

National Architectural Accrediting Board, Inc.

9 December 2012

MEMORANDUM FOR NATIONAL ARCHITECTURAL ACCREDITING BOARD

FROM: Michael Broshar, FAIA

RE: **Substantial Equivalency Visit One: B. Arch., University of Dammam**

In May of 2012, in a letter from Dr. Abdulla bin Muhammad Al-Rubaish, Rector of the University of Dammam, announced their intention to seek substantial equivalency for the Bachelor of Architecture Degree program at the College of Architecture and Planning.

The NAAB and University of Dammam agreed to conduct Visit One on 26-27 November 2012. The visit was completed by NAAB past director Michael Broshar, FAIA.

The purpose of visit one is to explain the *NAAB Conditions for Substantial Equivalency* and the *NAAB Procedures for Substantial Equivalency*, to confirm the standing of the school in the local community, and to see the physical arrangements for the program and for any visiting team.

Information on the university and college can be found at:

www.ud.edu.sa

http://www.ud.edu.sa/DU/en/colleges/col_engineering/col_ap/index.htm

1. A REVIEW OF THE RESOURCES COMMITTED TO THE PROGRAM

Historical Background and National Significance

History of the University:

King Faisal University was founded in 1975/1395H under the auspices of His Majesty King Khalid Bin Abdul Aziz per Royal Decree No. H/67, dated August 1975, following the Council of Ministers Ordinance No. 1964/20/11/1394. The university was named and officially inaugurated by the King on May 24, 1977, nearly two and one-half years after the starting date of studies. The Dammam campus initially comprised two colleges: the College of Medicine and the College of Architecture and Planning, as well as three centers (English Language, Computer, and Publication and Translation). The Dammam campus was established in the coastal area of Al-Rakah, situated between Dammam and Khobar. The main campus of King Faisal University was established in Al-Hassa. As the university grew, other colleges were established: The College of Applied Medical Sciences in 1995; the College of Dentistry in 2001; the College of Applied Studies and Community Services in 2003; and the College of Nursing, also in 2003. Satellite campuses (including new facilities currently under construction) were also established in Qatif, Jubail, and Khafji.

Later, Royal Decree No. A/18/1. Dated 15/9/1430H (2010) separated King Faisal University into two independent universities. Today, the University of Dammam covers six cities: Dammam, Jubail, Khafji, Khobar, Nu'Airiya, and Qatif. The university consists of 24 colleges, 123 departments, 1,414 faculty members, and 24,950 students.

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A new campus is being constructed across the Coastal Road (King Faisal Road) from the current Dammam campus. The campus will include a major medical school facility, an administrative building, a library, a mosque, and a new building for the College of Architecture and Design. Future phases of the campus construction will include student support facilities including athletic facilities, food service, and residential facilities. The new administrative center for the university is already complete and occupied, and it is anticipated that the new building for the college of Architecture and Design will be occupied in the Winter of 2013.

The University Council assumes responsibilities for the operation of the scientific, administrative and financial affairs, and application of General Policies of Universities in accordance with its Rules & By Laws. Its functions and duties are as detailed in the regulations. The first session of UoD Council was held on 10/1/1431H (27/12/2009G) in the Conference Room of His Excellency the President. The Council consists of the Minister of Higher Education, who serves as chair and the University President (Rector) as Vice Chairman. Members include the General Secretary of the Higher Education Council, the Vice Presidents of the university, and the deans of the colleges and supporting deanships.

History of the Program:

The College of Architecture and Planning began at the Al-Dammam campus of King Faisal University in the year 1395H/1975, with an enrollment of 60 students and total teaching staff of 20. It was the first college of architecture and planning established in the Kingdom of Saudi Arabia to prepare qualified scientific and professional graduates who would be specialists in the fields of architecture, engineering and the built environment. Enrollment increased to 200 students in the 1977-1978 academic year.

The Department of Architecture, upon its formation, awarded a Bachelor of Science degree in Architecture. The philosophy of education in this section has been based on a number of principles, such as commitment to architectural and design values to create the appropriate environment for creativity and innovation. It has also concentrated on the development of design skills of students and the development of methods of communications with a special focus on technical sciences and professional training. This is achieved through teaching a range of courses on design, construction, theories of architecture and engineering science, and by implementing the local environmental, economic, and social characteristics in the curriculum. The Department of Architecture also grants a postgraduate degree, which is a Master's of Science in Architecture.

Separate departments were created in 1976. These included departments of:

- Architecture
- Urban & Regional Planning
- Building Technology & Construction
- Engineering Sciences
- Math/Science/Computer Science (established as a service department)
- Landscape Architecture
- Interior Design

The curriculum was structured with an initial 3-year degree program culminating in a Bachelor of Architecture & Planning, followed by a 2-year Field Concentration in five

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areas: Architecture; Urban & Regional Planning; Engineering & Technology; Landscape Architecture; and Interior Design.

In 1981 the Interior Design department for female students was added. The degree program for the Bachelor of Interior Design began in 1982 with the admission of 29 female students. The degree program in Interior Architecture was the first program of its kind for female students in the region. In 1984/1404H the College of Architecture & Planning underwent a significant restructuring, based in part on the Integrated Program developed at Rice University in Houston, Texas, USA. The intent of this restructuring was fourfold:

- To introduce integration between all specialties in the college with greater emphasis on technology;
- To provide a strong base at the undergraduate level leading to more specialization at the graduate level;
- To provide a strong base in English Language for one full semester and extending the program to 5.5 years; and
- To provide opportunities for female students in the professions of interior design and interior architecture.

This restructuring resulted in consolidation of the departments of the college to five:

- Architecture
- Urban & Regional Planning
- Building Sciences & Technology
- Landscape Architecture
- Interior Design (Female)

In conjunction with this restructuring, the curriculum and degree options were also restructured over a five-year period (1984-1988). Undergraduate programs led to a Bachelor of Architecture & Planning and a Bachelor of Interior Design, attained over a course of study of 5.5 years. These were followed by graduate programs for a Master of Architecture, Master of Urban & Regional Planning, Master of Engineering & Technology, and a Master of Landscape Architecture.

The next evolution in the programs of the college was achieved in 1989/1409H, at which time the single Bachelor of Architecture program was branched into five separate degree programs to give individual departments more autonomy. The aims and philosophy of this restructuring were:

- To provide greater autonomy for each department to develop its own undergraduate program;
- To revise graduate programs to minimize the preparatory courses, thus reducing requirements and duration of study;
- To meet market demands for other professions at the undergraduate level; and
- To modify the female interior design program to include arts courses.

The resulting degrees were:

- Bachelor of Architecture & Planning
- Bachelor of Urban & Regional Planning

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- Bachelor of Landscape Architecture
- Bachelor of Interior Design, and
- Bachelor of Building Engineering

Undergraduate studies began with shared coursework in general education in the first two years, as well as some shared design courses in the second year, and model that has continued to this day. The 5-year undergraduate programs were also followed by the same options for 2-year graduate masters programs.

The Bachelor of Interior Design (Female) was temporarily closed in 1988 and reopened in 1994 with the inclusion of art courses.

The years from 1996 through 2005 saw much in the way of modifications and alterations that furthered the capabilities of the program without reshaping the vision of the college. These included the introduction of automation (digital presentation and smart classroom technology) in most courses including design studios. Some degree and department names were changed in response to challenges faced by some graduates seeking public sector positions. This included a diploma program in Fire Safety, added in 2005. The college also provided opportunities for designers and university staff (lecturers and teaching assistants) to obtain a doctorate in Urban & Regional Planning.

In 2006, the College of Architecture & Planning began a reassessment that has shaped today's program. One of the most significant changes was to create a separate College of Engineering and a College of Design for Female, both of which were planned to grow to encompass separate departments. Other initiatives have worked towards obtaining local and international recognition, increasing the autonomy of the departments while retaining the integrated concept of the first two years of study, establishing joint programs with other colleges within the university (especially the medical colleges), maximizing the role of the college in the community and maximizing cooperation with the government and private sectors (with a focus on acquiring projects and research).

The most recent restructuring and evolution of the program took place in 2009 as an outcome of the work of the "Review and Preparation Committee of the Proposed Bachelor Program of The College of Architecture and Planning." This brought about the current 3-step format: 1) the first year preparatory year including general education and spanning other colleges of the university; 2) second year joint program, with other departments within the College of Architecture & Planning; and 3) the three-year program in each department leading to the professional undergraduate degree. In this evolutionary change, the Second Year was designed to unify all five departments of the college.

The outline of this program is perhaps best described by reference to the report of the committee of June 24, 2009/1430H:

— *The College awards Bachelor degree in the above mentioned five disciplines to students who complete 165 credit hours and did the professional practice training as well.*

— *At the beginning of the study at the College, in the Preparatory Year, the freshmen students are given intensive teaching in English language, scientific research, learning methods and computer applications. They are also given basic design skills. This would enhance their scientific and professional skills and prepare them to efficiently*

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utilize specialist scientific references and keep pace and be updated with the scientific advances in the architecture field.

— In the second year, which is common to all the five departments, students continue completing the architectural and engineering knowledge and skills which represent the basic foundation before they join any department.

— After the completion of the second year, every student selects one of the five departments where he studies for three more years before he is awarded his final B.Sc. Degree in the one specific field of the five fields of the college. (The degree terminology in use in the Kingdom of Saudi Arabia for the professional architecture degree is Bachelor of Science in Architecture [B.Sc.]. In practice, this is equivalent to a Bachelor of Architecture. All architects in the KSA call themselves Engineer, and Architecture is a part of the Engineering Committee, the national body that validates degrees and professions.)

During the second year, the program focuses on “*shared courses between the departments of the College that are necessary for all students. These courses include site planning, design methods, drafting skills, construction and building concepts, basic and advanced computer applications in architecture and urban design, and geographic information systems (GIS).*”

The Joint Year (Second Year) is the pivotal point in the career of a student pursuing an architectural degree at the University of Dammam. This program allows students an opportunity to develop awareness of the disciplines of each of the five departments and to make informed choices that suit their needs and aspirations. Admission to the final three years of the architectural degree program is highly selective, requiring a minimum GPA of 3.0 and the satisfaction of other conditions set by the Council of the College of Architecture and Planning.

Today, The College of Architecture and Planning in Al Dammam comprises five departments: Architecture; Urban and Regional Planning, Building Technology; Landscape Architecture; and Interior Architecture. Students working towards the Bachelor of Architecture degree begin in the first two years in shared general education study and some shared design courses. At the conclusion of the second year, a number of students are admitted to continue in the architectural degree program. The final three years encompass the design studio sequence and architectural and related coursework.

The College maintains strong resources for research in all departments, and this will be further enhanced when the programs move to the new college building on the new campus in early 2013. The new building will also offer an exceptional technology and connectivity infrastructure. The Interior Architecture (Female) program is programmed to relocate to the current facilities of the College of Architecture & Planning

Mission and Vision of the Program

Vision:

The College seeks to provide distinguished and high quality education in the field of planning, design and construction of a sustainable built and urban environment and to promote scientific research and community service.

Mission:

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The College is committed to educate and prepare specialists who are able to professionally practice architecture, urban design, and to conduct scientific research. This education will prepare graduates to keep pace with rapid developments in the profession and to serve the community.

Objectives:

In order to carry out its vision and mission, the College of Architecture and Planning has the following objectives:

1. To provide the best ingredients of the educational process, composed of highly qualified human resources of staff and tutors, curricula, educational plans and methods, an ideal teaching environment, and advanced computer resources;
2. To provide students with sound preparation professionally, scientifically, and ethically, taking into account diversity and comprehensiveness when establishing the curriculum. The goal of this curriculum will be to achieve a correct balance between theory and practice;
3. To prepare qualified graduates from various architectural and engineering disciplines to pursue postgraduate studies in order to be more specialized and to be highly qualified to practice in the architectural profession and the field of building construction, and to work in various academic fields such as scientific research, development management, and other areas of expertise;
4. To help students to gain mastery of various graphic, research, and representative skills, including skills in digital technology to enable them in project design and the preparation of scientific and technical reports;
5. To increase students' awareness about the environment and renewable energy resources;
6. To enhance students' ability to assess the potential environmental impacts of policies and programs and to sharpen their research skills through the use of statistical and analytical methods; and
7. To contribute to the formation of students as scholars and to develop their leadership, organizational, and administrative capabilities.

A review of statistics assembled by the KSA Ministry of Labor in the recent past sheds light on the situation with respect to architectural education in the Kingdom of Saudi Arabia. As indicated early in this Overview, architects are considered a part of the engineering profession, although separate statistics are kept. In the year 2005(1425H) the Ministry of Labor identified a total of 9,023 architects practicing in the KSA. Of this number, only 960, or 10.6% were Saudis. Among all categories of Engineering, the Saudi total was only 10,883 of 114,257, or 9.5%.

Based on this and other evidence, there is a strong ongoing need for well-educated architects and engineers in the future to meet a growing demand. The goal of the national Engineering Committee is to reach a goal of Saudi architects of 30% of the total practicing within the KSA. The College of Architecture & Planning of the University of Dammam must play a strong role if this goal is to be reached. Total enrollment in the Department of Architecture in 2006 was 788 in the B. Arch program plus 90 in postgraduate Masters degree programs, and this will continue to grow as the college moves into its new quarters in 2013. The University of Dammam in 2004 awarded 32.7% of the architectural degrees in the KSA for that year (among five universities) and must bear a key responsibility in the growth of professional architectural education. The vision, mission, and objectives of the program have been developed to enable the University of Dammam to play its part in leadership towards and the achievement of this overall goal.

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Degrees

The Bachelor of Architecture program is 170 credit hours and is taken over a five-year (ten semesters) period. Total credit hours include 33 in preparatory courses, 34 in joint (combined 2nd year), and 103 in departmental courses.

Administration

The College of Engineering is one of four colleges that comprise the University of Dammam facilities at Dammam. The architecture program was established with the opening of the Dammam Campus in 1975, and was originally a separate campus of King Faisal University. In 2010, the university was split and the Dammam campus was renamed the University of Dammam.

The College of Architecture and Urban Planning is one of three colleges within the College of Engineering. In addition to the College of Architecture and Planning, the Colleges of Engineering and Design comprise the College of Engineering. The College has five departments: Architecture, Urban and Regional Planning, Building Technology, Landscape Architecture, and Interior Architecture. Each department has a chairperson. The College of Architecture and Planning awards two architecture degrees; a Bachelor of Architecture, and a Masters of Architecture.

Faculty

The faculty demonstrated they are strongly engaged in the teaching of architecture to the students, and are very interested in their personal success as well. The College has 24 faculty, comprised of 6 professors, 5 associate professors, 12 assistant professors, and 1 lecturer. Nineteen faculty members hold doctorate degrees. The faculty/student ratio is approximately 1 to 15 in the second year combined studios and is 1 to 8 in the dedicated third through fifth year studios. Nearly all of the faculty hold PhDs, which have been obtained from a variety of institutions in Europe, Asia, and the U.S. The program chair noted their goal is to maintain a minimum of 30% of the faculty coming from outside of Saudi Arabia. They are also developing and have received approval to use a sharing program with other universities outside the country to increase the breadth of experience offered in instruction of the students.

Physical Resources

The program is housed in facilities which include the architecture building, student center, restaurant and library. The architecture building houses two lecture halls, administrative and faculty office spaces, design studios, classrooms, labs (materials, acoustic, lighting, environment), computer labs and a model-making shop. Jury space is provided in an atrium that is the organizing space for the building.

Printing services for students are provided in the student center adjacent to the architecture building, and the university library is directly across the street from the college.

The existing university facilities date from the mid-1970s and were originally intended as temporary structures, although the construction is of good quality. The new building for the College is nearing completion, and they are anticipating a move to the new campus before the start of the next semester. The new building is part of a replacement campus for the university, and a new library has been constructed adjacent to the CAP building that will house the architecture collection. Significant expansion in studio space and labs is being provided in the new structure. Physical facilities will be sufficient to support the program.

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Financial Resources

Substantial government support is provided to the university and to the college. Significant investments in new infrastructure are being made with the move to the new facilities, and current labs and studios are well-equipped. Financial support of the college and the architecture program appears to be more than adequate. In addition, alumni provide a high level of financial support for special programs developed by students.

Human Resources

Staff support for administration of the program is adequate. Faculty members are provided opportunities to attend workshops and conferences outside of Saudi Arabia on an annual basis. In addition, the college sponsors conferences for the development of faculty and students. An international conference on biomimicry and sustainability took place concurrently with my visit, and attracted leaders in sustainable design from around the world. Faculty and students are provided opportunities to organize and host design-focused workshops with visiting architects providing lectures and workshops. Exhibits demonstrating the results of these workshops were prevalent throughout the halls of the school.

Information Resources

Information resources are housed in the library adjacent to the existing CAP building, and will be moving to a new library facility adjacent to the new structure. The architecture and planning collection is substantial. Visual resources are extensive and are available to faculty and students through an online database.

2. COMMITMENT OF THE INSTITUTION TO ACHIEVING THE DESIGNATION

The dean and vice rector enthusiastically support the program seeking substantial equivalency. The vice rector previously served as the dean over an extended time period and views this as a natural next step in advancing the stature and quality of the program.

The Bachelor of Architecture program has been developed with the aid of several U.S. educators over time. The current curriculum is being modeled to align with the NAAB Conditions and Procedures. I found, through discussions with faculty, students, and leadership, a strong awareness of the process for obtaining substantial equivalency and an understanding of the Student Performance Criteria. The faculty has begun development of the matrix tracking all SPCs through the curriculum.

3. ASSESSMENT OF THE READINESS OF THE PROGRAM TO COMPLETE VISIT TWO

The faculty members given responsibility for development of the Architecture Program Report have begun its development. Throughout the visit, the faculty and leadership exhibited an understanding of the substantial equivalency process and have modeled their program after the Conditions and Procedures for a U.S. accredited program. Students, faculty, and alumni were consistent in communicating their pride in the program and their confidence in its future. Students have a strong connection with the faculty, and this connection continues beyond their graduation.

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The SE visit one to the University of Dammam is complete.

- The program is supported by the university administration and the college.
- The program has a full complement of faculty and staff, with appropriate development to ensure the success of the program.
- There is a demand for architectural education, and the number of students applying continues to exceed the number that can be accepted.
- The program has an understanding of the SE Conditions and Procedures, to ensure an understanding of the process and expectations going forward.

Acknowledgments

I would like to express my appreciation to the faculty, staff, students and administrators who met with me during my visit, and for their candid assessment of their program in their discussions with me. I enjoyed the opportunity to meet with so many people during the visit, and I had a great experience.

I would particularly like to thank Dr. Abdulaziz Al-Saati, Vice Rector, University of Dammam; Dr. Abdulsalam Al-Sudairi, Dean, College of Architecture and Planning; Dr. Ibrahim Al-Naimi, Chairman, Department of Architecture; Dr. Egal Jofi for hosting the dinner with the alumni; and Dr. Iftexhar Khan; NAAB Committee Chair, and all of the faculty and student leaders who gave of their time and efforts during my visit. I would like to offer my gratitude to Dr. Khan and Yousef Al-Ohali for providing me transportation, waiting patiently while I negotiated Customs, and providing a very nice tour of the region.

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Attachments

- Visit One Schedule

NAAB (National Architectural Accrediting Board)

VISIT ONE November 26 and 27, 2012.

Reviewer: Michael Broshar FAIA

Agenda for working visit to the University of Dammam, College of Architecture and Planning, Nov. 26-27, 2012

Day 1: November 26, 2012/1433

- 9:00 Travel to University of Dammam campus

- Greetings and introductory meeting with Program Administrators:
 - Chair, Department of Architecture
 - Accreditation Committee
 - Courtesy meeting with the Dean, College of Architecture

- 10:00 Tour of the College
 - New Campus and facilities.
 - Courtesy call, Rector of the University. (to be arranged)
 - Meeting with the Vice-Rector, Dr. Abdulaziz Al-Saati

- 12:00 Working Lunch with the Chairman and senior faculties.

- 1:00 Meeting with Faculties in Majlis.
 - Introduction and presentation on the College.
 - Presentation by the Dean.
 - Presentation on NAAB process by Reviewer
 - Question-answer session.

- 4:00 Meeting with the Accreditation committee

- 5:00 Return to hotel

- 8:00 Dinner with the Leadership or Alumni

Day 2: November 27, 2012/1433

- 9:00 Travel to University, tour of existing campus and facilities; labs, library etc.
- 9:30 Visit Design Studios and students' exhibition.
(note: Design studios are on Saturdays and Tuesdays)
- 12:00 Working lunch with accrediting committee.
Discussions on NAAB requirements
APR issues.
- 1:00: Meeting the students leadership in lecture hall.
- Work in Office
- Farewell Dinner and return to hotel

Day 3: November, 2012/1433 (Not part of the formal agenda)

- 9:00 Sightseeing, visit the old town of Hofuf and surroundings, port of Uqair.
 - 12:00 Lunch
 - 4:00 Checkout and drive to the airport
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