



هيئة جودة التعليم والتدريب
Education & Training Quality Authority
Kingdom of Bahrain - مملكة البحرين

Directorate of Higher Education Reviews Programme Review Report

**Kingdom University
College of Architectural Engineering and Design
Bachelor in Architectural Engineering
Kingdom of Bahrain**

Site Visit Date: 24 – 26 October 2022

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Acronyms

APR	Academic Programme Review
AQAC	Accreditation and Quality Assurance Centre
BAE	Bachelor in Architectural Engineering
BQA	Education & Training Quality Authority
CAD	Computer-Aided Design
CAED	College of Architectural Engineering and Design
CC-QAEC	College Quality Assurance and Enhancement Committee
CC-TLAC	College Teaching, Learning, and Assessment Committee
CILO	Course Intended Learning Outcome
DHR	Directorate of Higher Education Reviews
HEC	Higher Education Council
IAACGU	Internship, Alumni Affairs and Career Guidance Unit
IACL	Industrial Advisory Council
IAU	Institutional Assessment Unit
ICT	Information and Communication Technology
ILO	Intended Learning Outcome
KU	Kingdom University
LMS	Learning Management System
MIS	Management Information System
NQF	National Qualifications Framework
OHS	Occupational Health and Safety
PILO	Programme Intended Learning Outcome
QAA-UK	Quality Assurance Agency for Higher Education- United Kingdom
QMS	Quality Management System
RIBA	Royal Institute of British Architects
SDU	Staff Development Unit

SER	Self-Evaluation Report
SIS	Student Information System
SPAGU	Strategic Planning and Governance Unit
UC-TLAC	University Teaching, Learning, and Assessment Committee
UNESCO-UIA	United Nations Educational, Scientific and Cultural Organization and International Union of Architects

I. Introduction

In keeping with its mandate, the Education & Training Quality Authority (BQA), through the Directorate of Higher Education Reviews (DHR), carries out two types of reviews that are complementary. These are: Institutional Reviews, where the whole institution is assessed; and the Academic Programme Reviews (APRs), where the quality of teaching, learning and academic standards are assessed in academic programmes within various colleges according to specific standards and indicators as reflected in its Framework.

Following the revision of the APR Framework at the end of Cycle 1 in accordance with the BQA procedure, the revised APR Framework (Cycle 2) was endorsed as per the Council of Ministers' Resolution No.17 of 2019. Thereof, in the academic year (2019-2020), the DHR commenced its second cycle of programme reviews.

The Cycle 2 APR Review Framework is based on four main Standards and 21 Indicators, which form the basis of the APR Reports of the Higher Education Institutions (HEIs).

The **four** standards that are used to determine whether or not a programme meets international standards are as follows:

Standard 1: The Learning Programme

Standard 2: Efficiency of the Programme

Standard 3: Academic Standards of Students and Graduates

Standard 4: Effectiveness of Quality Management and Assurance

The Review Panel (hereinafter referred to as 'the Panel') decides whether each indicator, within a standard, is 'addressed', 'partially addressed' or 'not addressed'. From these judgements on the indicators, the Panel additionally determines whether each of the four standards is 'Satisfied' or 'Not Satisfied', thus leading to the Programme's overall judgement, as shown in Table 1 below.

Table 1: Criteria for Judgements

Criteria	Judgement
All four Standards are satisfied	Confidence
Two or three Standards are satisfied, including Standard 1	Limited Confidence
One or no Standard is satisfied	No Confidence
All cases where Standard 1 is not satisfied	

The APR Review Report begins with providing the profile of the Programme under review, followed by a brief outline of the judgement received for each indicator, standard, and the overall judgement.

The main section of the report is an analysis of the status of the programme, at the time of its actual review, in relation to the review standards, indicators and their underlying expectations.

The report ends with a Conclusion and a list of Appreciations and Recommendations.

II. The Programme's Profile

Institution Name*	Kingdom University
College/ Department*	College of Architectural Engineering and Design
Programme/ Qualification Title*	Bachelor in Architectural Engineering
Qualification Approval Number	07-1633
NQF Level	
Validity Period on NQF	
Number of Units*	57
NQF Credit	
Programme Aims*	<p>The Bachelor in Architectural Engineering programme at Kingdom University aims to:</p> <ul style="list-style-type: none"> a) Provide a stimulating, innovative and creative education and learning environment b) Develop an inquisitive mind driven by a passion for knowledge on socio-cultural, functional, technical, aesthetic, economic and environmental aspects of human settlement and built environment c) Contribute positively to society and to shape the built environment through responsible and ethical practices within their profession d) Recognize the challenges of new knowledges and practices in architecture, in technologies, in society, in environment and economic aspects to arrive at novel solutions to complex problems with evidence based on sound research. e) Develop transferrable and multiple skills to actively engage in the profession and to be confident in applying these skills in a real-life context.
Programme Intended Learning Outcomes*	<p>A. Knowledge and Understanding Skills</p> <p>After successful completion of the programme a student will be able to:</p>

	<p>AO1: Identify and discuss core theories, principles, concepts and systems in the field of Architecture Engineering and Built Environment.</p> <p>AO2: Demonstrate critical knowledge and understanding of methodologies, process, techniques and systems of Architecture Engineering and Built Environment.</p> <p>AO3: Define and interpret values and requirements between human behaviour, built environment and the profession</p> <p>B. Subject-Specific Skills</p> <p>After successful completion of the programme a student will be able to:</p> <p>BO1: Apply methodologies, design process, planning process, techniques and systems to determine complex aspects in Architecture Engineering and Built Environment</p> <p>BO2: Organize and acquire new concepts by evaluating theories, principles and systems in Architecture Engineering and Built Environment</p> <p>BO3: Use design tools, experimental techniques, ICT and numeracy to provide valid conclusions to complex Architecture Engineering and Built Environment issues</p> <p>BO4: Develop integrated sustainable solutions to solve real world problems to achieve required end results in Architecture Engineering and Built Environment</p> <p>C. Critical Thinking Skills</p> <p>After successful completion of the programme a student will be able to:</p> <p>CO1: Assess and interpret complex Architecture Engineering and Built Environment problems and theories to make effective decisions</p> <p>CO2: Develop core skills to acquire, retrieve and analyse evidence and precedents</p> <p>CO3: Evaluate materials, resources and evidence to solve complex Architecture Engineering and Built Environment issues.</p> <p>D. General and Transferrable Skills (Other Skills Relevant to Employability and Personal Development)</p>
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	<p>After successful completion of the programme a student will be able to:</p> <p>DO1: Apply various methods and techniques to communicate ideas and justify decision using appropriate terminologies</p> <p>DO2: Demonstrate collaboration and coordinate in multidisciplinary teamwork</p> <p>DO3: Exercise ethical judgements and entrepreneur skills based on fundamental concerns of the discipline and sustainability values in executing tasks and projects.</p>
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* Mandatory fields

III. Judgement Summary

The Programme's Judgement: Confidence

Standard/ Indicator	Title	Judgement
Standard 1	The Learning Programme	Satisfied
Indicator 1.1	The Academic Planning Framework	Addressed
Indicator 1.2	Graduate Attributes & Intended Learning Outcomes	Addressed
Indicator 1.3	The Curriculum Content	Addressed
Indicator 1.4	Teaching and Learning	Addressed
Indicator 1.5	Assessment Arrangements	Addressed
Standard 2	Efficiency of the Programme	Satisfied
Indicator 2.1	Admitted Students	Addressed
Indicator 2.2	Academic Staff	Addressed
Indicator 2.3	Physical and Material Resources	Addressed
Indicator 2.4	Management Information Systems	Addressed
Indicator 2.5	Student Support	Partially Addressed
Standard 3	Academic Standards of Students and Graduates	Satisfied
Indicator 3.1	Efficiency of the Assessment	Addressed
Indicator 3.2	Academic Integrity	Addressed
Indicator 3.3	Internal and External Moderation of Assessment	Addressed
Indicator 3.4	Work-based Learning	Addressed

Indicator 3.5	Capstone Project or Thesis/Dissertation Component	Addressed
Indicator 3.6	Achievements of the Graduates	Addressed
Standard 4	Effectiveness of Quality Management and Assurance	Satisfied
Indicator 4.1	Quality Assurance Management	Addressed
Indicator 4.2	Programme Management and Leadership	Addressed
Indicator 4.3	Annual and Periodic Review of the Programme	Addressed
Indicator 4.4	Benchmarking and Surveys	Addressed
Indicator 4.5	Relevance to Labour market and Societal Needs	Partially Addressed

IV. Standards and Indicators

Standard 1

The Learning Programme

The programme demonstrates fitness for purpose in terms of mission, relevance, curriculum, pedagogy, intended learning outcomes and assessment.

Indicator 1.1: The Academic Planning Framework

There is a clear academic planning framework for the programme, reflected in clear aims which relate to the mission and strategic goals of the institution and the college.

Judgement: *Addressed*

- In 2004, Kingdom University (KU) introduced the Bachelor in Architectural Engineering (BAE) programme. Ever since, the programme has been reviewed several times both internally and externally by different entities, including external programme reviewers and the BQA. The review results have helped with the programme's development, based on an established planning process, ensuring its relevance, fitness for purpose, and continuous appropriate alignment with the requirements of the Higher Education Council (HEC), the BQA and the KU strategic plan. The Self-Evaluation Report (SER) refers to the subject benchmark statement of the Quality Assurance Agency for Higher Education-United Kingdom (QAA-UK), the Royal Institute of British Architects (RIBA) Part 1 criteria, and to the United Nations Educational, Scientific and Cultural Organization and International Union of Architects (UNESCO-UIA) criteria in reviewing and developing the BAE curriculum. This indicates a clear alignment of the programme with international occupational standards, which was further confirmed by the programme team in interviews.
- The BAE recently applied for placement on the National Qualifications Framework (NQF) and was reviewed accordingly on June 30th, 2022. The programme is in the process of fulfilling the NQF conditions regarding its placement. Nevertheless, evidence provided to the Panel illustrates the programme's alignment with the NQF design requirements, relevant mapping and confirmation processes.
- As for potential risks to the quality of the programme, there is continuous monitoring of them. For example, during the COVID-19 pandemic, the programme team identified several potential risks to the delivery of the programme and to its academic standards, as

the move to online teaching and learning was clearly a challenge and a risk for such a design-based programme. However, since 2021-2022, the teaching and learning went back to being face-to-face. Furthermore, the Panel was informed during interviews with the Senior Management that being a private institution, KU could face the risk of business discontinuity. The University tries to manage this risk by continuously developing its programmes and equipping its colleges with the latest technologies and providing in them appropriate facilities and workspaces. The University also has a robust staff development plan to improve teaching and learning within its programmes. In addition, the College has a risk management register and plan in place, to monitor the status of the programme and immediately begin to implement any mitigating actions once any risk is identified.

- The BAE has a clear and concise qualification title which accurately reflects the content of the programme and is correctly documented on the university website, certificates and other programme-related documents. The programme additionally has five aims that are regularly revised and which are characterized by their clarity, appropriate alignment with the missions and goals of the College of Architectural Engineering and Design (CAED) and the University, and their suitability for the construction sector in the Kingdom and the region. Information reported in interviews with relevant stakeholders and evidence of programme reviews indicate that the aims are revised regularly based on stakeholders' feedback and especially that elicited from the College Industrial Advisory Council (IACL).

Indicator 1.2: Graduate Attributes & Intended Learning Outcomes

Graduate attributes are clearly stated in terms of intended learning outcomes for the programme and for each course and these are appropriate for the level of the degree and meet the NQF requirements.

Judgement: Addressed

- The College has seven graduate attributes embedded in the BAE aims, to which the Programme Intended Learning Outcomes (PILOs) are clearly mapped. There is evidence to show that the PILOs meet international norms through benchmarking and meet NQF requirements. They are clearly stated and written in measurable terms and are appropriate for the type and level of the programme's qualification, while reflecting the different knowledge, skills, and competencies that learners are expected to acquire through the programme's courses.
- There is clear and appropriate mapping between the PILOs and the Course Intended Learning Outcomes (CILOs) in the programme. A review of the course specifications by the Panel indicated that, overall, the Intended Learning Outcomes (ILOs) of each course are consonant with its level and contents, and their appropriateness is ensured through related NQF mapping processes and also through benchmarking exercises against

professional bodies that accredit academic provision of architecture and architecture-related degrees (e.g., RIBA Part 1 and UNESCO-UIA standards).

Indicator 1.3: The Curriculum Content

The curriculum is organised to provide academic progression of learning complexity guided by the NQF levels and credits, and it illustrates a balance between knowledge and skills, as well as theory and practice, and meets the norms and standards of the particular academic discipline.

Judgement: Addressed

- In 2020-2021, the Department of Architectural Engineering started implementing a revised curriculum, which takes into consideration NQF, QAA-UK and RIBA standards. According to the programme's Senior Management, the Department is currently considering applying for international accreditation of this curriculum *via* RIBA. Additionally, local, regional, and international universities with similar programmes were considered in the benchmarking of the curriculum before its endorsement by Senior Management and implementation in the programme.
- The curriculum extends over a total period of five years including 179 credit hours covered in 57 courses, wherein the design studio work makes up 47 credit hours (26% of the total). This is represented through the programme's study plan, which the Panel finds to be clear and well-organized, showing appropriate progression year on year and course on course in terms of design, problem-solving complexity, NQF levels and credits, and pre-requisite requirements. The study plan also demonstrates a good balance between theory and practice, and between knowledge and skills in the curriculum. This is by ensuring among the different semesters a reasonable distribution of varied courses and aspects related to architectural engineering, such as: theory, technology, humanity, and design, wherein a practical design studio course is included within each semester of the plan.
- The course contents, as revealed through a review of a sample of course specifications and course portfolios, cover all elements expected in terms of depth and breadth. However, the Panel noticed from the study plan that the number of courses required of students per semester is somewhat high comparatively to similar programmes. Thus, the Panel recommends that the College should consider reducing the number of courses required per semester, by possibly merging some courses together. Doing this can impact positively the number of assessments assigned to students per semester, the number of resources needed, and the quality of students' works.
- The course specifications show that the textbooks and references used in the courses are, in general, current and relevant to recent research findings and professional practices, with a resource committee available at the department level to monitor and look after the

necessary references and textbooks of different programmes and to ensure their availability among the university library's collection.

Indicator 1.4: Teaching and Learning

The principles and methods used for teaching in the programme support the attainment of programme aims and intended learning outcomes.

Judgement: Addressed

- The CAED has a teaching, learning and assessment strategy that guides all related practices in the BAE programme and is easily accessible to all faculty members *via* SharePoint. This strategy is well-aligned with KU's mission to offer quality and challenging teaching and learning experiences to its students and with its first strategic dimension as articulated in the University Strategic Plan 2017-2022. This strategy also directs programmes in the College to utilize a variety of teaching methods based on the nature of their courses and the learning outcomes to be achieved.
- A review of the course specifications and course portfolios indicated to the Panel that the teaching and learning methods used in the courses are diverse and contribute to the attainment of the relevant CILOs and PILOs. As examples, they include but are not limited to one-to-one design tutorials, group tutorials, lectures, student presentations, seminars/group discussions, practical work/laboratories, field visits, role playing, research-based learning, and internship-based learning. Specific evidence provided to the Panel presented good examples of role playing and problem-based learning methodologies being used in the programme. E-learning is also there to support practices that take place in the classrooms. Interviews with faculty and students confirmed that online resources such as e-text books, e-courses, online video demonstrations, and online communication and support are provided, to help students with the achievement of their learning outcomes. Also, although teaching and learning shifted to face-to-face after COVID-19, and since 2021-2022 specifically, KU continues to provide flexible e-learning when needed.
- The Panel finds the rich and diverse range of formal and informal teaching and learning methods used in the courses, in addition to the non-formal learning experiences provided in the university environment, as full of potential to encourage students to research, create, and innovate, while providing them with ample opportunities to apply their theoretical knowledge in professional practice contexts and to direct their own learning toward professional development and growth. This is mainly accomplished among other things through programme components such as the 'Graduation Project Research' course (ARE551) and the 300-hour industrial internship requirement and through informal guest lectures, talks, presentations, and field visits organized by the College.

Indicator 1.5: Assessment Arrangements

Suitable assessment arrangements, which include policies and procedures for assessing students' achievements, are in place and are known to all relevant stakeholders.

Judgement: Addressed

- There is a clear framework through which all assessments in the College are managed. This framework consists of a set of policies and procedures that are readily available to faculty and students alike; as, policies and related procedures relevant to students are summarized in the Student Handbook, while those pertinent to faculty are available *via* SharePoint. Examples of policies within this framework are the Assessment and Moderation Policy, Assessment Procedure, Assessment Moderation Procedure, and the Assessment Appeal Procedure. A review of these policies and procedures by the Panel indicated their appropriateness for the level and type of the BAE programme. Additionally, an examination of the course portfolios and interviews with faculty, students, and alumni confirmed regular and sound adherence, overall, to their guidelines, including those relevant to the assessment of research assignments and projects, where applicable, and the the ethical principles of relevance to them.
- As per the assessment policy, formative assessment takes place in the programme in both theoretical courses as well as in courses of a more practical nature. Course Coordinators and faculty members confirmed during interviews that formative assessment is relied heavily on mostly in the design studio where it takes place through tutorials, interim reviews, and pre-juries on students works. Students, as well, confirmed the reliance of the programme on formative assessment as a mechanism for providing them with prompt feedback on their performance, and expressed general satisfaction with it.
- In addition to formative assessment, the programme uses summative assessments to evaluate students' performance. Evidence on this was provided in the form of examples of summative assessments and related feedback from several courses, such as 'Basic Design Studio II' (AED112), 'Landscape Architecture' (ARC361), and 'Sustainable Indoor Environment' (ARE421). With respect to the feedback provided to students on their works, the Panel noticed a greater reliance in some cases on feedback in the form of marks rather than on written statements. The Panel, thus, recommends that the College should ensure greater provision of standard written feedback in the form of comments on good achievement and areas for improvement in relation to students' assessed works.
- Internal and external moderation of examinations are implemented both pre-and-post examination. The pre-examination moderation is a procedure to check the coursework or the examination paper for consistency. The post-examination moderation is a process to check the consistency/robustness of the marking and feedback provided to students on their assessed work. In interviews, the external moderators and the reviewers of the

programme in general, acknowledged that, overall, one of the strengths of the programme consists in the good mechanisms it has in place for designing, marking assessments, and giving feedback to students. This is in addition to the good alignment in the programme between the design work and the theoretical aspects.

- In the case of a student not agreeing with their grade, they can submit an appeal to the University Grievance Committee. During the interview with students, they exhibited clear awareness of the appeal process and explained that they are informed about it during their induction into the programme. However, Senior Management confirmed to the Panel that the Department receives very few appeals per semester, mainly due to the robust moderation of marking mechanism put in place, which helps ensure the accuracy and fairness of grading students' works.
- As for academic misconduct by students, this is dealt with according to the university's Policy of Student Code of Conduct, Anti-Bullying, Discrimination, and Harassment. Based on the evidence provided in the form of samples of minutes of meetings for the College Misconduct Committee, the Panel was able to conclude that misconduct cases in the Department are well-recorded, well-documented, and handled according to policy.

Standard 2

Efficiency of the Programme

The programme is efficient in terms of the admitted students, the use of available resources - staffing, infrastructure and student support.

Indicator 2.1: Admitted Students

There are clear admission requirements, which are appropriate for the level and type of the programme, ensuring equal opportunities for both genders, and the profile of admitted students matches the programme aims and available resources.

Judgement: *Addressed*

- There is a clear admission policy and procedures documented in the programme specification and published in the Student Handbook and on the university website. The admission requirements are related to the programme's language of delivery, skills needed, and opportunities available after successful graduation from the BAE programme. As for the admission form, it includes a slot for applicants to declare any special needs that they may have, so that the university resources and premisses can be adjusted to support them if accepted into the programme. This indicates equal opportunities of admission into the programme for applicants irrespective of their needs. The same is true for gender equality, and the evidence provided shows a fair balance between the male and female students' acceptance ratio in the programme.
- The admission criteria include a high school degree with a cumulative average of a minimum of 60%; a pass mark in the university English and Mathematics Placement tests; and a pass mark in the architecture and design knowledge and skills test for applicants. The Panel finds the admission criteria and requirements outlined in the Admission Policy and Procedures to be consistent with and comparable to local and international architecture programmes and colleges. There is also evidence that they are fairly implemented, as they are rigidly monitored and audited by the Accreditation and Quality Assurance Centre (AQAC), as was confirmed by the Registration Department during the interviews.
- The minimal requirement for entry into the programme is a cumulative high school average of 60%, and the University provides support for inadequately prepared students to enter and progress in the programme, through relevant foundation courses that are offered for applicants with an average below 60% or who underperform in the required

entrance examinations. Despite this support, however, the Panel considers the minimal requirement of 60% low for the level and nature of the BAE programme, especially when compared with the minimal requirements of similar programmes locally and regionally. The Panel, thus, recommends that the College should seriously consider revising its admission criteria, to make the cumulative high school average requirement higher than 60%.

- There is a clear transfer policy included in the admission policy and procedure document for students transferring from other institutions, who are required to meet certain HEC regulations before being accepted into the programme. As for internal transfers within the University, their regulations are set out in the Recognition of Prior Learning Policy and Procedure, and in practice, the university's Student Information System (SIS) is used for automatically evaluating common courses between programmes for internal transfers. Courses that are not common are evaluated by the College Admission Committee and this takes place for external transfers as well.
- Interviews with senior management and faculty of the programme along with relevant evidence provided confirmed to the Panel that at the end of each year, the College Council reviews the admission criteria and makes necessary adjustments to them where necessary, in light of students' outcomes, stakeholders' feedback, and benchmarking results.

Indicator 2.2: Academic Staff

There are clear procedures for the recruitment, induction, appraisal, promotion, and professional development of academic staff, which ensure that staff members are fit-for-purpose and that help in staff retention.

Judgement: Addressed

- The University has a clear Human Resource Manual of policies and procedures and an Employee Handbook as well as an Induction Policy and Procedure that collectively help ensure fair recruitments of employees and protect their rights, while also clarifying what is expected of them in terms of codes of conduct. Interviews with faculty confirmed that there are clear and equal-opportunity recruitment procedures in place and that, upon appointment, they were inducted well at different levels (university, college, and department) and familiarised with what is stipulated in the main policies pertinent to their needs, such as the performance appraisal policy, staff development, and academic promotion policies and procedures.
- The Panel reviewed a sample of filled performance appraisal forms and noticed in the evaluation the reliance on several performance indicators and areas of self-improvement for future development, rated by both the faculty members themselves (as self-evaluation)

and by their Chair of Department, with comments and notes provided by the Chair. Student evaluation and class observation results are also calculated in the appraisal score for each faculty member. Interviews with academic staff confirmed to the Panel clear awareness of the appraisal criteria and procedures as well as a general level of satisfaction toward them.

- The appraisal results are incorporated in the promotion process at KU, where the procedures for applying for academic promotion are clear, well-defined and transparent. One main criterion for academic promotion is research output in terms of quality and quantity. However, although nine faculty members from the University were promoted between 2014-2022, none of them was from the BAE programme. The Panel, thus, recommends that the College should provide greater support where needed to assist faculty members with their career progression through academic promotion.
- At the time of the virtual visit, there was a total of 10 full-time faculty members in the College serving the programme, out of which five belonged to the Department of Architectural Engineering. Only one of the five was at an Associate Professor rank and the remaining at the rank of Assistant Professor. Additionally, there were two Teaching Assistants specialized in architectural engineering serving the programme on a part-time basis, with additional part-time instructors teaching the general courses. The Panel noticed that the faculty members in the College vary in professional experience in terms of teaching and practice in the field and many of them hold professional certificates (e.g., in Revit, 3D Max, and Maya). Also, most of them hold a United Kingdom Higher Education Academy fellowship, which denotes their professional practice in teaching and learning. Whereas their professional knowledge and development is demonstrated through their professional affiliation to well-known bodies in the field of architecture such as Autodesk and US Green Council. The Panel is of the view, thus, that the faculty members teaching on the programme are appropriate in terms of number, range of academic qualifications, specialisations and professional experience.
- The University has a clear research policy and procedures that contribute to ensuring a quality research culture. Additionally at the College level, there is good annual research planning that aligns research objectives with the college vision and mission. The research priorities set out by the College are aligned with its programmes' aims and visions, which the Panel found to be well-reflected in the good amount of research studies published by KU faculty in high-ranked journals and in their varied involvements in local and international conferences.
- The faculty members' engagements in research at KU along with their assigned workload is documented in their weekly timetable, as was observed during the campus tour visit and through conversations with the faculty during the virtual interviews. The timetables indicate clear adherence to HEC regulations in the allocation of teaching loads and

consistency with the faculty workload allocation policy specified in the Faculty Handbook. In addition, female faculty members' special needs are taken into consideration when allocating workload or assigning special tasks or projects, as was confirmed during interviews with the faculty.

- With respect to capacity building opportunities for staff, these are handled by a special unit in the University known as the Staff Development Unit (SDU), which is hierarchically under the Human Resource Department. The SDU plans and monitors effective arrangements for faculty professional development and analyses their impact *via* specific evaluation forms designed for that purpose. Ample evidence of staff professional development activities and engagements was provided to the Panel through the university's Staff Development Plan for 2021-2022 and the activities' feedback forms and analyses. The Panel appreciates the notable level of support in terms of capacity building opportunities provided to the faculty and staff by the College and the University.
- In relation to this, Table 2.7 in the SER displaying the number of years faculty members of the CAED have been rendering services at the University, reports an average length of service of 5.25 years and a maximum of 14 years, which indicates a high retention rate, that KU regularly monitors and measures and is keen on maintaining. In addition to the professional development opportunities, several incentives are in place to limit staff turnover, which were mentioned both in the SER and in interviews, such as support for research activities, and encouragement of faculty to take on administrative positions with additional allowance advantages.

Indicator 2.3: Physical and Material Resources

Physical and material resources are adequate in number, space, style and equipment; these include classrooms, teaching halls, laboratories and other study spaces; Information Technology facilities, library and learning resources.

Judgement: Addressed

- During the tour of KU's campus, the Panel found the number and size of the classrooms and laboratories to be adequate for supporting the programme's activities. The tour also confirmed the availability of an adequate laboratory, studio, and workshop setup, as demonstrated in the video provided by KU as evidence. Specifically, there are two model-making workshops that are well-equipped with the necessary machines for Architecture Engineering and that adhere to the relevant safety measures and procedures as spelled out in the Engineering Workshop Health & Safety Guidelines Catalogue. They also have clear utilization and safety instructions posted in them, with monitoring cameras as well as fire detectors. The case is the same in terms of adhering to the safety guidelines when it comes to the laboratory exclusively serving the programme. Nevertheless, the Panel

recommends that the College should ensure that there is better storage of materials and large wood panels in the workshops to prevent accidents and damage of goods. As for the classrooms, the Panel notes with appreciation the convenient and flexible setup in some of them using 22 movable partitions that allow ample space for the display of student work during juries.

- The Information and Communication Technology (ICT) facilities and resources that serve the programme were examined during the campus tour and also *via* the related demo provided during the virtual visit, and were found to be sufficient and adequate, with varied hardware, software, digital media, and communication and management systems being used, each for its own purpose, to support end users' needs whether faculty or students alike. For example, it was noticed that there is heavy reliance in the Department and College on an active Student Information System (SIS), Management Information System (MIS), a Learning management System (LMS) *via* Moodle, MS Teams, SharePoint, and an active IT helpdesk. Also, as mentioned in the SER, faculty and students have access to Office 365 suite with its main applications, a stable WIFI network, and the latest design modelling and rendering software.
- The University has in place a Library Management Policy through which the university library is guided in its main functions of acquisition, library membership, circulation, course reserves and stock of library collection. While the campus tour revealed that the physical library collection is relatively small in books and average in periodicals and references, the University benefits from a large electronic database to which the students and staff have direct access. Through interviews with library staff, the Panel concluded that proper induction of the library services is provided to faculty and new students by the librarian upon request. Considering the size of the College, the Panel finds this type of provision reasonable; however, the Panel advises that the library organize on a regular basis systematic and well-planned induction sessions for all its new users.
- In terms of maintenance of resources and facilities, KU provided evidence of outsourced maintenance companies, which conduct regular maintenance checks on, for example, the fire alarm system, air conditioners, elevators, and the like. An in-house technician is also available permanently on campus to perform maintenance tasks as needed. Interviews with faculty and students during the virtual visit confirmed their satisfaction with the maintenance services provided in the University.
- KU has appropriate arrangements to ensure the health and safety of students and staff on campus, which are guided by the Occupational Health and Safety (OHS) Procedure and the safety Manual. Health and safety on campus are supported mainly by a group of OHS officers, fire marshals, and a clinic with a full-time licensed nurse. The clinic was visited during the campus tour and found to have appropriate arrangements and equipment in place for minor to medium emergencies.

Indicator 2.4: Management Information Systems

There are functioning management information and tracking systems that support the decision-making processes and evaluate the utilisation of laboratories, e-learning and e-resources, along with policies and procedures that ensure security of learners' records and accuracy of results.

Judgement: Addressed

- There is an appropriate MIS that connects several administrative tasks together. The system gathers, sorts and organizes data to be processed and to generate reports linked to the SIS, as stated in the SER and demonstrated during the ICT demo during the virtual visit. Additionally, this system, as was demonstrated during the demo, uses an integrated algorithm within Moodle to track students' grades and CILOs' achievement, generate needed CILOs-PILOs mapping reports, and create the course portfolios within simple clicks. This allows and secures proper documentation of course content and saves a lot of administrative work and time for the faculty involved in the programme and is, consequently, considered by the Panel to be a good practice for other institutions to follow. Thus, the Panel notes with appreciation the original integration of the MIS with the LMS, which is generating critical reports, such as the ILOs' achievement reports, and data in the form of course portfolios, that can be used in important decision-making processes at the level of the programme. Moreover, KU utilizes other data management and tracking systems such as LABSTAT, which helps track the utilisation of its various resources, including e-resources, and supports the management's related decision-making processes.
- Learners' records and accuracy of results are maintained through a robust process of safe storage and monitoring, in adherence with the Record and Retention and Disposal Policy as well as other related policies that ensure the security of learners' records and archiving procedures. Physical and digital records are retained, encrypted and backed up regularly using a secure access to the SIS system. Local and remote servers are used for this process, as was observed during the campus tour and confirmed through the virtual interviews with the ICT staff. Furthermore, KU has in place a Certification Policy and Procedure aligned with HEC guidelines, through which the accuracy and authenticity of the certificates and transcripts it issues are verified and assured, and which ensures their issuance in a timely manner. The certification issuance process can take around two months in total depending on the HEC approval and is, in general, an easy process, as was confirmed by the BAE alumni during interviews.

Indicator 2.5: Student Support

There is appropriate student support available in terms of guidance, and care for students including students with special needs, newly admitted and transferred students, and students at risk of academic failure.

Judgement: *Partially Addressed*

- KU provides a variety of support services from which the students of the BAE programme benefit. To begin with, the facilities available for the students such as the library, laboratories, and workshops are well-equipped with professional and dedicated staff members. In the library, the staff organize information literacy sessions for the students as needed and in the computer laboratories, there are two technicians and two ICT specialists to support the students with any difficulties they may face. ICT technicians are also available to help troubleshoot hardware, software, and WIFI connection problems outside of the computer laboratories, as they arise. However, during the campus tour, the Panel noticed that there is only one laboratory dedicated for the students of Architecture Engineering to take their Computer-Aided Design (CAD) classes in and work on their projects. In relation to this, the Panel recommends that the College should establish another CAD laboratory to better support the students with their CAD-related projects by providing them with greater access to the relevant facilities even outside of their class time.
- Students can benefit from mental health and wellbeing support through counselling services available at the University that are offered as per the Student Welfare, Support and Guidance Policy. This policy is inclusive in nature, as along with other policies and procedures, it covers guidance for students with special issues and needs. Additionally, it was confirmed to the Panel through the SER and from interviews that appropriate arrangements are in place to integrate women's needs, including those of pregnant women or who have childcare commitments.
- Newly admitted students into the programme, irrespective of whether they are entering directly or being transferred from another programme, are provided with an orientation programme, which is organised by the Student Affairs Department as per the Student Orientation Procedure. Orientation includes inducting students about matters related to their studies at KU in general, the facilities and services, marking and grading, and the different systems in place. Information about the BAE programme in specific is provided to the newly admitted students by the Chair of the Department. Interviews with students confirmed a general satisfaction with the induction processes provided at KU.
- Employability and career counselling are provided according to the Student Career Guidance Policy and Procedure. The Internship, Alumni Affairs and Career Guidance Unit (IAACGU) is officially in charge of providing this type of counselling, which it conducts through an Annual Activity Plan that gets submitted to the College Dean and which includes topics relevant to career awareness and guidance. Despite this planning, the Panel noticed that the topics covered by the IAACGU do not focus much, if at all, on the possible paths graduates of the architecture engineering programme can take. Also, there is no evidence which indicates that one-to-one career counselling is taking place with

the BAE students. The Panel, thus recommends, that the College should improve the career guidance it provides the BAE students with, to make it more focused and relevant to their prospective field of work and possible career paths.

- In terms of academic advising, this is guided by the detailed Student Academic Advising Policy and Procedure, which ensures a clear, formal, and systematic advising process. Interviews with students confirmed that the advising is now being conducted face-to-face but was also available online during the COVID-19 pandemic. Interviews with faculty revealed that student advising helps monitor and ensure the academic progression of students and identify those at-risk of academic failure. The information systems available at the University, the LMS and the SIS, also help with the identification of such students. All support provided to at-risk students is planned for and executed according to the Student Academically at-risk Policy and Procedure.
- Support services at KU, are regularly evaluated through student satisfaction surveys, the analysis of which ultimately leads to relevant improvement planning. The Panel examined evidence in the form of a sample of completed Student Satisfaction surveys and a Student Satisfaction Survey Analysis Report, and noticed a generally high student satisfaction rate, ranging from 83% to 97% on every survey item related to academic support (e.g., academic advising and briefing on the requirements of the programme). The Panel was also informed of a second mechanism through which services are evaluated and this is through feedback received from the student representatives, who serve as a vital channel of communication between the BAE student body and the college officials.

Standard 3

Academic Standards of Students and Graduates

The students and graduates of the programme meet academic standards that are compatible with equivalent programmes in Bahrain, regionally and internationally.

Indicator 3.1: Efficiency of the Assessment

The assessment is effective and aligned with learning outcomes, to ensure attainment of the graduate attributes and academic standards of the programme.

Judgement: Addressed

- The programme uses a variety of formative and summative assessment methods. As indicated through the contents of the course portfolios and other provided evidence, the summative assessments are clearly documented and in line with current good practices, in terms of the level of assessments' complexity, and meet the academic standards of the programme. This was further confirmed through the review of a sample of assessed students' projects, which demonstrated consistent assessment across the board and good design work on the part of the students. Formative assessment is also well-implemented in the programme, with it being mostly provided in the design studio through tutorials, interim reviews, and pre-juries on students works, as reported by the course coordinators and faculty in interviews.
- The assessment methods in the programme are selected depending on the ILOs. This is illustrated in the mappings between the assessment methods and the CILOs included in the course specifications, which get checked and validated by both the internal and the external moderators to ensure their accuracy, as was confirmed through interviews with all the relevant stakeholders (i.e., course coordinators, faculty, and external moderators). To align the assessments with graduate attributes, the programme maps the CILOs to the PILOs and the PILOs to the graduate attributes. Additionally, the assessment tools themselves such as assignments and examination papers are mapped to the CILOs. Consequently, collective achievement of the CILOs through the assessment tools leads to the achievement of the PILOs and the graduate attributes mapped to them. Internal moderation and the CILOs and PILOs' achievement reports generated by the automated system through the LMS help verify and confirm that the student outcomes are being met. Indirectly, also, the PILOs are assessed through the surveys completed in the programme by the internship supervisors, alumni, and employers, which help confirm whether the knowledge and skills of students reflected in their achievements are at the level of the expected PILOs.

- In terms of monitoring the implementation of the assessment process, the programme has several mechanisms in place. To begin with, there are policies and procedures for monitoring the implementation of major examinations, which are comprehensive and provide an effective operational framework. Additionally, internal and external moderation occurs for both mid-term and final examinations. As for achievement of CILOs, this is monitored through the instructors' reflections on the courses they have taught *via* the completion of the 'Faculty's Personal Reflection and Future Plans of Improvement' form for each course, followed by proposed improvements to the courses. However, the Panel notes that the implementation of internships in the programme is not fully moderated and this was confirmed through interviews with Senior Management. Thus, the Panel recommends that the College should widen the scope of moderation to cover the internship component like any other course in the programme.

Indicator 3.2: Academic Integrity

Academic integrity is ensured through the consistent implementation of relevant policies and procedures that deter plagiarism and other forms of academic misconduct (e.g. cheating, forging of results, and commissioning others to do the work).

Judgement: Addressed

- KU has clear policies and procedures in relation to academic integrity and research ethics, which are disseminated to the university community through the Student Handbook, Employee Handbook, and SharePoint, and *via* some awareness sessions and briefings held by the Department. Students are also introduced to these policies during orientation day, and interviews with faculty and students indicated general awareness of how academic plagiarism can be avoided and how ethical principles of scientific research can be abided by.
- Verification of students' assignment submissions is implemented in line with the university's plagiarism policy and procedure and takes place through the use of Turnitin software and TinEye image checker, which provide staff and students with feedback on the academic integrity of students' submissions for assessment. The Panel examined a sample of Turnitin reports and determined from it that the verification of the academic integrity of students' works is according to policy and procedure.
- As for student misconduct, it is handled by the Misconduct Committee, comprising a minimum of five staff members, which operates within well-defined terms of reference. When necessary, the Committee convenes to review the case under consideration and determines appropriate action. As indicated by the committee's minutes of meetings, cases of academic integrity breaches are effectively addressed, and fair and relevant penalties are in place. As an example, the Panel was presented with a case of an academic integrity

breach including submitting other students' work as their own, for which the student received a failing grade and was required to repeat the course of study.

Indicator 3.3: Internal and External Moderation of Assessment

There are mechanisms in place to measure the effectiveness of the programme's internal and external moderation systems for setting assessment instruments and grading students' achievements.

Judgement: Addressed

- The Assessment Moderation policy and procedure at KU are appropriately delineated and include both internal and external moderation. Internally, the moderation is conducted pre-and-post the examination or major assignment. With the exception of the post-moderation of final examinations, which is conducted by the University Teaching, Learning, and Assessment Committee (UC-TLAC), all internal moderation is overseen by the College Teaching, Learning, and Assessment Committee (CC-TLAC), which designates an internal moderator to review based on certain criteria the relevance and alignment of the assessments to be moderated (pre-moderation) and check the assessment results after the assessments are completed (post-moderation).
- Internal moderators must have sufficient expertise in the related subject area and complete special forms designed for moderation purpose when reviewing assessments. The Panel reviewed a sample of completed internal moderation forms with instructors' correction, in addition to reviewing evidence of revisions done in assessments as a result of internal moderation and finds the process to be consistently implemented. The Panel also notes appropriate mechanisms for evaluating the internal moderation processes, in the form of moderation reports prepared by the CC-TLAC and submitted for discussion in the College Council.
- A somewhat similar moderation process applies for external moderation with slight variations. Again, the CC-TLAC plays a central administrative role to facilitate external pre-moderation of final examinations and post-moderation of entire course assessments and portfolios. The CC-TLAC is supported by the Chair of the Department, who according to the University Moderation Procedure, is the main party responsible for external post-moderation.
- External moderators, who normally serve three-year appointments, must be experienced academics from local, regional, and international institutions. They are selected by the Chair of the Department and approved by the College Council. Once done with their moderation tasks, external moderators present reports that are used by the CC-TLAC to prepare improvement plans with actions for forthcoming semesters, that require approval from the College Council. Implementation of the approved plans is then overseen by the

College Quality Assurance and Enhancement Committee (CC-QAEC) and the AQAC, which ensure monitoring with semestrial reportage from the CC-TLAC on implementation progress. This altogether helps ensure continuous evaluation of the effectiveness of the external moderation process.

- In interviews, the moderators confirmed that following the submission of their moderation reports, they always receive feedback from the Chair of the Department about how the Department plans to address their comments. In result, the Panel finds the overall moderation process in the programme to be clear and transparent. The Panel is also of the view that internal and external moderation explicitly influences and guides the setting of assessment and the fairness and appropriateness of marking. It is also an effective process for objective and expert alignment of assessment in the programme with international educational standards and professionalism. The Panel, thus, appreciates the robust internal and external moderation processes in place and the effective role they have in improving the programme's assessments.

Indicator 3.4: Work-based Learning

Where assessed work-based learning takes place, there is a policy and procedures to manage the process and its assessment, to assure that the learning experience is appropriate in terms of content and level for meeting the intended learning outcomes.

Judgement: Addressed

- There is a university-wide internship policy with a related procedure that sets out the roles, responsibilities and process for student internships in the programme. Equivalent experience amongst all students undertaking work-based learning is required as stipulated and ensured by the Student Career Guidance Policy and Procedure, in which the responsibilities of the various stakeholders are defined, including the industry partners and employers. The College Internship Committee oversees the implementation processes of the internship as per the committee's terms of reference, which ensure that all stakeholders involved and especially the students are briefed on the expectations and responsibilities for internships, whereby academic and field supervisors communicate with the students at different stages of the internship process to explain to them the exact tasks expected of them. This is in addition to preparing an explicit training plan for them to guide them in what needs to be done. The Panel examined samples of students' training plans and found them to be clear and sufficiently detailed.
- As defined in the specification of the 'Architecture Internship Training' (ARE470) course, the work-based learning component in the programme is a four-credit-hour course entailing 300 hours of field-work, that can be taken after completion of 125 credit hours in the study plan and successful completion of 'Building Regulations & Codes' (ARE371).

The internship is related directly to PILOs through the course CILOs, focusing on development and demonstration of knowledge and understanding of industry-specific skills, critical thinking and transferable skills as relevant to professional practice in industry. The Panel is of the view that the CILOs are appropriate for effective intended work-based learning in an industry context (i.e., internship).

- The assessment of student internships is thorough and detailed and is conducted by both the academic supervisor and the field supervisor. The academic supervisor evaluates and awards marks for four in-training reports (a total of 20% of the assessment weight), a final report (20% of the assessment weight), and a final presentation which is evaluated with the help of an examining panel (20% of the assessment weight). Additionally, the academic supervisor visits the intern in the field and carries out observations of their performance in practice, which are awarded 10% of the internship assessment weight. As for the field supervisor's evaluation, it amounts to 30% of the total grade and it is provided with relevant constructive feedback on the students' performance. Based on a review of a sample of students' internship work and related evaluation forms, the Panel finds the assessment of work-based learning in the programme consistently implemented and appropriate in terms of content and level.
- Several mechanisms are in place to evaluate the effectiveness of the internship component in the programme such as surveys to collect feedback from industry/field supervisors and from student interns. Through all these surveys, respondents can provide written feedback based on their internship experience whether as supervisors or interns and make recommendations for improvement of the course. The programme also relies on feedback from the college IACL members, who in the interview with the Panel confirmed that they had previously made recommendations on the work-based learning with regards to hours, topics, rules, regulations, and fees, to which the programme responded positively with changes.

Indicator 3.5: Capstone Project or Thesis/Dissertation Component

Where there is a capstone project or thesis/dissertation component, there are clear policies and procedures for supervision and evaluation which state the responsibilities and duties of both the supervisor and students, and there is a mechanism to monitor the related implementations and improvements.

Judgement: Addressed

- The capstone course in the BAE programme is the 'Graduation Project Design' (ARE512), where related documents that are accessible to supervisors and students alike, such as the course specification, the graduation project guidelines, and Assessment Procedure, demonstrate the desired structure for this course, specifically, the mapping of the CILOs

and PILOs, as well as the responsibilities of the supervisor, student and assessors. Importantly, students are briefed on this course in some detail through the awareness session organised by the Department specifically for the graduation project students.

- Students can register for the Graduation Project only after completing 'Graduation Project Research' (ARC401) and 'Architecture Design VI' (ARC511), as students are expected to apply what they learn in these courses in their graduation projects. As a capstone course of a professional design programme, ARE512 serves as a major final student undertaking that demonstrates that a student has a comprehensive and integral understanding of the sum-total of their studies.
- Assessment of the capstone course (ARE512) is comprehensively documented, where the assessment process is clearly delineated through all stages: pre-jury 1 and 2; progress critique; and final jury. Detailed assessment rubrics are also included for each of the four stages of assessment with related ILOs. The final jury assessment is undertaken by the academic supervisor, an internal assessor and an external assessor, by which both academic and industry standards are maintained. The Panel was provided with a group of graduation project design samples for some students and a sample of graduation project assessment forms and is of the view that mechanisms implemented for the assessment of the capstone project component of the programme are rigorous and help ensure its comparability in standards to equivalent programmes internationally.
- Throughout the process of working on their graduation projects up until completion, students are guided by way of continuous studio supervision. Regular and formal jury reviews, comprising supervisor, internal juror and external juror, allow students to present their designs at pre-determined stages of progress and to receive critical reviews and recommendations orally and in writing so that their designs may be improved prior to the final stage of the project. In addition to this regular monitoring and review of the students' progress while working on their graduation project, there is also monitoring conducted in relation to the implemented processes and improvements. This takes place through the work of the AQAC, which oversees and directs all improvement initiatives associated with the graduation project process, based on relevant stakeholders' feedback collected *via* surveys and other similar data-collection tools.

Indicator 3.6: Achievements of the Graduates

The achievements of the graduates are consonant with those achieved on equivalent programmes as expressed in their assessed work, rates of progression and first destinations.

Judgement: Addressed

- The Panel reviewed samples of graded assignments included in the course portfolios and interviewed faculty, students, alumni, employers, and members of the college IACL, to learn about the level of students' achievements and, in result, arrived at the conclusion that the level is appropriate for the BAE programme and is comparable with similar programmes locally, regionally, and internationally. Appropriateness of the achievements' level is further confirmed through the comprehensive mappings between the intended learning outcomes at different levels in the programme. Furthermore, the results from the February-April 2020 alumni and employers' survey about the programme's graduates and the Destination of Graduates List between 2017-2018 and 2020-2021 indicate that the programme performed well in terms of student outcomes and achievements.
- The analyses conducted by cohort of the ratios of admitted students to successful graduates including year-on-year progression, retention, and length of study over the last few years demonstrate, according to the Panel, acceptable progression, retention, and length of study, especially over the ongoing pandemic period. However, the Panel noticed that the programme relies only on informal communication with colleagues in other institutions in Bahrain, to compare the progress and achievement levels of its students against. The Panel thus recommends that the College should place more effort on developing formal mechanisms of benchmarking its student progression, retention, and length of study ratios against those of parallel programmes.
- Interviews with the Senior Management of the programme and the faculty confirmed that cohort reportage data and analyses of all results obtained through surveys targeting the monitoring of students' graduate destinations feed into the annual and periodic reviews of the programme. Such data thus helps the programme evaluate the extent to which its academic standards are being met and make related decisions about which areas of improvement need to be addressed. Similarly, feedback from alumni, their previous internship supervisors, and current employers about the graduates' standard and level of preparedness in terms of knowledge and skills is a valuable input for programme review and improvement. Interviews with all these groups of stakeholders during the virtual visit conveyed a good level of satisfaction with the graduates' profile in general and their skills, competencies, and professional attitudes.

Standard 4

Effectiveness of Quality Management and Assurance

The arrangements in place for managing the programme, including quality assurance and continuous improvement, contribute to giving confidence in the programme.

Indicator 4.1: Quality Assurance Management

There is a clear quality assurance management system, in relation to the programme that ensures the institution's policies, procedures and regulations are applied effectively and consistently.

Judgement: Addressed

- The BAE programme is guided in all its functions and operations by a set of bylaws, strategic frameworks, and strategic plans at the institutional level, such as the University Bylaws, Strategic Academic Planning and Review Framework, Strategic Academic Plan 2017-2022, and the Annual Research Plan. This is in addition to a large set of policies and procedures that the programme abides by such as the Quality Assurance and Enhancement Policy, Teaching and Learning Policy and Procedure, Assessment Policy and Procedure, Research Policy and Procedure, Internship Policy, and Registration, Enrolment and Academic Progress Policy and Procedure. These policies and procedures effectively contribute to the fulfilment of the needs of the programme and help ensure its academic standards. They are regularly reviewed according to the Policy and Procedure Development Framework Policy and Procedure every three years, as was confirmed during interviews with the BAE programme team. Interviews also referred, in general, to the clear system in place at KU for improving existing policies on the basis of internal and external audits and for ensuring clear communication of the policies to all stakeholders *via* multiple channels, such as SharePoint, the university website, and various handbooks and manuals.
- KU has a Quality Management System (QMS) in place through which all quality assurance matters are handled. This system is constituted of several structures in the form of a centre (the AQAC), units (the Accreditation and Quality Assurance Unit) and the Institutional Assessment Unit (IAU), committees at the university and college level (e.g., CC-QAEC). The CC-QAEC is directly responsible for monitoring and overseeing the quality assurance and enhancement of the BAE programme activities, which is guided and audited by the university AQAC and Strategic Planning and Governance Unit (SPAGU). The process of internal audit is the mechanism that verifies the implementation of the university policies and procedures to assure that they are consistently applied across the University. The auditing mechanism is well-organised and includes an audit checklist, pre-audit meetings,

internal audit reports and improvement plans. The Panel reviewed a sample of minutes of meetings of different committees, among them the quality assurance committees, and concluded from them and from various interviews with the college faculty and staff that the QMS activities in relation to the programme are consistently implemented.

- All faculty and staff at KU have access to a specific online link *via* SharePoint through which they can be provided with all the university policies and procedures including those that guide them in their core functions of teaching, assessment, and research and outline for them their quality assurance-related roles and responsibilities. Additionally, KU uses the staff induction programme to inform academics and support staff alike of the latest quality assurance guidelines. During interviews, the Panel noticed a strong awareness and understanding on the part of the faculty and members of the various committees of their roles and responsibilities in the programme's quality assurance.
- The evidence provided and interviews revealed how the QMS is monitored, evaluated and improved at different levels. As mentioned above, at the College level, all quality provisions are monitored and evaluated through the work of the CC-QAEC, and then at the university level through the work of the AQAC, and all based on the relevant institutional quality assurance policies. Results of the monitoring and evaluation, with corresponding improvement decisions, are discussed and approved in the college and university councils.

Indicator 4.2: Programme Management and Leadership

The programme is managed in a way that demonstrates effective and responsible leadership and there are clear lines of accountability.

Judgement: Addressed

- KU's organisational chart demonstrates a well-defined management structure. According to the SER and as was confirmed in interviews, the College Dean, the Department Chairperson, course coordinators and department committees are responsible for the programme's management, with the Dean reporting to the Vice President for Academic Affairs and Scientific Research who reports to the University President. The Panel thus acknowledges that the management of the College, Department, and the BAE programme is clear and well-describes the decision-making process and the flowlines of communication.
- The University has clear terms of reference for all University and College councils and committees. The academic responsibility and custodianship are clear and within a supportive framework involving upward and downward reporting across the University. The Dean, who chairs the College Council, holds the highest responsibility for the

programme, while assisted in maintaining its academic standards by the Department Chairperson, course coordinators and different committees, who together take on a leading role in delivering and assessing the programme.

Indicator 4.3: Annual and Periodic Review of the Programme

There are arrangements for annual internal evaluation and periodic reviews of the programme that incorporate both internal and external feedback and mechanisms are in place to implement recommendations for improvement.

Judgement: Addressed

- The University has policies and procedures specifically for the implementation of internal self-evaluations, according to which the programme has been subjected to several annual reviews, with corresponding self-evaluation reports being issued and relevant improvement plans being produced by the Department. The programme's annual self-evaluation reports are reflective and comprehensive documents including feedback gathered from all the relevant internal and external stakeholders. The AQAC is responsible for ensuring that the annual self-evaluations are implemented according to quality standards and that the recommendations resulting from them are being addressed and leading to improvements in the programme. Additionally, the self-evaluation reports are discussed in the different councils, for which minutes of meetings were presented to the Panel as evidence of the university's keenness to monitor effective implementation of the recommendations they entail.
- KU has a detailed policy to review the programme every five years. This review is managed by the College Programme Review and Development Committee, which ensures the comprehensiveness of the sources used to feed information into the review process, wherein both internal and external stakeholders' and expert feedback is considered including benchmarking results and results of the annual internal audit conducted of the programme by the AQAC. Like the annual self-evaluation report, the periodic review report is discussed by the councils at different levels, and the review process is formally audited by the AQAC, through which it ensures that the resulting report, improvement plans, and progress report are accurate and recommendations are followed up upon. The Panel appreciates the wide variety of experts that review the programme.

Indicator 4.4: Benchmarking and Surveys

Benchmarking studies and the structured comments collected from stakeholders' surveys are analysed and the outcomes are used to inform decisions on programmes and are made available to the stakeholders.

Judgement: Addressed

- In accordance with the Benchmarking Policy and Procedure, an informal comprehensive benchmarking exercise was conducted of the BAE programme against 13 other programmes, including one local, five regional, and seven international. The benchmarking included the programme aims, number of credits, PILOs, domain weights, offered courses, and course descriptions. The Panel was presented with the benchmarking results in the form of a report and notes a high level of similarity between the benchmarked aspects of the programme and those of other universities. Interviews with the programme team and minutes of meetings of the different councils confirmed to the Panel that benchmarking results are regularly reflected in the decisions taken to improve and update the programme.
- There are also clear and formal mechanisms in place to collect constructive comments from internal and external stakeholders. These include student course evaluation surveys, student satisfaction surveys, ICT and Library User satisfaction surveys, and alumni and employers' surveys, the results of which are analysed by the IAU and discussed by the College Dean and Department Chairperson and used to draft related improvement plans. Interviews and evidence submitted confirmed the implementation of the improvement plans.
- The SER describes the robust mechanisms in place to implement improvements based on stakeholders' feedback and to communicate the related outcomes back to them, either *via* the Student Council when outcomes concern students, or *via* the SharePoint when they concern faculty and administrative staff, or *via* the IACL when they concern employers. During the site visit, different groups of stakeholders reported that they are sufficiently informed of changes made based on their feedback and confirmed that KU responds effectively to their suggestions, while also providing examples in support of this. For example, in response to a lack of student knowledge on building materials noticed by members of the college IACL, the library added to its collection more relevant resources. Also, in response to a few students' suggestion to change one of the courses' structure and outline, the course was changed accordingly. Finally, the internship supervisors had at one point recommended that the internship hours be increased, and the programme proceeded with extending the internship period. In conclusion, the Panel finds that the programme's stakeholders are satisfied with changes implemented based on their feedback and appreciates the level of responsiveness to stakeholders' feedback exhibited by the BAE programme when making informed decisions.

Indicator 4.5: Relevance to Labour market and Societal Needs

The programme has a functioning advisory board and there is continuous scoping of the labour market and the national and societal needs, where appropriate for the programme type, to ensure the relevancy and currency of the programme.

Judgement: Partially Addressed

- The college's IACL serves as an active advisory board to the BAE programme, which meets a minimum of twice per academic year and has clear terms of reference. In its composition, it includes members from the architecture and interior design field either as employers, experts, or alumni. However, considering that the IACL is at the college level and is supposed to support all the programmes within the College including those other than Architectural Engineering like the Interior Design programme, the Panel noticed an imbalance in the number of professions represented in the IACL. The Panel thus recommends that the College should ensure that all the disciplines it covers are equally represented in its IACL. A review of a sample of minutes of meeting confirmed to the Panel that the IACL meets regularly and provides consistent feedback to the programme, which is clearly communicated to the programme decision makers and systematically translated into improvements plans that help with the BAE programme development, thus ensuring its relevance and currency.
- KU conducts several surveys that enable scoping the labour market and the national needs to check consistency with the programme's provision, such as the Alumni Survey, Employers and Potential Employers Survey. Although the data gathered from the surveys is well-documented in relevant analysis reports and there happens to be a high level of employers' satisfaction (92%) with KU's graduates' skills, the Panel noticed from the Employers and Potential Employers' survey of February-April 2020 that the same survey was administered for both the architectural engineering and the interior design programmes and, thus, its results are not clearly representative of the BAE graduates alone and it is therefore difficult to discern which findings apply to them and which to those of the Interior Design programme. The Panel thus recommends that the College should administer separate employers' surveys for its different programmes, to enable more accurate conclusions about the extent to which each programme's graduates' skills match the specific labour market requirements of their profession.
- From a market research perspective, KU relies on the Gulf Cooperative Council Architectural Services Market Report (2022-2027), which includes a chapter on Bahrain, to align the BAE programme to current market trends as well as national and societal needs. This applied mechanism is current and reflects how the industry and the programme can be effective post COVID-19 pandemic. To support employability, the Panel was informed during interviews that KU considers the employer-led skills requirements and graduates'

skills analysis for the Kingdom of Bahrain published by the HEC in 2014. However, despite this, the Panel recommends that the College should conduct formal local market research studies, to understand more thoroughly the gaps existing in the Bahraini architectural engineering market and its related employability needs.

V. Conclusion

Taking into account the institution's own self-evaluation report, the evidence gathered from the interviews and documentation made available during the virtual site visit, the Panel draws the following conclusion in accordance with the DHR/BQA *Academic Programme Reviews (Cycle 2) Handbook, 2020*:

There is Confidence in the Bachelor in Architectural Engineering programme of the College of Architectural Engineering and Design offered by Kingdom University.

In coming to its conclusion regarding the four Standards, the Panel notes, *with appreciation*, the following:

1. The notable level of support in terms of capacity building opportunities provided to the faculty and staff by the College and the University.
2. The convenient and flexible setup in some classrooms, using 22 movable partitions that allow ample space for the display of student work during juries.
3. The original integration of the Management Information System with the Learning Management System, which generates critical reports, such as the intended learning outcomes' achievement reports, and data in the form of course portfolios, that can be used in important decision-making processes at the level of the programme.
4. The robust internal and external moderation processes in place and the effective role they have in improving the programme's assessments.
5. The wide variety of experts that review the programme.
6. The level of responsiveness to stakeholders' feedback exhibited by the Bachelor in Architectural Engineering programme when making informed decisions.

In terms of improvement, the Panel recommends that the College of Architectural Engineering and Design at Kingdom University should:

1. Consider reducing the number of courses required per semester, by possibly merging some courses together.
2. Ensure greater provision of standard written feedback, in the form of comments on good achievement and areas for improvement, in relation to students' assessed works.
3. Seriously consider revising its admission criteria, to make the cumulative high school average requirement higher than 60%.
4. Provide greater support where needed to assist faculty members with their career progression through academic promotion.

5. Ensure that there is better storage of materials and large wood panels in the workshops to prevent accidents and damage of goods.
6. Establish another Computer-Aided Design laboratory, if possible, to better support the students with their Computer-Aided Design projects, by providing them with greater access to the relevant facilities even outside of their class time.
7. Improve the career guidance provided to the Bachelor in Architectural Engineering students, to make it more focused and relevant to their prospective field of work and possible career paths.
8. Widen the scope of moderation to cover the internship component like any other course in the programme.
9. Place more effort on developing formal mechanisms of benchmarking the programme's student progression, retention, and length of study ratios against those of parallel programmes.
10. Ensure that all the disciplines covered in the College are equally represented in its Industrial Advisory Council.
11. Administer separate employers' surveys for the college's different programmes, to enable more accurate conclusions about the extent to which each programme's graduates' skills match the specific labour market requirements of their profession.
12. Conduct formal local market research studies, to understand more thoroughly the gaps existing in the Bahraini architectural engineering market and its related employability needs.