The Hashemite University
Faculty of Engineering, Department of Architectural Engineering
Zarqa, Jordan

2020 Visiting Team Report
Visit Two for NAAB International Certification
14–16 December 2020

Bachelor of Science in Architectural Engineering (5 years, 172 credit hours)

The National Architectural Accrediting Board

Date of Visit One: 06–07 November 2019

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

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

Contents

I. Summary of Visit

a. Acknowledgments and Observations

The NAAB visiting team wishes to thank the entire Department of Architectural Engineering, the Faculty of Engineering and the HU community for their hospitality and warm welcome exhibited during our virtual visit. Chairman of the Department of Architectural Engineering Dr Ahmad Alhusban has been a gracious host and has been available to the team before and during our visit. His continuous engagement is an expression of his commitment to the department, the university, and the students. President of the Hashemite University Professor Fawwaz Al-Abed Al-Haq and Dean of Academic Development and Outreach Professor Adnan Abu Surra were very gracious with their time and helped the team understand the current status of the department and the future aspirations for its growth and development. Dean of the Faculty of Engineering Professor Awni Itradat also assisted the team by sharing his views on the department and its growing importance. All the faculty and students we met have been open and responsive to our many questions and willingly shared their views. Lastly, we wish to thank Mr. Murad Albawaleez and Dr Shatha Abu Khafajah for their time and patience while assisting us in our review of the department's financial status. Collectively you all responded to our every need during the visit.

Dr. Ahmad Alhusban and his team did an excellent job developing the materials we utilized while preparing for our visit. The Program Self-Evaluation Report was well written and presented a detailed accounting of the department's make-up, personnel, operations, and resources. The HU tour video provided a comprehensive introduction and overview of the campus along with a detailed tour of the department's building and related facilities. And, the digital files of student work products and coursework were well organized and annotated. The quality of these materials facilitated the team's quick understanding of the department, making our task easier to complete and more enjoyable.

It was clear to the visiting team that the faculty are collegial and work well together. They support the department's "learn by doing" philosophy and willingly devote the time and energy needed to implement this strategy. They hold a positive vision of the department and work with both administration and students in their efforts to enhance the quality of all aspects of the program.

Unfortunately, the visiting team was only able to spend time with a limited number of students. We found those we were able to meet to be open and thoughtful in their comments and wish we would have had the opportunity to interact with many more. Their positive assessment of the program and the opportunity it provides helped the team gain useful insight into the department's structure and operation.

The Department of Architectural Engineering's new building along with the adjacent laboratories and facilities available to the students are a great resource for the department. These facilities enable the department to provide the students with the latest tools and resources to support the curriculum and aid the students in pushing the boundaries of their learning. The department also benefits from the faculty, courses and facilities of the Faculty of Engineering which add support to the department's in-depth, hands-on approach to teaching the technical aspects of the curriculum.

During the last year, the university, the department and the students have fashioned an evolving strategy to deal with the ever-changing requirements and restrictions brought on by the COVID-19 pandemic. At its onset, the department moved quickly to an on-line model. However, as the technological challenges and educational limitations of this approach have come to light, several alternative, hybrid approaches which reinstate limited "hands-on" learning are being studied and will be implemented, based on the latest government direction, in the coming semester.

As a part of the department's evolution, it is anticipated that a proposal to remove the department from the Faculty of Engineering and create a new Faculty of Architecture and Interior Design will be presented to the administration within the next six months. If accepted, detailed planning will begin with eventual establishment of the new Faculty in the 2023 timeframe.

Over its 25-year history, HU has become one of Jordan's leading universities. The university's comprehensive environmental management program has enabled it build a strong fiscal and financial base, provide learning opportunities for its students, and act as an example for the nation. During the last 15 years the Department of Architectural Engineering has established itself as an essential and important member of the HU community and is well positioned to continue to educate quality professionals who will contribute to the growth and prosperity of the community and the nation.

b. Conditions Not Achieved

Not Met	Not Yet Met/In Progress	Not Applicable/Not Applicable to Visit Two
I.2.4 Information Resources **B.3** Codes and Regulations **B.10** Financial Considerations **C.3** Integrative Design **D.1** Stakeholder Roles in Architecture **D.2** Project Management		*Not Applicable*: **Part II, Section 3**: Evaluation of Preparatory Education **II.4.5** Admissions and Advising *Not Applicable to Visit Two*: **II.4.1** Statement on International Certification Degrees **II.4.2** Access to Conditions and Procedures for NAAB ICert **II.4.4** Public Access to Program Self-Evaluation Reports and Visiting Team Reports

c. Items to Address

1. I.2.1 Human Resources and Human Resource Development – The team has some concern that the number of tenured and tenure-track faculty is relatively low compared to the overall faculty and instructional needs of the program, especially as the program seeks to grow and create additional programs within the department.

2. II.2.2 Professional Degrees and Curriculum – The team found evidence of General Studies courses in the PSER but was concerned about the number of credits in this area as well as the way the courses were heavily weighted toward math and science courses rather than a balance with humanities.

3. D.4 Legal Responsibilities – While the team found evidence of detailed instruction regarding legal and contractual roles and responsibilities during the construction process, there was limited instruction regarding the architect's legal responsibilities during the design phase of projects. Clarification of local legal requirements and practices in this realm would be helpful in better understanding and judging the instruction being provided.

II. COMPLIANCE WITH THE 2019 CONDITIONS FOR NAAB INTERNATIONAL CERTIFICATION

Part One: Institutional Support and Commitment to Continuous Improvement
This part addresses the commitment of the institution, and its faculty, staff, and students to the development and evolution of the program over time.

Part One (I): Section 1—Identity and Self-Assessment

I.1.1 History and Mission: The program must describe its history, mission, and culture and how that history, mission, and culture shape the program's pedagogy and development.

- Programs that exist within a larger educational institution must also describe the history and mission of the institution and how that shapes or influences the program.
- The program must describe its active role and relationship within its academic context and university community. This includes the program's benefits to the institutional setting, and how the program as a unit and/or individual faculty members participate in university-wide initiatives and the university's academic plan. This also includes how the program as a unit develops multi-disciplinary relationships and leverages opportunities that are uniquely defined within the university and its local context in the surrounding community.

[X] Described

2020 Analysis/Review:

Hashemite University (HU) is a Jordanian state-run university which was established by royal decree in 1991 and opened with 600 students in 1995. HU enrollment has grown to 21,000, and now houses 19 faculties comprising 53 departments with a total faculty of 696. HU is considered one of the best universities in Jordan and the region. It is a comprehensive university offering undergraduate, graduate and doctoral education to Jordanian and international students. The university has developed an energy independent, green campus located east of the city of Zarqa, northeast of the Jordanian capital of Amman. HU is "committed to preparing loyal men and women who are not only technically competent in their professional fields, but also life-long learners who have a breadth vision, loyalty to their nation, and a sense of civil and moral responsibility and a devotion to the fundamental values of human life." (PSER, pp.6-7)

The Faculty of Engineering was established in August 1998, with 300 students and a total teaching staff of 20. The first engineering degrees were awarded in June 2003. The Engineering Faculty currently includes undergraduate programs in eight academic departments, with a teaching faculty of 132, assisted by 74 staff and technicians. Student enrollment is currently 4,800. The Faculty of Engineering is fully accredited by the Board for Engineering and Technology (ABET). The mission of the Faculty of Engineering is to prepare highly-qualified graduates for careers in the engineering profession, enabling them to handle the challenges of the local, regional, and global marketplace, and to conduct research that leads to recognized scientific contributions in the applied field globally and locally, which supports the comprehensive sustainable national development plans. (PSER, pp. 8-9)

The Department of Architectural Engineering was established in 2005, and opened in 2006 with 27 students and a teaching staff of 3. The department has grown to 19 faculty members, 6 scholarship students pursuing doctorates, 6 technicians, and a student enrollment of 300. The architectural degree program is designed to achieve NAAB International Certification and to satisfy the requirements of the Higher Education Accreditation Commission of Jordan. The department currently offers a single, full-time study track of 172 credit hours over 5 academic years leading to the degree of Bachelor of Science in Architectural Engineering (PSER, p. 10). The department mission is to educate students for future architecture practices to meet environmental, social, political, and cultural challenges that face the local, regional, and international contexts for the benefit of society. This student-centered learning program is implemented through a studio-based, holistic curricula. It focuses primarily on the knowledge, practices, and technical skills in the field of architecture. The graduates are expected to cope with rapid global changes, and to react rationally as well as creatively to contemporary issues in architecture, its problems, and challenges. (PSER, p. 11)

The architectural program is well-supported by the university as evidenced in meetings with the university President and the Dean of Academic Development. The team found the material on history and mission contained in the PSER was supported and reinforced throughout the visit, starting with the campus video and including meetings with students, faculty, administration, and staff. Due to Covid-19 restrictions all architecture department classes were only offered online in the spring of 2020. For fall 2020 it is anticipated that many studio and laboratory classes will be offered in some hybrid format on campus. (Professor Awni Itradat, Dean, Faculty of Engineering: Meeting #2)

I.1.2 Learning Culture: The program must demonstrate that it provides a positive and respectful learning environment that encourages optimism, respect, engagement, and innovation between and among the members of its faculty, student body, administration, and staff in all learning environments, both traditional and non-traditional.

- The program must describe how faculty, staff, and students been able to participate in the development of policies related to learning culture and the ongoing assessment and evaluation of those policies.
- The program must describe the ways in which students and faculty are encouraged to learn both inside and outside the classroom through individual and collective learning opportunities that include, but are not limited to, participation in field trips, professional societies and organizations, honor societies, and other program-specific or campus-wide and community-wide activities.

[X] Described

2020 Analysis/Review:

In PSER Section I.1.4.3 Core Values (p. 11), the program cites a list of core values that include many statements about learning and the learning culture and environment but does not provide specific examples or describe specific ways in which the learning environment is created or maintained. However, through meetings with faculty, staff, and students, it was clear that there is a very positive and open learning environment within the program for all. Numerous times students and faculty described the challenges of quarantine and the fact that many faculty members spent twice as much time working with the students as they would normally, indicating the commitment to education and learning objectives of the program.

The faculty and students in the program regularly enter design competitions, some of which are interdisciplinary. Other activities that support the learning culture include a lecture series, field trips, topical workshops, studio feedback sessions, social gatherings, and community service projects.

In PSER Section I.1.7.1 the program describes how the Studio Culture Policy was initially developed primarily by a committee of staff, faculty, and professionals. The report goes on to describe a process in which students were engaged and the policy evolved to be more inclusive of their “needs, abilities, and ambitions.” The policies are known to all and are evaluated annually. The English language document was found on a website provided by the program (PSER, p. 17).

Generally, the program exemplifies a positive and respectful learning culture that has been maintained throughout the quarantine period. Students and faculty expressed strong regard and respect for the difficulties that each group was facing during this time and maintained the positive outlook and forward momentum despite not meeting in person. And everyone expressed a strong desire to return to their previous work methods, particularly in the studio courses. (Faculty: Meeting #4; Students: Meetings #5 and #10; and Staff: Meeting #9)

I.1.3 Social Equity: The program must describe how social equity is defined within the context of the institution or the country in which it is located.

- The program must describe its approach to providing faculty, students, and staff with a culturally rich educational environment in which each person is equitably able to learn, teach, and work.
- The program must describe how its graduates have been prepared to be sensitive to differences in gender, culture, and customs, and be encouraged to assume responsibility as professionals in society.

[X] Described

2020 Analysis/Review:

"HU, as a community of scholars, is committed to the elimination of discrimination in education and the provision of equal opportunity at all levels in education. In compliance with Jordanian laws and regulation, we do not discriminate on the basis of age (within the constraints of Jordanian labor law), color, disability, family status, gender identity or expression, marital status, national origin, race, religion, or gender in any of our policies, procedures, or practices." (PSER, p. 26)

The architectural Program at HU has fully embraced the HU non-discrimination policy and is setting a new standard in Jordanian education with respect to social equity between the male and female roles in learning and community service. Any student, regardless of gender, nationality, or social rank holds equity with all others in academic and social terms. The high percentage (76%) of female students currently enrolled in the architectural program is one indication of the success of this policy. The program's international students of both genders provide additional evidence of the program's efforts, providing a mix of different backgrounds and an opportunity for cultural interaction (Professor Fawaz Al-Abed Al-Haq, President of Hashemite University: Meeting #3). In addition, faculty members bring a wide variety of social and academic backgrounds and experiences which contribute to an array of program learning outcomes. Through our interaction with the students, the team found that they appear to be in full support of the policy, intermingle freely, and appear to support each other.

Diversity is very important to the program as it brings together people of different talents, skill sets, backgrounds, experiences, learning styles, areas of excellence, and goals for the future. The department has sought to increase the diversity of its faculty to reflect the diversity of its student population. The majority of recent faculty and staff hires in the Architecture Department have been women (69%). All admissions, hiring, re-appointments, tenure, promotions, and scholarships follow the HU nondiscrimination policy. Incentives, or benefits of any kind, are awarded on an equal basis. This mix of talents and skills is also reflected in the variety of extracurricular activities of both students and academic staff, which has become one of the most integrated situations in Jordanian education. (PSER, pp. 26-27)

I.1.4 Defining Perspectives: The program must describe how it is responsive to the following perspectives or forces that affect the education and development of professional architects. The response to each perspective must further identify how these perspectives will continue to be addressed as part of the program's long-range planning activities.

A. Collaboration and Leadership. The program must describe its culture for successful individual and team dynamics, collaborative experiences, and opportunities for leadership roles.

B. Design. The program must describe its approach to developing graduates with an understanding of design as a multidimensional process involving problem resolution and the discovery of new opportunities that will create value.

C. Professional Opportunity. The program must describe its approach to educating students on the breadth of professional opportunities and career paths, including the transition to internship and licensure.

D. Stewardship of the Environment. The program must describe its approach to developing graduates who are prepared to both understand and take responsibility for stewardship of the environment and natural resources.

E. Community and Social Responsibility. The program must describe its approach to developing graduates who are prepared to be active, engaged citizens able to understand what it means to be professional members of society and to act ethically on that understanding.

[X] Described

2020 Analysis/Review:

In terms of Collaboration and Leadership, the program provided a lengthy list of activities that included everything from collaborative class assignments to faculty research and professional engagement (PSER, pp. 28-30). Leadership opportunities included student organizations as well as committees within the department and in extracurricular mentoring opportunities between year levels (PSER, pp. 31-33). The approach to design is presented primarily through the design studio sequence. Professional Opportunity is addressed through a series of courses but also through the participation of practicing architects on studio reviews and an annual job fair. Students must also complete an internship before graduating (PSER, pp. 33-35).

Hashemite University has a stated commitment to sustainable energy and has implemented many programs around campus that demonstrate Stewardship of the Environment. In addition, energy efficiency strategies are developed in all courses as appropriate to the year level. Community and Social Responsibility is one of the core attributes and values within the program and is demonstrated through opportunities to learn with and through the local community in design studios, student organization projects, and faculty research projects (PSER, pp. 35-39).

I.1.5 Long-Range Planning: An ICert degree program must demonstrate that it has a planning process for continuous improvement that identifies multiyear objectives within the context of the institutional and program mission and culture. In addition, the program must describe its process for collecting data and using the data to inform its plan for continuous improvement.

[X] Described

2020 Analysis/Review:

The architecture department has developed a multifaceted long-range planning process that incorporates input from a variety of sources. The process is designed to produce an ongoing series of five-year strategic plans that identify goals, objectives, and strategies within the context of the institution and program mission and culture.

The planning process starts with the establishment of a series of departmental goals. The student learning objectives are then developed to meet these goals while also satisfying the requirements of the NAAB student performance criteria; the Higher Education Accreditation Commission at Jordan (HEACJ); and the student learning outcomes (SLO). Annually, the department uses several data and information sources to validate the student learning objectives and modify the strategies as needed.

The architecture department also engages an external assessment of program quality. The External Advisory Board, comprised of active, practicing and education professionals, regularly reviews departmental goals and curriculum, critiques student work, and keeps the department apprised of concerns within the wider professional community, thus helping to ensure a high degree of relevance for the programs. Outreach to alumni and friends to obtain feedback about the program is a constant and significant practice. The “I am HU Architecture” Facebook page was launched to reconnect with HU alumni to survey their accomplishments as well as gauge their desire to connect and support the program. (PSER, pp. 39-43)

In multiple meetings the team was informed that a proposal is currently being developed to remove the Architectural Engineering Department from the Faculty of Engineering and create a new Faculty of Architecture and Interior Design (Dr. Ahmad Alhusban, Chairman, Department of Architectural Engineering: Meeting #1; Professor Fawaz Al-Abed Al-Haq, President of Hashemite University: Meeting #3; Professor Adnan Abu Surra, Dean of Academic Development and Outreach: Meeting #7). It is

anticipated that the proposal will be developed and presented within the next six months. If accepted, detailed planning for the department structure, operation, and programs will begin with eventual establishment of the new Faculty in the 2023 timeframe.

I.1.6 Assessment:

A. Program Self-Assessment Procedures: The program must demonstrate that it regularly assesses the following:

- How well the program is progressing toward its mission and stated objectives.
- Progress against its defined multiyear objectives.
- Strengths, challenges, and opportunities faced by the program while continuously improving learning opportunities.

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

B. Curricular Assessment and Development: The program must demonstrate a well-reasoned process for curricular assessment and adjustments, and must identify the roles and responsibilities of the personnel and committees involved in setting curricular agendas and initiatives, including the curriculum committee, program coordinators, and department chairs or directors.

[X] Described

2020 Analysis/Review

The program has provided a description of both the program self-assessment procedures which include annual data collection and review. Curricular assessment and development are implemented through a range of devices including grade comparisons against benchmarks, student and peer evaluations of teaching, and juries of peers and professionals which are documented.

Assessments are reviewed at faculty meetings and folded into ongoing course development and implementation with data collection as a measure of improvement. A Curriculum Committee reviews all data and makes recommendations on an ongoing basis. There is a clear structure for this process, and a diagram was provided by the program to illustrate this along with a chart to explain in more detail (PSER, pp. 45-60).

Part One (I): Section 2—Resources

I.2.1 Human Resources and Human Resource Development: The program must demonstrate that it has appropriate human resources to support student learning and achievement. This includes full- and part-time instructional faculty; administrative leadership; and technical, administrative, and other support staff.

- The program must demonstrate that it balances the workloads of all faculty to support a tutorial exchange between the student and the teacher that promotes student achievement.
- The program must demonstrate that faculty and staff have opportunities to pursue professional development that contributes to program improvement.
- The program must describe the support services available to students in the program, including, but not limited to, academic and personal advising, career guidance, and internship or job placement.

[X] Demonstrated

2020 Team Assessment of I.2.1

The PSER provides evidence on pp. 60-61 that faculty have a teaching workload that parallels a typical workload in a U.S.-based system with approximately between 9-15 credit hours per semester. As noted, every tenure-track faculty member teaches design studios, ensuring a tutorial exchange between faculty and students. There are typically 15 students per studio course. There are a large number of lecturers on faculty (12) compared to only 7 tenured or tenure-track faculty members. This group is supported by a staff of lab assistants who assist in teaching the studios and provide general support for the program.

One notable program within the university and the program is the support provided to faculty members for additional education at the PhD level. In addition, faculty members can apply for sabbatical leave every 6 years. Further, faculty can participate in training and workshops provided by the department and are eligible for funding to attend conferences and other research enterprises.

Per PSER p. 68, Hashemite University provides career guidance to assist students in preparing job search materials, and the department has assisted with a Career Day event in the past. The program also organizes field trips to offices and helps arrange internships with local firms for the students. The local professional community seeks out the HU students for offices which indicates a positive atmosphere for student professional development. In addition, final juries for the graduating students become a public event where up to 85 professionals attend and become, in essence, a job fair where many students receive job offers (Dr. Ahmad Alhusban, Chairman, Department of Architectural Engineering: Meeting #6).

I.2.2 Physical Resources: The program must describe the physical resources available and how they support the pedagogical approach and student achievement.

Physical resources include, but are not limited to, the following:

- Space to support and encourage studio-based learning.
- Space to support and encourage didactic and interactive learning, including labs, shops, and equipment.
- Space to support and encourage the full range of faculty roles and responsibilities, including preparation for teaching, research, mentoring, and student advising.
- Information resources to support all learning formats and pedagogies in use by the program.

If the program's pedagogy does not require some or all of the above physical resources, for example, if online course delivery is employed to complement or supplement on-site learning, then the program must describe the effect (if any) that online, on-site, or hybrid formats have on digital and physical resources.

[X] Demonstrated

2020 Team Assessment of I.2.2

The architecture department occupies a new (opened in May 2018), four-story, 8,100 SM building located in the HU campus' southern classrooms complex near the main Faculty of Engineering building. The building is a short walk from the HU central library and administration buildings. The new building houses design studios, open studios, labs, department and faculty offices, library, meeting rooms, NAAB display room, seminar rooms, interior and exterior exhibit spaces, printing room, archiving room and various other support spaces. The second floor opens into the adjacent building, which contains a number of classrooms and a 205-seat auditorium/theater.

The new building is equipped with full digital technology and audiovisual recourses, with wireless access throughout and wide distribution of power and data connections. Each classroom and studio space is equipped with a SmartBoard, projector, and PC. The labs are equipped with an array of the latest hardware and specialty software and a CAT 6 network tied to campus via fiber optic cables. In addition, students have access to 40 digital drawing and graphics tablets.

To support the "learn by doing" philosophy, the department also has a number of specialty labs. The fabrication lab is equipped to provide the ability to produce architecture models. The acoustical, lighting, energy, surveying, and building materials laboratories provide specialized equipment and software for advanced learning and in-depth analysis. Students also utilize engineering workshops, which provide hands-on learning in building materials, systems, and construction areas such as carpentry, electrical, HVAC, plumbing, and metal work (PSER, pp. 70-79). The campus video provided the team with a detailed tour of the architecture department building and adjacent facilities. Additionally, in discussions with students, faculty, and staff, the team noted that all were complimentary of the building and felt that the facilities and equipment were a significant asset to the program (Faculty; Meeting #4; Students: Meeting #5; Staff: Meeting #9).

At the onset of the Covid-19 pandemic, following government directives, the department moved quickly to an online model. To support the students during this time, the department offered temporary equipment loans, enhanced network connection options, and expanded instructional hours. Moving forward, several alternative, hybrid approaches which reinstate limited "hands-on" studio and lab learning are being studied and will be implemented, based on the latest government direction, in the coming semester (Dr. Ahmad Alhusban, Chairman, Department of Architectural Engineering: Meeting #1; Professor Awni Itradat, Dean, Faculty of Engineering: Meeting #2; Faculty: Meeting #4; Students: Meeting #5 & #10; Staff: Meeting #9).

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

[X] Demonstrated

2020 Team Assessment of I.2.3

HU is a state-run university whose main source of revenue is student stuition (approximately 70%). Secondary sources include grants, donations, and limited government support. The university has adopted an ambitious environmental management program that is designed to conserve resources and will ultimately serve to make the campus energy independent, thus significantly reducing the university's operating costs. According to our discussions with representative from Financial Affairs, HU has not had a deficit in over five years. In response to the economic issues caused by Covid-19, the university has created an interim program to help financially strapped students with their tuition (Professor Awni Itradat, Dean, Faculty of Engineering: Meeting #2).

The architecture department is funded through annual budget allocations from the HU Financial Affairs Unit. These allocations are determined in response to budget requests made by the department through the Faculty of Engineering. The architecture department's budgets have shown a small year-over-year increase reflecting the continuing increase in enrollment. Budget information provided suggests that the program is sufficiently funded to meet the department's growing needs in terms of personnel, operations, and facilities (PSER, pp. 80-81). Covid-19 restrictions have not affected the department's enrollment to date. The operational changes implemented by the department have enabled both Jordanian and international students to remain in the program.

I.2.4 Information Resources: The program must demonstrate that all students, faculty, and staff have convenient, equitable access to literature and information, as well as appropriate visual and digital resources that support professional education in the field of architecture.

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

[X] Not Demonstrated

2020 Team Assessment of I.2.4

This was an area of concern in the prior reports from the NAAB visiting team. We found little to no change in the situation. The program provided a list of 200 titles waiting for purchase, but shelves in the libraries remained primarily empty of books and resources and the library access showed some titles are available online. The library currently lists only 1,200 titles related to the discipline of architecture (PSER, p. 85). The digital and online references do not support either the preparation of course materials or student and faculty research efforts.

Conversations with faculty and students indicate that the university relies on a larger university system within the country to support the research and study needs of students and for course preparation. In addition, students suggest that the online electronic library resources are inadequate for the needs of the students at this time, leading them to rely on each other and resources outside the university for their work. This is apparent in the low quality of images in slide presentations as well as case studies and other research presented in the course materials (Faculty: Meeting #4; Students: Meetings #5 and #10; and Staff: Meeting #9).

The architectural engineering program has created a disciplinary library within its building and is waiting on relief from quarantine restrictions in order to begin the transfer of books and resources from the main library to the architectural engineering library.

During our visit, we were not able to meet with the Library Liaison due to a poor internet connection.

I.2.5 Administrative Structure and Governance

- **Administrative Structure:** The program must describe its administrative structure and identify key personnel within the context of the program and the school, college, and institution.
- **Governance:** The program must describe the role of faculty, staff, and students in both program and institutional governance structures. The program must describe the relationship of these structures to the governance structures of the academic unit and the institution.

[X] Demonstrated

2020 Team Assessment of I.2.5

The PSER (pp. 86–92) and subsequent meetings with the HU President and various program representatives provided a detailed description of the department's administrative structure, information on how the department administration melds with the other departments within the Engineering Faculty, and how the faculty fits within the university's overall administrative structure. The HU President, Prof. Fawwaz M. Al-Abed Al-Haq, is responsible for the administration of the university. The president is supported by four academic vice presidents and the University Council. The HU Student Council (HUSC) provides students with opportunities to offer opinions and actively affect the direction of the university.

The Dean (Professor Awni Itradat) is the Chief Academic and Administrative Officer of the Engineering College. The Dean, with guidance from the Faculty Council, directs college operations, is responsible for developing and implementing college-wide policies, and reports directly to the Vice President for Academic and Administrative Affairs (Prof Khalid AlHyari). The Architectural Department Chair is the head of that academic unit and chief administrator of the architecture program. Faculty and staff from the department participate in department governance through participation in the numerous working committees.

The Architecture Department Chair is responsible for supervising the facilities, hiring faculty, scheduling academic offerings, administering academic and institutional policies, coordinating with the registrar, and overseeing aspects of the academic program and student advisement. The department chair, together with the department faculty, has complete academic autonomy. Major resource decisions are made in consultation with the Dean.

The chair is assisted by the Department Council (which consists of all faculty members) and supported by several working committees. The Department Council meets regularly and discusses issues regarding curricular matters, appointments, promotions, proposals, and recommendations from department committees. All decisions are taken in the Department Council. Faculty members are involved in the guidance of the program, as well as in the assessment and evaluation processes related to the program's educational objectives and student outcomes, through several working committees. All decisions and conclusions drawn by the working committees are submitted to the Department Council for final discussions and approval. The recommendations from the Department Council are sent to the Dean for review and approval.

PART TWO (II): EDUCATIONAL OUTCOMES AND CURRICULUM
This part has four sections that address the following:

- **STUDENT PERFORMANCE**. This section includes the Student Performance Criteria (SPC). Internationally certified degree programs must demonstrate that graduates are learning at the level of achievement defined for each of the SPC listed in this part. Compliance will be evaluated through the review of student work.
- **CURRICULAR FRAMEWORK**. This section addresses institutional quality assurance and national authorization, credit hour requirements, general education, and access to optional studies.
- **EVALUATION OF PREPARATORY EDUCATION**. The NAAB recognizes that students entering a professional degree program from a preprofessional program and those entering from a non-preprofessional degree program have different needs, aptitudes, and knowledge bases. In this section, programs are required to demonstrate the process by which incoming students are evaluated and to document that the SPC expected to have been met in educational experiences at other institutions have indeed been met.
- **PUBLIC INFORMATION**. The NAAB expects internationally certified degree programs to provide information to the public about International Certification activities and the relationship between the program and the NAAB, admissions and advising, and career information.

Programs demonstrate their compliance with Part Two in four ways:

- A narrative report that briefly responds to each request to “describe, document, or demonstrate.”
- A review of evidence, artifacts, and observations by the visiting team, as well as through interviews conducted during the visit.
- A review of student work that demonstrates student achievement of the SPC at the required level of learning.
- A review of websites, URLs, and other electronic materials.

Part II, Section 1: Student Performance—Education Realms and Student Performance Criteria

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

Instructions to the team:

1. *When an SPC is MET, the team is required to identify the course or courses where evidence of student accomplishment was found.*
2. *If an SPC is NOT MET, the team must include a narrative that indicates the reasoning behind the team's assessment.*
3. *If an SPC is NOT YET MET, the team must include a brief narrative that indicates that the program has not yet delivered the course(s) in which SPC are expected to be met by the time of initial accreditation.*
4. *After completing the VTR, the team must prepare an SPC matrix (using a blank matrix provided by the program) that identifies the courses in which the team found the evidence of student achievement. The team's matrix is to be appended to the VTR as Appendix 2.*

Realm A: Critical Thinking and Representation: Graduates from NAAB-accredited programs must be able to build abstract relationships and understand the impact of ideas based on the research and analysis of multiple theoretical, social, political, economic, cultural, and environmental contexts. This includes using a diverse range of media to think about and convey architectural ideas, including writing, investigative skills, speaking, drawing, and model making.

Student learning aspirations for this realm include:

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

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

[X] Met

2020 Team Assessment of A.1: Evidence of student achievement in representational media at the prescribed level was found in student work prepared for ARCH 101: Architectural Drawing; ARCH 111: Free Hand Drawing; ARCH 102: Computer Applications in Architectural Design (1); ARCH 112: Architectural Communications and Presentations (1); ARCH 213; Architectural Communications and Presentations (2); ARCH 201: Computer Applications in Architectural Design (2). Evidence of student achievement in writing and speaking effectively was found in student work prepared for ENGI 203: Ethics and Communication Skills.

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

2020 Team Assessment of A.2: Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 121: Basic Design (1); ARCH 111: Free Hand Drawing; ARCH 122: Basic Design (2); ARCH 213: Architectural Communications and Presentations (2).

A.3 **Investigative Skills:** *Ability* to gather, assess, record, and comparatively evaluate relevant information and performance in order to support conclusions related to a specific project or assignment.

[X] Met

2020 Team Assessment of A.3: Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 221: Architectural Design 1.

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

[X] Met

2020 Team Assessment of A.4: Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 122: Basic Design (2); and ARCH 221: Architectural Design 1.

A.5 **Ordering Systems:** *Ability* to apply the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

[X] Met

2020 Team Assessment of A.5: Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 121: Basic Design (1); ARCH 122: Basic Design (2); ARCH 422: Architectural Design (6).

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

[X] Met

2020 Team Assessment of A.6: Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 343: Theory of Modern Architecture; ARCH 345: Theory and Methods of Architectural Design.

A.7 **History and Culture:** *Understanding* of the parallel and divergent histories of architecture and the cultural norms of a variety of indigenous, vernacular, local, and regional settings in terms of their political, economic, social, and technological factors.

[X] Met

2020 Team Assessment of A.7: Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 241: History and Theory of Architecture; ARCH 341: History and Theory of Architecture (2); ARCH 456: Conservation of Architectural Heritage; and ARCH 463: Urban Design and Planning.

A.8 **Cultural Diversity and Social Equity:** *Understanding* of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the responsibility of the architect to ensure equity of access to buildings and structures.

[X] Met

2020 Team Assessment of A.8: Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 465: Housing. Additional evidence was found in ARCH 343: Theory of Modern Architecture and ARCH 342: Islamic Architecture.

Realm A. General Team Commentary – Critical Thinking and Representation: The majority of criteria in Realm A were found to be MET. Students seem to be developing the basic skills necessary for architecture design. There is a strong emphasis on the development of oral, written, and graphic communication skills, and the range of history covered in the courses falling into Realm A was notable.

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

Student learning aspirations for this realm include:

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

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

[X] Met

2020 Team Assessment of B.1: Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 321: Architectural Design and ARCH 542: Graduation Project.

B.2 **Site Design:** *Ability* to respond to site characteristics, including urban context and developmental patterning, historical fabric, soil, topography, ecology, climate, and building orientation in the development of a project design.

[X] Met

2020 Team Assessment of B.2: Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 422: Architectural Design.

B.3 **Codes and Regulations:** *Ability* to design sites, facilities, and systems that are responsive to relevant codes and regulations, and include the principles of local life-safety and accessibility standards.

[X] Not Met

2020 Team Assessment of B.3: Although codes were listed as a topic in ARCH 463, no evidence was found that students had an ability to design according to codes and regulations, or that they understood which codes and regulations would apply in various locations, for example, the International Building Code which is used in the United States. The team was guided to look in ARCH 423 Working Drawings and ARCH 463 Urban Planning and Design, and although site design was well covered, the team did not

find evidence of ability to design facilities and systems using building codes and regulations that meet the B.3 criteria.

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

[X] Met

2020 Team Assessment of B.4: Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 423: Working Drawing.

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

[X] Met

2020 Team Assessment of B.5: Evidence of student achievement at the prescribed level was found in student work prepared for CIVL 214: Engineering Mechanics; CIVL 313: Structural Analysis for Architectural Students; CIVL 324: Concrete and Steel Structures for Arch. Students; and ARCH 335: Building Construction Systems.

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

[X] Met

2020 Team Assessment of B.6: Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 321: Architectural Design (3); ARCH 322: Architectural Design (4); ARCG 471: Lighting and Acoustics.

B.7 Building Envelope Systems and Assemblies: *Understanding* of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

[X] Met

2020 Team Assessment of B.7: Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 336: Building Finishing; ARCH 322: Architectural Design (4).

B.8 Building Materials and Assemblies: *Understanding* of the basic principles used in the appropriate selection of interior and exterior construction materials, finishes, products, components, and assemblies based on their inherent performance, including environmental impact and reuse.

[X] Met

2020 Team Assessment of B.8: Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 232: Building Materials; ENGB 101: Engineering Workshop; ARCH 336: Building Finishing; MECH 450: Electro-Mechanical Systems for Architecture Students.

B.9 Building Service Systems: *Understanding* of the basic principles and appropriate application and performance of building service systems, including lighting, mechanical,

plumbing, electrical, communication, vertical transportation, security, and fire protection systems.

[X] Met

2020 Team Assessment of B.9: Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 471: Lighting and Acoustics and in MECH 450: Electro-Mechanical Systems for Architecture Students.

B.10 Financial Considerations: *Understanding* of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

[X] Not Met

2020 Team Assessment of B.10: Evidence of student achievement at the prescribed level for construction cost estimating and construction scheduling was found in student work prepared for ARCH 452: Quantity Surveying. However, no evidence of student achievement was found for project financing, feasibility, operational costs or life-cycle costs.

Realm B. General Team Commentary: A strength of the HU architecture program is the comprehensive nature of the technical courses offered. These courses provide in-depth, detailed information on building materials, systems, and processes and are enhanced by the hands-on learning the students obtain in the associated lab work. In addition to learning about a variety of structural system types, students enhance this knowledge working through analyses and tests in the materials lab. In addition, student's lab work includes the construction of basic electrical and plumbing systems, as well as work in metal and wood shops. Projects in ARCH 471: Lighting and Acoustics employ the latest analytical software, which provides students with the opportunity to design using real-world tools.

However, while students are exposed to construction costs in the development of quantity surveys of their projects, there is no evidence that students are exposed to other financial aspects that impact projects such as financing and operational or life-cycle costs.

Realm C: Integrated Architectural Solutions.
Graduates from internationally certified degree program must be able to demonstrate that they have the ability to synthesize a wide range of variables into an integrated design solution.

Student learning aspirations for this realm include

- Comprehending the importance of research pursuits to inform the design process.
- Evaluating options and reconciling the implications of design decisions across systems and scales.
- Synthesizing variables from diverse and complex systems into an integrated architectural solution.
- Responding to environmental stewardship goals across multiple systems for an integrated solution.
- Knowing societal and professional responsibilities

The internationally certified degree program must demonstrate that each graduate possesses skills in the following areas:

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

[X] Met

2020 Team Assessment of C.1: Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 542: Graduation Project.

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

[X] Met

2020 Team Assessment of C.2: Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 421: Architectural Design and ARCH 521: Graduation Project.

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

[X] Not Met

2020 Team Assessment of C.3: The technical courses provide the students with in-depth knowledge of site selection, building materials, and systems. However, student work does not show evidence of the ability to integrate the different technical aspects such as plumbing systems, electrical systems, mechanical systems, life safety, and environmental systems into a cohesive design solution.

Realm C. General Team Commentary: The team found extensive evidence of student abilities in the areas of site research and analysis as well as the ability to use the information in design. However, there was very little evidence regarding the use of building systems including structures, life safety and environmental systems as applied to integrative design projects.

Realm D: Professional Practice.
Graduates from internationally certified degree program must understand business principles for the practice of architecture, including management, advocacy, and the need to act legally, ethically, and critically for the good of the client, society, and the public.

Student learning aspirations for this realm include

- Comprehending the business of architecture and construction.
- Discerning the valuable roles and key players in related disciplines.
- Understanding a professional code of ethics, as well as legal and professional responsibilities.

The internationally certified degree program must demonstrate that each graduate possesses skills in the following areas:

D.1 **Stakeholder Roles in Architecture:** *Understanding* of the relationships among key stakeholders in the design process—client, contractor, architect, user groups, local community—and the architect's role to reconcile stakeholder needs.

[X] Not Met

2020 Team Assessment of D.1: Evidence of student achievement at the prescribed level was not found.

D.2 **Project Management:** *Understanding* of the methods for selecting consultants and assembling teams; identifying work plans, project schedules, and time requirements; and recommending project delivery methods.

[X] Not Met

2020 Team Assessment of D.2: Evidence of student achievement at the prescribed level was not found.

D.3 Business Practices: *Understanding* of the basic principles of a firm's business practices, including financial management and business planning, marketing, organization, and entrepreneurship.

[X] Met

2020 Team Assessment of D.3: Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 551: Professional Practice.

D.4 Legal Responsibilities: *Understanding* of the architect's responsibility to the public and the client as determined by local regulations and legal considerations involving the practice of architecture and professional service contracts.

[X] Met

2020 Team Assessment D.4: Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 451: Specifications and Contracts; and ARCH 551: Professional Practice.

D.5 Professional Conduct: *Understanding* of the ethical issues involved in the exercise of professional judgment in architectural design and practice and understanding the role of local rules of conduct and ethical practice.

[X] Met

2020 Team Assessment D.5: Evidence of student achievement at the prescribed level was found in student work prepared for ARCH 551: Professional Practice and in ENGI 203: Ethics and Communication Skills.

Realm D. General Team Commentary: The team found that while a number of the elements of Realm D are presented in great depth, discussion of several other elements within this realm are given little attention. Elements dealing with building contracting and construction such as quantity surveying, specifications, types of construction contracts, and details of the owner-contractor agreement are well covered in ARCH 451: Specifications and Contracts, and in ARCH 452: Quantity Surveying. The operation and administration of an architecture firm are presented in ARCH 551: Professional Practice. And the rules of ethics and conduct are particularly well covered in ENGI 203: Ethics and Communications Skills. However, evidence of presentations or discussion of the roles and responsibilities of the various project stakeholders including the architect, or the project management activities and responsibilities of the architect was not found.

Part II, Section 2: Curricular Framework

II.2.1 National Authorization and Institutional Quality Assurance: The institution offering the internationally certified degree program must be or be part of an institution that has been duly authorized to offer higher education in the country in which it is located. Such authorization may come from a government ministry or other type of agency.

The institution must have explicit, written permission from all applicable national education authorities in that program's country or region. At least one of the agencies granting permission must have a system of institutional quality assurance and review which the institution is subject to and which includes periodic evaluation.

[X] Met

2020 Team Assessment of II.2.1:
The Hashemite University (HU) is one of Jordanian's state-run universities. It is named after the Jordanian Royal family—the Hashemites—and was established under Royal Decree dated 19 June 1991. Teaching at the university started on 16 September 1995.

The Accreditation & Quality Assurance Commission for Higher Education Institutions (AQACHEI) was established to advance quality and equity in higher education in Jordan. It also strives to improve the status of higher education in the Kingdom; assuring its quality, motivating higher education institutions to open up to and interact with universities, scientific research institutions, and international accreditation and quality control commissions; and developing higher education by employing internationally comparable standards. In August 2011, AQACHEI certified that the HU architectural engineering program meets its established requirements to obtain a bachelor's degree in architectural engineering (165 credit hours). The team was provided a copy (and translation) of the certification letter. This Condition is therefore **Met.**

II.2.2 Professional Degrees and Curriculum:

For International Certification, the NAAB requires degree programs in architecture to demonstrate that the program is comparable in all significant aspects to a program offered by a U.S. institution. Further, the program must demonstrate that the degree awarded at the conclusion of this program of study entitles the graduate to practice architecture in his/her home country, subject to meeting any requirements for experience and/or examination. Internationally Certified degree programs must include (or otherwise acknowledge) 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.

  If this education is acquired prior to university-level education, the program must describe the system for general studies education in the local context, and how it is substantially equivalent to the requirement stated above.

- **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

2020 Team Assessment of II.2.2:
Architects in Jordan are licensed as engineers, and the Bachelor of Architectural Engineering degree received from Hashemite University would be sufficient to apply for a license in Jordan. The current curriculum meets the educational standards of the higher education agencies in Jordan. The PSER (p. 104) describes that students take 12 credits of General Studies including ENGL 101, Arabic Language and a citizenship course. Additional General Studies are heavily weighted to science courses including physics, chemistry, and computer programming. See PSER p. 105 for curricular path. The curriculum is strongly focused on Professional Studies and Electives, and students take an average of 17 credit hours per semester.

Part II, Section 3: Evaluation of Preparatory Education
The program must demonstrate that it has a thorough and equitable process for evaluating the preparatory or preprofessional education of individuals admitted to the ICert degree program.

- Programs must document their processes for evaluating a student's prior academic course work related to satisfying NAAB student performance criteria when a student is admitted to the professional degree program.
- In the event a program relies on the preparatory educational experience to ensure that admitted students have met certain SPC, the program must demonstrate it has established standards for ensuring these SPC are met and for determining whether any gaps exist.

[X] Not Applicable

2020 Team Assessment:

Student admissions in all programs in all Jordanian public universities are handled by the Unified Admission Coordination Unit (UACU), which coordinates the process of admission in accordance with the principles established by the Jordan Higher Education Council. Because all student admissions are handled by the UACU, HU does not evaluate students prior to admission.

Jordanian Student Admissions Process
All students are admitted in one of three categories: regular, parallel, or international.

Students admitted in the regular program are of Jordanian Nationality and are accepted based on the ranking, nationwide, of their GPA in their general secondary school certificate (Unified Admission). A GPA of 80% or above in the scientific stream is required for admission in any engineering or architecture program. For the 2019–2020 academic year, the minimum required GPA for regular admission in the Architectural program was 85.4%. The minimum GPA for the 2020/2021 academic year was 96.4%.

Students admitted in the parallel program are only those Jordanian students who have been excluded from admission because of their ranking in the competition. These students are allowed to enroll in the same academic programs as the regular program students as long as their GPA is above the acceptable minimum (80%) and they are willing to pay the considerably higher (almost double) tuition.

The international program is only available and applicable to students of non-Jordanian nationalities (international students). The international students are admitted based on special requirements determined by the Unified Admission Coordination Unit. These requirements include a minimum high school certification equivalent GPA and other special requirements. For academic year 2019–2020 the minimum

required GPA for admission in the Architectural program was 95.8%. Tuition for students in the international program is also considerably higher than for regular program students.

PART TWO (II): SECTION 4 – PUBLIC INFORMATION

The NAAB expects programs to be transparent and accountable in the information provided to students, faculty, and the public. As a result, the following conditions require all ICert degree programs to make certain information publicly available online.

II.4.1 Statement on International Certification Degrees: In order to promote an understanding of the internationally certified degree by prospective students, parents, and the public, all schools offering the certified degree program must include in catalogs and promotional media the *exact language* found in the *Conditions for NAAB International Certification*, Appendix 6.

[X] Not applicable to visit two

2020 Team Assessment II.4.1:
Per the NAAB Procedures for International Certification (2019 edition), the suggested language on NAAB International Certification is to be added to the program's information after visit three. This Condition is therefore **Not applicable to visit two.**

II.4.2 Access to Conditions and Procedures for NAAB International Certification: 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 online and accessible by all students, parents, and faculty:

- *2019 Conditions for NAAB International Certification*
- *Procedures for NAAB International Certification* (edition currently in effect)

[X] Not applicable to visit two

2020 Team Assessment II.4.2:
Per the NAAB Procedures for International Certification (2019 edition), the documents containing information on NAAB International Certification are to be made available by the program after visit three. This Condition is therefore **Not applicable to visit two.**

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 internationally certified degree programs, the program must make appropriate resources related to a career in architecture available to all students, parents, staff, and faculty.

[X] Met

2020 Team Assessment II.4.3:

The PSER (pp. 33–35, 67–70) describes the various aspects of the program that provide career information and guidance. Department advisors work with each student from admission to graduation offering career advice and guidance. Students receive additional guidance during their required Practical Training work in local architecture offices. Annual events including a Career Day enable students to meet and work with professionals and showcase their own work to participating firms. The HU Career Guidance Office also provides instructions and assistance. Student indicated during our meetings that they make use of all these resources. This Condition is therefore **Met**.

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

- The final decision letter from the NAAB (not applicable to visit two)
- The most recent Program Self-Evaluation[1] (not applicable to visit two)
- 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 required to make these documents available electronically from their websites.

[X] Not applicable to visit two

2020 Team Assessment of II.4.4:
Per the NAAB Procedures for International Certification (2019 edition), the suggested documents on NAAB International Certification are to be made available by the program after visit three. This Condition is therefore **Not applicable to visit two.**

II.4.5. Admissions and Advising: The program must publicly document all policies and procedures that govern how applicants to the program being reviewed for International Certification are evaluated for admission. These procedures must include first-time, first-year students as well as transfers within and from outside the institution.

This documentation must include the following:

- Application forms and instructions
- Admissions requirements, admissions decisions procedures, including policies and processes for evaluation of transcripts and portfolios (where required), and decisions regarding remediation and advanced standing
- Forms and a description of the process for the evaluation of degree content
- Requirements and forms for applying for financial aid and scholarships
- Student diversity initiatives

[X] Not Applicable

2020 Team Assessment II.4.5: As noted in Part II, Section 3, Hashemite University is subject to the policies and all admissions are handled by a state-run agency, therefore Hashemite University does not handle or have records of admissions. Further, it is not a university policy that advising records are kept so the team could not view those records. However, the PSER describes a detailed process for advising on pp. 112–114. When asked, the students were unaware of any specific advising process but asserted that the rigidity of the curriculum seems to make curricular advising unnecessary. The team did not view any student records. (Dr. Ahmad Alhusban, Chairman, Department of Architectural Engineering: Meeting #1; Faculty: Meeting #4; Students: Meetings #5).

[1] This is understood to be the Program Self-Evaluation Report from the previous visit (if applicable), not the Program Self-Evaluation for the visit currently in process.

Appendix 1: Conditions Met with Distinction

I.1.2 Learning Culture
There was a remarkably positive and open discussion with each group of administrators, faculty, staff, and students. In particular, although the team could not observe the interactions of faculty and students, each group indicated sincere concern for the other in terms of the quarantine and the educational goals of the program. Students and faculty also expressed strong commitment to the program and their respective roles within the system. Students further articulated great appreciation for the administrative responses to their request and their own agency in the direction of the program.

A.1 Professional Communication Skills
The program uses a comprehensive approach which involves instruction and ability in written, oral and graphic communications. The written instruction focuses on the professional and technical writing skills students will employ not only throughout their education but on into their professional careers as well. Oral skills are not only taught but are then utilized by students in required presentations and videos. A variety of graphic communication skills focusing on various audiences and purposes and utilizing both hand and electronic media are taught and incorporated into the student's work.

A.7 History and Culture
The program requires several history courses throughout the curriculum that instruct students on the historical and cultural underpinnings within the region and in the contemporary world. Students not only study and memorize buildings but work to understand how and why buildings were constructed in a particular way as well as who was responsible for building them and why. Students also apply their knowledge to the creation of scaled models, presentations, and design work relative to historical and cultural contexts.

B.2 Site Design
The work in this area was extensive including detailed analysis of site conditions of context, environments, space, and programming that was then applied to design projects. The strength of site design was seen across multiple year levels and courses.

B.8 Building Materials and Assemblies
Student instruction in this area includes very detailed information on numerous building materials, systems, and components. The instruction not only includes classroom lectures and student research and reports, but also includes a number labs wherein students assemble and test basic building systems.

D.5 Professional Conduct
The instruction in the ethics of professional practice goes beyond discussion of the theoretical ethical rules and norms. The instruction not only includes an exploration of the history and development of professional ethics, but also includes a number of case studies that review actual situations involving ethical issues, giving students a better understanding of the application of the principles to their daily activities.

Appendix 2: Team SPC Matrix

The Hashemite University, Architectural Engineering Department Bachelor of Architectural Engineering **SPCs** **A: Ability or U: Understanding**	**REALM A: Critical Thinking and Representation**								**REALM B: Integrated Building Practices, Technical Skills, and Knowledge**										Integrated Architectural Solution			Professional Practice				
	Professional Communication Skill	**Design Thinking Skills**	**Investigative Skills**	**Architectural Design Skills**	**Ordering Systems**	**Use of Precedents**	**Historical and Global Culture**	**Culture Diversity and Social Equity**	**Pre-Design**	**Site Design**	**Codes and Regulations**	**Technical Documentation**	**Structural Systems**	**Environmental Systems**	**Building Envelope Systems and ...**	**Building Materials and Assemblies**	**Building Service Systems**	**Financial Considerations**	**Research**	**Integrated Evaluation and Decision-Making**	**Integrative Design**	**Stakeholder Roles in Architecture**	**Project Management**	**Business Practices**	**Legal Responsibilities**	**Professional Conduct**
	A1	**A2**	**A3**	**A4**	**A5**	**A6**	**A7**	**A8**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**B8**	**B9**	**B10**	**C1**	**C2**	**C3**	**D1**	**D2**	**D3**	**D4**	**D5**
COURSE NAME																										
ARCH 101: Architectural Drawing	X																									
ARCH 121: Basic Design (1)		X	X																							
ARCH 111: Free Hand Drawing	X	X			X																					
ARCH 102: Computer Applications In Architectural Design (1)	X																									
Arch 122: Basic Design (2)		X		X																						
Arch 112: Architectural Communications and presentation (1)	X				X																					
ENGI 203: Ethics and Communication Skills	X																									X
ARCH 221: Architectural Design (1)				X																						
Arch 213: Architectural Communications and presentation (2)	X	X																								
ARCH 241: History and Theory of Architecture (1)							X																			
ARCH 232: Building Materials																X										
CIVL 214: Engineering Mechanics													X													
ARCH 201: Computer Applications In Architectural Design (2)	X																									
ARCH 222: Architectural Design (2)																										
ARCH 341: History and Theory of Architecture (2)							X																			
ARCH 335: Building Construction Systems																										
CIVL 313: Structural Analysis for Architectural Students													X			X										
CIVL 369: Surveying and Building Documentation																										
ARCH 321: Architectural design (3)						X			X					X												
ARCH 345: Theory and Methods of Architectural Design						X		X																		
ARCH 342: Islamic Architecture					X			X																		
ENGB 101: Engineering Workshop																X										
ARCH 336: Building Finishing															X	X										
CIVL 324: Concrete and Steel Structure for Arch. Students													X			X										
ARCH 322: Architectural Design (4)						X								X	X											
ARCH 563: Landscape Design																										
ARCH 343: Theory of Modern Architecture						X		X																		
ARCH 423: Working Drawing												X														
ARCH 421: Architectural Design (5)																				X						
ARCH 471: Lighting and Acoustics														X			X									
MECH 450: Electro-Mechanical Systems for Arch. Students																X	X									
ARCH 422: Architectural Design (6)					X					X																
ARCH 456: Conservation of Architectural Heritage							X	X																		
ARCH 463: Urban Design and Planning							X																			
ARCH 465: Housing								X																		
ARCH 451: Specification and contracts																							X		X	
ARCH 542: Graduation Project (1)			X						X										X							
ARCH 452: Quantity Surveying																		X					X			
ARCH 521: Graduation Project (2)																				X	X					
ARCH 551: Professional Practice																								X	X	X
ARCH 470: Practical Training																										
ARCH 423: Ancient Building Technologies (Elective)																										
ARCH 444: Local Contemporary Architecture (Elective)																										
ARCH 472: Desert Habitation (Elective)																										
ARCH 473: Building and Energy (Elective)																										
ARCH 523: Special Topics in Architecture (Elective)																										
ARCH 541: Human Behavior in Architecture (Elective)																										
ARCH 562: Architecture and Identity (Elective)																										

ARCH 571: Green Architecture (Elective)																									

Appendix 3: Visiting Team Roster

Team chair (practitioner)
David A. Daileda, FAIA
Springfield, Virginia
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Team member (educator)
Jori Erdman, AIA
Charlottesville, Virginia
jori.erdman@gmail.com

Report Signatures

Submitted by

David A. Daileda, *team chair*

Jori Erdman, *team member*

Hashemite University

Response to VTR, Visit Two

Dear Janet
I first would like to thank you and the NAAB team members for your great kindness, professionality, and cooperation during Virtual NAAB Visit Two to the Hashemite University.

Please send the final NAAB Board Decision for the following emails:

To:
Prof. Fawwaz M. Al-Abed Al-Haq
President, The Hashemite University
e-mail: fawaz_m@hu.edu.jo; huniv@hu.edu.jo

CC:
Prof. Awni Itradat
e-mail: itradat@hu.edu.jo
Dr. Ahmad A. Alhusban
e-mail: ahmad.alhusban@hu.edu.jo

b. Conditions Not Achieved
I.2.4 Information Resources:
The main library equipments are in the last tendering stage. They will be fixed at the department library within a few months. Additionally, we will buy 200 new architectural books in the near future. The process is in the final tendering stage. Moreover, all the books in the main university library will be moved soon to the department library.

B.3 Codes and Regulations:
we will work to Adress the codes and regulation criteria in the following courses: ARCH 221, ARCH 222, ARCH 232, ARCH 335, ARCH 321, ARCH 336, ARCH 321, ARCH 322, ARCH 423, ARCH 421, ARCH 422, ARCH 463, ARCH 542, ARCH 521.

B.10 Financial Considerations
SHORT RANGE PLAN: We will work to address the financial consideration in the following courses to meet the NAAB requirements: ARCH 451 (specification and Contracts), ARCH 452 (Quantity Surveying), and ARCH 551 (Professional Practice).
LONG RANGE PLAN: We will modify the curricula and add the new course title Financial Consideration and Project Management as a fourth-year level course.

C.3 Integrative Design
We think that We meet this criterion in ARCH 422 and ARCH 521. AGAIN We will work to address the integrative design criteria clearly in the following courses to meet the NAAB requirements: Partially in ARCH 422 (Architectural design 5) and completely in ARCH 521 (Graduation project 2).

D.1 Stakeholders roles in architecture
We think we address this criterion in professional practice course Arch 551. AGAIN we will work to address this criterion clearly in the same course.

D.2 Project Management
SHORT RANGE PLAN: We will work to address this criterion in the following courses: ARCH 451 (Specifications and Contracts) and ARCH 551 (Professional Practice)

LONG RANGE PLAN: We will modify the curricula and add the new course title Financial Consideration and Project Management as a fourth-year level course.

C. Items to Adress
1. I.2.1 Human Resources and Human Resources Development:
Only current team members are for the architecture departments. If we get approval from the Ministry of Higher Education for the new interior design department, we will hire, assign, and award scholarships for Ph.D.

2. II.2.2 Professional Degree and Curriculum:
General study courses are heavily weighted toward math and science courses rather than a balance with humanities because they are required from the National Authorization and Institutional Quality Assurance (AQACHEI) see Part Two, Section 2 - Curricular framework.

3. D.4 Legal Responsibilities
The architect's legal responsibilities during the design phase of projects covers in ARCH 551 (Professional Practice)

I.1.2 Learning Culture (page 4)
In PSER Section I.1.7.1 ….. the students involved in a dialogue to the establishment of a Studio Culture Policy … see the last paragraph starting from In 2016, …….. end.

Additionally, see section a) **Participation in Development (Page 19)** that describes how the Studio Culture policy was initially developed ….