North Carolina State University
College of Design
School of Architecture

2018 Visiting Team Report

B. Arch. [preprofessional degree + 30 semester credits]

M. Arch. Track 1 [preprofessional degree + 48 semester credits]

M. Arch. Track 3 [non-preprofessional degree + 96 semester credits]

The National Architectural Accrediting Board
February 24-28, 2018

Vision: The NAAB aspires to be the leader in establishing educational quality assurance standards to enhance the value, relevance, and effectiveness of the architectural profession.

Mission: The NAAB develops and maintains a system of accreditation in professional architecture education that is responsive to the needs of society and allows institutions with varying resources and circumstances to evolve according to their individual needs.

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I. Summary of Visit

a. The team expresses its appreciation to Dean Hoversten, Professor Hill, the faculty, and staff members who participated in assembling review materials and the team room.

The School of Architecture was established in 1948 by Dean Henry Kamphoefner as a department in the School of Design (later the College of Design). Over the years the School of Architecture evolved under notable leadership, most recently Dean Marvin Malecha, who served until his departure in 2016. Dr. Mark Hoversten, current dean, brings fresh enthusiasm which regenerates excitement in program initiatives and invigorates both students and faculty.

The School of Architecture's mission is:

- To educate students for the profession of architecture;
- To promote growth, change, and improvement in the profession and academic discipline of architecture through creatiave work, scholarship, research and service;
- To increase public awareness of the nature of architecture and its essential contribution to life and society.

The team was impressed by how curriculum, faculty and the academic culture overlay the mission. Many faculty are licensed; some actively practitice. Faculty and program leadership are keenly aware of pressures facing graduates, actively addressing current challenges, and thoughtfully anticipating future hurdles.

Faculty meet twice yearly in retreats to review and refine the curriculum direction. The program participates in the IPAL program, allowing students the unique opportunity to take the professional licensing examination while completing their academic career. Not surprisingly, current graduate pass rates on the Architect Registration Examination are above the national average, validating the program's mission of educating students for practice.

Faculty are collegial, accomplished, and role models for students. Distinguished Professor Patrick Rand is a recent recipient of a Fulbright Distinguished Chair to teach and conduct research at Aalto University in Helsinki, Finland, in 2019. Students express confidence in counsel and advice received from faculty advisors. Recent graduates reflect fondly on their academic experience. Local professionals are eager to partner with and support the program when called upon.

Students and graduates value their experience and relationships built at NC State and, upon graduation, become productive members of the architectural community. The team felt the program was achieving its stated mission.

b. Conditions Not Achieved:

II.1.1 Student Performance Criteria

Realm B, criterion B.4, Technical Documentation

Realm B, criterion B.6, Environmental Systems

Realm B, criterion B.10, Financial Considerations

Realm C, criterion C.2, Integrated Evaluations and Decision-making Design Process

Realm C, criterion C.3, Integrtated Design

Part Two (II): Section 2 – Curricular Framework

II.4.2 Access to NAAB Conditions and Procedures

II.4.4 Public Access to APRs and VTRs

II. Progress Since the Previous Site Visit

2009 Criterion B.10, Financial Considerations:
Understanding of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

Previous Team Report (2012): No evidence was found that "Fundamentals of building costs such as acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an emphasis on life-cycle cost accounting" were addressed in the classroom setting or in required student assignments.

2018 Visiting Team Assessment: The 2018 team echos comments of the previous team – no evidence was found to demonstrate students understood fundamentals of building costs such as acquisition costs, project financing and funding, financial feasibility, operational costs, construction estimating, or life-cycle cost accounting. Criterion B.10 is still **Not Met**.

Previous Team Report (2012): Causes of Concern

A. Transfer credit procedures: The School of Architecture is not asked to assess more than a handful of students for transfer credit each year. When asked to do so, they have a system in place through which the program head reviews transcripts, course descriptions, and portfolios as appropriate. Student files, however, do not document transfer decisions and evidence in detail. In order to meet NAAB's new emphasis on rigor in course transfer policy, student files will need to be upgraded concerning future transfers. For NAAB purposes, what is being transferred is SPCs, not course credits, so files should document this aspect of transfers as well.

2018 Visiting Team Assessment: Based on student Advising Reports provided and reviewed this is no longer a cause of concern.

B. Financial uncertainties: Even though the college has done an admirable job addressing funding reductions from the state without affecting the educational experience of architecture students, further reductions could have a significant negative impact. Cost savings from administrative reorganization and special allocations from the chancellor's office cannot be counted on as future strategies to overcome additional reductions in public funding. With the unknown political commitment for ongoing public funding of higher education at the current level, there is concern of what additional impacts funding reductions would have.

2018 Visiting Team Assessment: Based on discussions with the Dean and a review of the 2017 NC State University Annual Financial Report, financial uncertainty is no longer a cause for concern.

C. Diversity: Since the previous 2006 visit, considerable strides have been made in achieving gender diversity among faculty and student bodies. Recent tenure-track teaching and research hires have also contributed to an intellectually balanced and increasingly diverse faculty. However, efforts to increase ethnic and racial diversity are lacking, particularly among the student demographic of the accredited programs.

In 2007 the School of Architecture adopted a Plan for Diversity with a primary goal of achieving a critical mass of historically underrepresented minority faculty and students. The plan lists several areas for affecting change that can be summarized as the following: diversity of philosophies; faculty and student recruitment; admissions procedures; scholarships and financial support; advising and mentoring; and visiting faculty. The APR states that in response to the Plan for Diversity for the School of Architecture, efforts made to date include: a careful screening of student applicants to diversify the freshman pool, a three-year commitment of department head as a University ADVANCE Scholar, a mentoring program pairing minority students with professional mentors to improve retention, and proactive recruitment of minority faculty. Aside from participation in ADVANCE, little progress has been made on these efforts. While the goals of the Plan for Diversity are comprehensive, implementation has been insufficient.

2018 Visiting Team Assessment: This condition is now **Met**.

III. Compliance with the 2014 Conditions for Accreditation

PART ONE (I): INSTITUTIONAL SUPPORT AND COMMITMENT TO CONTINUOUS IMPROVEMENT
This part addresses the commitment of the institution, its faculty, staff, and students to the development and evolution of the program over time.

Part One (I): Section 1 – Identity and Self-Assessment

I.1.1 History and Mission: The program must describe its history, mission, and culture and how that history, mission, and culture shape the program's pedagogy and development.

- Programs that exist within a larger educational institution must also describe the history and mission of the institution and how that shapes or influences the program.
- The program must describe its active role and relationship within its academic context and university community. The description must include the program's benefits to the institutional setting and how the program as a unit and/or individual faculty members participate in university-wide initiatives and the university's academic plan. The description must also include how the program as a unit develops multidisciplinary relationships and leverages opportunities that are uniquely defined within the university and its local context in the community.

[X] Described

2018 Analysis/Review: Starting in 1948, the program's early curriculum was partially based on Bauhaus principles emphasizing the interrelationship of design disciplines, materials and craft, and social responsibility. The Department of Architecture offered a single, five-year BArch degree. Offerings expanded in the 1980s to three degrees: the four-year, preprofessional Bachelor of Environmental Design in Architecture (BEDA), the professional Bachelor of Architecture (B.Arch, "5th Year"), and the Master of Architecture (M.Arch). A distinguishing feature of the undergraduate curricula is the first-year requirement for multiple interdisciplinary design courses as the foundation for architectural design.

The Mission of the School of Architecture is:

- To educate students for the profession of architecture;
- To promote growth, change, and improvement in the profession and academic discipline of architecture through creative work, scholarship, research and service;
- To increase public awareness of the nature of architecture and its essential contribution to life and society.

I.1.2 Learning Culture: The program must demonstrate that it provides a positive and respectful learning environment that encourages optimism, respect, sharing, engagement, and innovation between and among the members of its faculty, student body, administration, and staff in all learning environments, both traditional and nontraditional.

- The program must have adopted a written studio culture policy and a plan for its implementation, including dissemination to all members of the learning community, regular evaluation, and continuous improvement or revision. In addition, the plan must address the values of time management, general health and well-being, work-School of Architecture-life balance, and professional conduct.
- The program must describe the ways in which students and faculty are encouraged to learn both inside and outside the classroom through individual and collective learning opportunities that include but are not limited to field trips, participation in professional societies and organizations, honor societies, and other program-specific or campus-wide and community-wide activities.

[X] Demonstrated

2018 Analysis/Review: NCSU School of Architecture promotes a collaborative and open learning environment both through written statements displayed in the School of Architecture and through a culture of multi-disciplined collaborations. Students are encouraged to push boundaries and ask questions to enhance the learning experience.

NCSU's learning culture is guided by two documents: The College of Design "Right of Inquiry" and the "School of Architecture Studio Culture Statement." The "Right of Inquiry" document is provided to every incoming student in the college, and posted in Brooks Hall entry.

The team found the School of Architecture's Studio Culture Policiy statement was acknowledged and supported by the students. It describes a vision of an acceptable studio environment to foster a healthy learning culture leading to productive practitioners. The Studio Culture Statement is found on the College of Design's website.

I.1.3 Social Equity: The program must have a policy on diversity and inclusion that is communicated to current and prospective faculty, students, and staff and is reflected in the distribution of the program's human, physical, and financial resources.

- The program must describe its plan for maintaining or increasing the diversity of its faculty, staff, and students during the next two accreditation cycles as compared with the existing diversity of the faculty, staff, and students of the institution.
- The program must document that institutional-, college-, or program-level policies are in place to further Equal Employment Opportunity/Affirmative Action (EEO/AA), as well as any other diversity initiatives at the program, college, or institutional level.

[X] Demonstrated

2018 Analysis/Review: NC State University's Office of Institutional Equity and Diversity (OEID) promulgates policies and guidelines on diversity adopted by the university. Information on employment and hiring and non-discriminatory policies are found on the website.

The College of Design and the School of Architecture's Statement on Diversity reads:

> "At the College of Design, we aspire to a diverse design community that enhances the education experience of all students. Gradually over the past decade, the college has matured into a community diverse in culture, race, gender, and personal interests. Our belief is that the creative energy of the College truly comes to life through our differences."

The School of Architecture acknowledges more work must be done in recruiting African American faculty and students. The faculty of the School of Architecture have developed *A Plan for Diversity for the School of Architecture* to encourage a more socially equitable community. The School of Architecture has made strides in meeting and exceeding gender diversity goals.

I.1.4 Defining Perspectives: The program must describe how it is responsive to the following perspectives or forces that affect the education and development of professional architects. The response to each perspective must further identify how these perspectives will continue to be addressed as part of the program's long-range planning activities.

A. Collaboration and Leadership. The program must describe its culture for successful individual and team dynamics, collaborative experiences, and opportunities for leadership roles.

B. Design. The program must describe its approach for developing graduates with an understanding of design as a multidimensional process involving problem resolution and the discovery of new opportunities that will create value.

C. Professional Opportunity. The program must describe its approach for educating students on the breadth of professional opportunities and career paths, including the transition to internship and licensure.

D. Stewardship of the Environment. The program must describe its approach to developing graduates who are prepared to both understand and take responsibility for stewardship of the environment and natural resources.

E. Community and Social Responsibility. The program must describe its approach to developing graduates who are prepared to be active, engaged citizens able to understand what it means to be professional members of society and to act ethically on that understanding.

[X] Described

2018 Analysis/Review: **Collaboration and Leadership.** The School of Architecture offers students a broad professional education preparing them to be leaders and effective collaborators in both the academy and practice. The APR and conversations with Dean Hoversten and faculty confirmed the College of Design effectively supports productive collaboration with other departments in the college.

The program enjoys productive engagement with Landscape Architecture, Graphic Design, Industrial Design, Art + Design and other units across the university. Students and faculty are engaged in research, teaching, and other initiatives with the Colleges of Engineering, Natural Resources, Humanities and Social Sciences, Veterinary Medicine, and Sciences. The program collaborates in teaching and research with other University of North Carolina System units such as NC A+T State University's Department of Engineering, the UNC Coastal Studies Institute, and the UNC Coastal Hazards Center.

First Year Experience (FYE): is a freshman-year collaboration with students from Art + Design, Industrial and Graphic Design, and Architecture in multidisciplinary studios and design thinking courses to jump-start the culture of collaborative thinking.

In conversations with student leaders from AIAS, Freedom by Design, NOMAS, the College of Design Council and the Architecture Graduate Student Association, it was clear students are motivated and committed to advance issues relevant to their respective organizations' missions.

Design. The School of Architecture provides a professional education paired with multidisciplinary and self-directed design and research opportunities. A tradition of "making" that places value in tangible artifacts of design was evident in student work and by walking through the design studios. The School of Architecture cultivates design thinking abilities and discipline-specific skills to prepare students to be leaders and effective collaborators. University connections to the graduate professional community provide real-world opportunities for students.

Studios are organized as follows: multidisciplinary First Year Experience (FYE) studios introduce basic concepts and skills that are common to each design discipline; introductory architecture studios develop research and design processes with site emphasis (physical and cultural context), form, and composition; intermediate studios explore material logics, technical requirements, and more complex programs; Advanced studios require research and comprehensive/integrative solutions; options-level elective studios vary in topic and scope, and provide students the opportunity to specialize in topical areas. Students in graduate professional degree programs may pursue a Final Project (thesis). The School of Architecture offers ample resources to support design exploration: a Materials Lab (shop), the Bailey IT/Prototyping Lab, and the Harrye B. Lyons Design Library.

The School of Architecture enjoys collaborative relationships with allied departments in the College of Design and with units across the University such as the colleges of Engineering, Natural Resources, and Veterinary Medicine. They collaborate in teaching and research with the UNC Coastal Studies Institute and the UNC Coastal Hazards Center. The School of Architecture provides outreach to neighborhoods, non-profit organizations, and under-served populations through the AIA/S Freedom by Design community service program.

Leadership opportunities are available in the School of Architecture: participation in the American Institute of Architecture Students (AIA/S), the college's Design council which initiates public relations events and provides a student voice with college administration, the Architecture Graduate Student Association (AGSA), and an emerging chapter of the National Organization of Minority Architecture Students (NOMAS).

Professional Opportunity. The School of Architecture maintains a close liaison with practitioners devoted to the School of Architecture. Alumni and affiliated firms provide funding for scholarship and fellowship activities and employ students as interns.

Faculty and development staff participate in AIA state, regional, and national meetings. The School of Architecture sponsors alumni receptions at each event and maintains information update booths. A meeting with recent alumni confirmed that the School of Architecture is committed to offering professional opportunities to students, most recently as seen through the School of Architecture's participation in the Integrated Path for Architecture Licensure (IPAL). This initiative is well-matched to the School of Architecture's goal of integrating architectural education with the profession by promoting a connection between students to traditional and nontraditional work environments. Professors Purnell and Hallowell are NCARB and AXP Licensing Advisors.

Professionals are in regular contact with students via teaching in the studios and attending reviews. The School of Architecture's professional advisory board offers professionals a role in program assessment and planning efforts. Also, a college-level advisory board of interdisciplinary design professionals provides strategic guidance. The professional practice course has been updated to meet evolving pedagogical and practice-related priorities with selected lectures provided by practitioners; assignments require students to engage with firms and closely observe projects under construction. Electives in Legal Issues and Construction Administration are offered.

The College of Design Student Services Office provides students professional workshop opportunities, career counseling, and portfolio review events. This office hosts on-campus Interview Days that, according to students and alumni, are an effective way for students to meet practitioners and gain employment.

Stewardship of the Environment. Stewardship of the environment is apparent in School of Architecture initiatives, courses, research projects, and extracurricular opportunities. Elective courses address topics of resource consumption, indoor environmental quality, and low-impact development strategies.

The School of Architecture offers a Graduate Certificate in Energy and Technology and also a Graduate Certificate in City Design. These programs afford the students the opportunity to specialize in topics related to stewardship and the environment. Faculty members Jianxin Hu, Wayne Place, Soolyeon Cho, and Traci Rider are pursuing funded research on the topics of daylighting, energy, sustainability, and health.

Community and Social Responsibility. One of The College of Design's Strategic Plan goals is to provide "*High impact education experiences: service and community-based learning.*"

A Graduate Certificate in Public Interest Design (PID) program is fifteen credits of aligned research and design courses. Faculty interest and expertise in affordable housing, resilient communities, and PID results in

topical case studies and related courses. Of note is the Public Interest Architecture Study/Internship in cooperation with firms doing non-profit work. The APR and information obtained through interviews with the faculty and students demonstrates the program's commitment to prepare students to be proactive in a context of social advocacy. Relevant faculty publications include: *Good Deeds, Good Design (Bryan Bell); Expanding Architecture: Design as Activism (Bell and Katie Wakeford); Public Interest Design Practice Guidebook (Lisa Abendroth, Bell); Public Interest Design Education Guidebook (forthcoming, Abendroth, Bell).*

The Coastal Dynamics Design Lab is an interdisciplinary lab focused on community-engaged design and research in the unique costal topology of eastern North Carolina.

Prof. Tom Barrie leads an initiative focused on Affordable Housing + Sustainable Communities' research, and community-based demonstration and service-learning projects.

Freedom by Design (FbD) has designed and built two recent projects: Living with Autism and Life Experiences. The chapter received a 2017 national AIA/S FbD Program Honor Award.

I.1.5 Long-Range Planning: The program must demonstrate that it has a planning process for continuous improvement that identifies multiyear objectives within the context of the institutional mission and culture.

[X] Demonstrated

2018 Analysis/Review: Both the university and college have Strategic Plans - the university sets guiding principles; while the college plan reflects the consensus of views of administration, faculty, staff, and students in defining specific initiatives.

Each academic year is framed by college and School of Architecture retreats to set near-term priorities within the plan's framework with a recheck on progress at mid-year and a year-end final progress assessment. Regularly scheduled meetings of the faculty and advisory board monitor plan progress. Multi-year goals are carried over from the spring assessment to fall retreats.

Assessment of progress and the establishment of new goals emerge from instituitional data, disciplinary assessments, and initiatives of the five collateral organizations, including NAAB's Five Perspectives.

Initiatives resulting from these long-term planning processes include increased faculty participation in funded research, new or expanded course offerings aligning with college "grand" challenges, collaborative interdisciplinary courses with other college units (and beyond), new graduate certificates and concentrations, staff realignments, and participation in the IPAL program. All are regularly assessed for alignment with university and college strategic goals.

I.1.6 Assessment:

A. Program Self-Assessment Procedures: The program must demonstrate that it regularly assesses the following:

- How well the program is progressing toward its mission and stated objectives.
- Progress against its defined multiyear objectives.
- Progress in addressing deficiencies and causes of concern identified at the time of the last visit.
- Strengths, challenges, and opportunities faced by the program while continuously improving learning opportunities.

The program must also demonstrate that results of self-assessments are regularly used to advise and encourage changes and adjustments to promote student success.

B. Curricular Assessment and Development: The program must demonstrate a well-reasoned process for curricular assessment and adjustments, and must identify 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.

[X] Demonstrated

2018 Analysis/Review: Regularly scheduled meetings of groups (faculty, students, professional advisors) provide an informal forum for expression. Formal review processes occur annually through production of the university's required outcomes assessment report for both undergraduate and graduate programs, and the School of Architecture's faculty retreat results. The university requirement is a rigorous matrix of individual outcomes. Most are assessed by reviews of student work using analytical rubrics.

Course and curriculum issues are discussed in full-faculty, bi-weekly meetings, and annual retreats (2). The Curriculum Committee monitors, reviews, and recommend changes. Changes are made via faculty vote, subject to further institutional review. A record matrix of all involved parties and their roles is kept.

Part One (I): Section 2 – Resources

I.2.1 Human Resources and Human Resource Development:

The program must demonstrate that it has appropriate 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 demonstrate that it balances the workloads of all faculty to support a tutorial exchange between the student and the teacher that promotes student achievement.
- The program must demonstrate that an Architecture Licensing Advisor (ALA) has been appointed, is trained in the issues of the Architect Experience Program (AXP), has regular communication with students, is fulfilling the requirements as outlined in the ALA position description, and regularly attends ALA training and development programs.
- The program must demonstrate that faculty and staff have opportunities to pursue professional development that contributes to program improvement.
- The program must describe the support services available to students in the program, including but not limited to academic and personal advising, career guidance, and internship or job placement.

[X] Demonstrated

2018 Team Assessment: School of Architecture faculty monitor changing demands of practice and licensure; some maintain professional licenses and therefore engage in continuing education. Learning opportunities include a jointly sponsored Triangle AIA/School of Architecture Lecture Series, additional lectures through the Landscape Architecture Lecture Series, the College of Design's Annual Urban Design Conference, and attendance at scholarly and industry-specific conferences. Faculty report continuing education activities on their annual performance report.

Multiple institutional financial resources are available to faculty. If full funding is not available, the School of Architecture supplements funding where possible. In many cases, further funding is available via additional university offerings. Faculty paper presentations, participation on professional or academic boards of directors, and panel participation at professional or academic meetings are traditionally funded.

Faculty typically write their own grants, however the School of Architecture also has staff to assist both at pre- and post-award stages. Faculty also note that online and hybrid courses now allow them more research time. Faculty also noted funding for conferences and traveling expenses is available annually.

Sabbatical, or Scholarly Reassignment, is supported for engaging in activities not part of normal academic assignments, permitting faculty to concentrate on special areas of scholarly interest and to maintain professional practice skills.

The Office of Career Services supports students in career exploration and self-assessment. The Director of Career and Academic Advising for the College of Design offers programs, events, and one-on-one counseling for students seeking jobs and internships. Firms engage students through the Career Expo, Spring Interview Days, and Portfolio Review Days. Students seem to be aware of and take advantage of these services.

The School of Architecture is a participant in the Integrated Path to Architectural Licensure (IPAL) program. The school's licensing advisor also assists the non-IPAL cohort in establishing Architectural Experience Program (AXP) records. Dr. George Hallowell is the dedicated licensing advisor.

I.2.2 Physical Resources: The program must describe the physical resources available and how they support the pedagogical approach and student achievement.

Physical resources include but are not limited to the following:

- Space to support and encourage studio-based learning.
- Space to support and encourage didactic and interactive learning, including labs, shops, and equipment.
- Space to support and encourage the full range of faculty roles and responsibilities, including preparation for teaching, research, mentoring, and student advising.
- Information resources to support all learning formats and pedagogies in use by the program.

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, on-site, or hybrid formats have on digital and physical resources.

[X] Described

2018 Team Assessment: Faculty reported that space for studios and instruction is adequate for current enrollment. All faculty have private offices. Graduate and undergraduate students stated emerging online resources are, in some cases, useful as they can re-play lectures or pause to find referenced book material or a needed exercise. Students felt hybrid courses are effective in that they provide flexibility and also offer face-to-face interaction if needed thereby lessening the rigorous demand for space.

The IT Lab is directed by Jonas McCoy and provides technology support for the College of Design Students. Three classrooms with over 70 dual-booth Apple 27" iMac computers running Mac and Windows are available M-F 8:00 AM - 9:00 PM, Saturday 11:00 AM - 3:00 PM, and Sunday 1:00 PM - 9:00 PM. The IT lab has five 3-D printers. Lee Cherry is a full time dedicated specialist in 3-D printing. The lab provides equipment-lending services (cameras, projectors, laptops, peripherals) along with printing (black & white, color, large format, & 3D), and scaning (flatbed, lageformat & 3D) services. The college also provides departmental clusters distributed among buildings where computer, scanning, and printing services are available 24/7. Clusters are near studio spaces and also at the NCSU European Center in Prague. Students have full access to all printing from their personal computers anywhere on campus. IT is upgrading premise distribution wiring in Kamphoener and Brooks Halls.

The materials' fabrication shop is open M - H 9:00 AM -5:00 PM and 6:00 PM – 10:00PM; F 9:00 AM – 5:00 PM; Saturday 1:00 PM – 10:00 PM. Laser cutters are available 24/7. The shop is available to anyone enrolled in any College of Design Classes, including non-majors. All users must have proper training and safety orientation. Shop users are required to complete two policy and training modules: one 45-minute training on laser cutters and one 90-minute training on the materials shop. Afterward, forms are signed stating they have completed training; this information resides in a database for compliance verification. Teaching assistants often supervise the shop and are selected by shop staff based on resume, direct work with staff, and observation. Students can independently use all the equipment except: CNC machine, foundry, rip saw, milling equipment, and water jet cutter. Students are responsible for providing their own materials for fabrication although the shop does retain a small supply of leftover/surplus materials, hardware, and paint on a "first-come/first-serve" basis. Consumables such as glue and sandpaper are provided by the shop.

General shop hygiene includes "common sense" policies - leaving things the way you found them and cleaning up (sweep, wipe down, trash, and recycling). Use of the shop is a privilege and can be revoked with repeated misuse or neglect.

Annual shop budget is determined by the shop manager, the ETF Fund Manager, and the college's budget officer. The budget includes line items for consumables and regular equipment maintenance, equipment replacement, and new equipment purchases. New purchases/initiatives are advanced by students, faculty, and shop staff. Based on the allocation received, the shop prioritizes annual spending

based on the order of request received. Occasionally, equipment and shop needs are funded through grants.

I.2.3 Financial Resources: The program must demonstrate that it has appropriate financial resources to support student learning and achievement.

[X] Demonstrated

2018 Team Assessment: Two primary sources of the School of Architecture's funding are state funds administered and distributed by the university and private donations. Funds also flow to the School of Architecture from the central administration for Premium Tuition and online (DELTA) course enrollment. The School of Architecture has been allowed to use funds from vacant faculty lines to pay for part-time faculty, graduate teaching assistants, and other needs. The School of Architecture also receives limited-term funding from the provost to support a minority faculty hire.

The School of Architecture has the benefit of certain resources being funded by the College of Design, including administrative functions such as business, information technology, communications, external relations, and student services. The college also maintains facilities such as the library, Information technology lab, and the materials technology lab.

Donor funding can be used for discretionary needs such as guest lecturers and graduation awards. Faculty pursue research grant opportunities. The College of Design and the University each have competitive programs for seeking seed money for research initiatives. These seeds are geared to incentivizing multidisciplinary teams. Recently, faculty have also sought partnerships with non-profits and with professional firms in support of student research and studios.

No major changes are expected in near-term funding, however greater support from private sources in allied industries is anticipated. The College of Design participates in the university-level fundraising campaign which is an ongoing effort.

I.2.4 Information Resources: The program must demonstrate that all students, faculty, and staff have convenient, equitable access to literature and information, as well as appropriate visual and digital resources that support professional education in architecture.

Further, the program must demonstrate that all students, faculty, and staff have access to architecture librarians and visual resource professionals who provide information services that teach and develop the research, evaluative, and critical-thinking skills necessary for professional practice and lifelong learning.

[X] Demonstrated

2018 Team Assessment: The College has a dedicated branch of the university library in Brooks Hall staffed by university library services and having librarians permanently assigned to the program. The Brooks Hall library occupies approximately 4,500 square feet on level two and Karen DeWitt is Director. The architecture collection contains 10,000 volumes in Brooks and 10,000 volumes in D.H. Hill, one of the two main campus libraries.

Brooks' hours are M-H 7:30 – 10, F 7:30 – 6:00, S 1:00 – 7:00, and Sun 1:00 – 10:00. Library resource funding is through university library services; overall, resources are adequate to serve the needs of the program.

The APR provided data on annual acquisitions, and the current holdings. The university library is also part of a larger consortium that offers access well beyond their own collections.

Architecture is the strongest collection in the Design Library; an additional portion of the collection is in D.H. Hill (main library) due to insufficient space. Access to journals, visual resources, and digital media is readily available.

All check-out and cataloging functions are digital. Staff provide reference assistance and outreach to increase resource awareness. The library in Brooks Hall is undersized for a program of this magnitude.

Important materials for architecture students are also found in the engineering section of the Hunt library (another campus library) and the urban planning section of D.H. Hill. An architectural archive is available in Special Collections.

The IT Department is a college-level unit maintaining one central lab facility and 15 campus "clusters" plus support for student- and college- owned personal computers (approx. 750 students and 80 faculty and staff). A college technology committee provides input on budget priorities. The department is staffed by a director and three full-time positions.

I.2.5 Administrative Structure and Governance:

• **Administrative Structure:** The program must describe its administrative structure and identify key personnel within the context of the program and School of Architecture, college, and institution.

• **Governance:** The program must describe the role of faculty, staff, and students in both program and institutional governance structures. The program must describe the relationship of these structures to the governance structures of the academic unit and the institution.

[X] Described

2018 Team Assessment: The School of Architecture operates under a conventional administrative structure; the Head is assisted by a Director of Graduate Programs and a University Program Associate, advised by two professional committees, and coordinated with faculty.

Budget, student advising, development, and communications are supported by college rather than departmental staff. The Head has primary responsibility for all operations decisions. The Director of Graduate Programs assists by managing the M.Arch. program, coordinating with the graduate program in recruitment, admissions, and funding options, and serving as a primary M. Arch program advisor.

Faculty have responsibility for courses and curriculum, and participate in decisions on hiring and faculty promotions. Students participate in School of Architecture governance through student organizations and committee participation.

The Head is a member of the Administrative Council of the College. The Dean confers with the Council, but has sole responsibility as Executive Officer for budgeting, human resources, facilities, publications, and student conduct. The Dean is assisted by one Associate Dean and four Assistant Deans: Student and Academic Services, Budget and Administration, Development and Research, and Extension.

A Board of Governors and president oversee a multi-campus state university system. The Raleigh campus is guided by a chancellor and its board of trustees. Students, faculty, and staff all have representative assemblies through which to advocate and participate in Board policies and initiatives.

PART TWO (II): EDUCATIONAL OUTCOMES AND CURRICULUM

Part Two (II): Section 1 – Student Performance – Educational Realms and Student Performance Criteria

II.1.1 Student Performance Criteria: The SPC are organized into realms to more easily understand the relationships between each criterion.

Realm A: Critical Thinking and Representation: Graduates from NAAB-accredited programs must be able to build abstract relationships and understand the impact of ideas based on the study and analysis of multiple theoretical, social, political, economic, cultural, and environmental contexts. Graduates must also be able to use a diverse range of skills to think about and convey architectural ideas, including writing, investigating, speaking, drawing, and modeling.

Student learning aspirations for this realm include

- Being broadly educated.
- Valuing lifelong inquisitiveness.
- Communicating graphically in a range of media.
- Assessing evidence.
- Comprehending people, place, and context.
- Recognizing the disparate needs of client, community, and society.

A.1 Professional Communication Skills: *Ability* to write and speak effectively and use representational media appropriate for both within the profession and with the public.

B. Arch.

[X] Met

2018 Team Assessment: Evidence of superior achievement at the prescribed level was found in student work prepared for ARC 242 History of Western Architecture, ARC 441 History of Contemporary Architecture and ARC 501 Professional Architecture Studio I.

M. Arch.

[X] Met

2018 Team Assessment: The ability to write effectively and evidence of other exemplary communication skills was seen in work prepared for ARC 500 and 501, Architectural Design: Professional Studios.

A.2 Design Thinking Skills: *Ability* to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

B. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared in ARC 201 Architectural Design: Environment and ARC 501 Professional Architectural Studio I.

M. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 404 Architectural Design: Form and ARC 500 Architectural Design: Professional Studio.

A.3 Investigative Skills: *Ability* to gather, assess, record, and comparatively evaluate relevant information and performance in order to support conclusions related to a specific project or assignment.

B. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in work prepared for ARC 501 Professional Architectural Studio I and ARC 581 Project Preparation Seminar.

M. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 500 Architectural Design: Professional Studio.

A.4 Architectural Design Skills: *Ability* to effectively use basic formal, organizational, and environmental principles and the capacity of each to inform two- and three-dimensional design.

B. Arch.

[X] Met

2018 Team Assessment: Excellent student achievement at the prescribed level was seen in student work prepared for ARC 501 Architectural Design: Professional Studio I.

M. Arch.

[X] Met

2018 Team Assessment: Likewise, evidence of outstanding student achievement at the prescribed level was found in student work prepared for and ARC 500 Architectural Design: Professional Studio.

A.5 Ordering Systems: *Ability* to apply the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

B. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 201 Architectural Design: Environment and ARC 301 Architectural Design: Tectonics.

M. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 404 Architectural Design: Form and ARC 500 Architectural Design: Professional Studio.

A.6 **Use of Precedents:** *Ability* to examine and comprehend the fundamental principles present in relevant precedents and to make informed choices about the incorporation of such principles into architecture and urban design projects.

B. Arch.

[x] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 301 Architectural Design: Tectonics.

M. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 500 Architectural Design: Professional Studio.

A.7 **History and Culture:** *Understanding* of the parallel and divergent histories of architecture and the cultural norms of a variety of indigenous, vernacular, local, and regional settings in terms of their political, economic, social, ecological, and technological factors.

B. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for courses ARC 241 Introduction to World Architecture and ARC 441 History of Contemporary Architecture.

M.Arch.

[X] Met

2018 Team Assessment: This criterion is pre-requisite for Track 1 students. Evidence of student achievement for Track 3 students at the prescribed level was found in student work prepared for ARC 241 Introduction to World Architecture and ARC 441 History of Contemporary Architecture.

A.8 **Cultural Diversity and Social Equity:** *Understanding* of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the responsibility of the architect to ensure equity of access to sites, buildings, and structures.

B. Arch.

[X] Met

2018 Team Assessment: Evidence of an understanding cultural diversity is found in course ARC 241 Introduction to World Architecture. Evidence of understanding the responsibility of the architect to ensure equity of access to sites, buildings and structures was found in ARC 561 Professional Practice.

M. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement in understanding cultural diversity is found in ARC 241 Introduction to World Architecture. Evidence of understanding the responsibility of the architect to ensure equity of access to sites, buildings and structures was found in ARC 561 Professional Practice.

Realm A General Team Commentary: Critical Thinking and Representation:

Student abilities ranging from communication, to critical / analytical thinking, and demonstration of a broad understanding of influences that shape the built environment, both historically and today, were evident in many projects. Student work demonstrated the ability to identify specific connections between architecture and particular social, cultural, and religious contexts.

Students investigate links between design and social issues. They analyze housing and city planning concepts in the context of social equity. The team found abilities in communication, representation, creative and critical thinking to be exemplary.

Realm B: Building Practices, Technical Skills, and Knowledge: Graduates from NAAB-accredited programs must be able to comprehend the technical aspects of design, systems, and materials, and be able to apply that comprehension to architectural solutions. In addition, the impact of such decisions on the environment must be well considered.

Student learning aspirations for this realm include

- Creating building designs with well-integrated systems.
- Comprehending constructability.
- Integrating the principles of environmental stewardship.
- Conveying technical information accurately.

B.1 **Pre-Design:** *Ability* to prepare a comprehensive program for an architectural project that includes an assessment of client and user needs; an inventory of spaces and their requirements; an analysis of site conditions (including existing buildings); a review of the relevant building codes and standards, including relevant sustainability requirements, and an assessment of their implications for the project; and a definition of site selection and design assessment criteria.

B. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student coursework prepared for ARC 581 Project Preparation Seminar.

M. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 500 Architectural Design Professional Studio.

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.

B. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 581 Project Preparation Seminar, and ARC 501 Professional Architecture Studio I, with earlier explorations in course ARC 202 Architectural Design - Environment.

M .Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 500 Architectural Design: Professional Studio.

B.3 Codes and Regulations: *Ability* to design sites, facilities, and systems that are responsive to relevant codes and regulations, and include the principles of life-safety and accessibility standards.

B. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 581, Project Preparation Seminar and ARC 502, Professional Architecture Studio II.

M. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 500, Architectural Design: Professional Studio.

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.

B. Arch.

[X] Not Met

2018 Team Assessment: Evidence was found in areas of technically clear drawings and models, identifying the assembly of materials, systems, and components appropriate for a building design in ARC 501, Professional Architecture Studio I, however no evidence was found demonstrating the ability to prepare outline specifications.

M. Arch.

[X] Not Met

2018 Team Assessment: Evidence was found in making technically clear drawings and models identifying the assembly of materials, systems, and components appropriate for a building design in student work prepared ARC 500, Architectural Design: Professional Studio; however no evidence was found demonstrating the ability to prepare outline specifications.

B.5 Structural Systems: *Ability* to demonstrate the basic principles of structural systems and their ability to withstand gravitational, seismic, and lateral forces, as well as the selection and application of the appropriate structural system.

[X] Met

2018 Team Assessment: B. Arch. and M. Arch.: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 331 and ARC 332, Architectural Structures I and II.

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

B. Arch.

[X] Not Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was not found in student work presented. Scant evidence of student ability was found regarding principles of environmental design.

M. Arch.

[X] Not Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was not found in student work presented.

B.7 **Building Envelope Systems and Assemblies:** *Understanding* of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

B. Arch.

[X] Met

2018 Team Assessment: Evidence of achievement at the prescribed level was found for skin moisture transfer, durability, and energy and material resources in student work presented in ARC 432, Architectural Construction Systems. Evidence of achievement in aesthetics was found in work prepared in ARC 501, Professional Architecture Studio I. Work for projects reviewed satisfying this criterion was deemed exceptional.

M. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found relating to fundamental envelope performance, moisture transfer, durability, and energy and material resources in student work prepared for ARC 432, Architectural Construction Systems. Evidence of work regarding aesthetics was found in ARC 500, Architectural Design: Professional Studio. Work satisfying this criterion was deemed exceptional.

B.8 **Building Materials and Assemblies:** *Understanding* of the basic principles used in the appropriate selection of interior and exterior construction materials, finishes, products, components, and assemblies based on their inherent performance, including environmental impact and reuse.

B.Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in work prepared for ARC 432 Architectural Construction Systems.

M.Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in work prepared for ARC 500 Architectural Design: Professional Studio

B.9 Building Service Systems: *Understanding* of the basic principles and appropriate application and performance of building service systems, including lighting, mechanical, plumbing, electrical, communication, vertical transportation, security, and fire protection systems.

B. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 414 Environmental Control Systems.

M. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 414 Environmental Control Systems.

B.10 Financial Considerations: *Understanding* of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

B. Arch.

[X] Not Met

2018 Team Assessment: Evidence of *exposure* to concepts of construction cost estimating and life-cycle costing was found; however no corollary evidence was found demonstrating students' *understanding* of project financing methods and feasibility or operational costs.

M. Arch.

[X] Not Met

2018 Team Assessment: Evidence of *exposure* to concepts of construction cost estimating and life-cycle costing was found; however no evidence was found to demonstrate an *understanding* of the concepts presented, such as project financing methods and feasibility or operational costs.

Realm B. General Team Commentary: Student work demonstrated a broad exposure to factors to be considered in the design process. An appreciation of material, craft, and assembly was evident in physical models and technical wall sections. Technical information presented appeared rational / accurate. Evidence of the impact of all factors to be considered in the design process and application of these factors to design solutions was inconsistent across projects.

Realm C: Integrated Architectural Solutions: Graduates from NAAB-accredited programs must be able to demonstrate that they have the ability to synthesize a wide range of variables into an integrated design solution.

Student learning aspirations in this realm include:

- Comprehending the importance of research pursuits to inform the design process.
- Evaluating options and reconciling the implications of design decisions across systems and scales.
- Synthesizing variables from diverse and complex systems into an integrated architectural solution.
- Responding to environmental stewardship goals across multiple systems for an integrated solution.

C.1 **Research:** *Understanding* of the theoretical and applied research methodologies and practices used during the design process.

B. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement was found in student work prepared for ARC 501 Professional Architecture Studio I, ARC 561 The Practice of Architecture, and ARC 581 Project Preparation Seminar.

M. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement was found in student work prepared for ARC 500 Architectural Design: Professional Studio and ARC 561 The Practice of Architecture.

C.2 **Integrated Evaluations and Decision-Making Design Process:** *Ability* to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.

B. Arch.

[X] Not Met

2018 Team Assessment: Evidence was not found in the work presented. While ARC 501, ARC 502, ARC 561 and ARC 581 have produced case studies, class books, and projects addressing problem identification and set some design parameters, individual student projects generally fail to include evaluative criteria, present a systematic analysis of design solutions, or predict effectiveness of implementation(s).

In addition, plumbing, mechanical, electrical, and fire protection systems are not readily identified in many projects. Building systems identified do not logically integrate with other building service systems and the overall building design. Designs did not demonstrate an ability to integrate life safety requirements.

M. Arch.

[X] Not Met

2018 Team Assessment: Evidence was not found in work presented. While ARC 500 and ARC 561 have produced case studies, class books, and projects addressing problem identification and set some design parameters, individual projects fail to include evaluative criteria, present a systematic analysis of design solutions, or predict the effectiveness of implementation(s).

In addition, plumbing, mechanical, electrical, and fire protection systems are not readily identified in many projects. Building systems identified do not logically integrate with other building service systems and the overall building design. Designs did not demonstrate an ability to integrate life safety requirements.

C.3 **Integrative Design:** *Ability* to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

B. Arch.

[X] Not Met

2018 Team Assessment: Evidence was not found in student work presented. The projects presented in ARC 501 and 502 illustrated integration of environmental stewardship, site conditons, and building envelope systems and assemblies, but failed to appropriately address all other criteria covered by this SPC.

M. Arch.

[X] Not Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was not found in student work presented. The projects presented in ARC 501 and 502 illustrated integration of environmental stewardship, site conditions, and building envelope systems and assemblies, but failed to appropriately address other other criteria covered by this SPC.

Realm C. General Team Commentary: Student work shows the ability to conduct relevant research to inform the design process; however there is little evidence of building systems' evaluation and synthesis in the designs. Structural and mechanical system evidence is not complete. Multiple stewardship goals are not fully developed in the designs.

B.Arch. and M.Arch. curricula expect projects from Professional Studios ARC 501 and ARC 500 respectively to satisfy these criteria. Artifacts viewed of work produced in these courses were insufficient to demonstrate compliance. The observation that many projects failed to address basic ADA and life safety requirements was a concern.

Realm D: Professional Practice: Graduates from NAAB-accredited programs must understand business principles for the practice of architecture, including management, advocacy, and the need to act legally, ethically, and critically for the good of the client, society, and the public.

Student learning aspirations for this realm include:

- Comprehending the business of architecture and construction.
- Discerning the valuable roles and key players in related disciplines.

  Understanding a professional code of ethics, as well as legal and professional responsibilities.

D.1 **Stakeholder Roles in Architecture:** *Understanding* of the relationships among key stakeholders in the design process—client, contractor, architect, user groups, local community—the architect's role to reconcile stakeholders needs.

B. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 561, The Practice of Architecture.

M. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 561, The Practice of Architecture.

D.2 **Project Management:** *Understanding* of the methods for selecting consultants and assembling teams; identifying work plans, project schedules, and time requirements; and recommending project delivery methods.

B. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 561, The Practice of Architecture.

M. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 561, The Practice of Architecture.

D.3 **Business Practices:** *Understanding* of the basic principles of a firm's business practices, including financial management and business planning, marketing, organization, and entrepreneurship.

B. Arch,

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 561, The Practice of Architecture.

M.Arch

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 561, The Practice of Architecture.

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.

B. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 561, The Practice of Architecture.

M. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 561, The Practice of Architecture.

D.5 **Professional Ethics:** *Understanding* of the ethical issues involved in the exercise of professional judgment in architectural design and practice and understanding the role of the NCARB Rules of Conduct and the AIA Code of Ethics in defining professional conduct.

B. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 561, The Practice of Architecture.

M. Arch.

[X] Met

2018 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARC 561, The Practice of Architecture.

Realm D. General Team Commentary: Student work shows evidence of an understanding of business operations of professional firms and the management of design and construction of projects. Evidence was found supporting an understanding of projects with multiple stakeholders with differing interests and ethical and legal issues that require professional judgement and the architect's duties to the client, society, and the public. Student work points to an understanding of all criteria in this Realm.

Part Two (II): Section 2 – Curricular Framework

II.2.1 Institutional Accreditation

For a professional degree program in architecture to be accredited by the NAAB, the institution must meet one of the following criteria:

1. The institution offering the accredited degree program must be or be part of an institution accredited by one of the following U.S. regional institutional accrediting agencies for higher education: the Southern Association of Colleges and School of Architectures (SACS); the Middle States Association of Colleges and School of Architectures (MSACS); the New England Association of School of Architectures and Colleges (NEASC); the North Central Association of Colleges and School of Architectures (NCACS); the Northwest Commission on Colleges and Universities (NWCCU); or the Western Association of School of Architectures and Colleges (WASC).
2. Institutions located outside the United States and not accredited by a U.S. regional accrediting agency may pursue candidacy and accreditation of a professional degree program in architecture under the following circumstances:
    a. The institution has explicit written permission from all applicable national education authorities in that program's country or region.
    b. At least one of the agencies granting permission has a system of institutional quality assurance and review which the institution is subject to and which includes periodic evaluation.

[X] Met

2018 Team Assessment: The SACSCOC Institutional accreditation letter was found on pp. 68 -69 of the APR; interim reports are found here https://design.ncsu.edu/about/accreditation/.

II.2.2 Professional Degrees and Curriculum: The NAAB accredits the following 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.

The B. Arch., M. Arch., and/or D. Arch. are titles used exclusively with NAAB-accredited professional degree programs. The B. Arch., M. Arch., and/or D. Arch. are recognized by the public as accredited degrees and therefore should not be used by nonaccredited programs.

Therefore, any institution that uses the degree title B. Arch., M. Arch., or D. Arch. for a nonaccredited degree program must change the title. Programs must initiate the appropriate institutional processes for changing the titles of these nonaccredited programs by June 30, 2018.

The number of credit hours for each degree is specified in the *2014 NAAB Conditions for Accreditation*. All accredited program must conform to the minimum credit hour requirements:

[X] Met

2018 Team Assessment: The School of Architecture offers a non-accredited preprofessional degree (Bachelor of Environmental Design); a B. Arch accredited degree; and two tracks to attain an M. Arch accredited degree:

- Bachelor of Environmental Design (BEDA): 126 credit hours
- Bachelor of Architecture: 156 credit hours

- Master of Architecture for non-preprofessional degree holders: 96 credit hours
- Master of Architecture for preprofessional degree holders: 48 credit hours unless remedial coursework is required.

These curricula meet the minimum credit hours required by the *NAAB Conditions for Accreditation* (source: APR, pp. 70-83).

As required by NAAB, the program is in the process of changing a non-accredited post-professional degree title from an M. Arch. (Track II) to a Master of Advanced Architecture Studies. The Track II has been removed from the program website, and the new degree title is presently under review by the university.

Part Two (II): Section 3 – Evaluation of Preparatory Education

The program must demonstrate that it has a thorough and equitable process for evaluating the preparatory or preprofessional education of individuals admitted to the NAAB-accredited degree program.

- Programs must document their processes for evaluating a student's prior academic course work related to satisfying NAAB student performance criteria when a student is admitted to the professional degree program.

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

- The program must demonstrate that the evaluation of baccalaureate-degree or associate-degree content is clearly articulated in the admissions process, and that the evaluation process and its implications for the length of a professional degree program can be understood by a candidate before accepting the offer of admission. See also Condition II.4.6.

[X] Met

2018 Team Assessment: Evidence of a thorough evaluation process was found in the APR (pp. 84-87) and in the student admission evaluation files provided by the School. The team requested additional information on this topic and was provided representative files that included the standardized form for tracking transfer student information and matching this information to the pre-requisite program requirements including pre-requisite SPCs.

Part Two (II): Section 4 – Public Information

The NAAB expects programs to be transparent and accountable in the information provided to students, faculty, and the public. As a result, the following seven conditions require all NAAB-accredited programs to make certain information publicly available online.

II.4.1 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*, Appendix 1, in catalogs and promotional media.

[X] Met

2018 Team Assessment: This information is found on the NC State College of Design website: https://design.ncsu.edu/about/accreditation/

II.4.2 Access to NAAB Conditions and Procedures:

The program must make the following documents electronically available to all students, faculty, and the public:

The 2014 NAAB Conditions for Accreditation

The Conditions for Accreditation in effect at the time of the last visit (2009 or 2004, depending on the date of the last visit)

The NAAB Procedures for Accreditation (edition currently in effect)

[X] Not Met

2018 Team Assessment: The link for the 2014 NAAB Conditions for Accreditation (https://design.ncsu.edu/wordpress/wp-content/uploads/2017/09/2014-Conditions-Final-Approved-Companion-v2.docx) is not correct; it downloads the *Guide to the 2014 Conditions for Accreditation and Preparation of an Architecture Program Report 2ND EDITION* instead of the 2014 NAAB Conditions for Accreditation; link to the 2015 Conditions for Accreditation https://design.ncsu.edu/about/accreditation/ is correct.

II.4.3 Access to Career Development Information:

The program must demonstrate that students and graduates have access to career development and placement services that assist them in developing, evaluating, and implementing career, education, and employment plans.

[X] Met

2018 Team Assessment: Section 3.II.4.3 of the APR provides a link to the NCSU website Career Development services https://design.ncsu.edu/student-life/careers/.This website contains sufficient information on how to navigate and prepare for the job search process. During the student meeting, students stated they receive a weekly e-mail with information about internship opportunities. The NCSU AIAS president commented that the College of Design career advisor is readily available for career advising consultations. The College of Design career advisor is available to students in addition to general University career services. Students are aware of the career fair, other events organized for career development, as well as the new IPAL program.

II.4.4 Public Access to APRs and VTRs:

In order to promote transparency in the process of accreditation in architecture education, the program is required to make the following documents electronically available to the public:

- All Interim Progress Reports (and narrative Annual Reports submitted 2009-2012).
- All NAAB Responses to Interim Progress Reports (and NAAB Responses to narrative Annual Reports submitted 2009-2012).
- The most recent decision letter from the NAAB.
- The most recent APR.[1]
- The final edition of the most recent Visiting Team Report, including attachments and addenda.

[X] Not Met

2018 Team Assessment: The NAAB decision letter was not found: https://design.ncsu.edu/about/accreditation/

II.4.5 ARE Pass Rates:

NCARB publishes pass rates for each section of the Architect Registration Examination by institution. This information is considered useful to prospective students as part of their planning for higher/post-secondary education in architecture. Therefore, programs are required to make this information available to current and prospective students and the public by linking their websites to the results.

[X] Met

2018 Team Assessment: A link (https://www.ncarb.org/pass-are/are4/pass-rates/are4-pass-rates-School of Architecture) to the NCARB website identifies ARE pass rates by School; also statistics are provided in APR Section 3.II.4.5 and available on the College of Design website: https://design.ncsu.edu/about/accreditation/

II.4.6 Admissions and Advising:

The program must publicly document all policies and procedures that govern how applicants to the accredited program are evaluated for admission. These procedures must include first-time, first-year students as well as transfers within and outside the institution.

This documentation must include the following:

- Application forms and instructions.
- Admissions requirements, admissions decision procedures, including policies and processes for evaluation of transcripts and portfolios (where required), and decisions regarding remediation and advanced standing.
- Forms and process for the evaluation of preprofessional degree content.
- Requirements and forms for applying for financial aid and scholarships.
- Student diversity initiatives.

[X] Met

2018 Team Assessment: Evidence was found on the NC State Student Service Center website under the heading College of Design, Admissions. https://design.ncsu.edu/admissions/ and as stated on APR section 3.II.4.6.

II.4.7 Student Financial Information:

- The program must demonstrate that students have access to information and advice for making decisions regarding financial aid.
- 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.

[X] Met

2018 Team Assessment: Evidence was found on the NC State Student Service Center website under the heading Resources, Financial Aid. https://studentservices.ncsu.edu/your-money/financial-aid/ and as stated on APR section 3.II.4.7.

PART THREE (III): ANNUAL AND INTERIM REPORTS

III.1 Annual Statistical Reports: The program is required to submit Annual Statistical Reports in the format required by the *NAAB Procedures for Accreditation*.

The program must certify that all statistical data it submits to the NAAB has been verified by the institution and is consistent with institutional reports to national and regional agencies, including the Integrated Postsecondary Education Data System of the National Center for Education Statistics.

[X] Met

2018 Team Assessment: Found on department website: https://design.ncsu.edu/about/accreditation/

III.2 Interim Progress Reports: The program must submit Interim Progress Reports to the NAAB (see Section 10, *NAAB Procedures for Accreditation,* 2015 Edition).

[X] Met

2018 Team Assessment: Found on department website: https://design.ncsu.edu/about/accreditation/

IV. Appendices:

Appendix 1. Conditions Met with Distinction

II.1.1 Student Performance Criteria:

Realm A, Criterion A1 Professional Communication Skills –
ARC 500 Architectural Design: Professional Studio

Realm A, Criterion A4 Architectural Design Skills –
ARC 503 Advanced Architectural Design

Realm B, Criterion B7 Building Envelope Systems and Assemblies –
ARC 432 Architectural Construction Systems and
ARC 500 Architectural Design: Professional Studio

Appendix 2. Team SPC Matrix

The team is required to complete an SPC matrix that identifies the course(s) in which student work was found that demonstrated the program's compliance with Part II, Section 1.

The program is required to provide the team with a blank matrix that identifies courses by number and title on the y axis and the NAAB SPC on the x axis. This matrix is to be completed in Excel and converted to Adobe PDF and then added to the final VTR.

See attachments

Bachelor of Architecture

Courses and Studios Cross-referenced with the 2014 NAAB Student Performance Criteria (effective 4/1/15)

Student Performance Criteria (SPC)	Professional Communication Skills	Design Thinking Skills	Investigative Skills	Architectural Design Skills	Ordering Systems	Use of Precedents	History and Global Culture	Cultrual Diversity and Social Equity	Pre-Design	Site Design	Codes and Regulations	Technical Documentation	Structural Systems	Environmental Systems	Building Envelope Systems and Assemblies	Building Materials and Assemblies	Building Service Systems	Financial Considerations	Research	Integrated Evaluations and Decision-Making Design Process	Integrative Design	Stakeholder Roles in Architecture	Project Management	Business Practices	Legal Responsibilities	Professional Conduct
	Critical Thinking and Representation								Building Practices, Technical Skills, and Knowledge										Integrated Arch Solutions			Professional Practice				
	Ab	Ab	Ab	Ab	Ab	Ab	Un	Un	Ab	Ab	Ab	Ab	Ab	Ab	Un	Un	Un	Un	Un	Ab	Ab	Un	Un	Un	Un	Un
	A1	A2	A3	A4	A5	A6	A7	A8	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	C1	C2	C3	D1	D2	D3	D4	D5

SPC met in NAAB-accredited program, as follows:

	Course Number	Remarks	Course Title																								
Required Architecture Courses - BEDA Curriculum																											
BEDA Courses	SPC eVTpected to been met in preparatory or pre-professional education:																										
	ARC 162		An Introduction to Architecture																								
	ARC 201		Architectural Design: Form		VT			VT																				
	ARC 202		Architectural Design: Environment								VT																
	ARC 211		Natural Systems and Architecture																								
	ARC 232		Structures and Materials																								
	ARC 241		Introduction to World Architecture						VT	VT																	
	ARC 242		History of Western Architecture	VT																							
	ARC 251		Digital Representation																								
	ARC 292		Fundamentals of Arch. Representation																								
	ARC 301		Architectural Design: Tectonics					VT	VT																		
	ARC 302		Architectural Design: Technology																								
	ARC 331		Architectural Structures I											VT													
	ARC 332		Architectural Structures II											VT													
	ARC 401/490		Architectural Design: Urban																								
	ARC 402	(1)	Architectural Design: Advanced																								
	ARC 414		Environmental Control Systems															VT									
	ARC 432		Architectural Construction Systems												VT	VT											
	ARC 441		History of Contemporary Architecture	VT						VT																	
Required Architecture Courses - BArch Curriculum																											
BArch	SPC eVTpected to been met in preparatory or pre-professional education:																										
	ARC 501		Professional Architecture Studio I	VT	VT	VT	VT					VT				VT				VT							
	ARC 502		Professional Architecture Studio II										VT														
	ARC 561		The Practice of Architecture							VT										VT			VT	VT	VT	VT	VT
	ARC 581		Project Preparation Seminar			VT					VT	VT	VT							VT							

Master of Architecture (MArch.) Track 1: Courses and Studios Cross-referenced with the 2014 NAAB Student Performance Criteria (effective 4/1/15)

			Student Performance Criteria (SPC)	Professional Communication Skills	Design Thinking Skills	Investigative Skills	Architectural Design Skills	Ordering Systems	Use of Precedents	History and Global Culture	Cultrual Diversity and Social Equity	Pre-Design	Site Design	Codes and Regulations	Technical Documentation	Structural Systems	Environmental Systems	Building Envelope Systems and Assemblies	Building Materials and Assemblies	Building Service Systems	Financial Considerations	Research	Integrated Evaluations and Decision-Making Design Process	Integrative Design	Stakeholder Roles in Architecture	Project Management	Business Practices	Legal Responsibilities	Professional Conduct
				Critical Thinking and Representation								Building Practices, Technical Skills, and Knowledge											Integrated Arch Solutions			Professional Practice				
				Ab	Ab	Ab	Ab	Ab	Ab	Un	Un	Ab	Ab	Ab	Ab	Ab	Ab	Un	Un	Un	Un	Un	Un	Ab	Un	Un	Un	Un	Un
				A1	A2	A3	A4	A5	A6	A7	A8	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	C1	C2	C3	D1	D2	D3	D4	D5
	SPC met in NAAB-accredited program, as follows:																												
	Course Number	**Course Title**																											
Required Architecture Courses - BEDA Curriculum																													
BEDA Courses	SPC expected to been met in preparatory or pre-professional education:																												
	ARC 162	An Introduction to Architecture																											
	ARC 201	Architectural Design: Environment																											
	ARC 202	Architectural Design: Form																											
	ARC 211	Natural Systems and Architecture																											
	ARC 232	Structures and Materials																											
	ARC 241	Introduction to World Architecture								VT	VT																		
	ARC 242	History of Western Architecture																											
	ARC 251	Digital Representation																											
	ARC 292	Fundamentals of Arch. Representation																											
	ARC 301	Architectural Design: Tectonics																											
	ARC 302	Architectural Design: Technology																											
	ARC 331	Architectural Structures I														VT													
	ARC 332	Architectural Structures II														VT													
	ARC 401/49	Architectural Design: Urban																											
	ARC 402	Architectural Design: Advanced																											
	ARC 414	Environmental Control Systems																		VT									
	ARC 432	Architectural Construction Systems																											
	ARC 441	History of Contemporary Architecture								VT																			
Required Architecture Courses - MArch Track 1 Curriculum																													
M. Arch T1	SPC expected to been met in preparatory or pre-professional education:																												
	ARC 561	The Practice of Architecture									VT											VT			VT	VT	VT	VT	VT
	ARC 697	Final Project Reserch																											
	ARC 500	Architectural Design: Professional Studio		VT	VT	VT	VT	VT	VT			VT	VT	VT				VT	VT			VT							
	ARC 503	Advanced Architectural Design (series)																											
	ARC 598	Final Project Studio in Architecture																											

Master of Architecture (MArch.) Track 3:
Courses and Studios Cross-referenced with the 2014 NAAB Student Performance Criteria (effective 4/1/15)

SPC met in NAAB-accredited program, as follows:

	Course Number		Course Title	Professional Communication Skills	Design Thinking Skills	Investigative Skills	Architectural Design Skills	Ordering Systems	Use of Precedents	History and Global Culture	Cultrual Diversity and Social Equity	Pre-Design	Site Design	Codes and Regulations	Technical Documentation	Structural Systems	Environmental Systems	Building Envelope Systems and Assemblies	Building Materials and Assemblies	Building Service Systems	Financial Considerations	Research	Integrated Evaluations and Decision-Making Design Process	Integrative Design	Stakeholder Roles in Architecture	Project Management	Business Practices	Legal Responsibilities	Professional Conduct
	Student Performance Criteria (SPC)			Critical Thinking and Representation								Building Practices, Technical Skills, and Knowledge										Integrated Arch Solutions			Professional Practice				
				Ab	Ab	Ab	Ab	Ab	Ab	Un	Un	Ab	Ab	Ab	Ab	Ab	Ab	Un	Un	Un	Un	Un	Ab	Ab	Un	Un	Un	Un	Un
				A1	A2	A3	A4	A5	A6	A7	A8	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	C1	C2	C3	D1	D2	D3	D4	D5
Required Architecture Courses - MArch Track 3 Curriculum																													
M. Arch. Track 3	SPC eVTpected to been met in preparatory or pre-professional education:																												
	ARC 211		Natural Systems and Architecture																										
	ARC 232		Structures and Materials																										
	ARC 241		Introduction to World Architecture							VT	VT																		
	ARC 242		History of Western Architecture																										
	ARC 403		Architectural Design: Environment																										
	ARC 404		Architectural Design: Form		VT			VT																					
	ARC 405		Architectural Design: Technology																										
	ARC 450		Architectural Drawing																										
	ARC 451		Digital Drawing and Modeling																										
	ARC 331		Architectural Structures I													VT													
	ARC 332		Architectural Structures II													VT													
	ARC 414		Environmental Control Systems																	VT									
	ARC 432		Architectural Construction Systems															VT											
	ARC 441		History of Contemporary Architecture							VT																			
	ARC 561		The Practice of Architecture								VT											VT			VT	VT	VT	VT	VT
	ARC 500		Architectural Design: Professional Studio	VT	VT	VT	VT	VT	VT			VT	VT	VT				VT	VT			VT							
	ARC 503	(3)	Advnanced Architetural Design (series)																										
	ARC 598	(2)	Final Project Studio in Architecture																										
	ARC 697	(2)	Final Project Research																										

Remarks

2. Only required if ARC 598 Final Project Studio in Architecture is undertaken.
3. Students must take three ARC 503 studios OR two ARC 503 studios + one ARC 598 Final Project Studio in Architecture.

Appendix 3. The Visiting Team

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V. Report Signatures

Respectfully Submitted,

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Team Chair

Aaron D. Johnson, AIA
Team Member

Ann Marie Borys, Ph.D., AIA, ACSA
Team Member

Alfredo Fernandez-Gonzalez, ACSA
Team Member

Nyx Valerdy, AIAS
Team Member

Teri Canada, AIA
Non-Voting Team Member