University of Dammam College of Architecture and Planning Department of Architecture Dammam, Kingdom of Saudi Arabia

# **Visiting Team Report**

Visit Three for Substantial Equivalency

B. Arch. (170 credit hours)

The National Architectural Accrediting Board November 6-9, 2016

Year of Visit Two: 2014

**Vision:** The NAAB aspires to be the leader in establishing educational quality assurance standards to enhance the value, relevance, and effectiveness of the architecture 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 Team Findings

### 1. Team Comments and Visit Summary

Visit Three was conducted from November 5-9, 2016, and took place on the relatively new campus of the University of Dammam.

The team would like to sincerely thank Rector Dr. Abdullah Al-Rubaish, Vice-Rector Dr. Abdullah Al-Kady, Dean Dr. Abdulsalam Al-Sudairi, Department Chair Dr. Abed Al-Musallum, the faculty and student body, and Professor Iftekhar Khan for their gracious hospitality and the kindness they extended during the visit. Their passion for continuous improvement and commitment to achieving Substantial Equivalency (SE) were evident from the moment the team started its work. The team's observation was that such an achievement was not as much about being able to be licensed in the United States as it was validation for the program's efforts to raise the quality of architectural education and, by extension, the profession of architecture within the Kingdom of Saudi Arabia. In many respects, the program is pursuing the SE designation for the value that the team visits, findings, and reviews provide to help it guide its curriculum development. Moreover, the entire program—from the students to the administration—seems to be fully behind this effort, as was evident during the numerous team meetings and reviews. It is the team's understanding that this push for international recognition is a Ministry of Education mandate for most of the college programs and disciplines. The architecture program at the University of Dammam hopes to be the first to achieve this recognition.

The team's review of the team room and examination of student work indicated that the program had taken the findings of the Team Two report to heart and had made significant progress toward addressing Team Two's concerns, as outlined in this report. As noted in the APR (page 82), this led the program to initiate a Mock Visit that intensely scrutinized the program as though it were a NAAB visit. The findings of this self-imposed visit resulted in numerous recommendations that were put into effect, which led to the postponement of Visit Three so that the program would be able to present sufficient student work to the visiting team following the changes. The recommendations can be found starting on page 83 of the APR.

The team room was organized into two sections. The primary section displayed student work completed since the Mock Visit, and this is where the team spent the bulk of its time. The secondary section displayed student work completed between Visit Two and the Mock Visit. Considerable improvement was found in the work done after the Mock Visit, which validated the importance of this exercise in helping the program prepare for Visit Three. The team commends the program for the commitment of resources and the time devoted to improvement following the Mock Visit, as well as the purposefulness with which the program is pursuing the SE designation.

Keeping the differences in customs or culture within the program in mind, the team's approach was that this program is being evaluated for its ability to be substantially equivalent to education in the United States so that it will meet the educational requirements for U.S. licensure. It is in that context that we offer the following findings.

#### 2. Conditions Not Met

#### II.1.1 Student Performance Criteria

Realm A: Critical Thinking and Representation A.4. Technical Documentation

Realm B: Integrated Building Practices, Technical Skills and Knowledge

B.4. Site Design

Realm C: Leadership and Practice C.1. Collaboration

#### 3. Causes of Concern

Not applicable.

#### 4. Progress Since the Previous Visit

#### 1.4 Policy Review

**Visit Two Team Assessment (2014):** Policy documents were not provided in the team room. The team was told they exist, but in many cases are not in writing or are possibly in Arabic.

**Visit Three Team Assessment (2016):** This condition is now **Met**. The appropriate documents were available in the team room.

#### II.1.1 Student Performance Criteria

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

**Vist Two Team Assessment (2014): Not Met.** Technical documentation was generally weak and somewhat superficial. A broad understanding of technical drawing principles was not seen. In addition, craftsmanship of hand-built models must improve. The decision to require models is the program's; however, if required, the quality should meet care and craft standards of the profession.

**Visit Three Team Assessment (2016):** A.4. Technical Documentation is **Not Met**. The team could not find evidence of students' ability to write outline specifications.

A.10 Cultural Diversity: *Understanding* of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity on the societal roles and responsibilities of architects.

**Visit Two Team Assessment (2014):** Not Met. Cultural diversity was seen within the faculty and student body; however, no evidence was found as a curriculum component.

Visit Three Team Assessment (2016): A.10. Cultural Diversity is Met.

B.2 Accessibility: *Ability* to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.

**Visit Two Team Assessment (2014):** Not Met. Principles of accessibility were only seen on a superficial level in the projects reviewed.

**Visit Three Team Assessment (2016):** B.2. Accessibility is now **Met**. Evidence was not only found within dedicated coursework, but it was consistently evident in all studio work at both the high- and low-pass levels.

B.4 Site Design: Ability to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.

**Visit Two Team Assessment (2014): Not Met.** Student work reviewed did not indicate a range of abilities designing buildings responsive to traditional or challenging site conditions (legal, topographic, subsurface, utility).

**Visit Three Team Assessment (2016):** B.4. Site Design is **Not Met**. There is no consistent or clear evidence of students dealing with watershed and challenging sites with varying topographic conditions.

B.5 Life Safety: *Ability* to apply the basic principles of life-safety systems with an emphasis on egress.

**Visit Two Team Assessment (2014): Not Met.** Student work must clearly reflect a basic understanding of life safety concepts. (fire separation, floor/shaft penetrations, exit locations, exit widths, etc.). None of these concepts was readily apparent in student work reviewed.

Visit Three Team Assessment (2016): B.5. Life Safety is now **Met** and is consistently demonstrated in all studio work at both the high- and low-pass levels.

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

A O Design Thinking Chille

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

**Visit Two Team Assessment (2014): Not Met.** Students must be able to synthesize critical performance criteria in a single event, project, course or similar assignment at the ability level. No student work observed demonstrated this ability.

**Visit Three Team Assessment (2016):** B.6. Comprehensive Design is now **Met**. Student work from multiple courses demonstrated the required ability.

B.7 Financial Understanding: *Understanding* of the fundamentals of building costs, such as acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an emphasis on life-cycle cost accounting.

Visit Two Team Assessment (2014): Not Met. Financial analysis information viewed was weak and inconsistent.

**Visit Three Team Assessment (2016):** B.7. Financial Understanding (now B.7. Financial Considerations) is now **Met**.

B.8 Environmental Systems: *Understanding* the principles of environmental systems' design such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, daylighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.

**Visit Two Team Assessment (2014): Not Met**. Projects reviewed lacked complete, relevant environmental system selections or layouts.

Visit Three Team Assessment (2016): B.8. Environmental Systems in now Met.

B.11 Building Service Systems Integration: *Understanding* of the basic principles and appropriate application and performance of building service systems such as plumbing, electrical, vertical transportation, security, and fire protection systems.

**Visit Two Team Assessment (2014): Not Met**. Building service systems were not apparent on projects reviewed; therefore there was no evidence of their integration into the designs.

Visit Three Team Assessment (2016): B.11. Building Service Systems Integration is now Met.

B.12 Building Materials and Assemblies Integration: *Understanding* of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.

**Visit Two Team Assessment (2014): Not Met.** Wall sections/material selections and building skin relationships were not apparent in building design projects.

**Visit Three Team Assessment (2016):** B.12. Building Materials and Assemblies Integration is now **Met**.

C.3 Client Role in Architecture: *Understanding* of the responsibility of the architect to elicit, understand, and reconcile the needs of the client, owner, user groups, and the public and community domains.

**Visit Two Team Assessment (2014):** Not Met. Although client relationships in Saudi Arabia are not the same as those in the West, they remain a critical link in the design process. Evidence wasn't observed representing an understanding of this criterion.

Visit Three Team Assessment (2016): C.3. Client Role in Architecture is now Met.

C.5 Practice Management: *Understanding* of the basic principles of architectural practice management such as financial management and business planning, time management, risk management, mediation and arbitration, and recognizing trends that affect practice.

**Visit Two Team Assessment (2014): Not Met.** Evidence of roles in the management of a Saudi architect's practice was not found; this understanding is essential.

Visit Three Team Assessment (2016): C.5. Practice Management is now Met.

C.6 Leadership: *Understanding* of the techniques and skills architects use to work collaboratively in the building design and construction process and on environmental, social, and aesthetic issues in their communities.

Visit Two Team Assessment (2014): Not Met. An understanding of leadership skills was not apparent in evidence observed.

Visit Three Team Assessment (2016): C.6. Leadership is now Met.

C.8 Ethics and Professional Judgment: *Understanding* of the ethical issues involved in the formation of professional judgment regarding social, political and cultural issues, and responsibility in architectural design and practice.

**Visit Two Team Assessment (2014): Not Met.** Evidence presented did not adequately convey an understanding of ethics and professional judgment.

Visit Three Team Assessment (2016): C.8. Ethics and Professional Judgement is now Met.

Condition 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 NAAB Conditions for Substantial Equivalency, Appendix 6.

Visit Two Team Assessment (2014): Not Yet Met. NAAB's statement was found on the department's web page

at <a href="https://www.ud.edu.sa/DU/en/colleges/col">www.ud.edu.sa/DU/en/colleges/col</a> engineering/col</a> ap/DEPT ARCH ACCREDIT EN. Appropriate language will be posted if the SE status is granted.

Visit Three Team Assessment (2016): This condition is now Met.

**Condition II.4.4 Public Access to APRs and VTRs**: *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 APR

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

These documents must be housed together and accessible to all. Programs are encouraged to make these documents available electronically from their web sites.

Visit Two Team Assessment (2014): Not Yet Met. All of the documents related to the substantial equivalency process (NAAB Conditions and Procedures, SE application, report from visit one, NAAB decision letter after visit one, APR for visit two, and notice of the team and dates for visit two) have been posted on the Department of Architecture's web site at <a href="www.ud.edu.sa/DU/en/colleges/col\_engineering/col\_ap/DEPT\_ARCH\_ACCREDIT\_EN">www.ud.edu.sa/DU/en/colleges/col\_engineering/col\_ap/DEPT\_ARCH\_ACCREDIT\_EN</a>. Visit three has not yet occurred; therefore, there are no final NAAB results/reports to post.

Visit Three Team Assessment (2016): This condition is now Met.

#### II. Compliance with the Conditions for Substantial Equivalency

#### 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 is expressed in contemporary context. Programs that exist within a larger educational institution must also describe the history and mission of the institution and how that history, mission, and culture is expressed in contemporary context.

The substantially equivalent degree program must describe and then provide evidence of the relationship between the program, the administrative unit that supports it (e.g., school or college) and the institution. This includes an explanation of the program's benefits to the institutional setting, how the institution benefits from the program, any unique synergies, events, or activities occurring as a result, etc.

Finally, the program must describe and then demonstrate how the course of study and learning experiences encourage the holistic, practical and liberal arts-based education of architects.

[X] The program has fulfilled this requirement for narrative and evidence.

#### **Visit Three Team Assessment:**

The narrative of the program history and mission is complete, as indicated in the APR on page 1. The program's independence has been well established and is equivalent to that of NAAB accredited programs. In addition, the curriculum has developed significant interdisciplinary content throughout.

#### I.1.2 Learning Culture and Social Equity:

 Learning Culture: The program must demonstrate that it provides a positive and respectful learning environment that encourages the fundamental values of 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.

Further, the program must demonstrate that it encourages students and faculty to appreciate these values as guiding principles of professional conduct throughout their careers, and it addresses health-related issues, such as time management.

Finally, the program must document, through narrative and artifacts, its efforts to ensure that all members of the learning community (faculty, staff, and students) are aware of these objectives and are advised as to the expectations for ensuring they are met in all elements of the learning culture.

- Social Equity: The substantially equivalent degree program must first describe how social equity
  is defined within the context of the institution or the country in which it is located and then
  demonstrate how it provides faculty, students, and staff with a culturally rich educational
  environment in which each person is equitably able to learn, teach, and work.
- [X] The program has demonstrated that it provides a positive and respectful learning environment.
- [X] The program has demonstrated that it provides a culturally rich environment in which each person is equitably able to learn, teach, and work.

#### **Visit Three Team Assessment:**

The small class sizes (1:7 teacher-student ratio); the quality of, and equipment in, the studios (new), workshops, and labs; and the nature of the studio reviews witnessed by the team reveal a learning environment that is equivalent to that of NAAB-accredited schools. The APR response to this condition is both accurate and detailed.

The faculty come from a variety of areas in the Islamic world, and the students represent a range of socioeconomic and educational backgrounds.

- **I.1.3 Response to the Five Perspectives**: Programs must demonstrate through narrative and artifacts, how they respond to the following perspectives on architecture education. Each program is expected to address these perspectives consistently within the context of its history, mission, and culture and to further identify as part of its long-range planning activities how these perspectives will continue to be addressed in the future.
  - **A.** Architecture Education and the Academic Community. That the faculty, staff, and students in the substantially equivalent degree program make unique contributions to the institution in the areas of scholarship, community engagement, service, and teaching. In addition, the program must describe its commitment to the holistic, practical, and liberal arts—based education of architects and to providing opportunities for all members of the learning community to engage in the development of new knowledge.
    - [X] The program is responsive to this perspective.

#### **Visit Three Team Assessment:**

The program's curriculum is deliberately interdisciplinary in the first 2 years and continues its connection with other disciplines in the last 3 years through a professionally focused sequence of courses. Throughout the 5 years of the program, it maintains an effort to balance modernity and tradition, as well as East and West, through coursework, projects, activities, faculty research, and practice.

- **B.** Architecture Education and Students. That students enrolled in the substantially equivalent degree program are prepared to live and work in a global world where diversity, distinctiveness, self-worth, and dignity are nurtured and respected; to emerge as leaders in the academic setting and the profession; to understand the breadth of professional opportunities; to make thoughtful, deliberate, informed choices and; to develop the habit of lifelong learning.
  - [X] The program is responsive to this perspective.

#### **Visit Three Team Assessment:**

The program does an excellent job of preparing students to work in a global world, with many students spending time abroad for post-professional studies in countries across the globe. This was verified through the team's conversations with students and alumni. Many graduates of this program hold leadership positions as mayors and other public officials across Saudi Arabia. The students are working toward the goal of being lifelong learners and leaders, and promoting continual improvement. This was evident in the manner in which they responded to feedback and sought input into studios and critiques.

Students are encouraged to participate in national and international design competitions and studio projects. Several students have won top prizes at both regional and international events. In

<sup>&</sup>lt;sup>1</sup> See Boyer, Ernest L. *Scholarship Reconsidered: Priorities of the Professoriate*. Carnegie Foundation for the Advancement of Teaching. 1990.

December 2016, the program will host the first global summit focusing on mosque design, with input and support from the students.

Although King Faisal University has a 1-year study abroad program, the University of Dammam does not. This was brought up by students, who said that they would be in favor of such a program to further their global understanding and perspective. Students are trained in English and do much of their coursework in English, which prepares them for opportunities in the U.S. and abroad. Many students are interested in furthering their experience in Europe or in a neighboring Gulf country following graduation.

The team's conversations with students indicated that most of them are aware of the breadth of professional opportunities available within the Kingdom and abroad.

The program plans to initiate a program for women's architectural studies in the coming years.

- C. Architecture Education and the Regulatory Environment. That students enrolled in the substantially equivalent degree program are provided with a sound preparation for the transition to licensure or registration. The school may choose to explain in the APR the degree program's relationship with the process of becoming an architect in the country where the degree is offered, the exposure of students to possible internship requirements, the students' understanding of their responsibility for professional conduct, and the proportion of graduates who have sought and achieved licensure or registration since the previous visit.
  - [X] The program is responsive to this perspective.

#### **Visit Three Team Assessment:**

The program is located in a region where the regulatory environment is largely non-existent. Architecture is widely viewed as a "sub-skill" of engineering and is lumped with other trades involved in the building process. A university degree is the accepted professional credential for the practice of architecture, with no licensure or other regulatory requirement in place. It is hoped that the Saudi Council of Engineers, established by royal decree in 2001, will ultimately evolve into a regulatory or licensure body. There is evidence that a regulatory process is beginning in engineering, and one in architecture may soon follow.

The program has found ways to provide students with an understanding of their responsibility with respect to professional conduct by stressing life-safety, fire, and disability issues, even though there are few enforced local codes. In the absence of a national code, the program follows U.N. recommendations for building standards. As a result, the visiting team believes that students are imbued with an ethic regarding regulation that prepares them to enter practice in a regulated environment with only a need to acquaint themselves with locally accepted regulations.

- D. Architecture Education and the Profession. That students enrolled in the substantially equivalent degree program are prepared: to practice in a global economy; to recognize the positive impact of design on the environment; to understand the diverse and collaborative roles assumed by architects in practice; to understand the diverse and collaborative roles and responsibilities of related disciplines; to respect client expectations; to advocate for design-based solutions that respond to the multiple needs of diverse clients and populations, as well as the needs of communities; and to contribute to the growth and development of the profession.
  - [X] The program is responsive to this perspective.

#### **Visit Three Team Assessment:**

The program exists in a diverse geographic and cultural environment, where practice in a global economy is the norm. Given the program's multi-disciplinary teaching approach, particularly in the

first 2 years of study, students develop an understanding of the roles of related disciplines. In years 3 through 5, they develop projects collaboratively in a variety of teaming scenarios that bring small groups of students together during the investigative phases of the projects. The projects are then completed individually.

The curriculum's focus on environmental issues is evident in both studio and lecture work. The use of "real-life" projects provides students with the ability to engage communities and work with clients. Through design, students develop a sense of their impact on the environment and on the communities.

Through the regular incorporation of local architects into project reviews and final juries, the program bolsters the connection between the students and the profession. Students working on community-based projects also interact with local planning councils, many of which have University of Dammam alumni as members or staff.

E. Architecture Education and the Public Good. That students enrolled in the substantially equivalent degree program are prepared: to be active, engaged citizens; to be responsive to the needs of a changing world; to acquire the knowledge needed to address pressing environmental, social, and economic challenges through design, conservation, and responsible professional practice; to understand the ethical implications of their decisions; to reconcile differences between the architect's obligation to his/her client and the public; and to nurture a climate of civic engagement, including a commitment to professional and public service and leadership.

#### [X] The program is responsive to this perspective.

#### **Visit Three Team Assessment:**

It was evident through student work and team interviews that students are passionate about serving the public good. In a country where engineering holds more weight than architecture, the program has differentiated architecture from engineering by noting how architecture can serve communities, promote health, and become the steward of the environment. In the collaborative multi-disciplinary program, students are co-taught in the first 2 years by landscape architects, urban designers, and building technology experts, which gives them further exposure to the ways in which architecture can serve the public good. Many of the student projects focus on sites in communities where the students have grown up. Some of the projects look at how architecture can better inform and shape health and well-being in a community. Many alumni have gone on to hold leadership positions within communities as mayors and other civic officials who work toward serving the public good through architecture. The team commends the program for its sensitivity to, and commitment to serving, the public good.

**I.1.4 Long-Range Planning**: A substantially equivalent degree program must demonstrate that it has identified multi-year objectives for continuous improvement within the context of its mission and culture, the mission and culture of the institution, and the five perspectives. In addition, the program must demonstrate that data is collected routinely and from multiple sources to inform its future planning and strategic decision making.

#### [X] The program's processes meet the standards as set by the NAAB.

#### **Visit Three Team Assessment:**

The program proactively re-evaluates itself through 10-year timelines. The most recent reorganization occurred in 2008, and many of the initiatives, including the need for international accreditation, are well underway, if not completed. For the next 10 years, the program is turning toward sustainable development (page 20 of the APR):

The most recent mandate, since the 2008 reorganization has been 'Sustainable Development,' in essence reaffirming the national and worldwide convergence of national goal and public policy to safeguard and nourish a livable environment for posterity. It is a reaffirmation uniquely different for Saudi Arabia, a resource-rich, energy surplus country. The college, in all its specialization and emphasis, has reoriented its academic goals with a new ethical value but with deep technical dimension.

The team noted that the program's long-range plan includes opening a division for women within the architecture program. The team also found that the program has support and financial resources that align with its planning, and this planning is being developed in concert with the other departments of the college (such as landscape and engineering).

# **I.1.5 Self-Assessment Procedures**: The program must demonstrate that it regularly assesses the following:

- How the program is progressing toward its mission.
- Progress against its defined multiyear objectives (see I.1.4 Long-Range Planning) since the objectives were identified and since the last visit.
- Strengths, challenges, and opportunities faced by the program while developing learning opportunities in support of its mission and culture, the mission and culture of the institution, and the five perspectives.
- Self-assessment procedures shall include, but are not limited to:
  - Solicitation of faculty, students', and graduates' views on the teaching, learning and achievement opportunities provided by the curriculum.
  - o Individual course evaluations.
  - o Review and assessment of the focus and pedagogy of the program.
  - o Institutional self-assessment, as determined by the institution.

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

#### [X] The program's processes meet the standards as set by the NAAB.

#### **Visit Three Team Assessment**

The program has an adequate self-assessment process, which is rigorously applied as described on page 22 of the APR. In addition, the Kingdom of Saudi Arabia National Commission for Academic Accreditation and Assessment has outlined an assessment process, which was included in policy documents provided in the team room and was verified through interviews. The program is committed to continuous improvement and takes all feedback seriously. For example, the program brought in a third-party team from the United States between Visit Two and Visit Three to conduct a complete assessment of the courses and instruction. The assessment simulated the assessment carried out during a NAAB visit, which included feedback. Using this feedback, the program was further refined prior to Visit Three. The team found that the program is proactive in its self-assessment practices and takes a multi-year approach to assessment through the 10-year timelines in its long-range planning.

#### PART ONE (I): SECTION 2—RESOURCES

#### I.2.1 Human Resources and Human Resource Development

- Faculty & Staff:
  - A substantially equivalent degree program must have 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. Programs are required to document personnel policies which may include but are not limited to faculty and staff position descriptions<sup>2</sup>.
  - Substantially equivalent programs must document the policies they have in place to further social equity or diversity initiatives appropriate to the cultural context of the institution.
  - A substantially equivalent degree program must demonstrate that it balances the workloads of all faculty and staff to support a tutorial exchange between the student and teacher that promotes student achievement.
  - A substantially equivalent degree program must demonstrate it is able to provide opportunities for all faculty and staff to pursue professional development that contributes to program improvement.
  - Substantially equivalent programs must document the criteria used for determining rank, reappointment, tenure, and promotion as well as eligibility requirements for professional development resources.

#### [X] Human Resources (faculty and staff) are adequate for the program.

#### **Visit Three Team Assessment – Faculty and Staff:**

The faculty and staff model at the University of Dammam differs from the typical model at universities in the United States. For example, Saudi National Faculty are government employees, and are not tenured. However, the information provided in the APR (page 70) and the policy review documents demonstrate that the program is equivalent to NAAB-accredited programs in all of the above categories. Non-Saudi National Faculty are on annual contracts, and some of them have been at the institution for over 20 years, with promotions along the way.

#### Students:

- A substantially equivalent program must document its student admissions policies and procedures. This documentation may include but is not limited to application forms and instructions, admissions requirements, admissions decisions procedures, financial aid and scholarships procedures, and student diversity initiatives. These procedures should include firsttime, first-year students as well as transfers within and outside of the university.
- A substantially equivalent degree program must demonstrate its commitment to student achievement both inside and outside the classroom through individual and collective learning opportunities.

#### [X] Human Resources (students) are adequate for the program.

#### Visit Three Team Assessment – Students:

The APR and the policy review documents that were submitted to the team demonstrate that the program is equivalent to NAAB-accredited programs in both of the above categories.

#### I.2.2 Administrative Structure & Governance

Administrative Structure: A substantially equivalent degree program must demonstrate it has a
measure of administrative autonomy that is sufficient to affirm the program's ability to conform to the
conditions for substantial equivalency. Substantially equivalent programs are required to maintain an

<sup>&</sup>lt;sup>2</sup> A list of the policies and other documents to be made available in the team room during a substantial equivalency visit is in Appendix 4 of the 2012 Conditions for Substantial Equivalency.

organizational chart describing the administrative structure of the program and position descriptions describing the responsibilities of the administrative staff.

#### [X] Administrative structure is adequate for the program.

#### **Visit Three Team Assessment:**

The administrative structure of the University of Dammam and the College of Architecture and Planning provides processes and policies that ensure fair representation and participation of all stakeholders in decision making and long- and short-term planning. The required documentation was provided in the team room.

Governance: The program must demonstrate that all faculty, staff, and students have equitable
opportunities to participate in program and institutional governance as appropriate to the context and
culture of the institution.

#### [X] Governance opportunities are adequate for the program.

#### **Visit Three Team Assessment:**

The governance structure of the University of Dammam and the College of Architecture and Planning provides processes and policies that ensure fair representation and participation of all stakeholders in decision making and long- and short-term planning. The required documentation was provided in the team room. It is worth noting that the program benefits from the fact that both the dean and the vice-rector are graduates of the program and architects. This gives the architecture program a strong voice in governance.

- **I.2.3 Physical Resources**: The program must demonstrate that it provides physical resources that promote student learning and achievement in a professional degree program in architecture. This includes but is not limited to the following:
- Space to support and encourage studio-based learning
- Space to support and encourage didactic and interactive learning.
- Space to support and encourage the full range of faculty roles and responsibilities including preparation for teaching, research, mentoring, and student advising.

#### [X] Physical Resources are adequate for the program.

#### **Visit Three Team Assessment:**

The program is settling into a new facility, which was first occupied in 2013, and it continues the build-out and fabrication of various labs that are shared with other programs. These labs (Materials, Acoustical, Lighting, Thermal, Structural and Solar Monitoring Station, and Fab Lab) are state of the art and exceed what would be found in many programs in the United States. They provide resources for the architecture students and are used for teaching some of the technology sequences.

The space allocated to the Department of Architecture is ample and, when combined with the commonuse facilities, provides superior facilities for the department's use.

**I.2.4 Financial Resources**: A substantially equivalent degree program must demonstrate that it has access to appropriate institutional and financial resources to support student learning and achievement.

#### [X] Financial Resources are adequate for the program.

#### **Visit Three Team Assessment:**

As noted during prior team visits, practically all of the universities in the Kingdom of Saudi Arabia are funded by the state, which spends approximately half of total national revenue on education. The budget

allocation for the University of Dammam for FY 2013 was \$77.5 million US. The financial resources are adequate to support the program, including new facilities, state-of-the-art equipment, and labs. Generally, the program's annual budget appears to be increasing by about 8% per year, which seems commensurate with the growth of the program. See page 62 of the APR for further information. The team's conversations with the rector, vice-rector, and dean confirmed that funding has continued to be strong, with no issues or concerns observed or stated by the three members of the leadership.

**I.2.5 Information Resources**: The substantially equivalent program must demonstrate that all students, faculty, and staff have convenient access to literature, information, and visual and digital resources that support professional education in the field of architecture.

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

[X] Information Resources are adequate for the program.

#### **Visit Three Team Assessment:**

The campus of the Department of Architecture is a new extension of the University of Dammam, and the library is a brand new facility, which is less than a 3-minute walk from the program. As noted on page 64 of the APR, the staffed library currently holds 54,428 architecture-related printed items; 326 databases covering 69,164 e-journals; 225 printed journals, which are subscribed to annually; and 395,359 e-books.

#### PART I: SECTION 3—REPORTS

- **I.3.1 Statistical Reports.** Programs are required to provide statistical data in support of activities and policies that support social equity in the professional degree and program as well as other data points that demonstrate student success and faculty development.
- Program student characteristics.
  - o Number of students enrolled in the substantially equivalent degree program(s).
  - Qualifications of students admitted in the fiscal year prior to the upcoming visit compared to those admitted in the fiscal year prior to the last visit.
  - o Time to graduation.
    - Percentage of matriculating students who complete the substantially equivalent degree program within the normal time to completion for each academic year since the previous visit.
    - Percentage who complete the substantially equivalent degree program within 150% of the normal time to completion for each academic year since the previous visit.
- Program faculty characteristics
  - Number of faculty by rank (e.g., assistant professor, associate professor)
  - Number of full-time faculty and part-time faculty
  - o Number of faculty promoted each year since the last visit
  - Number of faculty maintaining licenses in the country of the program each year since the last visit, and where they are licensed

#### [X] Statistical reports were provided and provide the appropriate information.

#### **Visit Three Team Assessment:**

Statistical reports were included in the APR, and supplemental information was provided to the team during the visit. Certain NAAB statistical requirements were not applicable (e.g., licensure). In addition to providing what is required by the NAAB, the university's Decision Support Center is to be commended for its use of statistics and data to create useful dashboards for administrators, students, and the public who want to find information on virtually any program at the university, including architecture. The information includes data on demographics, education credentials, and career paths for students, employees, and alumni. See: http://www.uod.edu.sa/en/about-us/uod-observatory/students-dashboard

**I.3.2 Faculty Credentials**: The program must demonstrate that the instructional faculty are adequately prepared to provide an architecture education within the mission, history, and context of the institution.

In addition, the program must provide evidence through a faculty exhibit<sup>3</sup> that the faculty, taken as a whole, reflects the range of knowledge and experience necessary to promote student achievement as described in Part Two. This exhibit should include highlights of faculty professional development and achievement since the last substantial equivalency visit.

[X] Faculty credentials were provided and demonstrate the range of knowledge and experience necessary to promote student achievement.

#### **Visit Three Team Assessment:**

This condition is **Met with Distinction**. A complete list of the faculty, including their credentials and assignments, is provided on pages 150-179 of the APR (Section 3.2 Faculty Resumes). The list demonstrates the level of experience and knowledge necessary to promote student achievement, and

<sup>&</sup>lt;sup>3</sup> The faculty exhibit should be set up near or in the team room. To the extent the exhibit is incorporated into the team room, it should not be presented in a manner that interferes with the team's ability to view and evaluate student work.

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includes a much higher-than-normal number of Ph.Ds. Many of the faculty have earned degrees from institutions across the globe. The faculty exhibit provided further evidence of faculty scholarly pursuits.

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#### PART ONE (I): SECTION 4—POLICY REVIEW

The information required in the three sections described above is to be addressed in the APR. In addition, the program shall provide a number of documents for review by the visiting team. Rather than being appended to the APR, they are to be provided in the team room during the visit. The list is available in Appendix 4 of the Conditions for Substantial Equivalency.

[X] The policy documents in the team room meet the requirements of Appendix 4.

#### **Visit Three Team Assessment:**

This condition is now **Met**. Policy documents were supplied, as required, in the team room and were sufficient in detail and translation to provide supporting evidence.

#### PART TWO (II): EDUCATIONAL OUTCOMES AND CURRICULUM

PART TWO (II): SECTION 1—STUDENT PERFORMANCE—EDUCATIONAL REALMS & STUDENT PERFORMANCE CRITERIA

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

#### **Visit Three Team General Comments:**

- The SPC Matrix in the APR was very well organized and clear. However, the team found that some of the SPC that were covered by courses were not listed in the matrix as being associated with these courses. The team identified these courses in the SPC below.
- Most of the documents were provided in English—both student work and the information in the course binders. What was in Arabic was not a hindrance to the team review. The team appreciated the efforts of the program in this regard.
- All of the required course notebooks/binders were provided in English and were extremely well organized. This was an improvement over Visit Two.
- Generally noteworthy was the program's commitment to not just teaching an SPC once. Often,
  the team found evidence of ability that was consistent through each year once it was taught. Each
  SPC was coded into the syllabi of multiple courses, with ability-level SPC covered mostly in
  studios and understanding-level SPC covered mostly in lecture courses.

#### Realm A: Critical Thinking and Representation:

Architects must have the ability to build abstract relationships and understand the impact of ideas based on research and analysis of multiple theoretical, social, political, economic, cultural and environmental contexts. This ability includes facility with the wider range of media used to think about architecture including writing, investigative skills, speaking, drawing and model making. Students' learning aspirations include:

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

#### A.1. Communication Skills: Ability to read, write, speak and listen effectively.

[X] Met

#### **Visit Three Team Assessment:**

This criterion was **Met** in the drawings of the General Hospital (Design IX: ARCH 501) and the extensive precedent analysis for the design of a Dental Clinic (Research and Programming: ARCH 511). The team observed the ability of students to listen and speak effectively.

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

Visit Three Team Assessment:

This criterion is **Met with Distinction**. Evidence was found in Design V: ARCH 301 and other design studios. In particular, the Rakah Fire Station and Neighborhood Clinic projects provided evidence that this criterion was satisfied through a sequence of well-organized design drawings. In the course binder, a series of well-thought-out exercises leading from analysis and interpretation to the integration of spatial, material, and programmatic strategies provided further evidence.

A.3. Visual Communication Skills: *Ability to* use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.

[X] Met

#### **Visit Three Team Assessment:**

Evidence was found in Design IV: ARCH 202 and in coursework all the way up through the fifth-year studios. The Art Center project demonstrated a good grasp of an array of media, including physical models. In addition, there has been an emphasis on graphic representation since the last visit, which has resulted in much improved final presentation and process work across the board.

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

#### [X] Not Met

#### **Visit Three Team Assessment:**

Evidence was found in Contract Documents and Working Drawings: ARCH 431 for most of the requirements of this SPC; however, evidence of students' ability to write outline specifications was not provided. If it were not for the absence of outline specification evidence, this criterion would be Met with Distinction.

A.5. Investigative Skills: *Ability to* gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

[X] Met

#### **Visit Three Team Assessment:**

This criterion is **Met with Distinction**. Evidence of student ability to gather, assess, record, apply, and comparatively evaluate relevant information was found in the coursework for Design VII: ARCH 401. The team found evidence of instruction in investigative skills, and the student learning outcomes of that instruction were at a level above and beyond what is expected. Further evidence of student ability was exhibited in every subsequent design studio course, particularly Research and Programming: ARCH 511, which establishes the basis of the research for Design X: ARCH 502 (Comprehensive Design Studio).

A.6. Fundamental Design Skills: *Ability to* effectively use basic architectural and environmental principles in design.

[X] Met

**Visit Three Team Assessment:** 

In Design V: ARCH 301 and other design studios, evidence was found in the Rakah Fire Station and Dental Clinic projects, as well as the supporting design development exercises.

A.7. Use of Precedents: Ability to examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects.

[X] Met

#### **Visit Three Team Assessment:**

This criterion is **Met with Distinction**. Evidence of students' use of precedents was found in the coursework for Design VIII: ARCH 402. Additional evidence was found in the coursework for each subsequent studio. The team wanted to call special attention to the work exhibited for Research and Programming: ARCH 511, where the use of precedents was exemplary.

A.8. Ordering Systems Skills: *Understanding* of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

[X] Met

#### **Visit Three Team Assessment:**

Evidence was found in student work prepared for three strong courses: History and Theory I: ARCH 331, History and Theory II: ARCH 332, and History and Theory III: ARCH 421. Further evidence was found in studio work throughout the third and fourth years, as well as work introduced in the second-year studios spatially.

A.9. Historical Traditions and Global Culture: *Understanding* of parallel and divergent canons and traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national settings from the Eastern, Western, Northern, and Southern hemispheres in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.

[X] Met

#### **Visit Three Team Assessment:**

Evidence was found in student work prepared for three strong courses: History and Theory I: ARCH 331, History and Theory II: ARCH 332, and History and Theory III: ARCH 421. Further evidence was found in studio work throughout the third and fourth years. Evidence was also found in Research and Programming: ARCH 511, where students studied socioeconomic factors in preparation for comprehensive design.

A.10. Cultural Diversity: *Understanding* of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity on the societal roles and responsibilities of architects.

[X] Met

**Visit Three Team Assessment:** 

This criterion is now **Met**. Evidence was found in student work prepared for three strong courses: History and Theory I: ARCH 331, History and Theory II: ARCH 332, and History and Theory III: ARCH 421. Further evidence was found in studio work throughout the third and fourth years, in Research and Programming: ARCH 511, and in Humanities I: ARCH 352, which focused on the relationship between architecture and culture.

A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

#### [X] Met

#### **Visit Three Team Assessment:**

This criterion is **Met with Distinction**. Evidence was found in the coursework for Research and Programming: ARCH 511, which resulted in a published book that detailed applied research across a number of platforms (precedent, programming site, geographic, socioeconomic) and then translated it into a proposed program with design factors to be applied to comprehensive design.

**Realm A. General Team Commentary**: Within this realm, the program exhibits strength in areas such as investigative skills. Much progress has been made. There is room for additional progress in laying the introductory foundations of architectural education.

Realm B: Integrated Building Practices, Technical Skills and Knowledge: Architects are called upon to comprehend the technical aspects of design, systems and materials, and be able to apply that comprehension to their services. Additionally, they must appreciate their role in the implementation of design decisions, and their impact of such decisions on the environment. Students learning aspirations include:

- Creating building designs with well-integrated systems.
- · Comprehending constructability.
- Incorporating life safety systems.
- · Integrating accessibility.
- · Applying principles of sustainable design.
- B.1. Pre-Design: Ability to prepare a comprehensive program for an architectural project, such as preparing an assessment of client and user needs, an inventory of space and equipment requirements, an analysis of site conditions (including existing buildings), a review of the relevant laws and standards and assessment of their implications for the project, and a definition of site selection and design assessment criteria.

#### [X] Met

#### **Visit Three Team Assessment:**

This criterion is **Met with Distinction**. Evidence was found in Resarch and Programming: ARCH 511 and Design X: ARCH 502 (Comprehensive Design Studio). The preparation for projects was comprehensive and fulfilled all of the elements required in the pre-design criterion, particularly the Specialist Dentistry Center project in Al Khobar. This comprehensive design project was exceptionally successful, both in meeting the programmatic goals and in creating an attractive and interesting building.

B.2. Accessibility: *Ability* to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.

[X] Met

#### **Visit Three Team Assessment:**

This criterion is now **Met**. Evidence of the ability to design sites, facilities, and systems that provide accessibility was found in the coursework for Design VI: ARCH 302. This included instructional lectures that were quite detailed and were applied to the project work. Continued and consistent evidence of students' ability was found in every subsequent studio sequence as well.

B.3. Sustainability: Ability to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.

[X] Met

#### **Visit Three Team Assessment:**

Evidence of the ability to design projects that promote sustainability was found in the coursework for Design VII: ARCH 401.

B.4. Site Design: *Ability* to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.

#### [X] Not Met

#### **Visit Three Team Assessment:**

In Design VIII: ARCH 402 and the subsequent three studios, and in Environmental Design: ARCH 231, evidence was not sufficiently or consistently demonstrated to indicate that students could perform at the ability level with regard to various types of topography and watershed requirements. Most of the student work involved relatively flat sites in an arid climate, which does not facilitate the study of watershed and topography.

B.5. Life Safety: *Ability* to apply the basic principles of life-safety systems with an emphasis on egress.

[X] Met

#### **Visit Three Team Assessment:**

This criterion is now **Met**. Evidence of the ability to apply basic life-safety principles was found in the coursework for Design VI: ARCH 302 and Design IX: ARCH 501. Continued and consistent evidence of students' ability was found in every subsequent studio sequence as well.

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

A.2. Design Thinking Skills

**B.2. Accessibility** 

A.4. Technical Documentation B.3. Sustainability

A.5. Investigative Skills B.4. Site Design

A.8. Ordering Systems
A.9. Historical Traditions and

Global Culture B.9.Structural Systems

**B.5. Life Safety** 

#### [X] Met

#### **Visit Three Team Assessment:**

This criterion is now **Met**. Evidence of students' ability was found in comprehensive design projects in Research and Programming: ARCH 511 and Design X: ARCH 502 (Comprehensive Design Studio). These two commendable courses work together, with ARCH 511 serving as a pre-design course in which students documented, assessed, and produced a program for their comprehensive design project. The result of this course was a several-hundred-page bound book that demonstrated the integration of many of the SPC into early thinking. This was followed by ARCH 502, where further evidence showed students' ability to make decisions across scales while integrating all of the requirements of this SPC.

B.7. Financial Considerations: *Understanding* of the fundamentals of building costs, such as acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an emphasis on life-cycle cost accounting.

#### [X] Met

#### **Visit Three Team Assessment:**

This criterion is now **Met**. Sufficient evidence was found in Project Management: ARCH 442, where student work demonstrated this SPC at the ability level for the factors outlined, including project cost estimating and financial feasibility (break-even and profit analysis). The team found the depth of rigor offered in this area to be commendable as a result of separating professional practice into two courses: Project Management and Professional Practice.

B.8. Environmental Systems: *Understanding* the principles of environmental systems' design such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, daylighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.

#### [X] Met

**Visit Three Team Assessment:** This criterion is now **Met**. Evidence was found in Environmental Design I: ARCH 231. In Environmental Controls I: ARCH 222, Environmental Design II: ARCH 232, and, most notably, Environmental Control Systems II: ARCH 322, the SPC was met at the level of understanding. In Design X: ARCH 502 (Comprehensive Design Studio), it was met at the level of ability. The two health care projects in ARCH 502 displayed a satisfactory degree of integration of environmental control systems and the employment of both traditional and contemporary solutions to the problems of energy efficiency, sustainability, and wellness.

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B.9. Structural Systems: *Understanding* of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.

[X] Met

#### **Visit Three Team Assessment:**

Evidence of an understanding of structural systems was found in the coursework for Concept of Structure: ARCH 211, Structure I: ARCH 341, and Structure II: ARCH 342. Evidence was also found in the lectures and project work in Design IV: ARCH 302. Continued and consistent evidence was found in every subsequent studio sequence as well.

B.10. Building Envelope Systems: *Understanding* of the basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

[X] Met

#### **Visit Three Team Assessment:**

This criterion is now **Met**. Construction Systems and Assemblies: ARCH 321 covered most of the elements required in this SPC. Issues concerning building envelope systems and aesthetics were covered in Design X: ARCH 502 (Comprehensive Design Studio).

B.11. Building Service Systems Integration: *Understanding* of the basic principles and appropriate application and performance of building service systems such as plumbing, electrical, vertical transportation, security, and fire protection systems

[X] Met

#### **Visit Three Team Assessment:**

Evidence of understanding at an advanced level was found in the coursework for Environmental Control Systems II: ARCH 322.

B.12. Building Materials and Assemblies Integration: *Understanding* of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.

[X] Met

#### **Visit Three Team Assessment:**

This criterion is now **Met**. Evidence of understanding at an advanced level was found in the coursework for Construction Systems and Materials: ARCH 212 and Construction Systems and Assemblies: ARCH 321.

**Realm B. General Team Commentary:** The technical aspects of design, systems, and materials throughout the SPC of Realm B constitute a strength of the program, which gives its graduates an advanced level of competency in these areas that is not commonly found. In several instances, the program goes well beyond the required level of "understanding" and reaches an "ability" level, even though an ability level is not required of the criterion.

#### Realm C: Leadership and Practice:

Architects need to manage, advocate, and act legally, ethically and critically for the good of the client, society and the public. This includes collaboration, business, and leadership skills. Student learning aspirations include:

- · Knowing societal and professional responsibilities
- · Comprehending the business of building.
- Collaborating and negotiating with clients and consultants in the design process.
- Discerning the diverse roles of architects and those in related disciplines.
- Integrating community service into the practice of architecture.
- C.1. Collaboration: *Ability* to work in collaboration with others and in multi-disciplinary teams to successfully complete design projects.

#### [X] Not Met

#### **Visit Three Team Assessment:**

Only partial evidence of collaboration was found on the part of some students in participation in competitions or in the International Urban Design and Landscape Architecture workshop. Not all students gain experience in collaboration, nor is it embedded as a required part of the curriculum.

C.2. Human Behavior: *Understanding* of the relationship between human behavior, the natural environment and the design of the built environment.

#### [X] Met

#### **Visit Three Team Assessment:**

Evidence was found in Housing and Settlement: ARCH 411 and Design VIII: ARCH 402. Design X: ARCH 502 (Comprehensive Design Studio) also showed substantial understanding of the interaction between users and buildings.

C.3. Client Role in Architecture: *Understanding* of the responsibility of the architect to elicit, understand, and reconcile the needs of the client, owner, user groups, and the public and community domains.

#### [X] Met

#### **Visit Three Team Assessment:**

This criterion, which was not met at the time of Visit Two, is now **Met**. Evidence of student understanding of the client role in architecture was found in the coursework for Professional Practice: ARCH 512. There was also evidence that the criterion has been included in the work of various studios through the incorporation of "real" projects that require interaction with potential clients and the planning commissions that have oversight of the projects.

C.4. Project Management: *Understanding* of the methods for competing for commissions, selecting consultants and assembling teams, and recommending project delivery methods

#### [X] Met

#### **Visit Three Team Assessment:**

This criterion is **Met with Distinction**. Evidence of student understanding of this criterion was found in the coursework for Project Management: ARCH 442.

C.5. Practice Management: *Understanding* of the basic principles of architectural practice management such as financial management and business planning, time management, risk management, mediation and arbitration, and recognizing trends that affect practice.

[X] Met

#### **Visit Three Team Assessment:**

This criterion is **Met with Distinction**. Evidence was found in Project Management: ARCH 442 and Professional Practice: ARCH 512. The program is to be commended for its diligent approach to, and the structure in, the two courses, which allow for a much more thorough and in-depth study of practice and project management. Of note was the in-depth approach to resource management with regard to funding, and profitability monitoring and analysis; risk management; and time management. Marginal evidence was found for mediation and arbitration, but just enough to satisfy the criterion.

C.6. Leadership: *Understanding* of the techniques and skills architects use to work collaboratively in the building design and construction process and on environmental, social, and aesthetic issues in their communities.

[X] Met

#### **Visit Three Team Assessment:**

This criterion is now **Met**. Evidence was found in Project Management: ARCH 442, which satisfies all aspects of this criterion.

C.7. Legal Responsibilities: *Understanding* of the architect's responsibility to the public and the client as determined by registration law, building codes and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulation, and historic preservation and accessibility laws.

[X] Met

#### **Visit Three Team Assessment:**

This criterion, which was not met at the time of Visit Two, is now **Met**. Evidence of an understanding of these responsibilities was found in the coursework for Professional Practice: ARCH 512. Students reviewed, and were made familiar with, all forms of contracts that are applicable to, and in use by, the profession locally.

C.8. Ethics and Professional Judgment: *Understanding* of the ethical issues involved in the formation of professional judgment regarding social, political and cultural issues, and responsibility in architectural design and practice.

[X] Met

#### **Visit Three Team Assessment:**

This criterion, which was not met at the time of Visit Two, is now **Met**. Evidence of an understanding of these issues was found in the coursework for Professional Practice: ARCH 512. Students were provided with a thorough review of the various ethical standards in use locally and the global standards, such as those published by the International Union of Architects (UIA) and other organizations.

C.9. Community and Social Responsibility: *Understanding* of the architect's responsibility to work in the public interest, to respect historic resources, and to improve the quality of life for local and global neighbors.

[X] Met

#### **Visit Three Team Assessment:**

Evidence was found in Contemporary Issues: ARCH 521, Housing and Settlement: ARCH 411, and Design X: ARCH 502 (Comprehensive Design Studio). Evidence of the program's community and social engagement was found throughout the curriculum.

**Realm C. General Team Commentary**: The program does an excellent job of preparing students for the work included in this realm. It dedicates additional coursework to critical areas, such as the coursework in Project Management: ARCH 442, which provides a more specific look at these critical skills, including scheduling, estimating, and project financing.

#### PART TWO (II): SECTION 2—CURRICULAR FRAMEWORK

**II.2.1 National Authorization**: 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 federal ministry or other type of agency.

#### [X] Met

#### **Visit Three Team Assessment:**

Evidence of the National Commission for Academic Accreditation and Assessment (NCAAA) accreditation was outlined in the APR (page 75) and affirmed during interviews.

**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. This includes a curricular requirement that substantially equivalent degree programs must include general studies, professional studies, and electives.

Curricular requirements are defined as follows:

General Studies. A professional degree program must include general studies in the arts, humanities, and sciences, either as an admission requirement or as part of the curriculum. It must ensure that students have the prerequisite general studies to undertake professional studies. The curriculum leading to the architecture degree must include a course of study comparable to 1.5 years of study or 30% of the total number of credits for an undergraduate degree. These courses must be outside architectural studies either as general studies or as electives with content other than architecture.

This requirement must be met at the university or tertiary school level. Post-secondary education cannot be used to meet this requirement. At least 20% of the credits in the professional architecture degree must be outside architectural studies either as general studies or as electives with other than architectural content.

- Professional Studies. The core of a professional degree program consists of the required courses that satisfy the NAAB Student Performance Criteria (SPC). The professional degree program has the discretion to require additional courses including electives to address its mission or institutional context.
- **Electives.** A professional degree program must allow students to pursue their special interests. The curriculum must be flexible enough to allow students to complete minors or develop areas of concentration, inside or outside the program.

#### [X] Met

Visit Three Team Assessment: The architecture curriculum of the University of Dammam is delivered in three segments: the first year is the preparatory program covering general studies (33 credits); the second year is a joint program covering common basic design subjects (33 credits); the third through the fifth years cover professional studies (103 credits). Electives are available during the fourth and fifth years (12 credits). Curriculum balance by percentage is general studies 20% and professional studies 80% (of which electives are 7%). We did not count Humanities I: ARCH 352 and Humanities II: ARCH 422 as general studies, but rather as professional studies, given their content (taught within the architecture program).

#### II.2.3 Curriculum Review and Development

The program must describe the process by which the curriculum for the substantially equivalent degree program is evaluated and how modifications (e.g., changes or additions) are identified, developed,

approved, and implemented. Further, the NAAB expects that programs are evaluating curricula with a view toward the advancement of the discipline and toward ensuring that students are exposed to current issues in practice. Therefore, the program must demonstrate that architects authorized to practice in the country where the program is located are included in the curriculum review and development process.

### [X] Met

# **Visit Three Team Assessment:**

Evidence of a very healthy and proactive approach to curriculum review and development was found during team reviews with the administration, faculty, and students, and was demonstrated in the APR (page 78). Architects have been regularly involved in the development of the program. When the team questioned the faculty and the students, it was readily apparent that all of them are aware of, and most of them have been involved in, a very open and transparent manner with respect to curriculum review and development.

#### PART TWO (II): SECTION 3—EVALUATION OF PREPARATORY/PREPROFESSIONAL EDUCATION

Because of the expectation that all graduates meet the SPC (see Part Two, Section 1, above), the program must demonstrate that it is thorough in the evaluation of the preparatory education of individuals admitted to the NAAB substantially equivalent degree program.

In the event a program relies on the preparatory educational experience to ensure that 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. Likewise, the program must demonstrate it has determined how any gaps will be addressed during each student's progress through the substantially equivalent degree program. This assessment should be documented in a student's admission and advising files.

#### [X] Met

#### **Visit Three Team Assessment:**

As noted during Visit Two, students entering the program have little background in visual arts. Accordingly, the program carefully reviews incoming students' academic records, and then requires rigorous "catch-up" design courses for the first 2 academic years prior to determining whether students will head to architecture, landscape, or another discipline within the college. This leads to a third-year threshold admission review for the upper years of the program. All NAAB SPC are met within the University of Dammam curriculum; therefore, evaluations regarding the SPC are made at the admissions level.

#### PART TWO (II): SECTION 4—PUBLIC INFORMATION

#### 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 NAAB Conditions for Substantial Equivalency, *Appendix 6*.

#### [X] Met

#### **Visit Three Team Assessment:**

This condition is now **Met**. The exact language, as required, is posted in Arabic and English on the program's website:

http://www.uod.edu.sa/en/colleges/college-of-architecture-and-planning/accreditation

#### II.4.2 Access to NAAB Conditions and Procedures

In order to assist parents, students, and others as they seek to develop an understanding of the body of knowledge and skills that constitute a professional education in architecture, the school must make the following documents available to all students, parents, and faculty:

The 2012 NAAB Conditions for Substantial Equivalency

The NAAB Procedures for Substantial Equivalency (edition currently in effect)

#### [X] Met

#### **Visit Three Team Assessment:**

The team confirmed that the information was provided using the links to the 2012 NAAB Conditions for Substantial Equivalency and the 2013 NAAB Procedures for Substantial Equivalency on the Department of Architecture's website:

http://www.uod.edu.sa/en/colleges/college-of-architecture-and-planning/accreditation

#### **II.4.3 Access to Career Development Information**

In order to assist students, parents, and others as they seek to develop an understanding of the larger context for architecture education and the career pathways available to graduates of substantially equivalent degree programs, the program must make appropriate resources related to a career in architecture available to all students, parents, staff, and faculty. It is further worth commending the University on its commitment to a data driven dashboard system within the newly created Decision Support Center. This well designed system provides real time information on statics and data for both current systems and alumni, helping to use information to inform career choices or connect with alumni.

#### [X] Met

#### **Visit Three Team Assessment:**

The program informs students of their career options and pathways through the personal counseling center. In addition, connections are made for students with alumni in local firms, who can act as their mentors. The Professional Training Program, a required summer internship experience, provides an opportunity for students to connect with local practitioners in order to become aware of the jobs that might be available to a graduate of the program. Career counseling and information is also available through web-based resources on the University of Dammam website. The counseling center continues to offer services to alumni after graduation.

#### II.4.4 Public Access to APRs and VTRs

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 APR

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

These documents must be housed together and accessible to all. Programs are encouraged to make these documents available electronically from their web sites.

#### [X] Met

#### **Visit Three Team Assessment:**

This condition is now **Met**. The team found that the required access to APRs and VTRs was provided publicly on the following webpage:

http://www.uod.edu.sa/en/colleges/college-of-architecture-and-planning/accreditation

# III. Appendices

# **Appendix 1. Program Information**

A. History and Mission of the Institution and the Program

University of Dammam, APR, page 1

B. Long-Range Planning

University of Dammam, APR, page 20

C. Self-Assessment

University of Dammam, APR, page 22

# **Appendix 2. Conditions Met with Distinction**

# I.3.2 Faculty Credentials

#### **II.1.1 Student Performance Criteria**

- A.2. Design Thinking Skills
- A.5. Investigative Skills
- A.7. Use of Precedents A.11. Applied Research
- B.1. Pre-Design
- C.4. Project Management C.5. Practice Management

#### **Appendix 3. Visiting Team**

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#### **Report Signatures** IV.

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