NAAB

Texas Tech University
College of Architecture

2016 Visiting Team Report

Master of Architecture
(preprofessional undergraduate degree + 42 graduate credits)

The National Architectural Accrediting Board
March 9, 2016

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

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

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I.   **Summary of Visit**

a. **Acknowledgements and Observations**

Dean Andrew Vernooy, AIA, and others graciously hosted the team at the Texas Tech University (TTU) College of Architecture (CoA) Lubbock campus. Administrators and students from the university system's other sites also participated. The visit focused on the TTU Master of Architecture (M. Arch), which is composed of a preprofessional undergraduate degree + 42 graduate credits.

The visit was well organized. The provost, faculty, staff, alumni, and students were well informed, and the college responded quickly to all requests for information. Open and intimate conversations were held with all of the stakeholders. One NAAB team member had medical issues and was not able to participate.

The information in the team room was sizable and well organized. The room was unique in that SPC content was presented in a digital format. While supplemental hard copies were exhibited in the team room space and throughout the building, the core content for the SPC was met through online resources. The implementation of a digital team room has its benefits and challenges. Studio projects were often presented as multiple pdf files while a single scrollable file would have been easier. Course binders, exams, and class term papers were easily understood in the digital format. It was clear that the digital format provides a team with access to a much larger collection of student work. It also means that SPC can be verified prior to the visit. Even with the new medium, the evaluation of the work was typical and easy to review.

The student population was well aware of professional employment opportunities and the architecture licensing process. Many students are currently working in offices. They gain knowledge through the program's unique internship system, off campus studio options, and various development opportunities.

The university administration was keenly aware of the value of the CoA to the university. The CoA's multiple off-campus locations demonstrate the university's vision for state-wide service and economic development. In addition, the El Paso program illustrates the CoA's role in the university's commitment to diversity.

Program Strengths

Multiple educational resources enhance a TTU architecture student's academic experience. These include the Architecture Library, construction lab, fabrication lab, and massive printing lab. While each space was well equipped, the greatest resource was the personal staff and their support for the students. The staff was appreciated by the students, and they helped to maintain a thriving studio environment.

The students and alumni were talkative and aware of the purpose of the visit. The staff confirmed that there is a very student-centered environment. The alumni cited multiple examples where the program administrators appreciated their input. The students also cited examples of their role in shared governance.

The students' technical production abilities were outstanding. The ability to manipulate contemporary digital tools was uniquely integrated into the early studio experiences. The digital tools did not dominate design pedagogy but were in support of the design goals.

The El Paso site and other 2-year college partnerships provide multiple benefits to the program. In addition to providing the expected contribution of diversity, the off-campus initiative provides

unique grant-funded research partnerships and (as the students described) "energy in the third-year design" studios.

b. Conditions Not Achieved

All conditions were Met.

II. Progress Since the Previous Site Visit

2004 Criterion 13.10. National and Regional Traditions: Understanding of *national traditions and the local regional heritage in architecture, landscape design and urban design, including the vernacular tradition.*

Previous Team Report (2010): The team found evidence of National but not Regional traditions.

> **2016 Team Assessment:** The APR points to ARCH 2315 History of World Architecture II and ARCH 3313 History of World Architecture III as a response to understanding national and regional traditions. In these courses, students write short essays on early American traditions, focusing on analysis, methods, typology, and social and religious systems. In a similar manner, students write about Palladio's Veneto, the serpent mound of the Mississippian culture of Ohio, and the Teotihuacan Aztec culture of Mexico. The regional traditions of 20th century architecture in Texas are also examined. The team found excellent examples in ARCH 5501 and 5502, Topical Architectural Design Studios, which focus on urban landscapes and "land art," as in the work of Donald Judd. The team finds that this condition is **Met.**

2004 Criterion 13.14, Accessibility: Ability to *design both site and building to accommodate individuals with varying physical abilities.*

Previous Team Report (2010): While the team found evidence of this ability in site design work, it was not evident in building design material presented to confirm ability compliance.

> **2016 Team Assessment:** The team found ample evidence in ARCH 3501 Architectural Design Studio IV and ARCH 3502 Architectural Design Studio V to indicate that students possessed the ability to demonstrate the application of accessible routes, site provisions, restroom and assisted toilet clearances, vertical transportation, and reach zones. Evidence was also found in vignettes and test questions in ARCH 3373 Environmental Analysis – Site Planning. The team finds that this condition is **Met.**

2004 Criterion 13.18, Structural Systems: Understanding of principles of structural behavior in *withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.*

Previous Team Report (2010): The program did not present student evidence in support of this criterion.

> **2016 Team Assessment:** ARCH 3501 Architectural Design Studio IV, ARCH 3350 Architectural Construction II, and ARCH 3355 Architectural Construction III provide evidence that the inclusion of structure at the ability level is apparent in both the studio content and in course lectures and student testing. The team finds that this condition is **Met.**

2004 Criterion 13.19, Environmental Systems: *Understanding of the basic principles and appropriate application and performance of environmental systems, including acoustical, lighting, and climate modification systems, and energy use, integrated with the building envelope.*

Previous Team Report (2010): The program did not present student evidence in support of acoustical and lighting understanding.

> **2016 Team Assessment:** Both acoustics and lighting are topics covered in the lectures and testing exams in ARCH 2355 Architectural Environmental Systems. Student work in ARCH 3502 Architectural Design Studio V and ARCH 5901 Comprehensive Design Studio demonstrated the application of both artificial and daylighting strategies. The team finds that this condition is **Met.**

2004 Criterion 13.25, Construction Cost Control: Understanding of *the fundamentals of building cost, life-cycle cost, and construction estimating.*

Previous Team Report (2010): The program did not present student evidence in support of this criterion.

> **2016 Team Assessment:** In student work prepared for ARCH 4354 Integrative Systems, the team reviewed the student exam questions and results supporting an understanding of construction cost, life-cycle costing, and constructing estimating procedures. The team finds that this condition is **Met.**

2004 Criterion 13.38, Comprehensive Design: Ability to *produce a comprehensive architectural project based on a building program and site that includes development of programmed spaces demonstrating an understanding of structural and environmental systems, building envelope systems, life-safety provisions, wall sections and building assemblies, and the principles of sustainability.*

Previous Team Report (2010): Students are required to work in teams for this studio (ARCH 5501, which is not listed as the same studio course number in the curricular presented in APR Section 3.12 – Professional Degrees and Curriculum). The student work presented did not demonstrate consistent compliance on a per project basis. While individual components of the criterion were evident in separate projects, no project in either —Pass‖ or —High Pass‖ categories demonstrated fulfillment of the complete set of abilities. Syllabi were well-crafted and thoughtful in expected outcomes but resulted in complex, varied analysis and resolution to address —ability‖ competence.

> **2016 Team Assessment:** ARCH 5901 Comprehensive Design Studio is now organized as an individual project studio in a 9 credit-hour course that meets daily for 4 hours. Both High and Minimum Pass work demonstrated the ability to synthesize complex aesthetic and technical systems into a coherent architectural solution. The team finds that this condition is **Met.**

2004 Criterion 13.30, Architectural Practice: Understanding of *the basic principles and legal aspects of practice organization, financial management, business planning, time and project management, risk mitigation, and mediation and arbitration as well as an understanding of trends that affect practice, such as globalization, outsourcing, project delivery, expanding practice settings, diversity, and others.*

Previous Team Report (2010): No student evidence found for time & project management, risk mitigation, or arbitration/mediation methods, and current trends that affect practice.

2016 Team Assessment: ARCH 5392 Professional Practice utilizes the concept of "mock firm" exercises to act out many of the tasks, situations, and principles of firm and project management found in the course text, *Concepts in Risk Management*, and syllabi. The course has also been retooled to address the principles of time and project management demonstrated in the AIA Foresight Report, student Test 1 – Part B. Students develop a business plan, develop a firm structure, create an identity, and prepare mock contracts, RFPs, deliverables, schedules, meeting minutes, and invoices. Risk mitigation and mediation/arbitration are addressed in the course text and in Lecture Quiz 4. The team finds that this condition is **Met.**

Previous FE Team Report (2012)

2004 Condition 12, 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): The team concurs with the 2010 visiting team assessment that this condition is met. With regard to the related 2010 VTR Cause of Concern 5.A, the program has demonstrated an articulation of the current curriculum that is comprehensive and readily accessible to students and faculty.

It appears that just prior to the 2010 visit the unit was implementing externally imposed curriculum changes that caused some consternation among students and faculty. None of the requirements of the new curriculum changed existing degree plans, but involved content changes for the comprehensive studio and architecture course eligibility changes for university general education requirements. While the 2010 visit was reviewed under the 2004 *Conditions*, the comprehensive course changes were implemented to reflect anticipated 2009 *Conditions of Accreditation* criterion. Nevertheless these changes were intentional and managed through unit advising.

Such advising changes are communicated and monitored by cohort and are managed through required individual face-to-face meetings, as well as automated tracking, degree audits, and online advising sessions. The unit advising resources have been in place for over ten years and seem adequate as well as effective. Furthermore it appears that the concerns about curricular changes that surfaced during the 2010 visit have subsided, and the program has begun to monitor satisfaction of student advising through a school-wide survey. While only one year of data has been captured, and respondents represent less than 7% of the total student body, the team is satisfied that the policies, procedures, and assessment practices of the program represent required minimum standards.

2016 Team Assessment: The team concurs with the assessment of the previous visiting teams that this condition is **Met.**

III.   Compliance with the 2014 Conditions for Accreditation

PART ONE (I): INSTITUTIONAL SUPPORT AND COMMITMENT TO CONTINUOUS IMPROVEMENT

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. This includes 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. This also includes how the program as a unit develops multi-disciplinary relationships and leverages opportunities that are uniquely defined within the university and its local context in the surrounding community.

2016 Analysis/Review: Created by legislative action in 1923, TTU is the largest comprehensive higher education institution in the western two-thirds of the state of Texas. The university serves a region that is larger than 46 of the nation's 50 states. TTU was first accredited by the Southern Association of Colleges and Schools in 1928 and has been accredited continuously since then. In 2016, the university achieved Carnegie Tier One designation by the Carnegie Classification of Institutions of Higher Education, making it one of 81 public institutions in the top tier of this classification.

The TTU mission highlights "innovative and creative teaching, research, and scholarship" and is "dedicated to student success by preparing learners to be ethical leaders for a diverse and globally competitive workforce. The university is committed to enhancing the cultural and economic development of the state, nation, and world." This mission is supported by the CoA faculty's demonstration of "creative teaching" through the integration of traditional analog fine arts experiences, an intimate appreciation of building tectonics, and rigorous exploration of digital media resources. The topical graduate studios illustrate the role of design education as a vehicle for "creative scholarship" in cross-disciplinary, project-based learning. The students demonstrate critical and responsible leadership through active student organizations and the implementation of their "Roll Call" event. Recognizing TTU's mandate for "enhancing the cultural and economic development of the state," the CoA's off-campus initiatives and Pathway Partnerships provide a unique model for other NAAB-accredited architecture institutions.

The CoA has an active role and relationship within its academic context and university community. The faculty provide direct benefits to the institution through participation in institutional committees, such as the Faculty Senate, Graduate Council, Research Council, Academic Council, Associate Dean's Council, Dean's Gatherings, and Integrative Scholars. The collaborative studio connects architecture, interior design, and landscape architecture students, and the digital design and fabrication lab works with engineering students. In addition, dual-degree program opportunities exist between the CoA and the College of Business and the College of Engineering, and the CoA has a program with the Department of Public Health of TTU's Health Sciences Center (HSC).

The CoA engages multiple local communities through diverse studio centers that promote the creation of new knowledge with community engagement. The downtown Lubbock facility, the Urban Tech Center, engages the Lubbock community. Similarly, the El Paso campus and the Houston Practicum and Residency (HPR) have developed extensive community engagement projects and professional collaborations with over 30 firms citywide.

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 non-traditional.

- The program must have adopted a written studio culture policy that also includes a plan for its implementation, including dissemination to all members of the learning community, regular evaluation, and continuous improvement or revision. In addition to the matters identified above, 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, participation in field trips, professional societies and organizations, honor societies, and other program-specific or campus-wide and community-wide activities.

2016 Analysis/Review: The CoA Studio Culture Policy (SCP) was initially adopted in 2009. It was revisited and approved by faculty in 2012 and 2015. The policy was distributed to faculty via email and to students via the college website. The college has maintained its commitment to conducting reviews of the SCP every 3 years and has documented the participation of an SCP Committee composed of students and faculty in this process. The content of the SCP identifies fundamental values and shared responsibilities related to time management, general health and well-being, work-school-life balance, and professional studio etiquette.

The program structures opportunities for student and faculty engagement inside and outside the classroom. Inside the classroom, student can supplement traditional courses with digital media workshops. Faculty and staff have access to 3 credits of coursework across the TTU system, and advisors attend annual training. Outside the classroom, students and faculty participate in a variety of campus studios. The most unique is Land Arts, a semester-long field program that ventures across the American southwest. In addition, the student organization dialogue provides a unique vehicle for student-driven conversations.

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 as compared with the diversity of the faculty, staff, and students of the institution during the next two accreditation cycles.

- 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.

2016 Analysis/Review: The university and the CoA are aided by the university's Division of Institutional Diversity, Equity, and Community Engagement and Human Resources Office, which offer discussions, examinations, and resources that address issues of diversity, global competitiveness, gender-based harassment, discrimination, and sexual misconduct. The related university and college policies are the Equal Employment Opportunity and Affirmative Action (EEO/AA) policy and the Faculty Recruitment Procedure. They are promoted in the college through the Division of institutional Diversity, Equity, Community Engagement.

The program has increased the diversity of its students by creating various strategies that introduce underrepresented minority students to the program. The first is the Curtis W. Clerkley, Jr. Architecture Academy. It is a 2-week summer experience designed for high school students, and its recruitment policy targets under-represented populations. The second is the coordinated relationships between the CoA and state and regional community colleges. This strategy includes articulation agreements with El Paso Community College, Blinn College, Tarrant County Community College, Austin Community College, San Antonio College, the Dona Ana Branch of New Mexico State University, Texas Southmost College, and Del Mar College. In 2015, the CoA was ranked as the number one school in the state to award degrees to Hispanics in the field of architecture.

Like the students, the CoA faculty and staff reflect a diverse community. The college has recently hired four full-time female faculty. Fifty percent of all new faculty hired over the past 2 years have been female, and 20% of the new hires were born outside the United States. The CoA has also hired three new staff members, all of whom are from under-represented minorities. While the diversity of the administration, faculty, staff, and students in the CoA is greater than it is in other units on campus, no African-American faculty teach the advanced architecture classes. Even though an explicit plan for maintaining or increasing the diversity of the CoA's faculty and staff does not exist, the college's accomplishments with respect to student diversity have been remarkable.

I.1.4 Defining Perspectives: The program must describe how it is responsive to the following perspectives or forces that impact the education and development of professional architects. Each program is expected to address these perspectives consistently and to further identify, as part of its long-range planning activities, how these perspectives will continue to be addressed in the future.

A. **Collaboration and Leadership.** The program must describe its culture for successful individual and team dynamics, collaborative experiences, and opportunities for leadership roles. Architects serve clients and the public, engage allied disciplines and professional colleagues, and rely on a spectrum of collaborative skills to work successfully across diverse groups and stakeholders.

 2016 Analysis/Review: The college promotes collaboration and leadership through various mechanisms, including the organization of the curriculum, the study abroad program, dual-degree programs, the presentation of work to professionals and non-professionals, and leadership positions in various college and university student organizations. The team found that all of these identified mechanisms demonstrate a culture that promotes successful individual and team dynamics, collaborative experiences, and opportunities for leadership roles as defined in this condition.

 In addition to the examples outlined in the APR, the team found several strong examples where the college demonstrated this culture through collaborative design studios, the work of the Urban Tech Center in the community, and collaborative work with other departments in the university. In terms of leadership and collaboration, the work in these three areas was perhaps more demonstrative of the perspectives of this section than the examples outlined in the APR. The work of the Urban Tech Center is covered under I.1.4 E. Community and Social Responsibility. It is notable that the work of the Urban Tech Center demonstrates strong leadership in the community and collaborative efforts with professionals. These efforts have either directly or indirectly served as a catalyst for downtown redevelopment efforts and have provided real solutions to issues facing the Lubbock community.

 Further evidence of collaboration and leadership was found in the development of a large-format 3D printer apparatus, which uses a concrete medium and was developed in conjunction with several different departments of the university. In this case, the CoA faculty solicited input and led a team that consisted of the Electrical and Mechanical Engineering departments and others within the university. The project reflects true leadership and collaboration on the part of the college. The CoA efforts of collaboration across the university are further evidenced in collaborative work between the healthcare program, architecture studios, and the nursing program. Currently, the CoA is engaged in collaborative efforts with seven different departments in the university, which gives students many opportunities to provide leadership and to engage with students and faculty outside the CoA.

B. **Design.** The program must describe its approach for developing graduates with an understanding of design as a multi-dimensional protocol for both problem resolution and the discovery of new opportunities that will create value. Graduates should be prepared to engage in design activity as a multi-stage process aimed at addressing increasingly complex problems, engaging a diverse constituency, and providing value and an improved future.

 2016 Analysis/Review: The design perspective is **Met** through a series of preprofessional design studios: ARCH 2501 Architectural Design Studio II, ARCH 2502 Architectural Design Studio III,

ARCH 3501 Architectural Design Studio IV, ARCH 3502 Architectural Design Studio V, and ARCH 4601 Architectural Design Studio VI. There is primary evidence in these courses for fulfillment of SPC A.1 Professional Communication Skills, A.2 Design Thinking Skills, A.4 Architectural Design Skills, A.5 Ordering Systems, and A.6 Use of Precedents. The studio series culminates with the professional program's ARCH 5901 Comprehensive Design Studio, which furthers an understanding of incorporating structures, systems, the environment, assembly, sustainability, and building codes and regulations into a synergistic, integrated whole.

C. **Professional Opportunity.** The program must describe its approach for educating students on the breadth of professional opportunity and career paths for architects in both traditional and non-traditional settings, and in local and global communities.

2016 Analysis/Review: Students complete 300 hours of professional practice in order to obtain their degrees. This can be done working in the summer or through programs such as the Practicum and Studio program in Dallas and Houston, the Atelier Studio, or the downtown Lubbock program. The college also hosts a Career Fair each year to allow for student interview experiences with a broad range of diverse firms. Two courses, ARCH 3352 Building Information Technology and ARCH 4354 Integrative Systems, provide technical information, process, and documentation skills. The Alumni Board also works hard to inform the educational process and methods, thereby helping students prepare for the workforce.

D. **Stewardship of the Environment.** The program must describe its approach for developing graduates who are prepared to both understand and take responsibility for stewardship of the environment and the natural resources that are significantly compromised by the act of building and by constructed human settlements.

2016 Analysis/Review: A commitment to developing graduates that understand and take responsibility for stewardship of the environment can be found in required courses and in evidence from student groups. ARCH 2355 Architectural Environmental Systems and ARCH 3373 Environmental Analysis – Site Planning both showcase examples fulfilling this perspective through multiple choice and written exams that are given throughout the semester-long course. In addition, CoA Dialogues features discussions on the topics of stewardship and environmental impact. Students and faculty are also involved in chapters of the United States Green Building Council (USGBC), and an elective course is offered to students to prepare them for the LEED examination.

E. **Community and Social Responsibility.** The program must describe its approach for developing graduates who are prepared to be active, engaged citizens that are able to understand what it means to be a professional member of society and to act on that understanding. The social responsibility of architects' lies, in part, in the belief that architects can create better places, and that architectural design can create a civilized place by making communities more livable. A program's response to social responsibility must include nurturing a calling to civic engagement to positively influence the development of, conservation of, or changes to the built and natural environment.

2016 Analysis/Review: A commitment to developing graduates that are prepared, active, ethical, and engaged citizens and professionals within society is demonstrated with distinction through several alternative and topical studios. The university's downtown campus at the Urban Tech Center promotes community design and cultural enrichment through an open dialogue with community members. One example is the Urban Stage installation. The HPR involves students in local community designs that are integrated into their studios.

I.1.5 Long-Range Planning: The program must demonstrate that it has identified multi-year objectives for continuous improvement with a ratified planning document and/or planning process. In addition, the program must demonstrate that data is collected routinely, and from multiple sources, to identify patterns

and trends so as to inform its future planning and strategic decision-making. The program must describe how planning at the program level is part of larger strategic plans for the unit, college, and university.

2016 Analysis/Review: The CoA Strategic Plan is a planning process for continuous improvement that identifies multi-year objectives within the context of the institution and the program mission and culture. In addition to the Strategic Plan, the college has a process by which it identifies and evaluates its student learning objectives.

This Strategic Plan serves as a guide to long-range planning. It is written by a faculty committee appointed by the academic dean and is based on the mission of the college, which states that "the College of Architecture educates students for future design practice and advances knowledge of the discipline for the benefit of society." The CoA Strategic Plan is a 5-year plan that identifies goals, objectives, and strategies. The five goals of the plan are outlined in the APR.

Each goal has a set of strategies to achieve that goal, and each of these strategies is evaluated in the spring of each year through Texas Tech's Unit Assessment Report using software called TracDat. Both the university and the college use the Unit Assessment Report to determine how well the college is achieving its mission within the larger context of the university's mission.

The College of Architecture identifies its student learning objectives in accordance with three sources: the NAAB Student Performance Criteria, the Texas Higher Education Coordinating Board (THECB) Student Learning Outcomes (SLOs), and *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*, Lorin Anderson and David Krathwohl, eds. (New York: Longman, 2001). The APR also indicates how the five perspectives defined by the NAAB inform the long-range planning of the college.

The specializations incorporated into the Master of Science degree constitute a recent initiative that needs additional support and development, but they represent a significant enrichment opportunity for both the first professional and post-professional curricula. The CoA's long-range planning is also part of the university's planning goals.

The college uses several data and information sources to inform the development of the student learning objectives: the End-of-Semester Faculty Walk-thru, End-of-Semester Administrators Walk-thru, Binary Rubric, and Graphic Rubric. The individual results of these evaluations are copied explicitly on each faculty member's annual evaluation.

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 multi-year 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.

   2016 Analysis/Review: The program's procedures for self-assessment were confirmed through discussions with faculty, staff, students, and alumni. The College of Architecture's self-assessment procedures use several data and information sources to inform the development of

the college's long-range planning, curriculum development, learning culture, and responses to external challenges: the End-of-Semester Faculty Walk-thru, Alumni and External Critics for End-of-Semester Reviews, End-of-Semester Administrators Walk-thru, Binary Rubric, Graphic Rubric of B.S. graduates, and Graphic Rubric for M. Arch professional degree graduates. All of these methods of self-evaluation have been important in identifying areas for improvement of the CoA curriculum. Examples of actions that resulted include: (1) ARCH 1412 Architectural Design Studio I was required to more directly address its SPC in preparation for Architectural Design Studios II and III, and teaching assistants in this studio were replaced with two faculty members, and (2) ARCH 1412 was reorganized and coordinated differently for spring 2015.

Numerous examples of the results of the program's self-assessment are provided in the APR and were confirmed on site. Many of these assessments address deficiencies and causes of concern identified at the time of the last visit, as well as newly defined deficiencies or areas in need of improvement.

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.

2016 Analysis/Review: The college has a process for curricular assessment and adjustments that involves the college Curriculum Committee, the Programs Council, and the Deans' Council. The Curriculum Committee is composed of six faculty members from all three ranks and includes ex-officio members (the associate dean of academics and the director of academic programs). The Curriculum Committee is responsible for taking suggestions for curriculum changes, initiating curriculum changes, adding and approving new courses, and deleting courses. All changes to the curriculum must be presented to the faculty for discussion and response, and must then be forwarded to the Deans' Council for further discussion and response.

In spring 2015, the graduate programs of the CoA were evaluated by an internal TTU team and two external reviewers as part of the university's regularly scheduled Graduate Program Review (GPR) of all TTU graduate programs. Documentation of this evaluation was provided to the team. Curricular self-assessment procedures also include a close relationship with the Alumni Board, which meets at the college every year, and the end-of-semester External Review Process. In meeting with alumni, including alumni representing the Alumni Board, the team found evidence that the feedback solicited from the Alumni Board is not only accepted, but there is also successful implementation of solutions to identified issues. The CoA makes efforts to enhance students' verbal and written communication skills by broadening and emphasizing those skills across much of the curriculum. The alumni noted that they have seen tremendous improvement in recent graduates' communication skills.

TTU requires that all departments and colleges perform an annual self-assessment using the university's software called TracDat. This self-assessment tool measures the progress of the college's curricular goals and aspirations in accordance with the CoA Strategic Plan. Documentation of this evaluation was provided to the team.

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. This includes 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 Architect Licensing Advisor (ALA) has been appointed, is trained in the issues of IDP, 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

2016 Team Assessment: The CoA program has sufficient human resources to support student learning and achievement. The experienced faculty, progressive administration, and caring staff form the critical infrastructure that will ensure the program's long-term success. The faculty members' teaching and service assignments are typical for an architecture program. Even though the ALA's area of responsibility appears to be in transition, the students were able to identify the ALA. While faculty and staff referenced limited opportunities for professional development, faculty members can register for 3 credits each semester at no cost.

Students have sufficient access to academic advisors, convenient scholarship support, and multiple professional internship opportunities; however, students indicated that they often need to substitute peer-to-peer advisement for the institution's traditional model. The Architecture Library, printing lab, shop, and fabrication lab's equipment and (more importantly) the staff were all recognized by the students as positive aspects of the program.

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, for example, if online course delivery is employed to complement or supplement onsite learning, then the program must describe the effect (if any) that online, onsite, or hybrid formats have on digital and physical resources.

[X] Described

2016 Team Assessment: Floor plans and descriptions of the facilities were provided in the APR. The team toured the facilities and found the spaces available to the CoA to be as described and generally adequate in terms of meeting the needs of the students, faculty, and staff. Based on the team's physical tours and feedback from students, faculty, and staff, the team found excellence in the print lab, the Architecture Library, and the maker spaces. There are plans to expand the existing robotic lab, which will free up space at the current location of the apparatus and enhance opportunities for the digital design and fabrication program.

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

[X] Demonstrated

2016 Team Assessment: The team reviewed comparative budget summaries compiled since the last visit, which were provided by the director of the budget and the dean. Additionally, the director of development for the CoA provided a summary statement regarding the endowment and annual fund raising efforts for the recent past, including a $1.5 million grant for an addition and renovations to the shop facilities. The college enjoys a private endowment that is particularly substantial for a public university, and the provost demonstrated university support for the program by refusing to cut funding allocations for it, despite decreasing enrollment.

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 the field of architecture.

Further, the program must demonstrate that all students, faculty, and staff have access to architectural 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

2016 Team Assessment: The team found evidence that students have outstanding access to information resources through the Architecture Library located on the eighth and ninth floors of the Architecture Building, the collection available in the main library building, and an interlibrary loan system that provides 2-day free book delivery. The Architecture Library's collection includes approximately 33,170 volumes. The current and retrospective breadth, scope, and complexity of the Architecture Library's collection of materials are related to the practice, history, design, theory, and criticism of architecture. The collection also includes materials on related disciplines, such as urban planning, design, media, and construction, which cover the scope of the architecture program.

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 the 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

2016 Team Assessment: In the APR, the team found evidence of an autonomous administrative structure for the college and for the university. During interviews with the administration, faculty, and staff, it was confirmed that the administrative structure and key personnel are as described in the College of Architecture's Organizational Chart.

Regarding governance, the faculty, staff, and students have vehicles for input and decision making. Faculty are involved in a variety of program, service, advisory, and standing committees. The CoA is praised by the university administration for providing a recognized high-quality program that is a leader in the university with respect to outreach programs. Staff are engaged and active in their particular roles. Particular distinction was recognized in the printing staff activity and the "making spaces." Students have four ongoing organizations that they administer: the Knights of Architecture, Tau Sigma Delta, the American Institute of Architecture Students, and Global Architecture Brigades. The Knights of Architecture is unique to Texas Tech and is an active source of pride on the part of students.

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 individual criteria.

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 research and analysis of multiple theoretical, social, political, economic, cultural, and environmental contexts. This includes using a diverse range of media to think about and convey architectural ideas, including writing, investigative skills, speaking, drawing, and model making.

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 appropriate representational media both with peers and with the general public.

[X] Met

2016 Team Assessment: This criterion is **Met**. Evidence of student achievement at the prescribed level was found in work provided for ARCH 1341 Architectural Freehand Drawing, ARCH 2311 History of World Architecture I in well-written essays across the course, ARCH 3341 Digital Media II in a series of diagrams, and ARCH 3502 Architectural Design Studio V in project scopes and descriptions. Evidence was also found through interviews with architecture alumni regarding TTU architecture students.

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

2016 Team Assessment: This criterion is **Met**. Evidence of student achievement at the prescribed level was found in work provided for ARCH 3501 Architectural Design Studio IV in conceptual diagrams, ARCH 3502 Architectural Design Studio V in model exploration, and ARCH 5503 Topical Architectural Design Studio in pre-existing site conditions and model exploration.

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

2016 Team Assessment: This criterion is **Met.** Evidence of student achievement at the prescribed level was found in work provided for ARCH 5501 Topical Architectural Design Studio in infographics, ARCH 5502 Topical Architectural Design Studio in iterative sketches, and ARCH 5503 Topical Architectural Design Studio in conceptual and analytical diagrams.

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

[X] Met

2016 Team Assessment: This criterion is **Met.** Evidence of student achievement at the prescribed level was found in work provided for ARCH 1412 Architectural Design Studio I in three-dimensional models, ARCH 2501 Architectural Design Studio II in perspectives and axonometrics, and ARCH 3341 Digital Media 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

2016 Team Assessment: This criterion is **Met.** Evidence of student achievement at the prescribed level was found in work provided for ARCH 2501 Architectural Design Studio II in diagrams, ARCH 2502 Architectural Design Studio III, and ARCH 4601 Architectural Design Studio VI in site plans and elevations. Body augmented diagrams and augmentation Chronophoto images provided for ARCH 2501 Architectural Design Studio II were extremely well done.

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

[X] Met

2016 Team Assessment: This criterion is **Met.** Evidence of student achievement at the prescribed level was found in work provided for ARCH 3501 Architectural Design Studio IV in interpretive models, ARCH 3502 Architectural Design Studio V in studies of materials, and ARCH 4601 Architectural Design Studio VI in a series of sketches.

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, and technological factors.

[X] Met

2016 Team Assessment: This criterion is **Met.** Evidence of student achievement at the prescribed level was found in work provided for ARCH 2311 History of World Architecture I in student essays across the course, ARCH 2315 History of World Architecture II in exam identification questions, and ARCH 3313 History of World Architecture III in exams across the course.

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 buildings and structures.

[X] Met

2016 Team Assessment: This criterion is **Met**. Evidence of student achievement at the prescribed level was found in work provided for ARCH 2315 History of World Architecture II, ARCH 3313 History of World Architecture III, and ARCH 4601 Architectural Design Studio VI. This SPC was demonstrated in short essays in all of these courses.

Realm A. General Team Commentary: The 2016 visiting team found that the foundational criteria that comprise Realm A have been completely **Met** as evidenced by student work. Student ability in A.5 Ordering Systems was found to be strong in the work involving the application of ordering systems in ARCH 2501 Architectural Design Studio II. In addition, A.1 Professional Communication Skills has improved significantly since the last visit. Student work and short essays were presented from many courses across the curriculum. In most cases, the level of ability or understanding was clearly satisfied in both graduate-level and undergraduate-level courses.

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

Student learning aspirations for this realm include:

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

B.1   **Pre-Design:** *Ability* to prepare a comprehensive program for an architectural project, which must include 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

2016 Team Assessment: This criterion is **Met**. Evidence of student achievement at the prescribed level was found in ARCH 3501 Architectural Design Studio IV and ARCH 3373 Environmental Analysis – Site Planning.

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

2016 Team Assessment: This criterion is **Met**. Evidence of student achievement at the prescribed level was found in ARCH 3373 Environmental Analysis – Site Planning and ARCH 4601 Architectural Design Studio VI.

B.3   **Codes and Regulations:** *Ability* to design sites, facilities, and systems consistent with the principles of life-safety standards, accessibility standards, and other codes and regulations.

[X] Met

2016 Team Assessment: This criterion is **Met**. Evidence of student achievement at the prescribed level was found in ARCH 3501 Architectural Design Studio IV, ARCH 3373 Environmental Analysis – Site Planning, and ARCH 3502 Architectural Design Studio V.

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

2016 Team Assessment: This criterion is **Met with Distinction**. Evidence of student achievement at the prescribed level was found in ARCH 3501 Architectural Design Studio IV, ARCH 3350 Architectural Construction II, ARCH 3502 Architectural Design Studio V, and ARCH 3352 Building Information Technology.

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

[X] Met

2016 Team Assessment: This criterion is **Met with Distinction**. Evidence of student achievement at the prescribed level was found in ARCH 3501 Architectural Design Studio IV, ARCH 3350 Architectural Construction II, and ARCH 3355 Architectural Construction III.

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

[X] Met

2016 Team Assessment: This criterion is **Met with Distinction**. Evidence of student achievement at the prescribed level was found in ARCH 2355 Architectural Environmental Systems. In addition to weekly multiple choice quizzes, where students demonstrated an understanding of condition requirements, the team noted exams formatted with multiple choice and short answer questions, short essay exams, and sketch exercises that further enhanced the evidence for the required understanding.

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

2016 Team Assessment: This criterion is **Met with Distinction**. Evidence of student achievement at the prescribed level was found in ARCH 3502 Architectural Design Studio V and ARCH 3355 Architectural Construction III. The team recognized excellence in the curricular pairing of the two courses. This allows for a focused examination of precedents and the physical exercise of modeling precedent in ARCH 3355 that informs the original student work produced in ARCH 3502.

B.8   **Building Materials and Assemblies:** *Understanding* of the basic principles utilized 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

2016 Team Assessment: This criterion is **Met with Distinction.** Evidence of student achievement at the prescribed level was found in ARCH 3502 Architectural Design Studio V and ARCH 3355 Architectural Construction III. The team recognized excellence in the curricular pairing of the two courses, which was also noted in the team response to SPC B.7. Students demonstrated an understanding of material selection and identified the sustainable benefits inherent in the materials and systems selected.

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

[X] Met

2016 Team Assessment: This criterion is **Met.** Evidence of student achievement at the prescribed level was found in ARCH 4354 Integrative Systems. Student work demonstrated an understanding of the different systems, both graphically and through exam responses.

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

2016 Team Assessment: This criterion is **Met.** Evidence of student achievement at the prescribed level was found in ARCH 3352 Building Information Technology in the area of cost estimating in the form of estimating exercises and cost comparison essays. An understanding of the fundamentals of life-cycle costs and project financing and feasibility was demonstrated through answers to multiple choice quizzes and short-answer exam questions. The team found evidence that students are achieving at the level of understanding with respect to operational costs in work prepared for ARCH 4354 Integrative Systems involving the analysis of mechanical systems in terms of energy consumption and utility costs over a period of 15 years.

Realm B. General Team Commentary: The team found that the SPC requirements in Realm B are **Met.** The team found excellence in the organization of the curriculum that paired ARCH 3502 Architectural Design Studio V with ARCH 3355 Architectural Construction III, and ARCH 3501 Architectural Design Studio IV with ARCH 3350 Architectural Construction II. The evidence showed that this created a collaborative teaching and learning experience that enhanced student understanding of B.5 Structural Systems, B.6 Environmental Systems, B.7 Building Envelope Systems and Assemblies, and B.8 Building Materials and Assemblies, which were **Met with Distinction**, as was B.4 Technical Documentation.

Realm C: Integrated Architectural Solutions: Graduates from NAAB-accredited programs must be able to synthesize a wide range of variables into an integrated design solution. This realm demonstrates the integrative thinking that shapes complex design and technical solutions.

Student learning aspirations in this realm include:

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

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

[X] Met

2016 Team Assessment: This criterion is **Met.** Evidence of student achievement at the prescribed level was found in ARCH 5501 Topical Architectural Design Studio, ARCH 5506 Collaboration Studio, and ARCH 5502 Topical Architectural Design Studio. ARCH 5501 illustrates site analysis and documentation on an urban scale. In addition, photographs and diaries catalog the natural environment. ARCH 5506 illustrates the use of case studies and site analysis on an urban scale. Case studies were found in ARCH 5502.

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

[X] Met

2016 Team Assessment: This criterion is **Met.** Evidence of student achievement at the prescribed level was found in ARCH 5901 Comprehensive Design Studio and ARCH 4354 Integrative Systems. ARCH 5901 addresses issues concerning context, program, space, structure, and skin as vehicles for identifying problems, evaluating criteria, and analyzing solutions. ARCH 4354 provided evidence of the evaluation of heat gain, utility costs, and energy consumption. After the initial evaluation of these three options, the students selected and developed a single option, which was then re-evaluated.

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

[X] Met

2016 Team Assessment: This criterion is **Met.** Evidence of student achievement at the prescribed level was found in ARCH 5901 Comprehensive Design Studio. ARCH 5901 showcases this criterion through a compilation of sketches that identifies the requirements of program, systems, accessibility, and life safety. The projects then involve developing technical documentation on the integration of all the building requirements and systems. The integrative design documentation is thorough. It identifies the various systems and clarifies how those systems coexist within the design.

> **Realm C. General Team Commentary:** The team found that the SPC requirements in Realm C are **Met.** The student work presented, particularly in SPC C.3, was very tectonic, and it reinforced the reasons behind the desire of firms to hire graduating CoA students and the high employment rate for these

graduates. It was clear why the CoA students are sought after to a high degree. Excellence was evident in the drawings prepared for C.3 Integrative Design.

Realm D: Professional Practice: Graduates from NAAB-accredited programs must understand business principles for the practice of architecture, including management, advocacy, and acting 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 relationship between the client, contractor, architect, and other key stakeholders, such as user groups and the community, in the design of the built environment, and understanding the responsibilities of the architect to reconcile the needs of those stakeholders.

[X] Met

2016 Team Assessment: This criterion is **Met**. Evidence of student achievement at the prescribed level was found in ARCH 5392 Professional Practice. The team noted multiple choice test answers that covered the requirements and project information exercise results that included a listing of the stakeholders and their roles.

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

2016 Team Assessment: This criterion is **Met**. Evidence of student achievement at the prescribed level was found in ARCH 5392 Professional Practice. The team found multiple choice test answers that covered this SPC and mock firm assignments that mirrored real-world applications.

D.3   **Business Practices:** *Understanding* of the basic principles of business practices within the firm, including financial management and business planning, marketing, business organization, and entrepreneurialism.

[X] Met

2016 Team Assessment: This criterion is **Met**. Evidence of student achievement at the prescribed level was found in ARCH 5392 Professional Practice. The team found multiple choice test answers that covered the requirements of this SPC, as well as mock firm assignments.

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

2016 Team Assessment: This criterion is **Met**. Evidence of student achievement at the prescribed level was found in ARCH 5392 Professional Practice. The team noted multiple choice tests that covered the requirements of this SPC, as well as elements of the development of a mock firm identifying various legal structures of a business. The RFQ exercise included a section on professional services and professional services contracts.

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

[X] Met

2016 Team Assessment: This criterion is **Met**. Evidence of student achievement at the prescribed level was found in ARCH 5392 Professional Practice. The team noted exercises where students responded in essay form to a hypothetical ethical dilemma. Students cited the applicable sections of the AIA Code of Conduct and NCARB's Ethics and Professional Rules of Conduct in their responses.

Realm D. General Team Commentary: The team found that all the evidence presented was produced in ARCH 5392 Professional Practice. The course was structured with a series of mock exercises that drew from situations found in the practice of architecture. The strategy was effective since it resulted in an understanding of the numerous SPC of Realm D.

Part Two (II): Section 2 – Curricular Framework

II.2.1 Institutional Accreditation:

In order 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); and the Western Association of Schools and Colleges (WASC).

2. Institutions located outside the U.S. and not accredited by a U.S. regional accrediting agency may request NAAB accreditation of a professional degree program in architecture only with explicit written permission from all applicable national education authorities in that program's country or region. Such agencies must have a system of institutional quality assurance and review. Any institution in this category that is interested in seeking NAAB accreditation of a professional degree program in architecture must contact the NAAB for additional information.

[X] Met

2016 Team Assessment: The status of Texas Tech University's accreditation by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) was documented and confirmed with a copy of the official accreditation letter.

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.

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 *NAAB Conditions for Accreditation*. Every accredited program must conform to the minimum credit hour requirements.

[X] Met

2016 Team Assessment: Texas Tech University offers a professional program for the Master of Architecture degree as a single institution (SI). This degree meets the requirement of a total of 168 credit hours, with at least 30 of them at the graduate level. Texas Tech requires students to take 173 credit hours, and 42 of those are taken at the graduate level. Within these requirements, students must obtain a C or better in all graduate-level courses and must obtain a 3.0 GPA each semester in order to graduate. The team found that Texas Tech's requirements meet the standards for general studies with its Core Curriculum credits.

PART TWO (II): SECTION 3 – EVALUATION OF PREPARATORY EDUCATION

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

- Programs must document their processes for evaluating a student's prior academic coursework related to satisfying NAAB Student Performance Criteria when a student is admitted to the professional degree program.

- In the event that a program relies on the preparatory educational experience to ensure that admitted students have met certain SPC, the program must demonstrate that 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 prior to accepting the offer of admission. See also, Condition II.4.6.

[X] Met

2016 Team Assessment: The CoA has documented and prescribed a fair system for evaluating the preparatory or preprofessional education and critical thinking skills of entering students. The reviewers focus on two pools of applicants: internal applicants from the TTU Bachelor of Science program (with and without a 3.0 TTU cumulative GPA) and external applicants (not currently in the CoA). Each type of applicant submits the required application materials depending on the pool the applicant is in, and all applicants must submit the university application for graduate admission as well. For external applicants, the process confirms that transfer students have met the SPC in their transfer credits.

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 general 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

2016 Team Assessment: The team found evidence fulfilling this condition through a link on the CoA website.

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

2016 Team Assessment: The team found evidence fulfilling this condition through a link on the CoA website.

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

2016 Team Assessment: The team found evidence fulfilling this condition through a link on the CoA website.

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.
-

> [1] This is understood to be the APR from the previous visit, not the APR for the visit currently in process. The most recent APR.

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

[X] Met

2016 Team Assessment: The team found evidence fulfilling this condition through a link on the CoA website.

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

2016 Team Assessment: The team found evidence fulfilling this condition through a link on the CoA website.

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

2016 Team Assessment: The team found evidence fulfilling this condition through a link on the CoA website.

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

2016 Team Assessment: The team found evidence fulfilling this condition through a link on the CoA website.

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

2016 Team Assessment: The program provided evidence fulfilling this condition.

III.2 Interim Progress Reports: The program must submit Interim Progress Reports to the NAAB (see Section 11, *NAAB Procedures for Accreditation,* 2012 Edition, Amended).

[X] Met

2016 Team Assessment: The program provided evidence fulfilling this condition.

IV.   Appendices:

Appendix 1. Conditions Met with Distinction

B.4 Technical Documentation
B.5 Structural Systems
B.6 Environmental Systems
B.7 Building Envelope Systems and Assemblies
B.8 Building Materials and Assemblies

The team found excellence in the organization of the curriculum that paired ARCH 3501 Architectural Design Studio IV with ARCH 3350 Architectural Construction II, and ARCH 3502 Architectural Design Studio V with ARCH 3355 Architectural Construction III. The evidence showed that this created a collaborative teaching and learning experience that enhanced student understanding of B.5 Structural Systems, B.6 Environmental Systems, B.7 Building Envelope Systems and Assemblies, and B.8 Building Materials and Assemblies. By the end of the program, the students demonstrated distinction in SPC B.4 Technical Documentation, which requires the ability to make technically clear drawings.

Appendix 2. Team SPC Matrix

Texas Tech University College of Architecture
MATRIX of the REQUIRED COURSES across the 3.5 year PROFESSIONAL CURRICULUM over the NAAB 2014 STUDENT PERFORMANCE CRITERIA

PRE PROFESSIONAL PROGRAM — Bachelor of Science in Architecture - Undergraduate
PROFESSIONAL PROGRAM — Master of Architecture - Graduate

Courses (column headers):
- 3311 Design, Environment, and Society
- 3341 Architectural Freehand Drawing
- 1412 Architectural Design Studio I
- 1316 Digital Media I
- 2501 Architectural Design Studio II
- 2322 History of World Architecture I
- 2342 Digital Media II
- 2312 Architectural Construction I
- 2602 Architectural Design Studio III
- 2316 History of World Architecture II
- 2342 Creative Process
- 2350 Architectural Environmental Systems
- 3503 Architectural Design Studio IV
- 3313 History of World Architecture III
- 3350 Architectural Construction II
- 3371 Environmental Analysis - Site Planning
- 3502 Architectural Design Studio V
- 3314 Contemporary Issues in Architecture
- 3352 Building Information Technology
- 3355 Architectural Construction III
- 4501 Architectural Design Studio VI
- 4000 Research in Architecture and Urban Studies
- 4041 Media Elective
- 4354 Integrative Systems
- 5501 Comprehensive Design Studio
- 5501 Topical Architectural Design Studio
- 5550 Collaboration Studio
- 5362 Architectural Theory
- 5501 Professional Practice
- 5503 Topical Architectural Design Studio
- 5394 Advanced Studies in Construction Technology
- 5503 Topical Architectural Design Studio

Student performance criteria (row labels):

Code	Student performance criteria
A.1	Professional Communication Skills
A.2	Design Thinking Skills
A.3	Investigative Skills
A.4	Architectural Design Skills
A.5	Ordering Systems
A.6	Use of Precedents
A.7	History and Global Culture
A.8	Cultural Diversity and Social Equity
B.1	Pre-Design
B.2	Site Design
B.3	Codes and Regulations
B.4	Technical Documentation
B.5	Structural Systems
B.6	Environmental Systems
B.7	Building Envelope Systems and Assemblies
B.8	Building Materials and Assemblies
B.9	Building Service Systems
B.10	Financial Considerations
C.1	Research
C.2	Integrated Evaluations & Decision-Making
C.3	Integrative Design
D.1	Stakeholder Roles in Architecture
D.2	Project Management
D.3	Business Practices
D.4	Legal Responsibilities
D.5	Professional Conduct

Appendix 3. The Visiting Team

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V.   Report Signatures

Respectfully Submitted,

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