



**King Saud University
College of Architecture and Planning**

**2019 Visiting Team Report for
Renewal of Substantial Equivalency**

B. Arch. (170 credit hours)

The National Architectural Accrediting Board

Date of Last Site Visit: October 13-17, 2012

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. Acknowledgments and Observations

The team appreciated the hospitality of the program during the visit. The tours of local architecture (during recovery day and post visit) were appreciated. The program was well prepared for the visit with an excellent team room designed by the accreditation faculty committee, chaired by Elsayed Amer with team room organization led by Imad Aoutabachi. All course materials were clearly organized, and student work displayed was easy to evaluate.

The program, started in 1967 and founded under the umbrella of the College of Engineering, became the first academic institution for architecture education in the Arabian Peninsula and was also one of the early programs to achieve the Substantial Equivalency designation. The team found the program has sustained the momentum since its founding and also noted the impact that the graduates represent in the leading generation of architects who have been successful in practice, in addition to establishing a number of schools and colleges of architecture in the Kingdom and the Gulf Region.

The King Saud professional architecture program approaches design as indivisible from construction, fabrication, aesthetics, and culture with a sincere reverence to design thinking. The program offers a range of lectures, guest jurors, and specialists to broaden student exposure to varying design pedagogies. Students are given a degree of empowerment through travel experiences and studio instructor selections. Design studios make up a significant portion of their required coursework and are carefully coordinated to specific criterion in support of sequential integration with increasing architectural complexity. The careful selection of design problems, many of them with real clients in the studio sequence, allows for the accommodation of the integrated studio criterion of special coursework that includes significant design research and community interaction. The ability to develop research and community design in the studio sequence is a strength of the program. Qualitative design aspiration is a sustained interest of the research, pedagogy and service of the administration, faculty, staff and students in the program. An awareness of this ethos was reinforced by the dean of the college, as well as the rector of the institution.

The Kingdom, university, and college have a tradition of strategic planning exercises that will inevitably impact the program. Specifically, the Kingdom's 2030 Vision will result in a nested series of plans, one of which may lead to a change in the university's status, from a public institution to a private one. The program's long-term objectives for flexibility, qualitative excellence, ingenuity, innovation, and pluralism will be supported if this university change moves forward.

The program is to be commended for establishing a model for other Arabian Peninsula architecture programs to follow, adding women to the program for the 2020 academic year along with increasing the number of women faculty members. This visiting team supports the continuation and expansion of this effort.

Physical Resources

The program benefits from generous physical resources, which support the optimum faculty/student ratio of 1:8 to 1:10. There are ample spaces for design studios, lecture and seminar rooms, as well as laboratories and offices for the faculty and administration. Each of these is fully furnished and equipped with state-of-the-art equipment and facilities that enhance the teaching and learning environment.

Administration

The program chair, Mohammad Kotbi, is a strong yet modest leader, and the students benefit from his accessibility and patience. The alignment of the program's strategic plan to that of the college and university are commendable. In addition, the strong communication between Mr. Kotbi, Dean Abdullah Althab, and Rector Budran Alomur speak well to the alignment of the program's mission to the goals of the university.

Faculty

The program faculty is a highly qualified, collegial group with strong bonds with the students and dedicated to the success of the program. With 92% of its faculty holding PhDs, there are wide-ranging community experiences, research projects, and international collaborations.

Support Staff

The staff is devoted to ensuring the growth and quality of the program. Some staff have been with the program for more than 30 years, while some have newly arrived following completion of international degree programs, bringing current advancements in technology in their respective experiences.

Students

The team found the students to be mature and ambitious with a high level of respect for one another, showing a high level of collegiality. They are active in student organizations and have been recognized with annual awards from the university for excellence in programs developed. Additionally, student participation in the national competitions offered by the Ministry of Education has often resulted in first and second prizes.

Alumni

The alumni of the program play a pivotal role in supporting and advising the program, especially through their participation in juries and the provision of career opportunities.

Causes for Concern

Diversity and variety in project scale and type: the program would benefit from establishing a range of project types and scales throughout the curriculum. The visiting team noted that in the upper division design studios there does not seem to be a variety of project types.

Communication about flexibility in electives (also a concern in 2012 visit): while there seems to be some improvement in students being able to take electives, they are confused and uninformed about the approval process for electives outside program.

b. Conditions Not Achieved

None

II. Progress Since the Previous Site Visit

Both Public Information and Social Equity are now **Met**.

III. Compliance with the 2014 Conditions for Substantial Equivalency

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

2019 Analysis/Review: Named King Saud University in 1982, the Kingdom's pioneer institution of higher education was opened in 1957 as Riyadh University. It was envisioned as a world-class university and a leader in developing Saudi Arabia's knowledge economy, with a mission to foster learning, creativity and the use of current and developing technologies and effective international partnerships.

In 1967, under the umbrella of the College of Engineering, the program began as the first higher education curriculum for architecture education in the Arabian Peninsula. Over time, it became the leading school for architecture education in the region; the university, college, and program all recognize and champion this status.

Following a study begun in 1977, the College of Architecture was launched by supreme decree in 1984 and renamed the College of Architecture and Planning in 1985. The college envisions worldwide eminence in developing knowledge of the built environment and contributes substantially in service of that mission and vision within the university context. To that end, community development, research, and collaborations have had a significant impact on the built environment, and alumni have staffed significant posts in governmental, institutional, and private organizations.

In turn, the Department of Architecture and Building Sciences has played a significant role supporting the mission and vision of the college, as well as that of the university. From the inception of the program in 1967, it has modeled its performance and characteristics on the best aspirational practices of architecture education in the United States, with an eye toward educating its professionals in place making in the Gulf region.

The program of Architecture and Building Sciences sees itself and is widely recognized as the leading program of architecture education in the Kingdom and region. The faculty, staff, and students share in the common drive for excellence that is responsive to the dynamics of its planning and built environment.

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.*

[X] Demonstrated

2019 Analysis/Review: The Architecture and Building Sciences program trains students and staff by adopting an educational strategy focused on keeping abreast with advances in information and building technology. There is also a significant emphasis on maintaining the values of Saudi culture and traditions by preserving the natural environment and architectural heritage. The program encourages a positive learning environment by providing regular lectures, competition opportunities, class site visits, and participation in the annual university career week. A student representative from each studio, 8 in total, is selected by the faculty to serve on the student council. These representatives meet with faculty every 3 weeks to discuss the needs of the program. Any grievances related to harassment or discrimination can be reported to an academic advisor or university counseling center.

Studio culture is an important focus of the program, and it has developed a Studio Culture Policy. The faculty has given a series of lectures to cover the topics of ethics, principles, conditions, and rules. The policy is posted on a large-format poster in every studio, and addresses student-to-student relationships, student-to-faculty relationships, and the role of each. It is based on mutual respect, regardless of gender, culture, color, religion, and physical abilities. The policy also establishes mechanisms to foster academic integrity by setting consequences for plagiarism and cheating. At least twice during the semester, faculty from the NAAB committee visit all design studios to ensure that the studio culture policy has been well implemented, which is one of the primary objectives of the committee, in addition to complying with NAAB's Student Performance Criteria. Students are very aware of this policy.

Students are encouraged to join student clubs. The two primary clubs are the architecture student club and sports club. The architecture student club is very active within the college and plans regular social events, both formal and informal, that enhance the learning culture and foster an inclusive, positive and engaged student body. The visiting team informed the students of additional opportunities for involvement, such as the international chapters of AIAS and Tau Sigma Delta honor society.

While this condition is met, the visiting team did not find evidence that the students have had the opportunity to participate in the development of learning culture policies. The intent is to have these policies continually assessed and evaluated, and we encourage the program to involve the students in the process moving forward.

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

2019 Analysis/Review:

The program has increased the number of international faculty and students. Through recruitment, there are scholarships to promote international exchanges. There are also professional placements and field trips to diversify relevant experiences for students, as well as participation of faculty in local, regional and international conferences.

The team found an incremental methodical effort to develop graduate and undergraduate education of women in the professional program. Following the hiring of women faculty and ongoing recruitment, the

college started a pilot graduate program for the education of women. There are 45 students in their preparatory year who will start in the undergraduate professional program in 2020.

Social equity is often driven by the social context, which can drive the proclivities of diversity and inclusion. This may have a significant impact on the assessment of the condition for this program. To that end, the program has developed the plan outlined above.

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

2019 Analysis/Review:

A. Collaboration and Leadership

The program does an excellent job employing, in addition to architects, mechanical/structural engineers, and project managers as faculty members. The program provides support for this collaborative leadership model by organizing specialized groups that include: housing and urban design, systems, programming and project management, architecture and design, sustainable architecture, building technology and behavior and theories of architecture. This combination of disciplines provides a balance of theoretical, technical, professional, and creative knowledge that prepares students for careers in architecture and a wide assortment of other design or construction-related professions.

B. Design

The King Saud professional architecture program approaches design as indivisible from construction, fabrication, aesthetics and culture, with an emphasis on design thinking. The program offers a wide range of lectures, guest jurors, and specialists to diversify student exposure to varying design pedagogies. Design studios comprise a significant portion of students' required coursework and are carefully coordinated to specific criterion in support of sequential integration with increasing architectural complexity. The careful selection of design problems, many of them with real clients in the studio sequence, allows for the accommodation of the integrated studio criterion of special coursework that includes significant design research and community interaction. The ability to develop research and community design within the studio sequence is a strength of the program.

Qualitative design is a sustained interest of the research, pedagogy and service of the administration, faculty, staff and students in the program. An awareness of this ethos was reinforced by the dean of the college and the rector of the institution.

C. Professional Opportunity

Undergraduate architecture students are required to take ARCH 491 Architectural Professional Practice. The course develops an understanding of the profession and its relationship to society. In addition, the course develops organization and management of the professional services process and the procedures, requirements, and expectations toward future registration as a professional member of the Saudi Council of Engineers.

The program directs its students at level six or seven to undertake supervised training in professional practice in the public or private sector.

D. Stewardship of the Environment

At the national level, the Saudi government has emphasized the development of sustainability and renewable energy programs for projects all over the Kingdom. As part of the national planning and orientation, the architecture program at King Saud University is preparing its students to be aware of their environmental responsibility. The university's committee on sustainability supports the program's attention to environmental stewardship. Students are trained to be aware of these opportunities and have even requested that there be more focus on sustainability in the program. Students are also able to visit projects in the region and learn about their ethical responsibility to the environment.

E. Community and Social Responsibility

As addressed in the Program Self-Evaluation Report, interaction with the community and participation in the development of Saudi community has always been an important objective of the architecture program at King Saud. Community engagement is evident, not only in faculty and staff, but also students. Examples of program participation in the local community are numerous: actual projects in the community, involvement in various research programs, public lectures and training courses, preparation of exhibitions, consultation services, and career week. In addition, students have participated in many high-visibility competitions, including an international competition for planning and designing King Abdullah Grand Expansion of the Holy Mosque in Mecca. The program is to be commended for such opportunities, which have led to winning designs and invaluable experiences for students.

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

2019 Analysis/Review:

The architecture program is closely aligned with the strategic initiatives in the university and college, both of which are attentive to changes to the Kingdom as a whole. Similarly, student learning objectives in the substantially equivalent program are identified primarily by faculty and staff with significant attention to the monitoring of trends in architecture, allied professions and technical resources such as software and fabrication tools. The program has defined seven major areas for strategic development: 1. distinctive education; 2. enhanced qualified graduates; 3. conducive learning environment; 4. enhanced academic staff; 5. efficient administration; 6. collaborations with society, kingdom and community; 7. hosting critical Saudi institutions, boards and societies to the architecture profession.

The university's rector, dean, program chair and faculty are engaged in ongoing regular meetings and dialogue concerning the long-range planning of the substantially equivalent program to align with the institutional

mission and culture.

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

2019 Analysis/Review:

A. Program Self-Assessment Procedures

The program assessment process, which is used for continuous improvement of the undergraduate course of study and the department's educational operations, requires a yearly strategic reassessment from each academic program to understand the strengths and weaknesses and identify the challenges and actions needed to develop the program. The plan for the assessment of the program objectives was first formulated and discussed through gathering discussions between the faculty members and attended by the dean and the program chair. The plan considers the following four guiding principles:

- Target program outcomes.
- Critical faculty participation.
- Program constituent participation (students, alumni, etc.).
- Flexible execution within a standardized framework.

B. Curricular Assessment and Development

The program has developed two levels for assessing each course in the study plan. The course-level assessment compiles input from individual faculty members teaching a course and the faculty coordinator. In order to minimize inconsistencies in teaching courses by different faculty members and to have a coherent structure of core and elective courses in the area, the first level is performed by the faculty teaching the course, and the second level is by a group of coordinators consisting of faculty members who are considered to be specialized in the field of that course. The outcomes are measured using three indices: student assessment, faculty assessment, and quantitative assessment.

The program does an excellent job of surveying a wide range of entities of the program, which includes: student exit survey, alumni survey, market/employer and professional survey, academic advisory board to the college of architecture, professional/training survey, student progress evaluation procedures, and strengths, weaknesses, and challenges.

Curriculum Strengths:

- 1- International Recognition: the program has achieved the NAAB Substantial Equivalency for six years and is now in the renewal stages;
- 2- Participation in national competitions: the program has always been present in national competitions and often achieved the first and second prizes (government/Ministry of Higher Education);
- 3- Optimum faculty/student ratio (faculty / student ratio is 1:8 to 1:10);
- 4- Generous physical resources;
- 5- Distinguished faculty structure (high percentage of PhD credentials from very well-known universities in the world);
- 6- Sending students to national and international summer training and research programs for three weeks in the following countries: United States, Italy, France, Germany, Turkey, Malaysia, and Morocco;
- 7- Biweekly lectures organized for students and faculty members;
- 8- New program for women students to achieve social equity (starting with 45 students for the 2020 academic year) with equal chances for women and men to have their education in the same institution;
- 9- Supportive financial resources: funding to support student modeling materials/ fabrication and printing and for faculty to attend national and international conferences;
- 10- Strong administrative structure for program to work with the dean of the College of Architecture and Planning, vice dean for research and graduate studies, and vice dean for development and quality;
- 11- Workshops for students in Riyadh, organized by: Zaha Hadid's office, King Abdullah Research Center, and Prince Sultan University (Smart City Workshop);
- 12- Student architectural identity: student council's role in facilitating a connection between the college and students.

Second, the Program's Weaknesses:

- 1- Lack of interdisciplinary research activities of faculty members;
- 2- Lack of continuous and accurate market study survey.

Third, the Program's Future Directions for improvements:

- 1- Renewing the NAAB Substantial Equivalency;
- 2- Achieving the National Accreditation, NCAAA, National Commission for Academic Accreditation and Assessment
- 3- Maintaining the ratio between the faculty and students at 1:10 to keep the quality of educational performance;
- 4- Encouraging more research activities by faculty members;

5- Initiating more academic programs inside the architecture program.

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 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

2019 Team Assessment: The program has 55 full-time faculty members (12 full professors, 12 associate professors, 26 assistant professors, and 5 lectures) and 12 part-time instructors (7 part-time lecturers and 5 visiting practitioners). 92% of the full-time faculty hold PhDs, The faculty is supported by 15 full-time teaching assistants. All full-time faculty members are responsible for a minimum of thirty-five hours per week with assignments for teaching, research, academic advising, office hours and service for college and departmental meetings and committees. Teaching loads vary by rank as full professors are assigned 10 credit hours, associates professors 12 credit hours and assistant professors 14 credit hours. All faculty members are assigned a minimum of eight hours per week for research and six hours for office hours and advising. Administrator faculty members are provided appropriate release time for their responsibilities.

Students benefit from a faculty-student ratio of 1:10 in studio courses and 1:15-20 in seminar and lecture courses, which provides a strong informal network for faculty mentoring of students. Students indicated that faculty were always accessible for consultation. Formal programs are offered to support student learning and achievement, such as the practical training program, summer program abroad, various exhibitions (typically led by the active student organizations), visiting lecturers, and symposia. Students are assigned an academic adviser within the faculty of the College of Architecture and Planning when they first enter the program. In addition, there are university counseling services.

Both faculty and staff have indicated that professional development provided by the program is generous. The program has a supportive administrative staff of technical professionals, adjunct instructors, teaching assistants and support staff, many of whom have dual tasks administering labs/facilities, as well as, delivering professional course instruction. Most have training in architecture. All staff reported balanced work expectations and institutional support for professional development and conference attendance. The program faculty also indicated strong institutional support for professional development and conference attendance. Since 2016, the program, through the support of the university, has provided full funding for qualified graduates of the program to pursue a PhD degree at an international university of choice (e.g., American, Australian, Dutch, British, etc.), with the stipulation that they return to the program to teach for a minimum of 5 years. Under this program, seven KSU faculty members have obtained their PhD degrees and have returned to join the faculty.

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

2019 Team Assessment: There are ample spaces for design studios and lecture and seminar rooms, as well as laboratories and administration and faculty offices. Each of these is fully furnished and equipped with state-of-the-art equipment and facilities that enhance the teaching and learning environment.

Computer labs: there are six computer labs fitted with over 200 computers equipped with the latest software to support architecture design and planning. Students also have access to 8 plotters and 2 scanners of size "A0," located in the printing lab.

In addition to the computer labs, the facilities also include a thermal, lighting, acoustics, photography, structure, building materials, transportation, environmental studies, and virtual reality labs. The relationship between the number of students and available square footage is more than adequate. The studio spaces are expansive and can be set up for collaboration between two studios.

In addition, there are two interior courtyards, student social and club spaces, prayer hall, cafeteria, and meeting and auditorium spaces.

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

[X] Demonstrated

2019 Team Assessment: As stated in the Program Self-Evaluation Report and witnessed through the visit, the program of Architecture and Building Sciences is highly supported financially by the university. The faculty are appropriately remunerated, well-staffed, and supported with visiting professors from abroad. They are able to take advantage of professional training experience internationally. Further, the program is active in fundraising to support instructional and community projects, as well as consultancy services with collaborations involving institutions, private companies, and government agencies.

As mentioned above, the program chair, college dean, and university rector indicated that the financial needs of the program will be maintained if the transition to a private university happens.

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

2019 Team Assessment: The architecture library, known as the Learning Resources Center, was started in 1985 and is housed in the architecture building. Begun as mainly a reading room populated with books by faculty and donated periodicals, the collection has grown to more than 9,900 volumes of professional books, 54 international periodicals, and 41 Arabic periodicals. In addition, samples of student work including master's thesis projects and doctoral dissertations have been made available for current

students to reference and study previous work on design projects, case study analysis, and architectural programming.

The Documentation Center contains a range of digital materials: GIS library, educational documentaries, slide libraries on history and theory of architecture, events documentation and photo library, and local/international competitions documentation. The program has access to the Learning Resources Center staff, as well as dedicated staff who oversee digital media and virtual reality development. KSU's King Salman Library, located across the main campus, also contains architecture resources. Due to the distance from the central library to the architecture building, the program is encouraged to continue developing the content and resources in the Learning Resources Center.

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

2019 Team Assessment: The department chair heads the program of architecture and reports directly to the dean of the College of Architecture and Planning. The chair also heads what is referred to as the department council (mentioned below as four administrative units). The dean reports directly to the university rector. Three vice deans (academic affairs, development and quality, and research and graduate studies) provide support to programs. The department chair is supported by an assistant chair and an administrative assistant. The program is administratively structured into four units: administrative affairs (teaching assistants, laboratories, staff recruitment); academic affairs (accreditation, design studios), post-graduate programs (master's, PhD, and program development), and general relations. Each of the four administrative units is chaired by a senior faculty member.

Students indicated an open and strong communication network with the program head through year-level student representatives involved in a range of active student organizations. All students in the program are encouraged to join one of the four student clubs in the College of Architecture and Planning: Architecture Students Club, Planning Students Club, Cultural and Social Club, and Sports Club.

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.

Instructions to the team:

1. *When an SPC is MET, the team is required to identify the course or courses where evidence of student achievement at the prescribed level was found.*
2. *If an SPC is NOT MET, the team must include a narrative that indicates the reasoning behind the team's assessment.*
3. *After completing the VTR, the team must prepare an SPC matrix (using a blank matrix provided by the program) that identifies the courses in which the team found the evidence of student achievement. The team's matrix is to be appended to the VTR as Appendix 2.*

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

Student learning aspirations for this realm include

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

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

[X] Met

2019 Team Assessment: [The team found evidence of achievement at the prescribed level in student work prepared for ARCH 250 Architecture Design 1.](#)

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

2019 Team Assessment: [The team found evidence of achievement at the prescribed level in student work prepared for ARCH 250 Architecture Design 1.](#)

Abstract ideas, diverse points of view, well-reasoned conclusions, and testing alternative outcomes were all integral in studies and theories on color, as well as principles of 2-dimensional and 3-dimensional design.

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

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for ARCH 360 Architectural Design 4.

Design projects included gathering, assessing, recording, and evaluating relevant site analysis information (such as geography, climate, noise pollution, and sun exposure) that subsequently influenced building and site design.

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

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for ARCH 350 Architectural Design 3, Environmental Design.

The team found evidence of two- and three-dimensional design informed by environmental principles such as solar access, geothermal and wind energy, passive systems, rainwater collection, and materials properties.

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

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for ARCH 260 Architectural Design 2.

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

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for ARCH 266, History of Architecture; however the ability to incorporate such principles into architecture (urban design projects not found) projects was evident in ARCH 430 Architecture Design 7.

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

2019 Team Assessment: The team found evidence of student achievement at the prescribed level in student work prepared for ARCH 352 Theory of Architecture 1 and ARCH 410 Theory of Architecture 2.

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

2019 Team Assessment: The team found evidence of student achievement at the prescribed level in student work prepared for ARCH 360 Architectural Design 4.

The project studies the balance of local cultural heritage and tourism in order to attract visitors to a resort area. Site solutions, amenities, physical abilities to access the site and buildings were all considered.

Realm A. General Team Commentary:

Evidence presented conveyed an understanding, and where noted, an application of the abstract relationships and impact of ideas based on the study and analysis of multiple theoretical, social, political, economic, cultural, and environmental contexts. A diverse range of skills for thinking about architectural ideas, including writing, investigating, speaking, drawing, and modeling were also evident.

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

Student learning aspirations for this realm include

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

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

[X] Met

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for ARCH 424 Facility Programming

Students learned about development of facility programming, analysis of users' needs, functional scenarios, and spatial requirements in architectural programming through detailed study of existing facilities spread among diverse project types.

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

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for ARCH 269 Site Analysis & Landscape.

Projects in Level 4 showed evidence of planning, site analysis of environmental factors, landscape hardscape elements and plant materials.

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

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for ARCH 357 Building Legislations] ARCH 434 Graduation Project 1.

Project course evaluated U.S. planning legislation in relation to urban growth. Projects in Level 5 also indicated life safety systems in egress at a basic floor plan level. Level 4 projects focused more on planning density in communities.

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

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for ARCH 416 Building Construction 2.

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

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for CE 378 Design of Reinforced Concrete Structures.

The course studies the aspects of concrete structures which are exemplified in actual graphic projects calculating the stresses and forces.

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

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for ARCH 351 Studies in Environmental Control and ARCH 427 Lighting and Acoustics.

Specifically, active and passive heating and cooling, solar geometry, daylighting, natural ventilation, indoor air quality, and solar systems are covered in ARCH 351, and lighting systems and acoustics are covered in ARCH 427.

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

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for in student work prepared for ARCH 430 Architecture Design 7.

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

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for ARCH 266 Building Materials.

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

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for ARCH 430 Architectural Design 7.

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

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for ARCH 425 Contracts, Quantities, and Specifications.

The course takes the student through exercises looking at sitework, structure and finish materials in terms of quantities and costs.

Realm B. General Team Commentary: The student work showed the *Ability and Understanding* (where applicable) of integrated systems, detailed construction drawings, and environmental stewardship through accurate technical representation. ARCH 430 Architectural Design 7 is the culmination of the program curriculum up to this point and serves as the penultimate course before the graduation project.

Realm C: Integrated Architectural Solutions: *Graduates of SE 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

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for ARCH 434 Graduate Project 1.

While many design studios exhibit design research, ARCH 434 Graduate Project- 1 offers a comprehensive integrated research process that assists in the preparation of ARCH 495 Graduate Project 2 and its integrative design intentions.

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

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for ARCH 434 Graduation Project 1 to be well met. The documentation that was consistently shown across a range of student process clearly identified the problem, evaluation criteria and connections to the solution and therefore made it easy for the team to assess the effectiveness of project implementation.

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

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for ARCH 495 Graduate Project 1.

Realm C. General Team Commentary:

Realm C is an extension of the comprehensive studio legacy as the final studio in a sequence of eight courses carefully curated to increase in complexity with strategic content to support the research and integration expectations of ARCH 495 Graduate Project 2. ARCH 434 Graduate Project 1 was recently renamed by the program to more directly align it as a research and integration course for evaluation, synthezation and environmental responsiveness in service of the subsequent ARCH 495 Graduate Project 2 course.

Realm D: Professional Practice: *Graduates of SE 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

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for ARCH 491 Architectural 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

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for ARCH 435 Project Management.

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

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for ARCH 491 Architectural 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

2019 Team Assessment: The team found evidence of achievement at the prescribed level in student work prepared for ARCH 491 Architectural Professional Practice.

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

[X] Met

2019 Team Assessment: Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 491 Architectural Professional Practice

The course references a Code of Conduct and the standards regulating performance that distinguishes a Professional Architect from a businessman/tradesman.

Realm D. General Team Commentary: The student work showed *Understanding* of the general roles and responsibilities of an architect, the process involved in setting up an architecture firm in the Kingdom of Saudi Arabia and the legal, ethical and managerial matters related to achieving excellence in providing professional architectural services primarily through the ARCH 491 Professional Practice and ARCH 435 Project Management curriculum.

Part Two (II): Section 2 – Curricular Framework

II.2.1 National Authorization and Institutional Quality Assurance: *The institution offering the substantially equivalent degree program must be or be part of an institution that has been duly authorized to offer higher education in the country in which it is located. Such authorization may come from a government ministry or other type of agency. The institution must have explicit, written permission from all applicable national education authorities in that program's country or region. At least one of the agencies granting permission must have a system of institutional quality assurance and review which the institution is subject to and which includes periodic evaluation.*

The program must provide a copy of the most recent letter, certificate, or charter from the ministry/agency regarding the institution's authorization.

[X] Provided

2019 Team Assessment:

A provided copy of the Certification of the University by the Saudi Kingdom Education Evaluation Commission provided on page 256, Appendix 6 of the Program Self-Evaluation Report shows the university accreditation is valid through April 2024.

II.2.2 Professional Degrees and Curriculum: *For substantial equivalency, the NAAB requires degree programs in architecture to demonstrate that the program is comparable in all significant aspects to a program offered by a U.S. institution. Further, the program must demonstrate that the degree awarded at the conclusion of this program of study entitles the graduate to practice architecture in his/her home country, subject to meeting any requirements for experience and/or examination. Substantially equivalent degree programs must include (or otherwise acknowledge) general studies, professional studies, and electives.*

[X] Met

2019 Team Assessment: The structure and content of the professional curriculum has substantially equivalent content to that offered by a U.S. institution. The preparatory year of education in the university offers general studies coursework. The program has evolved the curriculum to include selected electives within the college and a petition option for institution-wide courses to provide flexibility in the curriculum.

While Saudi Arabia, at present, does not require an independent license or professional examination for the practice of architecture, architects are invited to membership in the national Saudi Council of Engineers. Several faculty are members of this association and some are also involved in the development of code and regulatory infrastructure at the local and national levels.

Part Two (II): Section 3 – Evaluation of Preparatory Education: *The program must demonstrate that it has a thorough and equitable process for evaluating the preparatory or preprofessional education of individuals admitted to the NAAB-accredited degree program.*

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

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

[X] Met

2019 Team Assessment: Through regional examinations of ability, aptitude, and achievement, high school students are ranked and admitted to the preparatory year (known as Riyadh University). During this preparatory year, students apply to and complete an acceptance examination, which combined with

previous university entrance examinations are assessed for ranking and subsequent entry into the Department of Architecture and Building Sciences at King Saud University.

During the visit, examples were shared illustrating the process for acceptance into the preparatory year, as well as the weighting and assessment process for matriculation into the substantially equivalent professional program.

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 conditions require all substantially equivalent degree programs to make certain information publicly available online.

II.4.1 Statement on Substantially Equivalent Degrees:

In order to promote an understanding of the substantially equivalent professional degree by prospective students, parents, and the public, all schools offering a substantially equivalent degree program or any candidacy program must include in catalogs and promotional media the exact language found in the 2019 *Procedures for Substantial Equivalency*, Appendix 6, Required Text After Visits One and Two.

[X] Met

2019 Team Assessment: Exact language found in the 2019 *Procedures for Substantial Equivalency*, Appendix 6 is found on the architecture program's website page on NAAB Substantial Equivalency: <https://cap.ksu.edu.sa/ar/node/427> (accessed 11/18/2019). Program must include this language in any future hardcopy promotional media and catalogs.

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:

2019 NAAB Conditions for Substantial Equivalency

2013 Procedures for Substantial Equivalency

[X] Met

2019 Team Assessment: Both the 2019 *NAAB Conditions for Substantial Equivalency* and 2013 *Procedures for Substantial Equivalency* are available electronically on the architecture program's website page on NAAB Substantial Equivalency: <https://cap.ksu.edu.sa/ar/node/427> (accessed 11/18/2019).

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

2019 Team Assessment: There are several website links about careers and training. The program also has a Job Board with job listings related to the supervisor-in-charge, by prospective employers or firms to the department staff and faculty. The program places students in internship positions for 60 days during their course of study and also follows up after graduation regarding employment status. Four years of experience in architecture is required prior to licensure under the Saudi Council of Engineers.

II.4.4 Public Access to Program Self-Evaluation Reports and Visiting Team Reports: In order to promote transparency in the process of substantial equivalency in architecture education, the program is required to make the following documents available to the public:

- The final decision letter from the NAAB

- The most recent Program Self-Evaluation Report (the PSER from the previous visit, if applicable, not the PSER for the visit currently in progress)
- The final edition of the most recent Visiting Team Report, including attachments and addenda

[X] Met

2019 Team Assessment: The final decision letter from the NAAB, current Program Self-Evaluation Report (December 2018), APR from Visit 3, and VTRs from Visits 2 & 3 have all been made electronically available to the public on the architecture program's website in the page on NAAB Substantial Equivalency: <https://cap.ksu.edu.sa/ar/node/427> (accessed 11/18/2019).

II.4.5 Admissions and Advising:

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

2019 Team Assessment: The Program Self-Evaluation Report outlines and the website links to: online forms, processes, pre-professional degree content descriptions which are posted at: <http://dar.ksu.edu.sa/en> (accessed 11/18/2019). Examinations of ability, aptitude and achievement by high school students are used to rank and admit to the preparatory year. During this preparatory year students are advised and counseled how to apply to and complete an acceptance examination toward consideration of entry into the program. A system is in place to accommodate transfer students external and internal to the university.

During the visit, examples were shared illustrating the process for admittance into the substantially equivalent professional program, as well as recent evaluation and outcomes for students transferring into the program. Very few students successfully transfer external to the university.

IV. Appendices

Appendix 1. Conditions Met with Distinction

C2 Integrated Evaluation & Decision-Making Design Process

Appendix 3. Visiting Team

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V. Report Signatures

Respectfully Submitted,



Thomas Fowler IV



Kristine A. Harding



Nathaniel Quincy Belcher



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