7193 Capstone Studio (6 Cr.) Summer II 2022
ARCH 6890: Directed Independent Study: Studio @ CTI (3 Cr.) Spring 2021

Educational Credentials:
University of California Los Angeles, Doctor of Philosophy in Architecture Distinguished Alumnus
University of California Berkeley, Master of Architecture
Texas A&M University, Bachelor of Environmental Design CUM LAUDE

Teaching Experience:
University of North Carolina Charlotte
2002-Present Professor of Architecture & Urbanism
(tenured in 2008; promoted to full in 2020)
2006-Present Latin American Studies Faculty Member
Florida A&M University
2018 (Fall) Visiting Studio Instructor: Graduate Core Studio_Urban Design
University of Nevada Las Vegas
1999-2002 Assistant Professor of Architecture (tenure track)
2002 (Spring) Interim Chair of Latin American Studies
Portland State University
1998 -1999 Visiting Assistant Professor of Architecture

Professional Experience:
2nd Vice President, Association of Collegiate Schools of Architecture
Consulting Designer, Assemblage Studio, Las Vegas, NV 1999 - Present
Archivist and Researcher 1995-*summer*
Zaha Hadid Architects-London/Museum of Contemporary Art, Los Angeles
Architectural Associate I 1993-1994
San Francisco Housing Authority, San Francisco, CA
Architectural Intern 1992-1993
Van Meter Williams Pollack Architecture + Urban Design, San Francisco, CA

Selected Publications and Recent Research:
José Gámez, Zhongjie Lin and Jeffrey Nesbit. Rio de Janeiro: Urban Expansion and Environment (London: Routledge Press, 2019).
Zhongjie Lin and José Gámez. Vertical Urbanism: Re-conceptualizing the Compact City (London: Routledge Press, 2018).
Tara Bengle, Janni Sorensen, José Gámez, and Liz Morrell. “A Model of Action Research for Building Neighborhood Decision-making Capacity” in Collaborations: A Journal of Community-based Research and Practice 4: 1, 4 (2021) 1-11.
Alex Cabral, Heather Freeman, Robby Sachs, Thomas Schmidt, and José Gámez. “DIY in Pandemic Times: Design Leadership during COVID-19” in TAD: Technology/Architecture + Design 4:2 (2020) 140-143.
José Gámez and Susan Rodgers. “Introduction: An Architecture of Change” in Introduction to Architecture: Global Disciplinary Knowledge edited by Joseph Godlewski (Cognella Academic Publishing, 2019) 151-152.

Name: Matthew Gin

Courses Taught (Four semesters prior to current visit)**:**

ARCH 1502/LBST 1105– The Arts and Society: Designing Change [Honors]

ARCH 4201/5201– Architectural History I: Prehistory to 1750

ARCH 4202/5202– Architectural History II: 1750 to Present

ARCH 4204/5204– Landscapes of Peacebuilding: Christianity, Slavery, and the City of Charlotte

Educational Credentials:

PhD, Architecture, Harvard University, 2020

AM, Architecture, Harvard University, 2013

MED, History and Theory of Architecture, Yale University, 2012

BM, Baroque Flute Performance, Oberlin Conservatory of Music, 2009

BA, Art History (Highest Honors), Oberlin College, 2009

Teaching Experience:

Assistant Professor of Architectural History, University of North Carolina at Charlotte, 2022-

Visiting Assistant Teaching Professor in Architectural History, Northeastern University, 2020-22

Lecturer in Architectural History, Northeastern University, 2018

Professional Experience:

Art, Architecture, and Liturgy Consultant, The Episcopal Chaplaincy at Harvard, 2020-22

Curatorial Intern, Department of Architecture & Design, The Museum of Modern Art, 2011

Preservation Intern, Frederick C. Robie House, The Frank Lloyd Wright Trust, 2008-09

Licenses/Registration:

N/A

Selected Publications and Recent Research:

"Staging Sovereignty: Ephemeral Architecture and the Entry of Maria Teresa Rafaela into France, 1745," *Journal of the Society of Architectural Historians* (forthcoming, March 2024).

"Something Old, Something New: Repurposing and the Production of Ephemeral Festival Architecture in Eighteenth-Century Paris" in Kristel Smentek and Wendy Bellion, eds. *Material Cultures of the Global Eighteenth Century: Art, Mobility, and Change*. (London: Bloomsbury Academic, 2023), 61-80.

Professional Memberships:

Society of Architectural Historians, Global Architectural History Teaching Collaborative, College Art Association, Historians of Eighteenth-Century Art and Architecture, American Society for Eighteenth-Century Studies, Renaissance Society of America, Society for French Historical Studies

Chris Jarrett
Professor, David R. Ravin School of Architecture, UNC Charlotte

Courses Taught

Fall 2023	ARCH 1502/LBST 1105: Architecture, Culture and Environment
	ARCH 4050/5050: Japanese Concepts of Space
Summer 2023	TOKYO Study Abroad Program
Spring 2023	ARCH 7104: Diploma Studio
Fall 2022	LBST 1105: Architecture, Culture and Environment
	ARCH 4050/5050: Japanese Conceptions of Space
Summer 2022	SEOUL Study Abroad Program

Educational Credentials

1986	Master of Science in Architecture (M.S.), Columbia University
1983	Bachelor of Architecture (B.Arch.), University of Oregon

Teaching Experience

2009-Present	Professor, University of North Carolina at Charlotte
2009-2019	Director, School of Architecture, University of North Carolina at Charlotte
2002-2009	Associate Director, School of Architecture, Georgia Institute of Technology
2001-2009	Associate Professor, School of Architecture, Georgia Institute of Technology
1995-2001	Assistant Professor, School of Architecture, Georgia Institute of Technology
1994-1995	Visiting Assistant Professor, School of Architecture, Georgia Institute of Technology
1990-1994	Adjunct Assistant Professor, School of Architecture, University of Southern California

Professional Experience

1995-1996	Design Consultant, Smith Dalia Architects, Atlanta, GA
1989-1995	Principal, Jarrett + Suharnoko, Los Angeles, CA
1988-1989	Design Consultant, Arthur Erickson Architects, Los Angeles, CA
1987-1988	Associate, Kohn Pederson Fox Architects, New York, NY
1986-1987	Designer, Skidmore, Owings + Merrill, New York, NY
1983-1985	Designer, Bobrow Thomas and Associates, Los Angeles, CA
1979-1980	Intern, Peter Munselle Architect, Beverly Hills, CA

Licenses/Registration
CA #24465 (inactive), AIA Associate #38304172, NCARB #854966

Selected Publications and Recent Research
Jarrett, C and Sharag-Eldin, A, Co-Editors, "*Resilient City: Physical, Social and Economic Perspectives,"* ARCC-EAAE Conference Proceedings (832 pages), ISBN 978-1-935129-31-8, August 2022

Jarrett, C and Sharag-Eldin, A, Co-Editors, "*Performative Environments*," ARCC Conference Proceedings (652 pages), ISBN 978-0-578-51242-7, August 2021

Jarrett, C, "*Intricate Compatibility: Study of a Hillside Lot in Tokyo,"* ARCC 2021: Performative Environments, University of Arizona, Tucson, AZ., March 2021

"*Questions for Architectural Research in Hybrid Reality*," ACSA 109th Annual Meeting (virtual), Expanding the View: Prospects for Architectural Education Futures; C Jarrett, C Bollo, R Azari, March 2021

designLAB, Co-Director, Dubois Center: design research and creative practice projects that interrogate professional and theoretical issues through speculative research and design ideas

Professional Memberships
2022-2024, Past-President; 2020-2022 President; 2016-2020 Vice-President: 2014-2016, At-Large Member, Architectural Research Centers Consortium (ARCC)
European Association for Architectural Education (EAAE)
International Council for Research and Innovation in Building and Construction (CIB)
Society of Building Science Educators (SBSE)
Association of Collegiate Schools of Architecture (ACSA)

Name: Kyoung Hee Kim

Courses Taught (Four semesters prior to current visit)**:**

7103 Integrated Design Studio | 7104 Diploma Studio
6306 Sustainable Façade Design | 5305 BSI | Independent Study
7211 Studio Lab 1 | 7212 Studio Lab 2 | 7213 Capstone Project

Educational Credentials:

2009, PhD in Architecture, University of Michigan Ann Arbor
2005, Master of Science in Architecture, University of Michigan Ann Arbor
2003, Master of Architecture, University of Michigan Ann Arbor
2001, Master of Architectural Engineering, *Chonbuk National University, Korea*
1998, Bachelor of Architectural Engineering, *Chonbuk National University, Korea*

Teaching Experience:

Design studios: Graduate Integrated Design Studio, Graduate Diploma Studio, 5th Year Undergraduate Comprehensive Design Studio, Research-based Topic Studio
Technology courses: Building Systems Integration, Sustainable Façade Design
MS program and INES PhD courses: MS program Studio Lab 1, 2, and Capstone project, INES PhD program cross-listing technology courses

Professional Experience (selected):

Aspen Art Museum, CO, USA. 2800 m^2. Completion 2014.
Biosphere at Amazon Headquarters, Seattle, USA. 6,000m^2. Completion 2018.
Canadian Parliament House of Commons at West Block, Ottawa, Canada. 1,700 m^2. Completion 2017.
Children's Hospital of Philadelphia, Philadelphia, PA. 47,000 m^2.
Gabon Convention Center, Libreville, Gabon. 20,000 m^2; Google Headquarters, Mountain View, CA.
Isabella Stewart Gardner Museum Extension, Boston, USA. 6,500 m^2. Completion 2012.
Jane's Carousel, New York, USA. 480 m^2. Completion 2012
Shinsegae Headquarter, Seoul, Korea. Completion 2014
TWA Flight Center Hotel, NY, NY. Completion 2020.
World Trade Center Museum Pavilion, New York, USA. 3,700 m^2. Completion 2012.

Licenses/Registration:

Registered Architect State of North Carolina, License Number 14481
NCARB Certified, Certification Number: 138649

Selected Publications and Recent Research:

Kim, Kyoung Hee. *Microalgae Building Enclosures: Design and Engineering Principles*. Routledge, 2022.
Warren, K., Milovanovic, J. and Kim, K. Effect of a Microalgae Façade on Design Behaviors: A Pilot Study with Architecture Students. Journal of Buildings, Buildings 2023, 13, 611.
Kim, Kyoung Hee et. al. 2023. Performance Assessment of a Multifunctional 3D Building Integrated Photovoltaic (BIPV) System. Proceeding of 2023 ARCC EAAE Conference.
Kim, Kyoung-Hee et. al. 2021 Architect R+D Award. "R+D Award: Toward Carbon Neutrality—High-Performance Biochromic Window."
Kim, Kyoung Hee et. al. 2021 AIA Latrobe Prize (Shortlisted). Nature Positive Design.
Kim, Kyoung-Hee et. al. NSF SBIR Phase II ($1M). High-Performance Microalgae Building Enclosures for Energy Efficient Retrofitting Application. 07/2022-10/2024
Kim, Kyoung Hee et. al. NSF PFI ($420,000). High performance, regenerative windows for building energy reduction and clean energy production
Wang, W. & Kim, Kyoung Hee. US-ASEAN Green Building Innovation Program: ($299,404): Serve as Co-PI. US Department of State (DOS).

Professional Memberships:

American Institute of Architects | The National Organization of Minority Architects | Council on Tall Buildings and Urban Habitat | Façade Tectonics Institute

Name: Lidia Klein

Courses Taught (Four semesters prior to current visit)**:**

ARCH 4600/4204/5204: “Methodologies of Architectural History and Criticism” [seminar] (Fall 2021 and Fall 2022)

ARCH 4203/5203: “Contemporary Architectural Theory: From the 1950s to the Present” [lecture survey for undergraduates and graduate students] (Fall 2021 and Fall 2022)

ARCH 5204/4204: “Architecture and Production: From Assembly Line to 3-D Printing” [seminar] (Spring 2022 and Spring 2023)

ARCH 5204/4204/ARTH 3001: “Brave New Worlds: Utopian Thinking in Urban Planning” [seminar] (Spring 2023)

Educational Credentials:

Ph.D.	Duke University Art, Art History, and Visual Studies, Summer 2018
Ph.D.	University of Warsaw, Art History, 2013
M.A.	University of Warsaw, Art History, 2007

Teaching and Professional Experience:

2018–	Assistant Professor of Architectural History, University of North Carolina- Charlotte, Charlotte, NC
2016	Visiting Assistant in Research, Yale School of Architecture, New Haven, CT
2012–2013	Assistant Professor, Academy of Fine Arts in Warsaw, Poland
2012–2013	Adjunct Faculty, School of Form, Poznan, Poland

Licenses/Registration: not applicable

Selected Publications and Recent Research:

Political Postmodernisms: Architecture in Chile and Poland, 1970–1990. London and New York: Routledge, 2023. (single-author book)

“Between Propaganda and Dissent: Postmodern Architecture in Pinochet’s Chile,” *Architectural Histories* 11 no. 1 [special issue “The Geopolitical Aesthetic of Postmodernism,” edited by Maroš Krivý and Léa-Catherine Szacka] (2023): 1–29. (essay)

“Postmodernist Revivalism and Architectural Gimmicks” in *The Contested Territory: Architectural Theories after 1960*, ed. Elie G. Haddad (London: Routledge, 2022): 125–133. (essay)

“Architecture and Trans Experience,” Annual International Conference of the Society of Architectural Historians, Albuquerque, April 2024. (session chair)

Professional Memberships: Society of Architectural Historians, College Art Association, European Architecture History Network

August 2023

MING-CHUN LEE, Ph.D.

Courses Taught:
Advanced Urban Design Studio / MUDD 6102
Graduate Topical Architecture Studio / ARCH 7101
GIS & Urban Mapping / MUDD 6050
Urban Analytics / ARCH 4050/6303

Educational Credentials:
Ph.D., University of Washington, Seattle, USA, 2008: Urban Design and Planning
M.ARCH., University of Washington, Seattle, USA, 2001: Architecture
M.S., National Cheng Kung University, Tainan, Taiwan, 1993: Aeronautics & Astronautics
B.S., National Cheng Kung University, Tainan, Taiwan, 1991: Hydraulic & Oceanic Engineering

Teaching Experience:

2019-present	Associate Professor, School of Architecture, University of North Carolina at Charlotte
2013-2019	Assistant Professor, School of Architecture, University of North Carolina at Charlotte
2009-2013	Assistant Professor, School of Architecture, University of Texas at Austin

Professional Experience:

1995-1997	Consulting Civil Engineer, Chiao-Lung Engineering Consultant, Taipei, Taiwan
1993-1995	Civil Engineering Officer, Lieutenant, The Special Defensive Missile Group, Army, Taiwan

Selected Publications and Recent Research:

1. [2023]. "Geo-visualization through Augmented Reality," extended abstract, CUMUP 2023, The 18th International Conference on Computational Urban Planning and Urban Management on June 20-22, 2023, Montreal, Canada.
2. [2022]. "Historian for a Day: A Use Case of Augmented Reality in Civic Engagement ," in Smart Cities and Smart Communities: Empowering Citizens through Intelligent Technologies, Springer series on "Smart Innovation, Systems and Technologies.", May 29, 2022, Springer.
3. [2022]. "Empowering through Extended Reality," in the proceedings for the 110th ACSA (Association of Collegiate Schools of Architecture) Annual Meeting, LA, CA, March 17-19, 2022.
4. [2021]. "Rediscovering Neighborhood History through Augmented Reality," 2021 IEEE International Conference on Artificial Intelligence and Virtual Reality (AIVR), XR Technologies in Museums (XRTM) Workshop, Virtual Event, Nov 15-17, 2021, Proceedings: AIVR 2021 IEEE, Catalog Number: CFP21O53-ART, ISBN: 978-1-6654-3225-2, p.60-64.
5. [2021]. "Transforming City of Charlotte with Immersive Visual Data," ACSP 2021 Annual Conference, Abstract Id: 390, Abstract Within Pre-Organized Session 47, Book of Accepted Abstracts, Virtual Event, October 21-23, 2021, The Association of Collegiate Schools of Planning
6. [2021]. "Exploring the Potential of Augmented Reality in Public Participation and Civic Engagement," extended abstract, CUMUP 2021, The 17th International Conference on Computational Urban Planning and Urban Management on June 9-11, 2021, online event
7. [2021]. "Mechanism of Sustainable Development of Urban Form Guided by Greenway System: A Case Study of Charlotte," in *Landscape Design*. 2021, 28(8): 18-23.
8. [2021]. "Mechanism of Smart Growth in American New South Cities: A Case Study of Charlotte's Expansion of Open Space System," *Journal of Urban Planning International*.

Professional Memberships:

Association of Collegiate Schools of Planning (ACSP)	2009~ Present
Association of American Geographers (AAG)	2013~ Present
International Seminar on Urban Form (ISUF)	2013~ Present
Urban Land Institute (ULI)	2013~ Present
International Society of City and Regional Planners (ISOCARP)	2013~ Present

Name: Emily Gunzburger Makas

Courses Taught:

Fall 2023	ARCH 7201: Design & Research Methodologies
	ARCH 4204/5204/5600: Critical Approaches to Heritage (Arch History/Theory Topics)
Spring 2023	ARCH 4050/5050: Civil Rights Memory (Architectural Elective)
Fall 2022	ARCH 7201: Design & Research Methodologies
	ARCH 4890/6890: Freelon Exhibition (Directed Independent Study)
Spring 2022	ARCH 4204/5204: Museums and Race (Arch History/Theory Topics)
	ARCH 4890/6890: Freelon Exhibition (Directed Independent Study)

Educational Credentials:

2007	**Cornell University**, Ph.D., History of Architecture & Urbanism
1997	**Columbia University**, Masters of Science, Historic Preservation
1995	**University of Tennessee**, Bachelors of Arts, History, Magna Cum Laude

Teaching Experience:

2013-Present	**School of Architecture, UNC Charlotte,** Associate Professor with Tenure
2007-2013	**School of Architecture, UNC Charlotte,** Assistant Professor

Professional Experience: N/A

Licenses/Registration: N/A

Selected Publications and Recent Research:

under contract	**Book:** *Urban and National Identities and the Rebuilding of Mostar.* London: Routledge.
under contract	**Book:** *Planning East European Capital Cities, 1945-1990*. London: Routledge.
2022	**Exhibition**: Container/Contained: Phil Freelon: Design Strategies for Telling African American Stories, North Carolina Museum of Art, Raleigh, NC
May 2023	**Invited Lecture**: "Urban Memory and Preservation," Preservation Through Generations: Istanbul 2023 – Im Memoriam Amir Pasic," IRCICA (Islamic History, Art and Culture Research Center), Istanbul, Turkey.
Nov. 2022	**Paper Presentation**: "Phil Freelon: Design Strategies for Telling African American Stories," at the Southeast Chapter of the Society of Architectural Historians 40th Annual Conference, Memphis, Tennessee
Sept. 2022	**Invited Lecture**: "Imagining Mostar's Center: Defining and Designing Shared Space in a Divided City," War Diaries Symposium, Georgia Tech School of Architecture, Atlanta, GA
Mar. 2022	**Paper Presentation**: "Bosnia-Hercegovina at Paris 1900: Colonialism, Nationalism, and Pan-Slavism," International Expositions: Looking to the Past, Seeing the Future, Institute of the Study of International Expositions Inaugural Symposium
2021	**Exhibition**: Container/Contained: Phil Freelon: Design Strategies for Telling African American Stories, Gantt Center for African American Art and Culture, Charlotte, NC
2021	**Book Chapter:** "Heritage Reconstruction in Mostar: Memories and Identities in Post-Conflict Bosnia-Hercegovina," In *Transforming National Heritages in the former Yugoslavia*, ed. by G. Badescu, B. Baille, F. Mazzucchelli, an. London: Palgrave MacMillan.
2019-2022	**Exhibition**: The Legacy of Lynching: Confronting Racial Terror in America / It Happened Here, Levine Museum of the New South, Charlotte, NC
2012	**Book Chapter:** "Rebuilding Mostar: International and Local Visions of a Contested City and its Heritage." In *On Location*, ed. by D.F. Ruggles. New York: Springer
2011	**Book:** *Architectural Conservation in Europe and the Americas,* with J.H. Stubbs. Hoboken, NJ: John Wiley & Sons.
2010	**Book:** *Capital Cities in the Aftermath of Empires: Planning in Central and Southeastern Europe,* co- edited with T.D. Conley. London: Routledge

Professional Memberships: N/A

Name: Marc Manack AIA NCARB

Courses Taught (Four semesters prior to current visit)
ARCH 2101 2nd Year Studio: Sites [Coordinator]
ARCH 2102 2nd Year Studio: Functions [Coordinator]
ARCH 7101 MARCH Advanced Standing: Meta Design-Build / Proto-Practices
ARCH 4050 / 6050 / 6307 Good|Fast|Cheap: Democratizing Design Build
ARCH 6050 Studio Lab
ARCH 4206/5206 Professional Practice

Educational Credentials:

2003 - 2005 The Ohio State University Knowlton School of Architecture
Master of Architecture

1997 - 2001 The Ohio State University Knowlton School of Architecture
Bachelor of Science in Architecture [Cum Laude]

Teaching Experience:

2016 - Present **University of North Carolina at Charlotte** [Assistant / Associate Professor]
2012 - 2016 **University of Arkansas / Fay Jones School of Architecture** [Assistant Professor]
2008 - 2011 **The Ohio State University / Knowlton School of Architecture** [Adjunct Professor]
2006 - 2008 **Kent State University / CAED** [Adjunct Professor]
2003 - 2005 **The Ohio State University / Knowlton School of Architecture** [Teaching Assistant]

Professional Experience:

2012 - Present SILO AR+D **|** Principal + Founder | www.siloard.com
2001 - 2012 Robert Maschke Architects Inc. | Architect + Design Lead | www.robertmaschke.com

Licenses/Registration:

2009 - Present **Registered Architect**
2009 - Present State of Ohio [Arc 0914810]
2016 - Present State of North Carolina [13626]
2012 - 2020 State of Arkansas [8668]

Selected Publications and Recent Research:

2012 - Present **SILO AR+D | Various Commissions | Exhibitions | Installations**
2022 **Northwest Arkansas Design Excellence Program** Walton Family Foundation
2021 **AN Interior Top 50 North American Architects** AN Interior Journal
2021 **A South Forty** | European Cultural Center | Venice Architecture Biennale

2023 **"Customization's Parametric Play"** with Frank Jacobus in Architectonics and Parametric Thinking, Francesco Bedeschi, Angela Carpenter, Frank Jacobus, Rachel Smith Loerts, Antonello Di Nunzio, editors [Routledge]

Professional Memberships:

2013 - Present National Council of Architecture Registration Boards **[Certificate No. 74928]**
2010 - Present American Institute of Architects **Member [38088644]**

Name: Elizabeth L. McCormick, AIA, CPHC, LEED AP

Courses Taught (Four semesters prior to current visit)**:**

Fall 2021: ARCH7102 Topical Design Studio, Protective Atmospheres & Entomological Happenings. ARCH4305/ARCH5305 Building Systems Integration

Spring 2022: ARCH4050/6306 High-Performance, Low-Tech

Fall 2022: ARCH7103 Integrated Design Studio (coordinator), ARCH5305 Building Systems Integration

Spring 2023: ARCH7102 Topical Design Studio, Protective Atmospheres: Healthy Building Prototypes for Hot-Humid Climates. ARCH6306/CEGR5090 Art, Technology & Climate Change (co-taught with Brett Tempest)

Educational Credentials:

PhD in Design, North Carolina State University (in progress, expected Dec 2024)
SMarchS in Building Technology, Massachusetts Institute of Technology
B'Arch, BA, Rhode Island School of Design

Teaching Experience: ~5 years of full-time teaching experience.

Professional Experience: ~10 years professional experience.

Licenses/Registration: Registered Architect, Texas.

Selected Publications and Recent Research:

NSF International Research Experiences for Students (20-598) (IRES Track I). $300,000. 2023-2026. PI/PD. Co-PI Brett Tempest. S*ustainable Housing & Protective Building Materials: Masonry as a Link Between Accessible Construction, Energy, Human Comfort and Mosquito Control in Rural Tanzania.*

InsideOUT: Inhabiting the Indoor Biome Post Pandemic. Book. Edited by E. McCormick. Routledge, 2024 [in press].

Democratized Innovation & Accessible Thermal Testing: The Approachable Hot Box. Energy and Buildings, 2023. E. McCormick, C. Wu, M. Roberts, O. Im

Avoiding the Imperialist Agenda when Designing for the Developing World. BTES Conference, Mayer, AZ, 2023. E. McCormick, L. Deshpande.

Modernity and Human Health: The Connection to Outdoor Air. ARCC-EAAE International Conference, Miami, 2022. E. McCormick, T. Rider

Professional Memberships: (current): Softwood Lumber Board, Advisory Board Member; American Institute of Architects (AIA), Board Member AIA Charlotte; AIA Charlotte Climate Action Committee; Building Technology Educators Society (BTES), Board Member; Society of Building Science Educators (SBSE); National Passive House Alliance (PHAUS).

Deborah Ryan, Professor of Architecture and Urban Design

Courses Taught
• Site Seeing, Sensing and Knowing (Spring 2023)
• The Anarchist's Guide to Activating Historic Sites (Spring 2023)
• Dilemmas of Modern City Planning: Equity in Design (Fall 2022)
• Architecture Design Studio VII: Intro to Urban Design (Fall 2022)
• Reassignment of Duties while a Senior Fellow with the Center for Living Cities (Spring 2022)
• Urban Form: Place and Race (Fall 2021)
• Graduate MUD Studio: Intro to Urban Design (Fall 2021)

Educational Credentials:
• Master of Landscape Architecture, Graduate School of Design, Harvard University 1983
• Bachelor of Environmental Design in Landscape Architecture (Cum Laude), North Carolina State University 1979.

Teaching Experience:
• Professor of Architecture and Urban Design, UNCC 1985 – Present; International Faculty, Italy, Spain, Denmark, Germany and Sweden; Adjunct Associate Professor, Master of Science in Real Estate Program, UNCC College of Business, 2012-2014; Adjunct Associate Professor, UNCC Women's Studies Program, 1990-1998.
• Visiting Critic in Historic Preservation and Community Engagement, Columbia University, 2013
• Visiting Critic, University of Hawaii, Manoa, 2010
• Visiting Critic in Urban Design, Graduate School of Design, Harvard University, 2003 - 2004
• Visiting Assistant Professor of Landscape Architecture, Harvard University, 1988
• Teaching Fellow, Harvard College, 1982-1983

Recent Professional Experience:
• Park Expo Vision Plan and Local Design Lead, Charlotte, NC, 2023-
• *Belmont Bombers* Ground Mural, (with UNCC and City of Charlotte Urban Design Center) Alexander Park, Charlotte, NC, 2021
• McCullough Street Station TOD Master Plan (with UNCC, UC Partners and Atapco), 2021
• Le Jardin Academy, Master Facilities Plan, Honolulu, Hawaii, 2019-2020
• *Sweet Little Brew House*, A Tactical Urbanism, Circular Economy Demonstration Project at the Innovation Barn (with UNCC), Charlotte, NC, 2019
• Old Concord Station Light Rail TOD Master Plan, (with UNCC), 2018
• *Walk This Way*, Tactical Urbanism Installation (with UNCC and Charlotte DOT), 2017
• City of Raleigh Historic Resources and Museums Plan (with HR&A), 2017-2018

Licenses/Registration:
Landscape Architect, Licensed in North Carolina, #599 since 1997

Selected Publications and Recent Research:
• *Site Seeing, Sensing and Knowing* (Research undertaken while a Senior Fellow with the Center for the Living City) 2021-
• Deborah Ryan et. al., The Millennial Plan, Blurb.com, Charlotte, NC 2018
• Deborah Ryan and F. Vagnone, Anarchist's Guide to Historic House Museums, Routledge. Now in its seventh printing, 2015
• Deborah Ryan and M. Williams, Small Town Fit: Healthy People, Places and Policies in Davidson, North Carolina, University of North Carolina at Charlotte, 2011

Name: Greg Snyder

Courses Taught (Four semesters prior to current visit)**:**

Spring 2023
- ARCH 1102: 1st year Design Studio
- LBST 2213 Science, Technology & Society: An Environmental Ethic
- ARCH 4050/5050_Civil Rights

Fall 2022
- ARCH 1101: 1st year Design Studio
- ARCH 4301: Materials + Assembly Principles
- ARCH 4050/6050: The Metal Building in an Expanded Field

Spring 2022
- LBST 2213 Science, Technology & Society: An Environmental Ethic
- ARCH 4050/6050: Freelon Exhibition

Fall 2021
- ARCH 1101: 1st year Design Studio
- ARCH 4301: Materials + Assembly Principles
- ARCH 4050/6050: Freelon Exhibition

Educational Credentials:

Rice University, Houston, Texas, Master of Architecture 1989
University of Texas at Arlington, Arlington, Texas, Bachelor of Science of Architecture 1987

Teaching Experience:

The University of North Carolina at Charlotte, 2003 – present Associate Professor
The University of North Carolina at Charlotte, Fall 1994 – 2003 Assistant Professor
The University of Houston, fall 1989 - summer 1994 Adjunct Assistant Professor

Professional Experience:

1989-1994, Designer and Fabricator, Peter Waldman Architects

Licenses/Registration:

North Carolina Building Contractor License #76035
AWS Welding Certification #1507823W

Selected Publications and Recent Research:

Article – “A Homage to Buster” in ON SITE review 39 Tools, Summer 2021.

Article – “The Bookshelf as Surrogate Self” in ON SITE review 40 The Architects Library, Winter 2022.

Exhibit - “Container / Contained: Phil Freelon - Design Strategies for Telling African American Stories” at the Harvey B Gantt Center, October 29, 2021 - January 17, 2022.

Exhibit - “Container / Contained: Phil Freelon - Design Strategies for Telling African American Stories” at the North Carolina Museum of Art, February 26 - May 16, 2022.

Exhibit - “Container / Contained: Phil Freelon - Design Strategies for Telling African American Stories” at Florida A&M University, School of Architecture and Engineering, March 10 - May 19, 2023.

Building Design and Construction – “A House for Long Farm.” The design development and construction documents for a house in Mount Pleasant, North Carolina. The project embodies research related to the metal building that I have been involved with, both as a teaching interest and a research interest.

Presenter, MBMA Faculty Workshop on Metal Building Education, August 2022, Nashville, Tennessee.

Professional Memberships:

none

Name: David Thaddeus

Courses Taught (Four semesters prior to current visit)**:**

ARCH 3101 (3rd Yr. Fall studio) | ARCH 4303/5303 (Structural Principles) | ARCH 4304/5304 (Structural Systems) | ARCH 4050/6306 (The Structure of the Everyday) | CEGR 6090/8090 (Structural Systems : co-taught)

Educational Credentials: Master of Architecture (M.ARCH). 1988. University of Houston, Texas
Bachelor of Engineering (BE). 1981. American University of Beirut, Lebanon

Teaching Experience: Professor. UNC Charlotte. 1999-Present
Associate Professor . University of Houston. 1990-1999
Visiting Assistant Professor . University of Houston. 1988-1990

Professional Experience: Lay-Su and Assoc. Architects and Engineers. Houston, TX. 1993-1999
Tackett Lodholz Architects. Houston, TX. 1988-1989
Center for Environmental Structure (Christopher Alexander).Berkeley, 1987
Middle East Construction Co. Beirut, Lebanon. 1982-1985
ZAKO General Contractors. Abu Dhabi. UAE . 1981-1982
TL Chang and Assoc. 1980. Taipei, Taiwan

Licenses/Registration: Registered Architect. NC. License #9500

Selected Publications and Recent Research:

Azarbayjani, M, Thaddeus, D. Means to Achieve Net Zero in the Building Industry. Ed. Ali Sayigh. Chapter title: Environmental Dimensions of Climate Change: Endurance and Change in Material Culture. Springer International Publishing, Switzerland.2023

Azarbayjani, M, Thaddeus, D. Building Comfort by Natural Means.Ed. Ali Sayigh. Chapter: High comfort- Low Impact: Integration of thermal mass in Pursuit of Designing Sustainable Buildings.

"Team Totemics," co-authored with Frances Hsu and Peter Wong, 2021 National Conference on the Beginning Design Student (NCBDS) Texas A&M University, April 2021, paper presentation and proceedings. Paper was also submitted and accepted at

- 2021 Building Technology Educators' Society (BTES) Conference, Auburn University, June
- 2021 S.ARCH Conference, Rome Italy, Fall 2021
- 5th International Conference on Structures and Architecture (ICSA2022), Rome, Italy 2021

Azarbayjani, M, Thaddeus, D. The importance of Wood and Timber in sustainable buildings. Ed. Ali Sayigh. Chapter title: Cross Laminating a Sustainable Future for Mass Timber - One Floor at a Time, Springer International Publishing. 2021

TOYS: Visual Teaching and Learning Using Digitally-Fabricated Structural Models. 2006-Present

Professional Memberships: AIA 2003-2022. Member. Board of Directors 2020-2022
Building Technology Educators' Society. 2006-Present
NCARB. 2006-2013

Name:

Betsy West, Associate Professor

Courses Taught (Four semesters prior to current visit)**:**

ARCH 6101 – Master of Architecture I Studio (Fall 2023)
ARCH 3102 – 3rd Year Studio (Spring 2023)
ARCH 7101 – Grad Topical Studio (Fall 2022)

ARCH 4204/5204/5050 – Humanitarian Architecture: Small-Scale Design in a Big-Scale World (Fall 2022, Fall 2023)

Educational Credentials:

Master of Architecture – Yale University
Bachelor of Architecture, North Carolina State University
Bachelor of Arts in Architecture, North Carolina State University

Teaching Experience:

1998-2023, UNC Charlotte School of Architecture

2001-04 – Graduate Program Director
2004-08 – Chair, College of Architecture
2007-08 – Provost's Task Force on the Creation of the College of Arts + Architecture
2012-13 – Interim Chair, Department of Dance

Professional Experience:

studio01architects (2001-present)

Licenses/Registration:

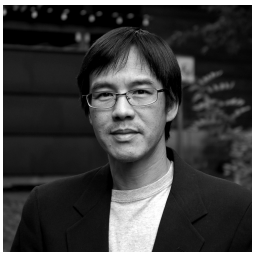
Architecture license – NC #6767

Selected Publications and Recent Research:

Margin & Text: Expanding Narratives in Architecture (Princeton Architectural Press, Spring 2024)
Co-edited with Kelly Carlson Reddig and Jose Gamez

Professional Memberships:

NA



Peter L. Wong, Associate Professor

Courses Taught (four semesters prior to NAAB visit):
ARCH 3101 Design Studio (coordinator), Fall 2022, Fall 2023.
ARCH 4102 Rome Design Studio, Spring 2023.
ARCH 4050 Field Drawing Representation (Rome/Istanbul), Spring 2023.
ARCH 5050 Free-line Representation, Fall 2022.
ARCH 7102 Graduate Studio: Saccade Space: Design & Eye Tracking, Spring 2022.
ARCH 4205/5204 History and Theory of Architectural Space, Spring 2022.

Educational Credentials:
Master of Architecture, Univ. of Pennsylvania; December 1985.
Bachelor of Arts in Architectural Studies, Univ. of Washington, Seattle, March 1981.

Teaching Experience:
University of North Carolina Charlotte, School of Architecture, 1988 to present.
Tongji University, College of Arch. and Urban Planning, Visiting Scholar, Fall 2011.
Guest Critic at: Univ. Tenn., Univ. Virginia, Univ. of Penn, Clemson Univ. (selected).

Professional Experience:
Peter Wong, Architect, PLLC, Charlotte, NC, 2007 to present.
George Yu, Architects, Philadelphia, PA, 1986 – 1988.
Maynard and Partch Architects, Anchorage, AK, 1981 – 1983.

Licenses/Registration:
Professional Architect, State of North Carolina, No. 6526, February 1993 to present.
Professional Architect, State of Pennsylvania, No. RA010572X, June 1987 to present.
Peter Wong, Architect, PLLC, State of North Carolina, No. 51827, Jan. 2007 to present.

Selected Publications and Recent Research:
" Reading Architectural Elements and Spaces: An Eye-Tracking Exploration," *Journal of Architecture and Planning Research*, Issue 37, No. 1, 2022.
"Team Totemics," co-authored w/ F. Hsu and D. Thaddeus, *Contemporary Architectural Education*, Urban Environment Design Magazine Press, Tianjin University, October 2022.
3D Printed Spatial Maquettes of Adolf Loos Houses, research work published in the article "Ideario," *Stoa Journal: Spaziovirgoa*, No. 1, Naples: Thymos Books, 2021.
"Vague Space: Tracing Eyes, Edges, and the Indeterminate Limits of the Architectural Interior," 2021 ACSA Annual Meeting, Washington University, St. Louis, paper and proceedings, March 2021.
"Chinese Puzzle: The Changing Social Conditions of Shikumen Architecture," book chapter for *Diversity and Design: Understanding Hidden Consequences*, ed. K. Smith, B. Tauke, and C. Davis, Routledge, forthcoming publication Fall 2015.
"A Comparison of 'Third Place', High Density Residential Environments," presented at the 2014 ACSA International Conference: Open City: New Post-Industrial World Order, Seoul, Korea, June 21-23, 2014.
"The Expanding Corner: the interior landscape of Richard Neutra's domestic work," moderator, presented at the 2013 Southeast Society of Architectural Historians *Mid-Century Modernism in the South*, September 25-28, 2013.
"From Metabolic to Behavioral: the changing scale of urbanism in Japan," published in *Urban Flux*, No.6, December 2012, 52-62.

Professional Memberships:
National Certification of Architectural Registration Boards, No. 37,350, 1988 to present.
America Institute of Architects, No. 30304493, 2004 – 2009.