



**North Dakota State University  
Department of Architecture and Landscape Architecture  
Architecture Program**

## **2018 Visiting Team Report**

**M. ARCH. [prerequisite + 32 graduate credits]**

The National ARCH Accrediting Board  
March 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 ARCH 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.

## Contents

<u>Section</u>	<u>Page</u>
I. Summary of Visit	1
II. Progress since the Previous Site Visit	2
III. Compliance with the 2014 Conditions for Accreditation	
Part One (I): Institutional Support and Commitment to Continuous Improvement	6
Part Two (II): Educational Outcomes and Curriculum	16
Part Three (III): Annual and Interim Reports	29
IV. Appendices	
1. Conditions Met with Distinction	30
2. Team SPC Matrix	31
3. The Visiting Team	32
V. Report Signatures	33

## I. Summary of Visit

### a. Acknowledgments and Observations

The visiting team would like to express its sincere and heartfelt thanks to Ms. Cindy Urness, Program Director for Architecture and Associate Professor, Dr. Michael Strand, Interim Chair and Professor, and Dr. David Bertolini, Dean of the College of Arts, Humanities and Social Sciences, for their efforts in organizing an extremely well structured visit and a compact digital team room, but most importantly for their frankness and assistance during our visit. We would like to also extend our thanks to Mr. Ben Bernard, the Program's IT specialist, who made our systems work through an all-digital school exhibit. Special thanks go to Professor Regin Schwaem and Ms. Charlott Greub for their individual effort in installing additional material that complemented the digital evidence necessary to comply with NAAB's SPC criteria.

We would like to extend our sincere thanks to Dr. Dean L. Bresciani, University President, and Dr. Beth Ingram, Provost and Vice President for Academic Affairs, for their genuine, open, and frank discussion, which allowed the visiting team to better understand the support they provide to the Architecture Program, how much value this program brings to this institution, and how this program fits into the long-range plans of the administration.

The Department was led by Dr. Bertolini who has assumed the role of Dean of the College. He enabled an effective dialogue among the faculty, the Department and the Architecture Program, all of which have benefited from his leadership in addressing a number of critical issues, including curricular revisions, rates of retention, research, and graduation. Dr. Bertolini's leadership skills were praised by both faculty and staff in the Department and also by the President and Provost.

The visiting team not only had the opportunity to see the wide range of educational offerings this program provides to its students. but we were also able to engage the students and faculty in discussions about the program offerings. We found the following:

- Individuals who are passionate, excited, committed and acting as advocates for architecture education. This was felt all the way from the president's office to the students at their studio desks.
- Faculty that is equally committed to scholarship and research and to advancing the art and science of architecture and design.
- A program that is not self-satisfied; instead, one that continuously seeks to improve itself and therefore improve the design community it serves.
- A department that has a strong sense of culture that permeates all levels; a culture of care, nurturing, and mentoring.
- A department guided by a newfound vision and focus, which in turn guides the program's leadership in how to embrace education in this evolving profession.
- A program deeply rooted in community and the state it serves.
- A program that continues to enrich the academic experience of its students by balancing the student's educational experience with the use of both full-time and adjunct faculty as a means to provide the diversity in skills and knowledge that students need.
- A program eager to reach out to its alumni and professional colleagues, keeping both involved in the program through advising, teaching, and mentoring opportunities.
- A program where staff is as committed, passionate and supportive as its academic peers. We heard countless praises across the board for Mr. Ben Bernard (IT) and his extraordinary support of the students.

- A program that is a risk taker, improvising and adjusting their academic offerings to enrich the knowledge base of our profession.
- A program whose students' work is incredibly diverse, fresh, and at times innovative.
- A program with an extremely passionate and insightful leadership committed to enhancing the educational experience of its students.
- A mature yet young program ready to change the game in our profession.
- A program that is housed in two inviting, light-filled repurposed downtown buildings in which students, faculty and staff work in a tight-knit community.

In addition, projects like eFargo and other joint projects initiated by the Program's faculty are a model for collaborative University-community relationships. The projects continue to realize the vision of the College as an essential part of the everyday life of the town.

Overall, the team room was well organized; the meetings with staff, faculty and students were extremely informative and filled with frank discussions. The staff was courteous and helpful and the visiting team would like to extend our deepest thanks to Ms. Teresa Enderson for her extremely well organized and well executed scheduling of our visit.

**b. Conditions Not Achieved**

**2018 Visiting Team Assessment:** Found that all courses met the NAAB criteria for all Student Performance Criteria as required.

**II. Progress Since the Previous Site Visit**

**2009 Condition II.2.2, Professional Degrees and Curriculum:** *The NAAB accredits the following professional degree programs: 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 electives. Schools offering the degrees B. ARCH., M. ARCH., and/or D. ARCH. are strongly encouraged to use these degree titles exclusively with NAAB-accredited professional degree programs.*

**Previous Team Report (2012):** PLEASE NOTE: Refer to II-Section 3 for clarification of the team's application of NAAB conditions to the full five-year curriculum.

The curriculum meets the required number of overall (168) and graduate level credits. However, the program offers two courses as general studies—ENDV 101 Introduction to Environmental Design and ARCH 321 History of Architecture I—that include a great deal of ARCH content. It counts these as non-Architecture courses but requires Architecture majors to complete them. Without these courses, the remaining credits do not meet the NAAB requirement for “at least 45 credit hours... outside of ARCH studies.” Although these courses are available to non-Architecture majors, they do not include “other than ARCH content.” The curriculum includes 40 hours of general studies in addition to 3 credits of ENVD 101 and 3 credits of ARCH 321.

**2018 Visiting Team Assessment:** The visiting team reviewed the courses identified by the program as complying with the Student Performance Criteria and the requirements the program has to meet for the 132 credit hour, pre-professional degree curriculum. ENVD 101 – Introduction to Environmental Design is no longer identified as a course required to meet the SPC requirements for accreditation and is part of the Humanities and Fine Arts credits offered by the institution. ARCH 321 – History of Architecture I is now a required course assigned to a specific SPC. Therefore, the issues identified by the previous accreditation team are no longer an area of concern.

**2009 Student Performance Criterion B.6, Comprehensive Design:** *Ability* to produce a comprehensive ARCH project that demonstrates each student's capacity to make design decisions across scales while integrating the following SPC:

- |  |                           |
|--|---------------------------|
| A.2. Design Thinking Skills                  | B.2. Accessibility        |
| A.4. Technical Documentation                 | B.3. Sustainability       |
| A.5. Investigative Skills                    | B.4. Site Design          |
| A.8. Ordering Systems                        | B.5. Life Safety          |
| A.9 Historical Traditions and Global Culture | B.7 Environmental Systems |
|  | B.9. Structural Systems   |

**Previous Team Report (2012):** The program has identified that the thesis projects are intended to satisfy this criterion. However, the breadth of projects in the thesis appears to be an obstacle to demonstrating the required integration of all categories. The team did find evidence that this criterion was satisfied in several thesis projects, but not all. In order to get a wider sample, the team also looked at work chosen by the program for display as well as additional examples on file with the library. The team also looked at other courses that included portions of the subject matter referenced above, but did not find consistent results that are part of the required curriculum for all students.

**2018 Visiting Team Assessment:** Based on the response provided at the APR which read as follows:

"The 2012 assessment caused the faculty to look once again at the process that we have had in place for many years to require students to view their Thesis projects as an "opportunity to culminate your education by rigorously developing a comprehensive, student generated design project," as stated in our Thesis manual. During the following two academic years, there was a concerted effort among faculty to emphasize to students the necessity to address the already-in-place requirements of Comprehensive Design as part of their Thesis design and communication process, with an increased emphasis on the necessity of projects of adequate breadth. While we were reasonably satisfied with the results of these efforts, we saw that there was still too much that was left to chance, and that despite the best efforts of faculty and students, the exigencies of completing a comprehensive, individually-driven Thesis design within a thirteen-week period was not resulting in the uniformity of Comprehensive Design documentation that we wanted to see. Often, we knew that the work had been done but it had simply not made its way to the presentation. Additionally, there was the sense that Comprehensive Design requirements (soon to evolve into the Realm C: Integrated ARCH Solutions requirements) in the Thesis project might not be suitable for any interest that the program had to encourage Thesis work of a more research-based nature. During the 2015-16 academic year, the program transitioned Realm C: Integrated ARCH Solutions to the fall ARCH 471 design studio, which had long served as the program's capstone project. This collaboratively-taught studio (Profs. AlyAhmed, Crutchfield, Faulkner), focused on the design of a high-rise building, has proven to be a more suitable vehicle for the requirements of Realm C. During that year, to make the transition, both ARCH 471 students and ARCH 772 (Thesis) students incorporated Realm C: into their project requirements."

After reviewing the information provided and the work completed in the ARCH 471 Studio, the 2018 Visiting Team thinks there is sufficient improvement in the outcomes of the studios and that the efforts undertaken by the program ensure that this is no longer an area of concern.

**2009 Student Performance Criterion C.1, Collaboration:** *Ability* to work in collaboration with others and in multi-disciplinary teams to successfully complete design projects.

**Previous Team Report (2012):** Evidence of the ability to work in collaboration with other Architecture majors is found in both course work and projects as presented in student's work in studio teams of two or more on a variety of projects in both second and fourth year curriculum; ARCH 271 ARCH Design I; and ARCH 272 ARCH Design II; and specifically in ARCH 471 ARCH Design V; and ARCH 472 ARCH Design VI.

However, collaboration with others in multidisciplinary teams is not part of the required curriculum. While the program has identified many opportunities to collaborate with Engineering, Visual Arts, Landscape Architecture, English, Nursing, Construction Management, Environmental Resources, etc., these have not been built in as required experiences for all students.

**2018 Visiting Team Assessment:** This SPC has been eliminated and is now incorporated into one of five defining perspectives. The Program has addressed this issue by having Architecture and Landscape Architecture students start studying and working together in five Environmental Design introductory classes: three lecture classes, a drawing class, and a beginning design studio. During the first few weeks of second year design studio, all Architecture students work with all Landscape Architecture students on a project called the "Terrature." Fourth year Architecture and Landscape Architecture students share studio space and work on a joint urban design project in the same large American city. There are also joint Architecture/Landscape Architecture seminars in the fifth year. Therefore, the issues identified by the previous accreditation team are no longer an area of concern.

#### **Previous Team Report (2012): Causes of Concern**

**A. Promotion and Tenure Expectations:** The team noted in its review of the materials for Condition 1.2.1, Human Resources/Development: Faculty & Staff that the university has written policies for rank, reappointment, tenure, and promotion that include scholarly activity as an important factor in these decisions. However, the team is concerned that there are conflicting expectations surrounding the definition of scholarly and creative activity that are not accounted for in these policies in a way that recognizes the unique nature of ARCH work.

**2018 Visiting Team Assessment:** The visiting team notes that since the last visit, the Department made a significant move from the College of Engineering and Architecture to the College of Arts, Humanities and Social Sciences. This change has allowed for departmental leadership to revise and develop a new PT&E document, which addresses creative activity in a more detailed manner as described in the PT&E document (revised 11 December 2014). As per discussion with the Provost Office, the University also has a new set of standards and criteria for promotion that was not available during the previous accreditation visit. In addition, the College has implemented a new checklist that Architecture faculty can use to ensure compliance with the new PT&E guidelines prior to the submission of an application for promotion and tenure. The issues identified by the previous accreditation team are no longer an area of concern.

**B. Department Chair Search:** The team noted in its review of the materials for Condition 1.2.2, Administrative Structure and Governance, that the program has clearly been affected by the sense of limbo from a four-year protracted interim status of the department chair. The team

understands that the position is now funded and a search is underway, with the expectation that a new chair will be in place by fall 2012. However, this has not yet occurred, and the team understands that previous searches have not yielded sufficient applicant pools to fill the position.

**2018 Visiting Team Assessment:** Since the last visit the Department and the Program addressed this issue successfully. The search for a new department chair was launched in the fall of 2012. Dr. David Bertolini was appointed to the position in June 2013. As reported in the APR and corroborated in meetings with the faculty and staff, Dr. Bertolini has provided the needed leadership of the department and has managed to address successfully issues that had affected the Architecture program, such as the declining enrollment, low retention and graduation rates. In recent months, due to advancement within the university senior hierarchy, the Dean of the College of the Arts, Humanities and Social Sciences moved to a new position and Dr. Bertolini was appointed by the office of the President and Provost to serve as the Interim Dean of the College of the Arts, Humanities and Social Sciences.

As we were informed by President Bresciani and Provost Ingram during our visit, Dr. Bertolini will assume that role on a permanent basis. Prof. Michael Strand, Chair of the Department of Visual Arts, was appointed Interim Chair of the Department of Architecture and Landscape Architecture. The appointment of Prof. Strand, a long term leader in the College of the Arts, Humanities and Social Sciences, has allowed for a smooth and extremely seamless implementation of Dr. Bertolini's agenda. We were informed by the President and the Provost that the search for the new chair will commence in the fall 2018. The visiting team believes that this is no longer an issue since the working relationship between the Interim Chair and the Department Head is seamless and fully supportive of the changes that Dr. Bertolini was implementing. The issues as identified by the previous accreditation team are no longer an area of concern.

- C. Visibility within the Institution:** The team noted in its review of the materials for Condition 1.2.3, Physical Resources, that the facilities are a tremendous asset to the program. They have clearly enhanced its educational effectiveness. The students' presence has been a key factor in transforming Fargo's downtown into a vibrant commercial core, and has introduced the students to urbanism and the community in a direct way. However, the team heard concerns from students about the lack of visibility of the program within the overall university's main campus located just over a mile away.

**2018 Visiting Team Assessment:** The students collectively provided very positive feedback about their downtown location. Many students stated that because of their physical location away from the main campus, the students in the program feel very close, almost like a close knit family. The distance between the Architecture building and the main campus is about a mile, a 10-minute bus ride or 15-minute walk. Students are able to use the bus system with little or no delays in their commute between campuses.

Students believe that the downtown location is a positive asset since it places the program at the center of downtown Fargo, as an active participant in the urban renewal of the city. In this location it is much easier for students to connect with the local architecture firms since most of them are located the downtown area. Faculty and staff also agreed with the student sentiment that this location is best as well. Students still participate with other students, activities, and take courses on the main campus. Student housing is still within the confine of the main campus. The issues as identified by the previous accreditation team are no longer an area of concern.



### 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 Visiting Team Assessment:** Based on the response provided at the APR, where portions of the most critical information were provided and with additional information discussed during our visit and conference calls, the following information is used for assessment of this requirement:

[North Dakota State University](#) (NDSU) is distinctive as a student-focused, land-grant, research university, that provides affordable access to an excellent education at a top-ranked institution that combines teaching and research in a rich learning environment, with a history of educating future leaders who will create solutions to national and global challenges that will shape a better world.

Located in Fargo, [North Dakota State University](#) was established as North Dakota Agricultural College (NDAC: the state's Land Grant College) in 1890, one year after North Dakota gained statehood. Under the Morrill Land-grant Act, the institution was given the mission of providing education, research and service to the people of the northern Great Plains. The school's first courses were in the areas of Agriculture, Engineering/Mechanic Arts and Home Economics. A program in Pharmacy was soon added and, in 1914, courses in Architecture began under the Mechanic Arts program. In 1960 an amendment to the State's constitution changed the official name of the school to North Dakota State University. The University is governed by the State Board of Higher Education (SBHE) and by the Chancellor of the North Dakota University System (NDUS).

In May of 2010, [Dr. Dean L. Bresciani](#), formerly the vice president for student affairs at Texas A&M University, was named North Dakota State University's 14th president by the SBHE. In 2004, the SBHE granted the department a substantial increase in student program fees to help fund educational excellence beyond the capacity of state and university funding. The department currently offers two undergraduate degrees – the Bachelor of Science in Architecture (for Architecture students) and the Bachelor of Science in Environmental Design (for landscape Architecture students – and two professional degrees, the Master of Architecture and the Bachelor of Landscape Architecture degree. In 2008, the Architecture program was listed by Design Intelligence as the 17th top ranked five-year Bachelor's degree program in Architecture in the country.

At this time the 2018 Visiting Team feels that the program not only has a strong connection to the university as a whole but it also has a strong outreach program to serve the region, and thus meets NAAB criteria for accreditation.



**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-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 Visiting Team Assessment:** The learning culture of the program is presented in the APR (pp. 9-11) and supplemented by additional information provided through interviews and meetings with students and faculty. Adequate and focused policies that address the learning and studio culture were made available to the visiting team. Based on feedback from students and faculty, the school updated its studio culture policy in October 2017. Students and faculty alike, acknowledge the significance of the issues addressed by the Department's "NDSU ALA Studio Learning Culture Policy" and strive to adhere to the expectations described in those policy documents as they relate to work-school-life balance, general health and well-being, and professional conduct. There is a genuine atmosphere of trust and informal understanding of mutual effort, camaraderie, and support between students, between students and faculty, and between students and staff. The visiting team was able to locate copies of the document posted on several locations throughout the building allowing the students to have this document visible at all times and thus meets NAAB criteria for accreditation.

**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 Visiting Team Assessment:** The Program's policy on diversity and inclusion for current and prospective faculty, students, and staff and is outlined in APR pp11-13.

### **University Plan for Equity and Diversity**

The visiting team reviewed the university's strategic plan for diversity initiatives, which benefit the Architecture program as follows:

- Diversity-specific accountability for employees.
- Diversity training and sexual harassment training for all employees.
- Faculty and staff orientation that addresses diversity in the workplace, including recognizing and accepting differences.

- Nominating and search committees that emphasize the diversity of the university community in selecting candidates, with training sessions for search committee members sponsored by the campus NSF-sponsored Advance FORWARD initiative.
- Recruitment and retention efforts that strive to create a diverse qualified workforce.
- Safe Zone training for all employees (voluntary).
- NDSU Diversity Policies.

### Departmental Equity and Diversity

The visiting team notes that the Department's plan is dedicated to increasing diversity among faculty, staff, and students. Specifically, the following points are indicative of the department's efforts:

- In the past 4 years they have appointed a female as Program Director, hired two female assistant professors, and adjusted pay inequity for female lecturers.
- In 2016, the department worked with students to attend the National Organization of Minority Architects (NOMA) Conference in Los Angeles with the goal of starting a university-based NOMA student chapter. This goal was accomplished when the students established a NOMAS chapter in fall 2017.
- Two generous yearly scholarships of \$10,000 and \$1,500 for Native Americans, African Americans, and women have recently been established.
- The program includes a small number of international students who have chosen to study Architecture at NDSU, coming from Italy, Taiwan, Cambodia, Vietnam, Japan, Norway, Canada, Malaysia, China, Tibet, Brazil, and India, as well as exchange students from Belgium.
- The percentage of female students graduating from the Architecture program is currently at 56%.

The visiting team observed that the overall number of minority and foreign students is still low. This is mainly owing to the lack of diversity within the pool of student reaching out to the university to do their academic studies. This region of North Dakota, according to the department, mirrors to a great extent the diversity of the region as a whole. However, both the program and the institution say that they are more diverse than at the time of the last site visit. The recruitment efforts by the university to reach out to other neighboring states is a strong priority of the administration and still meet their requirement to serve the needs of the citizens of North Dakota. Currently the number of students in the program identifying themselves as non-white is 16%.

The additional efforts that have been made to improve the students' lack of exposure to diverse traditions and values include involving them in exercises that expose them to diversity as follows:

- Academic programs focusing on urban sites in various national and international settings; field trips to urban centers and the Term Abroad Program, which has taken mixed studios of Architecture and landscape Architecture students to Spain, India, and currently Belgium.
- The Department lecture series has included a group diverse of speakers who represent diverse cultures, ethnicities, and gender.
- The program hosted lectures on community and diversity by James Garrett of 4rm+ULA, a regional architecture firm, and Tiffaney Brown, NOMA regional Representative.
- The John Klai Endowed Scholarship was established in 2016 as an annual award of \$4,000. This represents the largest scholarship in the Department, and it gives preference to recipients from diverse classifications.
- The Doug Hanson Diversity Scholarship was awarded this year, where preference was given to students from underrepresented groups.
- The Deb Fredrickson Diversity Scholarship, will come online in 2018 and will provide a single award up to \$4,000.

Also, based on our conversation with the Chair and Department Director, we were advised that recent faculty searches have all resulted in diverse pools of candidates, with a female or ethnically diverse candidate being hired in four out of the last five faculty searches. At this time the visiting team feels that the program continues to work on these efforts and thus meets NAAB criteria for accreditation.

**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 Visiting Team Assessment:** the visiting team found the following information and verified it with a meeting attended by the Dean, Chair, and Department Head.

**A.** As described in the APR (pp. 13-14) collaborative research and/or team efforts are a part of both studio and lecture class curricula, starting with their first year in the pre-professional program. The review of evidence revealed that studio experiences include working individually, in teams (2-3 individuals) and/or in larger groups. There are several student organizations within the Department and College that provide opportunities for students to build their leadership skills. They include AIAS/Freedom by Design, Tau Sigma Delta Honorary, USGBC, NOMAS, and AHSS Ambassadors. These organizations also serve to relay the voice of the students to the faculty/ administration and back down to students.

**B.** As described in the APR (pp. 14-15), NDSU's Architecture program "has a long history of educating students in a pluralist design milieu," with design at the core of its pedagogy. As reported in the APR, "emphasis is placed on design process, problem solving, scale, and community engagement" at all levels of the curriculum. A strong design competency and sensibility is apparent in projects exhibited in the team room and elsewhere around the Department but need to be refocused if they are to meet the national expectation set forth by the President and the newly appointed Dean.

**C.** Architect Licensing Advisor for NDSU is Prof. Mark Barnhouse, who introduces the AXP to every class level from second year onward, starting in a lecture class at the second year. The program enjoys strong support from the professional communities in the North Dakota and Minnesota. Local professionals come to speak as guest lecturers and are also invited as studio critics. Many NDSU students work during summers in the offices of local architects, and some work part-time during the school year. Information about job opportunities is distributed through a student listserv and through the NDSU Career Center. Studio travel takes students to major metropolitan areas, and visits to professional offices are a routine part of those trips. Firm Crawls are organized annually by student groups in order to keep the students connected with local practitioners.

- D. The APR described the clear environmental focus of several courses (p. 16), with discussions of sustainability and the responsibility to be stewards of the environment embedded in courses throughout the curriculum. Student work in the team room illustrated this statement as being a key component to all studio projects. Prof. Malini Srivastava's "eFargo" project, focused on reducing Fargo's energy footprint, is cited as a model for University and community cooperation through a partnership that includes NDSU, the city of Fargo, and several energy companies. Fargo is currently a finalist in the Georgetown University Energy Prize Competition, and work on eFargo has given many students in the program an opportunity to work as research assistants, working in the community to educate the public about energy conservation.
  
- E. The place of Architecture within society is a focus of several courses in the program; the history and theory seminars in fourth and fifth year look at recent or current condition of Architecture throughout the world. Students in the program are also exposed to a variety of local social situations in some studios. Many of the faculty members in the department lead by example, by being involved in the community as elected officials, members of local review boards, frequent lecturers at public events, organizers for regional issues such as affordable housing, volunteers for service activities, leaders of neighborhood associations, members of service groups, and lobbyists for environmental and design issues. Efforts of NDSU faculty have resulted in the local school district adopting LEED standards for its buildings and sustainability becoming a major goal for design of new facilities throughout the city of Fargo.

The 2018 Visiting Team feels that the program continues its efforts to improve outcomes and meets NAAB criteria for accreditation.

**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 Visiting Team Assessment:** In our discussion with President Bresciani and Provost Ingram, the institution is progressing on its long-range plan and focusing on three key initiatives: Interdisciplinary Research, recognition as the premier Center of Excellence in higher learning in the region (Knowledge Thought Leadership), and Support the State of North Dakota and the immediate region with top quality professionals. These three goals drive the vision and mission for the institution.

Based on text provided by the Department in the APR and with verification by the Dean, Department Chair and Program Director, their ongoing annual assessment of the program and when coupled with the seven-year evaluation cycle, the institution's leadership continues to align the set goals of the department with those of the University.

They expect to continue their scheduled assessment of the program once the accreditation visit is completed and the interim Dean takes over the permanent assignment in August 2018. This is a plan that both the Provost and the President are in agreement with.

At this time the 2018 Visiting Team feels that the program has a strong grasp of its role within the institution, has developed and continues to advance plans for the betterment of the program, and is proactive in self guiding their vision for the program and thus meets NAAB criteria for accreditation.

**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 Visiting Team Assessment:** The Program's processes for self-assessment and curricular assessment and development processes are described in detail in the APR (pp. 18-20). The progress toward the Program's long-term goals is assessed at pre-year faculty meetings, by the Program's Advisory Board and Departmental Council, and through the University Program Review.

As part of the institutional assessment, the University identifies strengths and weaknesses of the program through a periodic Program Review process. The Program Review Committee suggests actions based on their review and urges the department to act in specified areas. The Architecture program was last reviewed in 2011-2012 and expected to begin their next cycle in 2018-2019.

As a result of the curricular assessment process, the Program instituted an enhanced semester abroad opportunity for students and reaffirmed its continued focus on design outreach projects that serve the needs of the region. The Program introduced several design-build studios since the last accreditation visit and added innovative technology for model building (CNC router, 3D printers, etc.). The Program's curriculum assessment is also based on the assessment of learning outcomes, i.e., student course evaluations. An assessment of the Program's beginning design experience led to significant changes in the way that freshman courses were offered and taught.

The Department benefits from the support of an alumni Advisory Board that includes representatives of allied professions and the profession at-large, including the Executive Director of AIA North Dakota and the State Board of Architecture, an executive from a large regional construction firm, and a visual artist. The Board meets in Fargo twice a year and conducts two teleconference meetings a year.

The 2018 Visiting Team feels that the program has a strong grasp of its role and expectations while still being proactive, thus meeting NAAB criteria for accreditation.

## 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 Visiting Team Assessment:** Evidence of compliance is presented in the APR (pp. 26-29) and verified through our meetings and supplemental information provided in meetings with Department's Leadership, faculty, staff and students.

There are currently 17 full-time faculty positions in the Architecture Program (including the Interim Dean/Department Chair): 12 tenured (5 Professors and 7 Associate Professors), 2 tenure track (at the rank of Assistant Professor), one Associate Professor of Practice, and two Lecturers (APR p. 26). Four faculty members hold doctoral degrees. Eight of the 17 full-time Architecture faculty members are registered architects in the United States, four are registered overseas, and one is a certified planner. Seven faculty are members of the American Institute of Architects (AIA).

Faculty members each teach one studio section and one lecture or seminar course per term, with release from one course rotated through the faculty as is feasible. Faculty members spent 60% of their time on teaching and are expected to devote approximately 30% of their time to scholarship, research and/or creative activity, with additional time (10%) for service to the University, the profession or the community.

The Department has one administrative assistant, one librarian, and one student services coordinator (professional academic advisor) who advises 400 students. There are four additional non-administrative full-time staff with specialized responsibilities: one computer systems specialist, one woodshop technician, one studio technician, and one building engineer.

As reported in the APR (p. 27), faculty members can apply for grants from various institutional sources to initiate and advance their research interests. Faculty can also receive financial assistance from the University, College, and Department for conference travel grants to enable them to present their work. The travel allowance for conference attendance at the department level is \$750 per faculty member and a maximum of \$1,000 from the Office of the Dean. Travel awards up to \$1000 are available from the office of the Vice President for Research and Creative Activities. Although NDSU does not have a policy for granting scheduled sabbatical leave, faculty could apply for a "developmental leave". In addition, at the University level, a Faculty Luncheon series for enhancing student learning and Faculty Conferences for new and returning faculty are provided.

Professor Mark Barnhouse serves as the Program's Architect Licensing Advisor. Each year, he introduces the Arch Experience Process (AXP) and the transition to practice to all students, starting in a lecture class at the second year. The ALA meets with North Dakota State Board representatives and the state licensing



advisor, follows changes in the AXP and ARE licensing requirements, and attends NCARB training sessions while maintaining his membership with the AIA.

As reported in the APR (Pg. 28), a full time professional academic advisor with a Master's degree in Educational Leadership is provided for all students in the program. Academic guidance begins in the first year and is maintained until graduation with meetings minimally twice per year and faculty providing career guidance. While no formal intern placement exists, firms visit twice annually to recruit interns and Tau Sigma Delta has organized portfolio reviews.

**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 Visiting Team Assessment:** The physical resources available to the students are an asset to their education and stand out as one of the best factors of the program. Studio-based learning is supported through small studio classes with 16 students per studio, allowing for personal mentorship from the studio professor. Digital resources—e.g., laser cutters, 3D printers, and large-scale printers—are all available 24/7 and free of cost to students. With the exception of paper and materials to cut, all materials are provided for the students (such as 3D printer filament, ink, etc.) The students claimed that this access gave them unlimited “freedom to explore.” Students are trained by staff to use all these machines and get assistance from the technician on staff with any issues they face. A photo documentation room is also available as a resource to students. Availability of these resources is sufficient to students as they all collectively share and understand one another's deadlines. The wood shop is another resource available to students in second year and up. The shop is a very clean and safe environment, as there is always at least one full time employee present and students are required to do a training project in order to use the machines. The shop is open over 12 hours a day during the week and is closed on weekends. Based on what the visiting team saw of these facilities and heard from students, it is clear that the resources available to the students are an asset to their education. This requirement for continued accreditation is therefore described and meets NAAB expectations.

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

**[X] Demonstrated**

**2018 Visiting Team Assessment:** Under the University leadership by President Bresciani and Provost Ingram, the institution continues to demonstrate a strong commitment for financial support of the department of Architecture. In our conversation with President Bresciani, the visiting team was advised on recognition of the Architecture Department as one of the University's flagship programs and thus a recipient of its financial support. This is evidenced also on pages 34-37 of the APR and verified during the visit with the University President and Provost. In addition, the university has demonstrated overall support of the



department by moving the department from the College of Engineering to the College of Arts, Humanities, and Social Sciences. This move is intended to put the program under a similar group of departments where research is measured differently than the College of Engineering.

The upper administration has encouraged the department to continue with its growth projections and that funding will still be available when the need arises for new faculty lines. The visiting team was assured that an additional line/position would be made available for the 2019-2020 academic year, contingent on State of North Dakota budget appropriations. This requirement for continued accreditation is therefore demonstrated and meets NAAB expectations.

**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 Visiting Team Assessment:** The Architecture library is available to students and staff and is equipped with relevant and historical texts. It is not entirely convenient for students—the architecture library and main university library are in a different section of the campus. Students voiced a concern about the hours of operation for the architecture library, but after discussing the issue with the librarian, the team learned that the Architecture library follows the same hours of operation as the rest of the library system on campus.

The materials library may be a concern as there is not a large variety of physical materials available as a resource. The librarian does ensure that this collection is growing. In the digital realm, e-books are beginning to be purchased starting this year by the current librarian. She expects the future purchase of texts to be primarily in this format, being much more accessible to students.

Other informational resources that support professional education is access to updated licensure information. There is an AXP student liaison that keeps students updated with licensure changes, and students affirmed that professors help with questions related to this.

2018 Visiting Team feels that the Program and University have a commitment to enhance the program collection, expand the material resources collection, and continue to digitize existing photo and slide collection so this requirement for continued accreditation is therefore demonstrated and meets NAAB expectations.

**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, 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 Visiting Team Assessment:** Based on the response provided in the APR and with additional information discussed during our visit and conference calls the following information is used for assessment of this requirement:

**University Administrative Structure**

The University President presides over a Cabinet representing the office of the Provost, Vice President for Finance and Administration, Vice President for Research and Creative Activity, Vice President for Information Technology, Vice President for Agricultural Affairs, Associate Vice President for University Relations, Athletic Director, and State Forester, with liaisons from Development Foundation, Research and Development Park, Research Foundation, Graduate School, as well as Presidents of the Faculty Senate, Staff Senate, and Student Body.

The University's administrative structure is organized into eight colleges reflected in the current Bulletin: Agriculture, Food Systems, and Natural Resources; Arts, Humanities and Social Sciences; Business; Engineering; Human Development and Education; Health Professions; Science and Mathematics; and University Studies.

The Architecture Department belong to the College of Arts, Humanities and Social Sciences (AHSS).

The College of Arts, Humanities and Social Sciences has approximately 125 faculty and lecturers, 15 staff members, 1,500 undergraduate and 200 graduate students from the departments of Architecture and Landscape Architecture; Communications; Criminal Justice and Political Science; Emergency Management; English; History, Philosophy and Religious Studies; Modern Languages; Performing Arts (Theatre Arts and School of Music); Sociology and Anthropology; Visual Arts; and Women and Gender Studies.

### **Department and Program Administrative Structure**

Department of Architecture and Landscape Architecture is made up of two professional programs: the Architecture program and the Landscape Architecture program. The Department is administered by a permanent Chair who reports to the Dean of the College of Arts, Humanities and Social Sciences. Because of the modest size of the institution and generally informal atmosphere of the university community, direct and frequent communication takes place between the department and all levels of university administration. Faculty of each program meets as necessary, and there is a monthly meeting of the Departmental Council consisting of all faculty members from Architecture and Landscape Architecture. There are numerous standing committees made up of faculty and student members who report to the Departmental Council or program faculty on the following areas of responsibility, as listed in Department Bylaws: Assessment Committee (a university requirement to assess student learning), Community Service Committee, Creative Means Committee (overseeing computer use and policy), Curriculum Committees for both programs (to review curriculum change proposals), Facilities and Space Committee, Library Committee, Differential Tuition Oversight Committee (not included in Bylaws), PTE Committee, Student Affairs and Scholarships Committee (student grade appeals and scholarship recommendations), Supplementary Education Committee (primarily guest lecturers), Term Abroad/Foreign Study Committee, Study Abroad Committee, Thesis Committees (to oversee the design thesis process), Search Committees (as needed). The Chair and two directors make up an Executive Committee to perform administrative duties and to act on the Department's behalf when full-time faculty cannot be convened. Ad hoc committees are appointed by the Chair to handle specific issues. Student participation in most of the decision-making and planning processes in the Department is strongly encouraged. The AIAS/FBD, ASLA, Tau Sigma Delta Honor Society, USGBC, a newly formed NOMA Student Chapter and student class representatives to the Advisory Board have been particularly active and have been very helpful in organizing and promoting departmental functions.

Based on information provided and verified, the visiting team believes this requirement has been described and thus meets NAAB criteria for accreditation.

## CONDITIONS FOR ACCREDITATION

### 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 ARCH 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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 231 and ARCH 772 - Design Thesis. Additional evidence was found on courses ENVD 130 - Drawing Skills for Environmental Designers, and - ARCH Drawing, ARCH 472 – ARCH Design VI that supplemented the requirements of this SPC Criteria.

**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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for the core studios ARCH 371 and 372 – ARCH Design III and IV. Additional evidence is provided in student work for ARCH 271 and 272 – ARCH Design I and II and ARCH 471 and 472 – ARCH Design V and VI that supplemented requirements of this SPC Criteria.

**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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 471, ARCH Design V (Capstone), ARCH 763 Thesis Preparation.

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

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ENVD 172 – Environmental Design Foundation Studio, ARCH 271 – ARCH Design I, and ARCH 272 – ARCH Design II.

**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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 233 – Math for Designers and ARCH 443 – ARCH Structures II, but not in student work prepared for ARCH 172 – Environmental Design Fundamentals studio and ARCH 271 – ARCH Design I as reported in the SPC matrix.

**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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 763 – Thesis Preparation; and ARCH 772 – Design Thesis. Additional information was found in ARCH 471 – ARCH Design V (Capstone); and ARCH 771 – Advanced ARCH Design that supplemented the requirements of this SPC Criteria.

**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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 321/322/323 - History and Theory of Architecture I, II, III, ARCH 721 – Non-Western Traditions, and ARCH 772 – Design Thesis.

**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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 781, Professional Practice, ARCH 461, Urban Design, ARCH 321, History and Theory of ARCH I.

**Realm A. General Team Commentary:** There is ample evidence in exhibited student projects and writings that students possess necessary design thinking, investigative, and communication skills and abilities. All criteria in this realm are met. Students exhibit abilities to explore their design ideas effectively, from writing, sketching and diagramming to digital modeling and physical model making. Conceptual ideas are developed through thematic research and precedent analyses pertinent to pedagogic objectives of each studio. Projects are successfully presented through diagrams, normative drawings, axonometric views, rendered interior and exterior perspectives, and carefully crafted scale models produced using a variety of digital fabrication equipment available in the Department. Based on discussions with students and observation of their performance, it is apparent that the students are able to articulate their ideas in a discussion setting.

**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 ARCH 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 ARCH 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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 471 – ARCH Design V (Capstone) and ARCH 772 – Design Thesis. Additional evidence was found in ARCH 763 – Programming/Thesis Preparation that supplemented the requirements of this SPC Criteria.

**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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 341, Site Design for Architects, ARCH 471 ARCH Design (Capstone). Note: Not enough evidence at the prescribed level was found in ARCH 271, ARCH Design I, but the team found additional evidence as noted above in ARCH 471 that supplemented the requirements of this SPC Criteria.

**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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 772 - Design Thesis, ARCH 450 - ARCH Detailing, and ARCH 471 - ARCH Design V (Capstone)

**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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 450 – ARCH Detailing; ARCH 471 – ARCH Design V (Capstone); and ARCH 781 – Professional Practice. Additional information was found in ARCH 472 – ARCH Design VI that supplemented the requirements of this SPC Criteria.

**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 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 344 – ARCH Structures I and ARCH 443 – ARCH Structures II. Additional validation of application of appropriate structural systems was identified in ARCH 772 - Design Thesis that supplemented the requirements of this SPC Criteria.

**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.

**[x] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 453 Environmental Cont. Systems - Passive, ARCH 454 Environmental Cont. Syst. II – Active.

**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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for courses, ARCH 351 – Materials and Construction, and ARCH 450 – ARCH Detailing. Additional validation of this compliance for application of appropriate building systems was identified in ARCH 471 – Architecture Design V, and ARCH 772 - Design Thesis that supplemented the requirements of this SPC Criteria.

**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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 351 - Materials and Construction, and ARCH 772 - Design Thesis.

**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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in much of the student work prepared for ARCH 454 – Environmental Control Systems II.

**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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 471 – ARCH Design V (Capstone); and ARCH 781 – Professional Practice.

**Realm B. General Team Commentary:** As a whole, students demonstrated very good comprehension of technical aspects of design, building systems and materials applications which were evidenced in their architectural studio projects. The visiting team noted examples of exceptional student work in Realm B, particularly regarding site design, technical documentation, environmental and building service systems, building materials and assemblies and building envelope systems.

**Realm C: Integrated ARCH 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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 763 – Thesis Preparation. Additional information was found in ARCH 771



– Advanced Architectural Design, and in preparation of all other design courses that supplemented the requirements of this SPC Criteria.

**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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for courses ARCH 772 - Design Thesis. Additional validation of this compliance for application of appropriate structural systems was identified in ARCH 471 – Architecture Design V that supplemented the requirements of this SPC Criteria.

**C.3 Integrative Design:** *Ability* to make design decisions within a complex ARCH 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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for courses ARCH 471 – Architecture Design V. Additional validation of this compliance for application of appropriate structural systems was identified in ARCH 772 - Design Thesis that supplemented the requirements of this SPC Criteria.

**Realm C. General Team Commentary:** This is probably one of the strongest Realms this curriculum has to offer. The visiting team found ample evidence in exhibited student projects in the Capstone Design Studio (ARCH 471) and Design Thesis (ARCH 772) that students possess necessary prescribed abilities and skills to synthesize a broad range of contextual, design and technical considerations into an integrated design solution.

**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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 781-Professional Practice.

**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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 781, Professional Practice.

**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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 781 Professional Practice.

**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.

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 781 – Professional Practice.

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

**[X] Met**

**2018 Visiting Team Assessment:** Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 781 – Professional Practice.

**Realm D. General Team Commentary:** Realm D connects directly to the practice of Architecture. While all SPCs in this realm are met, the program evidence was found in a single Professional Practice (ARCH 781) course taught by Prof. Urness. While the instructional content in that course is strong, exposing students to a range of professional scenarios and literature, the sheer density of topics taught in a single course left us with some questions. The opportunity to have portions of the requirements for this SPC spread out into some of the terminal studio projects was an issue of discussion among the visiting team.

## 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 Schools (SACS); the Middle States Association of Colleges and Schools (MSACS); the New England Association of Schools and Colleges (NEASC); the North Central Association of Colleges and Schools (NCACS); the Northwest Commission on Colleges and Universities (NWCCU); or the Western Association of Schools 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 Visiting Team Assessment:** NDSU is accredited by the Higher Learning Commission (HLC). The date of the most recent reaccrediting letter was M. ARCH 26, 2016, with the next scheduled review to occur in 2025-2026. Additional information, including the final report, may be found on the University's Accreditation website.

**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 non-accredited programs.

Therefore, any institution that uses the degree title B. ARCH., M. ARCH., or D. ARCH. for a non-accredited degree program must change the title. Programs must initiate the appropriate institutional processes for changing the titles of these non-accredited 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 Visiting Team Assessment:** NDSU's Architecture program offers a pre-professional Bachelors of Science in Architecture (B.S.Arch.) degree, leading to a professional Master's of Architecture (M. Arch) degree (APR p. 43). Students complete 136 credit hours in B.S.Arch. and 32 credit hours in M. Arch for the total of 168 credits, of which 40 are in general education, 108 in required professional studies, and 20 in optional studies. The program does not require a minor or an additional area of concentration; however, students transferring from other majors or other institutions often pursue a minor, typically requiring 18-24 credits. In the past five years, the minors that students have pursued were in Art, Landscape Architecture, Business Administration, Psychology, Anthropology, International Studies, Spanish, Chemistry, Accounting, and Community Development.

The Department's Term Abroad Program (TAP) constitutes a full semester of residential study in an overseas location. Student participants complete their studies under the direction of an NDSU faculty member working in cooperation with faculty at international host institutions. The Term Abroad Program incorporates the NDSU M. Arch. curriculum for the Spring Semester of 4<sup>th</sup> Year. Thus, from a curricular point of view, TAP participants complete the same courses, earn the same credits, and make identical progress toward their degrees as do the students who opt not to participate.

### 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 pre-professional 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 Visiting Team Assessment:** The APR (pp. 45-46) describes student admission procedures. More detailed explanations of the assessment process were provided in meetings with the Program's Director. Almost all of the students admitted into the M. Arch program complete their pre-professional education through the B.S. Arch program. Undergraduate transfer students who have completed coursework in Architecture at another institution can apply for admission into the pre-professional B.S. Arch program and may be given advanced standing. Graduates of pre-professional programs in Architecture elsewhere who apply for admission into the M. Arch professional program can be required to complete remedial coursework if there was no previous SPC match. In both cases, students must submit transcripts, course descriptions, and a portfolio for review by the Program Director; the content of transfer courses must align with course offerings in the Department that meet required SPC as defined by NAAB. Transfer courses may be combined to meet the SPC requirement of an NDSU course. Based on the information provided to the visiting team by both the Student counselor and the Department Chair, the program has an extremely limited number of students who want to enter the M. Arch. program, so their evaluation tends to be more student specific and allows the program to match the skill required with the skill the students has.

## 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 Visiting Team Assessment:** Evidence of the full statement on NAAB-Accredited Degrees is found at <https://www.ndsu.edu/ala/Architecture/Degree.php>

### 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] Met

**2018 Visiting Team Assessment:** Evidence of the of the open access to the 2014 NAAB Conditions for Accreditation and The NAB Procedures for Accreditation were found at:

[https://www.ndsu.edu/ala/architecture/Degree\\_accreditation.php](https://www.ndsu.edu/ala/architecture/Degree_accreditation.php)

### 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 Visiting Team Assessment:** NDSU has a Career Center, whose information can be found in the following website or in the Student Services Center Building on campus.

<https://career.ndsu.edu/>

In addition, the department has a link to access data from various sources that pertain to career development.

[https://www.ndsu.edu/ala/Architecture/Degree\\_accreditation.php](https://www.ndsu.edu/ala/Architecture/Degree_accreditation.php)

Career Development Information links are as follows:

- [NDSU Career Center](#)
- [The 2009 NAAB Conditions for Accreditation](#)
- [The NCARB Handbook for Interns and Architects](#)

- [Studio Culture: Stories and Interpretations](#)
- [NCARB – The National Council of ARCH Registration Boards](#)
- [AIA – The American Institute of Architects](#)
- [NAAB – National ARCH Accrediting Board](#)
- [AIAS – American Institute of Architecture Students](#)
- [ACSA – Association of Collegiate Schools of Architecture](#)

#### **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.
- The final edition of the most recent Visiting Team Report, including attachments and addenda.

#### **[X] Met**

**2018 Visiting Team Assessment:** Evidence of public access to APRs and VTRs is found at [https://www.ndsu.edu/ala/Architecture/Degree\\_accreditation.php](https://www.ndsu.edu/ala/Architecture/Degree_accreditation.php)

#### **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 Visiting Team Assessment:** Pass rates for both ARE 4.0 and 5.0 are linked on the Department website. This link takes one to the NCARB website.

[https://www.ndsu.edu/ala/Architecture/Degree\\_accreditation.php](https://www.ndsu.edu/ala/Architecture/Degree_accreditation.php)

The visiting team notes that it found specific information pertaining to the Architecture program pass rates at the following link:

<https://www.ncarb.org/pass-are/are4/pass-rates/are4-pass-rates-school>

#### **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 pre-professional degree content.
- Requirements and forms for applying for financial aid and scholarships.
- Student diversity initiatives.

**[X] Met**

**2018 Visiting Team Assessment:** The policies and procedures that govern how applicants are evaluated for admission and advanced placement are described in APR (pp. 46-47). All applicants make application directly to NDSU using the University's Admissions website, which provides a comprehensive gateway to all aspects of the admissions' process, directing prospective students to the appropriate information and forms, including costs, financial aid, scholarships, diversity resources and international applications. Applications for admission into the graduate program are made through the Graduate School portal, which provides a streamlined process that does not require references and GRE testing for students who are continuing from the pre-professional program. The policies and procedures that govern how applicants are evaluated for admission and advanced placement are described in the APR in section II.3, under "Evaluation of Preparatory Education" (pp. 45-46).

The APR (pg. 12) identifies Departmental Equity and Diversity policies which the Department attempts to go beyond by actively encouraging students to be aware of diverse cultures and viewpoints. In addition, support and scholarships are available including the following:

Grant support for research work of students with faculty include:

- NDSU Chapter of NOMA
- John Klai Endowed Scholarship (\$4,000 to recipients from diverse classifications)
- Doug Hanson Diversity Scholarship (given to students from underrepresented groups – 2 - \$5000 or 1-\$10,000 offered to high school or early career student with possibility of renewal)
- Developed two yearly scholarships of \$10,000 and \$1,500 for Native Americans, African Americans, and women with Alumni Foundation Development Officer.
- NDSU's Culture Diversity Tuition Waiver and additional scholarship programs for minorities including Native Americans

**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 Visiting Team Assessment:** Evidence of compliance with this condition is provided in APR (p. 48), with links to various University and School websites that offer information regarding tuition, living expenses and other costs, and financial aid. The Department website offers an "Anticipated Costs" worksheet that provides additional, department-specific information on estimated costs.

### **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 Visiting Team Assessment:** The visiting team found the Annual Statistical Reports on the following web based links:

2012: <https://drive.google.com/file/d/0B07fJGmYGtW3c05jWHI3WTJJSWc/view>

2013: <https://drive.google.com/file/d/0B07fJGmYGtW3THdnYIltX0VHbk0/view>

2014: <https://drive.google.com/file/d/0B07fJGmYGtW3U2JoTXZmclpEVGs/view>

2015: <https://drive.google.com/file/d/0B07fJGmYGtW3S2VfWFl6dFMyQjQ/view>

2016: <https://drive.google.com/file/d/0B07fJGmYGtW3R0xPaWpkNmtxZU0/view>

**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 Visiting Team Assessment:** Based on documents provided by NAAB this criterion is met.

#### IV. Appendices:

##### Appendix 1. Conditions Met with Distinction

**2018 Visiting Team Assessment:** The following courses were identified by the visiting team deserving of special recognition:

- ARCH 781 – Professional Practice by Prof. Cindy Urness: this course meticulously presents the ethos of the architecture profession. It has an extremely detailed, piece by piece explanation for the practice. The amount of information that has been packaged into a one semester program is amazing.
- ARCH 450 – Architecture Detailing by Prof. Mark Barnhouse, AIA: a comprehensive step by step process to understand how buildings go together and why we make the decisions we make when it comes to building systems.
- ARCH 341 – Site Design by Prof. Charlott Greub: illustrating all of the forces one has to analyze and understand in the development of a project, this class presents the steps, information, and concerns in a simplistic but insightful manner.
- ARCH 454 - Environmental Construction Systems II by Prof. Bakr Mourad Aly Ahmed, PHD, EDP: just like ARCH 341 this course presents all of the issues we have to analyze and understand in the development of a building project in a rather simplistic but insightful manner.
- ARCH 321 - History and Theory of Architecture I and ARCH 322 - History and Theory of Architecture II by Prof. Ron Ramsay: the two-semester course provides an exceptional overview of architectural history and theory that provides a solid foundation for the students to build from. The amazing collection of photos and diagrams are part of the excellence this course brings to the program.
- ARCH 323 - History and Theory of Architecture III by Prof. Regin Schwaen, MAA: a very tight and insightful theory and history course that focuses of comparative methods of analyzing and discussing modern architecture from the mid-century to contemporary architects with a global and vernacular view.
- ARCH 351 - Materials and Construction by Prof. Malini Srivastava: this course illustrates the uniqueness that our profession brings to the table as the custodians of how we build in this environment. The course is packed with how to ideas and coupled with examples of how things are built.

**Appendix 2. Team SPC Matrix**

The visiting 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 visiting 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.

# NAAB ACCREDITATION STUDENT PERFORMANCE CRITERIA (SPC) MATRIX – 2014 By the visiting team

North Dakota State University – Department of Architecture and Landscape Architecture – Architecture Program



Course with *primary* or *shared* responsibility for achieving understanding or ability, as required by each SPC

**UN:** Understanding – The capacity to classify, compare, summarize, explain and/or interpret information

**AB:** Ability – Proficiency in using specific information to accomplish a task, correctly selecting the appropriate information, and accurately applying it to the solution of a specific problem, while also distinguishing the effects of its implementation

Courses and Realm A,B, C, and D SPC's	Realm A: Critical Thinking and Representation								Realm B: Building Practices, Technical Skills and Knowledge										Realm C: Integrated Arch. Solution			Realm D: Professional Practice						
	Professional Comm. Skills	Design Thinking Skills	Investigative Skills	Architectural Design Skills	Ordering Systems	Use of Precedents	History and Global Culture	Cult. 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 Arch.	Project Management	Business Practices	Legal Responsibilities	Professional Conduct		
	A.1 AB	A.2 AB	A.3 AB	A.4 AB	A.5 AB	A.6 AB	A.7 UN	A.8 UN	B.1 AB	B.2 AB	B.3 AB	B.4 AB	B.5 AB	B.6 AB	B.7 UN	B.8 UN	B.9 UN	B.10 UN	C.1 UN	C.2 AB	C.3 AB	D.1 UN	D.2 UN	D.3 UN	D.4 UN	D.5 UN		
<b>Required Courses</b>																												
<b>PRE-PROFESSIONAL COURSES</b>																												
<b>FIRST YEAR CURRICULUM</b>																												
ENVD 101 Introduction to Environ. Design																												
ENVD 102 Drawing Basics for Environ. Designers																												
ENVD 104 Environment Design Fundamentals																												
ENVD 130 Drawing Skills for Environ. Designers																												
ENVD 172 Environmental Design Fund. Studio																												
ARCH 321 History and Theory of Arch I.																												
ARCH 322 History and Theory of Arch II																												
<b>SECOND YEAR CURRICULUM*</b>																												
ARCH 231 Architectural Drawing																												
ARCH 232 Design Technology																												
ARCH 233 Math for Designers																												
ARCH 271 Architectural Design I																												
ARCH 272 Architectural Design II																												
ARCH 323 History and Theory of Arch. III																												
ARCH 344 Architectural Structures I																												
<b>THIRD YEAR CURRICULUM</b>																												
ARCH 341 Site Design for Architects																												
ARCH 351 Materials and Construction																												
ARCH 371 Architectural Design III																												
ARCH 372 Architectural Design IV																												
ARCH 450 Architectural Detailing																												
ARCH 453 Environment Cont. Systems - Passive																												
ARCH 454 Environmental Cont. Syst. II - Active																												
ARCH 461 Urban Design																												
<b>FOURTH YEAR CURRICULUM**</b>																												
ARCH 443 Architectural Structures II																												
ARCH 471 Architectural Design V (Capstone)																												
ARCH 472 Architectural Design VI																												
OR ARCH 474 International Design Studio																												
<b>GRADUATE COURSES</b>																												
<b>FIFTH YEAR CURRICULUM</b>																												
ARCH 763 Thesis Preparation																												
ARCH 781 Professional Practice																												
ARCH 771 Advanced Architectural Design																												
ARCH 772 Design Thesis																												

\*Students enter the professional program at the beginning of the second year. \*\* Students may apply to and enter the Graduate School at the beginning of the fourth year to take select graduate courses prior to the fifth year.

### Appendix 3. The Visiting Team

#### **Team Chair, Representing the AIA**

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#### **Nonvoting Team Member**


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V. Report Signatures

Respectfully Submitted,

  
Nestor Infanzon, FAIA  
Team Chair

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Branko Kolarevic, Ph.D.  
Team Member

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Richard McNeel, AIA  
Team Member

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Tori Hertz  
Team Member

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Kathleen Lechleiter, AIA  
Non-Voting Team Member

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