



# **Directorate of Higher Education Reviews**

## **Programmes-within-College Reviews Report**

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

**Date Reviewed: 30 November – 2 December 2015  
HC072-C2-R072**

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## Acronyms

AE	Architecture Engineering
ARD	Admissions and Registration Department
AQAO	Accreditation and Quality Assurance Office
BSAE	Bachelor of Science in Architecture Engineering
BID	Bachelor in Interior Design
CAAD	Computer Aided Architectural Design
CAED	The College of Architectural Engineering and Design
CILO	Course Intended Learning Outcome
CPD	Continuous Professional Development
CPRDC	The College Programme Review and Development Committee
CTLAC	College Teaching Learning and Assessment Committee
CQAC	College Quality Assurance Committee
DHR	Directorate of Higher Education Reviews
FTE	Full Time Equivalence
GPA	Grade Point Average
HEC	Higher Education Council of the Ministry of Education, Kingdom of Bahrain
IAC	Industry Advisory Council
ILO	Intended Learning Outcome
KU	Kingdom University
LABSTATS	Laboratory Tracking System

LACS	Library Access Control System
LMS	Learning Management System
MIS	Management Information Systems
NAAB	The National Architectural Accrediting Board
NAPDC	New Academic Programme Development Committee NAPDC
NQF	Bahrain National Qualifications Framework
PILO	Programme Intended Learning Outcome
QA	Quality Assurance
QAA-UK	The Quality Assurance Agency for Higher Education – United Kingdom
QMS	Quality Management System
QQA	National Authority for Qualifications & Quality Assurance of Education & Training
RIBA	The Royal Institute of British Architects
SER	Self-Evaluation Report
UPRDC	University Programme Review and Development Committee
UQAC	University Quality Assurance Committee
UTLAC	University Teaching, Learning and Assessment Committee

## The Programmes-within-College Reviews Process

### A. The Programmes-within-College Reviews Framework

To meet the need to have a robust external quality assurance system in the Kingdom of Bahrain, the Directorate of Higher Education Reviews (DHR) of the National Authority for Qualifications & Quality Assurance of Education & Training (QQA) has developed and is implementing two external quality review processes, namely: Institutional Reviews and Programmes-within-College Reviews which together will give confidence in Bahrain's higher education system nationally, regionally and internationally.

Programmes-within-College Reviews have three main objectives:

- to provide decision-makers (in the higher education institutions, the QQA, the Higher Education Council (HEC), students and their families, prospective employers of graduates and other stakeholders) with evidence-based judgements on the quality of learning programmes
- to support the development of internal quality assurance processes with information on emerging good practices and challenges, evaluative comments and continuing improvement
- to enhance the reputation of Bahrain's higher education regionally and internationally.

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

#### **Indicator 1: The Learning Programme**

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

#### **Indicator 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 3: Academic Standards of the Graduates**

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

#### **Indicator 4: Effectiveness of Quality Management and Assurance**

*The arrangements in place for managing the programme, including quality assurance, give confidence in the programme.*

The Review Panel (hereinafter referred to as ‘the Panel’) states in the Review Report whether the programme satisfies each Indicator. If the programme satisfies all four Indicators, the concluding statement will say that there is ‘confidence’ in the programme.

If two or three Indicators are satisfied, including Indicator 1, the programme will receive a ‘limited confidence’ judgement. If one or no Indicator is satisfied, or Indicator 1 is not satisfied, the judgement will be ‘no confidence’, as shown in Table 1 below.

**Table 1: Criteria for Judgements**

Criteria	Judgement
All four Indicators satisfied	Confidence
Two or three Indicators satisfied, including Indicator 1	Limited Confidence
One or no Indicator satisfied	No Confidence
All cases where <b>Indicator 1</b> is not satisfied	

## **B. The Programmes-within-College Reviews Process at the Kingdom University**

A Programmes-within-College review of the Kingdom University (KU) was conducted by the DHR of the QQA in terms of its mandate to review the quality of higher education in Bahrain. The site visit took place on 30 November - 2 December 2015 for the academic programmes offered by the College of Architectural Engineering and Design (CAED), these are: Bachelor of Science in Architecture Engineering (BSAE) and Bachelor in Interior Design (BID).

This Report provides an account of the review process and the findings of the Panel for BSAE based on the Self-Evaluation Report (SER) and appendices submitted by KU, the supplementary documentation made available during the site visit, as well as interviews and observations made during the review site visit.

KU was notified by the DHR/QQA on 20 May 2015 that it would be subject to a Programmes-within-College reviews of its College of Architectural Engineering and Design with the site visit taking place on 30 November - 2 December 2015. In preparation for the review, KU conducted its college self-evaluation of all its programmes and submitted the SER with appendices on the agreed date on 20 September 2015.

The DHR constituted a panel consisting of experts in the academic field of Architecture Engineering and in higher education who have experience of external programme quality reviews. The Panel comprised four external reviewers.

This Report records the evidence-based conclusions reached by the Panel based on:

- (i) analysis of the Self-Evaluation Report and supporting materials submitted by the institution prior to the external peer-review visit
- (ii) analysis derived from discussions with various stakeholders (faculty members, students, graduates and employers)
- (iii) analysis based on additional documentation requested and presented to the Panel during the site visit.

It is expected that KU will use the findings presented in this Report to strengthen its BSAE. The DHR recognizes that quality assurance is the responsibility of the higher education institution itself. Hence it is the right of KU to decide how it will address the recommendations contained in the Review Report. Nevertheless, three months after the publication of this Report, KU is required to submit to the DHR an improvement plan in response to the recommendations.

The DHR would like to extend its thanks to KU for the co-operative manner in which it has participated in the Programmes-within-College review process. It also wishes to express its appreciation for the open discussions held in the course of the review and the professional conduct of the faculty in KU.

## **C. Overview of the College of Architectural Engineering and Design**

The College of Architectural Engineering and Design is one of the four KU colleges, which was established in 2001. KU started offering academic programmes in September 2004 and currently offers eight programmes on a range of disciplines. The College of Architectural Engineering and Design mission is to 'provide architecture and design education by combining both theory and practice in order that the students are prepared to embark upon the challenges of the distinct and competitive career, locally, regionally and internationally'. Its mission is closely aligned to KU vision and mission, which seeks to offer 'quality educational experience centred on its students to develop their knowledge, skills and values; achieved through excellence in teaching, learning, research, and community engagement'. KU vision, mission, core value and goals are accessible on its website, emphasizing the institution role in student development, research, industry linkages, community engagements, and faculty and staff development.

The College of Architectural Engineering and Design offers two bachelor degrees in Architecture Engineering and Interior design through two departments: Department of Architecture Engineering and Department of Interior Design. The statistics provided by College of Architecture Engineering and Design during the site visit

indicate that there were 153 students registered in the two programmes in the first semester of the academic year 2015-2016 and the total number of academic staff was 11; nine of them are full-time and two are teaching on part-time basis.

#### **D. Overview of the Bachelor of Science Architecture Engineering**

The College of Architectural Engineering and Design first offered the BSAE programme in the academic year 2004-2005, graduating its first batch comprising 14 students in 2007-2008. BSAE is currently offered through the Department of Architecture Engineering and CAED is looking forward to applying for the Royal Institute of British Architects (RIBA) international validation of the BSAE programme. Admission to the programme was halted between 2011 and 2013 based on a decision by the HEC and was reopened in September 2014 following the relocation of KU to Riffa. A total of 157 students have graduated since the commencement of the BSAE programme and currently there are 121 students registered in the programme and seven full-time and two part time academic staff contributing to the delivery of the programme according to the statistics provided by the institution during the site visit.

#### **E. Summary of Review Judgements**

**Table 2: Summary of Review Judgements for the Bachelor of Science in Architecture Engineering**

<b>Indicator</b>	<b>Judgement</b>
1: The Learning Programme	Satisfies
2: Efficiency of the Programme	Satisfies
3: Academic Standards of the Graduates	Does not satisfy
4: Effectiveness of Quality Management and Assurance	Satisfies
<b>Overall Judgement</b>	<b>Limited Confidence</b>



## 1. Indicator 1: The Learning Programme

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

- 1.1 There is a clear academic planning framework for the BSAE programme, which aligns the programme aims, goals and ethos to both KU and CAED's mission statements and demonstrates a close symbiotic working relationship, that is equally beneficial for both. This is evidenced in some detail in the SER in tables 1.1.1 – 1.1.4, which illustrate the programme mapping to college mission, goals and graduate attributes and their relationship to the KU Strategic Plan for the academic years 2012-2017. In the academic year 2014-2015, the programme was subject to a major review. This involved substantial contribution from faculty, students, alumni, external academic panel and industry representatives. The revised programme aims (2015-2016) are appropriate for the degree awarded and build on those prior (2008-2009). The Panel appreciates that there is a close symbiotic working relationship between the University, College and the programme, and its aims are clearly aligned to the mission, vision and goals of the University.
- 1.2 The Architectural curriculum is well organized, balanced, with clear aims for each of the five levels, which are incremental, progressive and expand learning in all critical areas for the education of an Architect. After a period of reflection, investigation and benchmarking undertaken during the last periodic review conducted by KU, a revised curriculum was implemented for the academic year 2015-2016 that aspires to the demands of the global 21<sup>st</sup> century, but implemented locally. There are appropriately listed pre-requisites for the entry and progression on the programme, which are well balanced with components of theory and practice. The student workload is in keeping with accepted international standards. The programme comprises 179 credit hours drawn from 56 courses and distributed as follows: 21 credit hours (eight courses) university requirement; 40 credit hours (14 courses) college requirement; 112 credit hours (31 courses) core programme requirement and six credit hours (3 courses) of programme elective requirements. The Panel appreciates that the architecture curriculum is well organized to ensure year-on-year progression and provides a balance between theory and practice.
- 1.3 The College conducted web-based benchmarking across a variety of similar programmes and invited international external reviewer commentary on the syllabus. Although, there is reference to the UK QAA Criteria/RIBA Criteria Part 1+2, care should be taken to continuously enhance and benchmark the syllabus to ensure it does not become self-referential within a global market place. The Panel is of the view that there is a need to review the detailed validation/ accreditation criteria of leading professional bodies and to benchmark to robust international Architectural colleges,

which is important to the ethos and evolutionary development of the programme over the next period. Key textbooks and references are at the appropriate levels throughout the programme and the syllabus content is in keeping with the accepted international standards, exposing students to the domains of architectural design, structures and construction technology, history and theory of architecture, building, planning and urban design sciences and computer aided drafting design. There is also increasing evidence that relevant research work undertaken by the tutors is feeding into the work produced by the students in the area of the context sustainability and the culture of Bahrain within a global context. Current teaching aspires to find the 'sweet spot' between imagination, experimentation, realism, relevance and professionalism. The potential to offer specialist courses in stewardship of the environment, context sustainability and Islamic Architecture should not be underestimated. The Panel concludes that the syllabus content meet accepted professional international standards, but there is insufficient evidence of context sustainability and construction technology demonstrated in the work exhibited. Therefore, the Panel recommends that the College review the syllabus with reference to context sustainability and technology.

- 1.4 The Programme Intended Learning Outcomes (PILOs) documented in the programme specifications are aligned with the aims and objectives of the programme at an appropriate level for the degree awarded – BSAE. According to the SER, the programme currently has 18 PILOs divided into four categories: knowledge and understanding (A01-A07), subject-specific skills (B01-B05), thinking skills (C01-C03), and general transferrable skills (D01-D03). The designated PILOs are comprehensive and aspirational components for the education of an Architect and is regularly updated with both internal and external inputs, which add value, breadth and depth to the programme. They have been formulated in relation to relevant national, regional and international benchmarking and reference the National Authority for Qualifications and Quality Assurance of Education and Training (QQA); Bahrain National Qualifications Framework (NQF); Royal Institute of British Architects (RIBA) and the Quality Assurance Agency for Higher Education (QAA) – United Kingdom Subject Benchmarking Statements for Architecture. The Panel appreciates that all intended learning outcomes expressed in the programme specifications are aligned to the aims and objectives of the programme at an appropriate level for the degree.
- 1.5 Both the university and the department's mission, goals and aspirations are clear, as are the PILOs and Course Intended Learning Outcomes (CILOs) which have been regularly revised in an evolutionary and progressive manner, that is appropriate and to ensure that they do not become insular and self referential. In general, the CILOs are measurable and are appropriate to the aims, level and content of the course and have been satisfactorily matrix mapped against the PILOs. This process aims to ensure that a typical student has the necessary skills and knowledge upon graduation. This

was further explored at meetings with faculty and students whom were well informed about this. The Panel appreciates that the CILOs have been properly mapped to the PILOs and are appropriate to the aims and level of the course.

- 1.6 Work-based learning is undertaken in the form of industrial/professional training. The BSAE programme includes a compulsory six credit Practical Training Course running over eight weeks. This is undertaken with the support of the academic advisor, academic supervisor and field supervisor. The industrial/professional training has clearly defined CILOs mapped to the PILOs. Nevertheless, this should be longer in duration. Students are required to take up training in an Architecture office or Government Department for 200 actual training hours. The practical training procedures are clear and appear to be working well, but the Panel has a concern that this period of 200 training hours is insufficient. This period of practical training hours is considerably less than internationally accepted norms. The Panel although supportive of the practical training, considers it important that this is substantially extended, which was verified at the students interview sessions and both employers and field supervisors' meeting. Hence, the Panel recommends that the College revise the practical training period to ensure that it is sufficient to attain the stated learning outcomes.
- 1.7 KU teaching and learning policy aspires to create a distinctive teaching and learning environment that encourages the acquisition of relevant skills and knowledge, meeting both KU and the college's missions. The documentation, processes, procedures and responsibilities are clear and well defined. A wide range of teaching and learning methods are deployed within the programme, which include current e-learning and Computer Aided Architectural Design (CAAD) technology, and are monitored by the College Teaching, Learning and Assessment Committee (CTLAC). These methods are aligned with accepted practices found in most international Architectural colleges. There are some procedures and exercises to encourage student participation in the learning process. Examples of these include the emphasis on individual research, manifest in particular in the Graduation Project and self-reflection during placement. In addition, students are expected to reflect upon the applied nature of design theory in practice, a process underpinned by the range of voices inputting into course delivery including industry experts, practitioners and faculty staff. Students participate in supervised and independent site visits that develop skills in decision-making, prioritization of tasks and time management as well as encouraging reflective practice relative to contextual matters both historic and contemporary. The Panel notes with appreciation the Practicum offered to students, as an innovative and important student experience, which has a central peer led component inbuilt in its structure and drew student and faculty attention to context and interdisciplinary work. However, the Panel is of the view that there could be greater emphasis on students developing a more reflective self-critical approach to their work through

better observational analysis, intellectual ambition, design development, communication skills and the mutually enriching relationship between technology and learning. The Panel met with a representative group of students who expressed the aspiration to be more critical, autonomous and reflective learners. The Panel considers that the principles and methods for teaching in the programme, support the attainment of the aims and intended outcomes, but more student reflective independent learning needs to be encouraged in all years of the programme. The Panel recommends that the College should enhance the student learning skills/experience to be more reflective, self-critical and independent in their learning.

- 1.8 The Student Work and Assessment Policy, The Student Work Assessment Procedures, The Student Work Assessment Guidelines and KU Plagiarism Avoiding Policy and Procedure, which empathize the use a computerized programme (Turnitin) to detect plagiarism, cover operations relevant to assessment at both the institutional and college level. The University Policy, Review and Development Committee (UPRDC) is charged with overseeing operations to ensure reliability, currency and accuracy of all procedures. This information is disseminated within the College and programme. During the various interview sessions with the Panel, both staff and students were asked about their knowledge of the institution's policies and procedures on assessment. The staff appeared to be well informed, the students less so. Moreover, the Panel is concerned that the students do not receive feedback from tutors on why they have achieved a particular grade for the final examination. The Panel also found little evidence of feedback or written justification for marks and therefore derived grades for some of the students' assessed work (see 3.5 and 3.11). The Panel recommends that the College should develop and enhance feedback mechanisms to include more opportunities for the students to receive written feedback on both formative and summative assessment. Transparency of grading mechanisms is achieved *via* the standard external examiner/moderator process. Previously some students' work was examined by the external examiner, but for the 2015-2016 period all work will be available for moderation by the external examiner, which is an accepted international procedure. External Jurors are also included in the process of assessment. Arrangements for appeal developed by the UPRDC include a procedure for students to appeal against final assessment grades. The process initially involves consultation with the course instructor and subsequent second level appeal with the College Grievance Committee. Interviewed students and alumni indicated their satisfaction with the assessment and appeal procedures. The Panel appreciates that there are suitable assessment arrangements in place that ensure transparency, fairness and consistency of assessment.

1.9 In coming to its conclusion regarding the Learning Programme, the Panel notes, *with appreciation*, the following:

- There is a close symbiotic working relationship between the Institution, College and the programme, and its aims are clearly aligned to the mission, vision and goals of the Institution.
- The architecture curriculum is well organized to ensure year-on-year progression and provides a balance between theory and practice.
- The programme intended learning outcomes are stated clearly and are aligned to the aims and objectives of the programme at an appropriate level for the degree.
- There are clearly stated course intended learning outcomes which are measurable, appropriate to the aims and level of the course and properly mapped to the programme intended learning outcomes.
- The winter practicum is educationally intercultural and draws student and faculty attention to context and interdisciplinary work.
- There are suitable assessment arrangements in place that are consistently implemented and revised to ensure the reliability and the accuracy of the grading system.

1.10 In terms of improvement the Panel **recommends** that the College should:

- review the programme with reference to context sustainability and construction technology
- revise the practical training period to ensure that it is sufficient to attain the stated learning outcomes
- enhance the student learning skills to be more reflective, self-critical and independent in their learning
- develop and enhance feedback mechanisms to include more opportunities for the students to receive written feedback on both summative and formative assessment.

#### 1.11 **Judgement**

On balance, the Panel concludes that the programme **satisfies** the Indicator on **The Learning Programme**.

## 2. Indicator 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.*

- 2.1 KU has clear admission policy and procedures that are communicated to stakeholders *via* the Student Handbook. High school scores are set at a minimum of 65% to be enrolled directly to the programme. For those who fall below this threshold, there is a preparatory orientation programme, which they should take prior to being enrolled into the programme. This combined with the entrance examination process helps ensure that a level of fit is achieved, and that selected students are capable of completing the programme. Potential students are interviewed, as part of the admission process, which is appropriate and should be a key component for admission decisions. However, it was brought to the attention of the Panel that KU had recently cancelled interviews, which is a retrograde step. Regulations are also defined for transferred students and external credit gained within the previous seven years is applicable, if the achieved grade is C and the maximum credits that can be exempted is 60% of the total credit hours of the BSAE programme. In academic year 2014-2015, 20 students (40% of the intake) were transfers into year two or year three of the programme. The Panel is of the view that admission policy and procedures are clear and address all areas of importance for the programme, including transfers into the programme.
- 2.2 The SER states that procedures for admission seek to ensure that the profile of students admitted matches the programme aims and available resources. The profile of admitted students is monitored and maintained by the Admissions and Registration Department (ARD). This profile includes background material such as academic background, experience etc. The samples of student profiles submitted to the Panel record for each student; ID, name, school major, school Grade Point Average (GPA), CUM GPA, placement test scores (mathematics, English and architecture) and programme results by semester. In the provided sample of student portfolio, high school GPA ranged from 67.2% to 87.9%. The Panel also notes that the admission procedure allows for provisional admission to be granted in relevant cases, subject to completion of specified remedial courses. Student progress is recorded with a verified system for identifying students at risk academically and referring them for counselling and monitoring. In the academic year 2014 – 2015, 50 students were admitted of which 20 were transfers into year two or year three of the programme. One additional student was admitted from a foundation programme. All are full-time. Of these, 22 are female and the remainder male. Most are Bahraini (49) with the balance (two) Arab. The Panel acknowledges that the profile of admitted students is in general suitable for the programme needs.

- 2.3 The programme lines of accountability are in place where the Department Chairperson manages the programme's tasks. The role of the Chairperson is to provide an assurance that the programme is delivered and assessed as approved and in accordance with the university procedures and policies. The College Dean is ultimately responsible for all of the college's programmes as stated in the SER and verified through comprehensive evidence submitted by the programme team. There is a pyramidal structure headed by the Vice President for Academic Affairs and Research, through College Dean, Department Chairperson, Course Co-ordinators and finally Course Instructors. Interview sessions confirmed the existence and application of accountability for the management of the BSAE programme. The Panel appreciates that there are clear lines of accountability with regard to the management of the Programme.
- 2.4 There are generally sufficient staff to teach the programme with appropriate academic qualifications and specializations. In addition, there is relevant input of professional experience for this professional university programme. On a Full Time Equivalence (FTE) basis the staff to student ratio is eight FTE staff for 99 students = 1:12, according to the SER. The Panel studied the CVs of the faculty members contributing to the programme and notes that the spread of expertise is appropriate for the range of courses offered in the programme. The Panel acknowledges that teaching staff and others who contribute to the programme are generally fit for the purpose of educating students in the BSAE programme and that, in general, the profiles of recent and current academic research, teaching and educational development match the programme aims and curricular content. Nonetheless, the Panel notes a need for further full-time faculty members with technical background and experience. During interview sessions, the alumni reported that they experienced difficulty with background and knowledge in electrical and mechanical issues. This was confirmed through interviews with employers. This lack was certainly reflected in the quality of design projects, as evidenced in recent graduation projects, where clear deficiencies in these areas were noted (see section 3.7 of this Report). While in no way denigrating the value of part-time academic instructors, who bring professional practical value to the BSAE programme, there is a clear need for a full-time presence in the technical areas so that there may be on-going interaction, consultation and input for students. Moreover, the Panel found some weaknesses in design-based projects, which are detailed in paragraph 3.8 of this Report. The Panel recommends, as a matter of immediate imperative, that the College recruit senior teaching staff members, on a full-time basis in technical areas related to architecture, in addition to senior full- or part-time design instructors to address the weaknesses found in students' capstone designs and to strengthen the architectural design instruction.
- 2.5 There are clearly stated and well documented policies and procedures for recruitment, appraisal and induction of academic staff. The Panel studied these policies and

procedures and finds these to be comprehensive and clear. Interviewed staff were familiar with the policy for promotion of academic staff of KU and the procedure is transparent. Over the past five years, one CAED staff has been successful with his application for promotion under this policy, from assistant professor to associate professor. It was reported that staff needed a PhD degree to be appointed or promoted to assistant professor. Interviewed teaching staff members supported the communication of these policies and procedures to them as well as their application. Newly admitted full-time staff are properly inducted through a formal process and interviewed staff members expressed their satisfaction with the process. Induction sessions are compulsory and in the case of part-time staff who may not be able to attend such sessions they, instead meet with the Dean and Chairperson before commencing with their teaching role. Nonetheless, the Panel encourages that KU supports participation of all part-time staff in the formal induction process. Staff appraisal procedures are in place and utilized. An integral component is peer review of teaching when peers attend and review classes. Self-appraisal as well as that from appropriate Line Manager are also considered. General satisfaction with these procedures was indicated in meetings with management and staff, who confirmed that teaching staff turnover is moderate and normal for an institution of this type. Despite there having been a weak track record for promotion of CAED teaching staff, the Panel notes with appreciation that the procedures for the recruitment, induction and appraisal of academic staff are implemented consistently and in a transparent manner. Nonetheless, the Panel suggests that greater attention is to be devoted by KU to encouraging and supporting promotions as this will positively impact teaching staff recruitment and their retention.

- 2.6 There is a university-wide information management system. Central to this is a universal Learning Management System (LMS). The LMS allows for administration, monitoring and integration across the University, the College and the BSAE programme. The LMS is a key and effective platform for multi-user interfacing and administration by managers, staff and students, as was demonstrated to the Panel during the site visit. Ample capabilities allow effective generation and distribution of reports with, where relevant, suitable cross-referencing with CILO and PILO frameworks. Managers, teaching staff and students advised that the LMS is useful and effective for their needs where they have access *via* their personal portable and desk-based computers. Students in particular found this system useful for tracking their progress in their courses as their professors provide this information on the LMS. The Panel appreciates the comprehensive use of the LMS for providing a range of information and reports that are used to improve teaching functions.
- 2.7 The Panel notes that appropriate policies and procedures for security of records and accuracy of results are in place and implemented. Printed copies of the grades are verified and approved by the Department Chairperson and then submitted to the



College Dean for verification and approval after these grades are entered and saved by the academic staff in the Edu-gate and before grades are sent to the ARD. The implementation of adequate safeguards are also in place to protect the integrity of the LMS system and its data. KU Back up Procedure requires daily and weekly full backup of records. There is a document tracking procedure in place and hardcopy records of student work and their associated documentation submitted to Panel review during site visit were noted to be in proper order and readily accessible. KU policy and procedures for the accuracy of student results are clear and focus on the validity and reliability of assessment; including moderation, appeal process and grievance review. The Panel was advised by management that KU, and therefore the BSAE programme, did not have a functioning risk management plan, except as provided for with IT. The Panel recommends that a risk management plan is prepared for the Architectural Engineering programme, to set out the coordinated and cost-effective application of resources to minimize, monitor, and control the probability or impact of undesired events, specifically those related to the loss of records or the corruption of results' accuracy.

- 2.8 During the site visit, a comprehensive tour of the physical premises of KU and those utilized by the BSAE programme was conducted. The Panel notes that overall, the KU campus building is modern and generally well laid out. The building is a compact multi-storey structure with basement facilities. Administrative offices, reception areas and related service areas are well positioned. The amenities, such as the staff and student cafeteria and the nurse station, are suitable for the campus and interviewed students advised that they have good access to the campus after hours. There are seminar/lecture rooms that are properly furnished and have suitable IT features for instructor and student interaction. The library stocks a range of hardcopy books and journals as well as online access to some electronic databases of books and journals that are adequate for the requirements of the BSAE teaching staff and their students. During interview sessions with teaching staff and students, the Panel confirmed that library, IT and Wi-Fi provision are acceptable. There are open-plan academic staff offices, which the Panel found to be spacious and appropriately furnished. This can be useful for creating a sense of shared and open working however, it must be acknowledged that open-plan offices have specific challenges and that academic focus is varied and staff may require access to more private spaces where confidential discussion may take place, sometimes at very short notice. The Panel suggests that the College revise the office arrangements of the faculty members to ensure its appropriateness to the faculty and students' needs. Furthermore, the Panel checked the design studio classrooms and noted that they are inadequate in terms of spatial allocation, desk size and spatial arrangement as far short of normal standards of other universities' architectural design studios. The Panel also visited the workshop and checked the materials laboratory that students would normally utilize as part of their learning. These facilities were clean, well ordered and brightly illuminated and

appeared to have had little use. The technology available in both is very limited and thus would be of limited usefulness for contemporary education support. The Panel was encouraged to hear of future redevelopment plans to develop the studio provision but recommends that the College expand design studio classrooms so that there is adequate space for each Architecture Engineering (AE) student to be allocated, for their exclusive and individual use, a dedicated studio desk of suitable size, for the entire time of the teaching semester. With respect to the workshop and materials laboratory, the Panel recommends that the College benchmark the technologies and related support with leading international Architectural colleges with the equivalent to be provided for the use by both AE students and staff.

- 2.9 KU has a tracking system to determine the usage of laboratories and other resources. The Panel reviewed the provided sample reports of laboratory and library use and noted the relevant high use of the laboratories by the AE students (entries and duration) in comparison with other programmes offered by other colleges. These reports were produced by the propriety technology utilization application, 'Labstats'. This system has wide-ranging potential, which allows for evaluation of the utilisation of these resources. The related procedures allow for the management and monitoring of these facilities while regulating their use. The tracking system is used when making decisions regarding resourcing as it measures logins on laboratories for frequency as well as duration, use of specific applications and by programme major. The system also flags up bottle-necking of resource. Alongside the laboratories tracking system, sits a library access control system measuring visits and duration of stay in the facility. Finally the LMS, which has been mentioned earlier in this Report, is a useful management tool for both staff – administration and teaching - and students to monitor progress in individual courses and therefore overall within the BSAE programme. The Panel appreciates that procedures related to the tracking of the usage of laboratories and other resources are in place and utilized effectively.
- 2.10 Generally, the Panel notes that there is adequate support for students available in terms of the KU ancillary facilities, such as library, laboratory and e-learning resources. As demonstrated during the Panel's tour of the campus, it was clear that support staff are available and able to provide the necessary guidance and support. Students are able to access e-resources online for their e-learning requirements. Teaching staff advised that they are available on a regular basis for consultations with their students so as to provide guidance and academic support, which was confirmed by students during interview sessions. The Student Support Office provides for further guidance and support and several services to students with special educational needs and physical disabilities. There is also a medical clinic within the university's main building to handle simple health issues of the students and staff members. Graduating students are surveyed annually on a range of eight aspects related to availability and quality of advising and support. A Senior Exit Survey Analysis report with a sample

of 14 students, 11 of which had completed a five-year course of study, confirmed that academic support, advising and counselling are satisfactory, especially for its quality and its availability. During interview sessions, students and alumni confirmed that their support and guidance needs were being met. The Panel appreciates the quality and availability of guidance and support for students. Notwithstanding the above, discussion with management revealed an absence of a coherent policy and the application of procedure for supporting students who had special needs in terms of access, mobility, comprehension and learning. The Panel recommends that the College develop and implement comprehensive policy and procedure to address the special needs of both students and staff.

- 2.11 KU has a formal procedure for orienting new students that seeks to provide 'new students with the information, resources, assistance and support to adapt to its culture'. This procedure covers administrative and operational aspects of new student orientation and requires orientation at three levels: university, college and programme. At the level of the BSAE programme, the orientation specifically covers the programme specifications, activities, credit and grading system, pre-requisite to be taken for the courses offered, attendance, training programme and GPA. The academic calendar for 2015-2016 sets aside one day at the beginning of each semester for the induction of students in which they tour the facilities after the completion of the induction programme and the distribution of the orientation kits. In this programme, prospective students are introduced to the college's mission and achievements, and the credit and the evaluation systems. The effectiveness of the orientation for new and transfer students was confirmed by the students interviewed during the site visit. The Panel appreciates the provision for and effectiveness of the KU and AE orientation for new students.
- 2.12 The Panel notes that there is monitoring of student progress through a support system that tracks students' progress, where records are kept. The process is guided by the KU Student Advising Procedure. In addition, students at risk of academic failure are identified and flagged for intervention as students in need of enhanced guidance. This process is governed by the KU Student at Risk Policy and operationalized by KU Student at Risk Procedure. Evidence of the tracking and guidance of AE students through this KU process were provided to the Panel indicating that they receive ample guidance, support and encouragement. Current students confirmed that their support and guidance needs are being met as also confirmed by the alumni. Overall, the guidance and support of students is satisfactory, as noted in the outcome of the exit surveys conducted for graduating students.
- 2.13 Informal education is a critical component of university education and perhaps more so with a professional design programme, such as the BSAE programme. The Panel notes that the opportunities provided for the BSAE programme students are multi-

faceted and include non-formal interaction between students and their instructors as well as informal interactions amongst themselves and not only between those of their narrowly defined cohort. Such informal learning is a major benefit of full-time university education that adds significant value to the educational process and spaces for such interactions are critical to their occurrence and effectiveness. The physical spaces where informal learning occurred were observed to be seating areas in public areas of the campus, the staff and student cafeteria and the library. However, the Panel believes that the studios should be a place for both formal and informal education, where the latter is not possible with the present arrangements. In addition, more informal spaces are needed in the campus to enhance opportunities for informal education. Nonetheless, informal learning is a feature of education at KU and within the BSAE programme. It does broaden student experiences as well as their knowledge. A positive sense of the quality of informal learning was gained from separate conversations with both existing students and alumni during the site visit. A range of informal learning opportunities is made available to enhance student education. Significantly, some of these actively engage international participation, offsite exhibition opportunities (such as the KU Architecture and Design Podium at the Bahrain Contemporary Arts Association), international visitors and the KU Winter Practicum. The Panel acknowledges the latter as a strong example of the importance of such models of learning and one, which the Panel was enthusiastic about as a clear enhancement to studio delivery. The Panel appreciates the range of informal learning opportunities offered by KU to enhance student education.

2.14 In coming to its conclusion regarding the Efficiency of the Programme, the Panel notes, *with appreciation*, the following:

- There are clear lines of accountability with regard to the management of the Programme.
- The procedures for the recruitment, induction and appraisal of academic staff are implemented consistently and in a transparent manner.
- There is a learning management system that provides a range of information and reports, which are used to improve the teaching functions.
- Procedures related to the tracking of the usage of laboratories and other resources are in place and utilized effectively.
- Students are provided with suitable guidance and support to address their different needs.
- There is a formal orientation programme for new students that is implemented effectively.
- There is a range of informal learning opportunities offered by KU to enhance student education.

2.15 In terms of improvement, the Panel **recommends** that the College should:

- recruit, as a matter of immediate imperative, new senior teaching staff on a full-time basis in the field of construction technology, and senior full- or part-time design instructors
- develop and implement a risk management plan for the BSAE programme to identify and mitigate different risks
- expand the design studio classrooms so that there is adequate space allocated for each AE student individually for the entire time of the teaching semester
- benchmark the technologies and related support of the workshop and materials laboratory with leading international Architectural colleges with the equivalent to be provided for the use of both AE students and staff
- develop and implement comprehensive policy and procedure to address the special needs of both students and staff.

## 2.16 **Judgement**

On balance, the Panel concludes that the programme **satisfies** the Indicator on **Efficiency of the Programme**.

### 3. Indicator 3: Academic Standards of the Graduates

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

- 3.1 The recently formulated 'Graduate Attributes' articulate six clear outcomes with which the graduates of the programme should be competent. Thus, the BSAE programme is structured to align its aims and ILOs with the graduate attributes. An intent is for graduates to have a high potential for employability locally, regionally and internationally, as well as for acceptance to post graduation programmes of study. A structured assessment strategy is in place for courses including the important studio-based design and drawing courses. Appropriately, for a professional programme, differentiation is made in assessment approach and process between the studio-based design and drawing courses and other courses. Nonetheless, the Panel has some concerns with regard to the effectiveness of these processes. There is also an overarching policy in place along with associated procedures to manage the programme. The Panel appreciates that graduate attributes are clearly articulated and the programme aims and learning outcome are appropriately mapped to the graduate attributes.
- 3.2 The Panel notes that there are university-level benchmarking policy and procedure in place that seek to position the University for excellence in education, learning, scientific research and community service that is demonstrably comparable with other reputable institutions of higher learning. These seek to integrate a range of benchmark and review undertakings for the overall benefit of the programme and its outcomes. There is a combined benchmarking policy and procedure document that was approved on 23 May 2013. This appears to supersede the benchmarking procedural document of 2012, which was more comprehensive and had a clear delineation of line of authority and responsibilities for managing benchmarking activities covering programme aims, PILOs, CILOs, teaching and learning, assessment and graduate profile. While aspects of the combined policy-procedure document are useful, the Panel is of the view that the present policy and procedure need to be reconsidered, developed and detailed with clear distinguish between the policy and the procedure. The procedures need to be as comprehensive in terms of scope – both breadth and depth – as the superseded procedures. A benchmarking of the programme against the standards of a professional body and six other institutions was undertaken, mapped and documented. In addition, five external academic experts were engaged to review the BSAE programme. Nevertheless, the application of benchmarking appears to be *ad hoc* with limited overt comparative analysis or evidence of specific application of findings to programme validation or improvement. The Panel did not also find any evidence of continuous and rigorous and most importantly formal benchmarking, which is an important component for programme development and demonstration of

programme standing. Therefore, the Panel recommends that the College should formally benchmark the programme against professional body criteria and leading international, regional and national Architectural colleges on a regular basis and expand the benchmarking activities to include the teaching and learning methods, learning resources and students standards.

- 3.3 The policy and procedure at the university level for assessment of student work are interrelated with the KU policy and procedure for teaching and learning and these are comprehensive and cover many important aspects related to assessment of student work, and thus provide a solid framework for students, instructors, assessors and moderators, if followed. To support compliance there is a University-level Teaching, Learning and Assessment Committee (UTLAC) and a similar committee at the college level, CTLAC. It is also noted that suitable university moderation procedures are in place for appropriate general application of written examinations. Importantly, these procedural outlines are sufficient and appropriate for the conduct of written midterm and final examinations but do not deal sufficiently with other forms of assessment such as the important design-based examinations, during which students present their design proposals supported by drawings and models. Faculty are primarily responsible for the implementation of the existing assessment policy and procedures including KU Avoiding Plagiarism Policy & Procedure and to ensure that the criteria and process used for assessing student work is fair, transparent and consistent, and the students are informed about the marking plan well ahead. Assessment is recorded in the LMS where both senior administrators and students have appropriate access and therefore shortcomings, or omissions, or both would be clearly seen. The Panel viewed sample of written assessments that provided appropriate commentary for the students. Nonetheless, some assessed students' work did not include proper feedback. The Panel also held discussions with external moderators, who were satisfied with the consistency of the implementation of assessment for the non-design courses. The Panel acknowledges that assessment policies and procedures are consistently implemented and monitored for theoretical courses and are made available to students.
- 3.4 The policy and procedural framework for assessment of student work provides for the alignment of assessment of student outcomes and the stated ILOs, both programme and course ILOs. According to the SER, each part of the assessment is aligned with a CILO, which is measured through student work using different methods of formative and summative assessments. Each form of assessment is given different weight depending on the nature of the course and the delivery methods. The LMS Grade Book is used to demonstrate the student achievement of both CILOs and PILOs numerically and the minimum level of grade required to attain a CILO is 60%. There are also requirements that course assessment is moderated, both internally and externally. Internal assessment alignment procedures are in place, which is overseen by CTLAC, which in turn is under the UTLAC. The Panel appreciates that there are mechanisms

to ensure that assessment is aligned with the course and programme ILOs to meet the academic standards of the graduates.

- 3.5 There are internal moderation procedures in place. From review of the course samples, it is apparent that the internal moderation process is generally implemented. A key component of this is internal moderation of final examination papers, where internal moderation may have required modification of the examination paper. Such moderation is under the direction and instruction of the Chair of the CTLAC. Post-examination moderation is conducted on samples of student answers under the supervision of the UTLAC. Moreover, final design juries comprise three jury members, with each juror contributing to the moderation of a final assessment for each student. The Panel studied the samples of course files provided during the site visit and noted that there are shortcomings with the application of assessment criteria, which should have been identified during internal moderation. Furthermore, there was external moderator commentary on the absence of assessment criteria for assignments and quizzes as well as the lack of evidence of feedback on students' assessed work. In summation, the Panel acknowledges that the internal moderation systems are in place for both theory courses and design courses and encourages the College to develop a mechanism to assess its effectiveness.
- 3.6 Policy, procedure and supporting processes for the external moderation of student work are generally satisfactory. Courses and their assessments are subject to independent review on the basis of 25% of the courses under examination each semester. From viewing provided samples of course files and as advised by teaching faculty, the operationalization of these is largely acceptable. In addition, interviewed external moderators indicated that the process for external moderation is functioning to an adequate level. Nonetheless, during interview sessions the Panel confirmed that the current practice of selecting external moderators does not follow the formally approved procedures. Moreover, the Panel studied the current list of external moderators and notes that it lacks in academic seniority and internationalism and not in line with the Assessment Moderation Procedures. The Panel recommends that the College reconsider the list of external moderators and follow its formal selection procedure. In addition, the Panel acknowledges that the policy and procedure for inclusion of an external juror in each pre-jury and final jury for design-based projects is required and followed, however the Panel has a concern that internalizing the external moderation within the internal assessment process removes the independence that external moderation requires to be effective. The Panel recommends that the College revise the moderation procedures for design courses to require independent external moderation of all the assessments decided by design juries.



- 3.7 The Panel sought evidence that the level of achievements as found in samples of the assessed work by the students was suitable with respect to the levels and type similar programmes nationally, regionally and internationally. Overall, for the level of achievement in the theory courses, viewed as a body of work by the KU AE students, the Panel is satisfied with the adequate quality when viewed in the context of other relevant programmes at institutions offering similar programmes. For the design courses' levels of achievement with respect to other institutions, the Panel relied on the displayed evidence in the students' capstone design submissions. These designs were awarded final grades in the range of A to B+, so represented the better design work for this cohort of architectural design students. The Panel noted that these architectural design proposals were professionally presented with CAAD and that the drawings were clear and informative. Nevertheless, the Panel noted a uniform weakness in these designs related to lack of site and building context, absence of integral structural considerations and no acknowledgement of mechanical and electrical provision. There was also evidence of lack of understanding of the discipline of space planning. These capstone designs were not at an acceptable level. Key aspects were confirmed by the interviewed alumni who noted that they were strong in CAAD application but weak with freehand. In addition, during the site visit interview sessions, the employers' view was that the graduates were creative but lacked technical knowledge.
- 3.8 Following on the paragraph above, the view of the Panel is that the grades for the provided sample of capstone architectural design (graduation) projects are too high when considered within the context of the quality of similar capstone projects at international institutions. This is a significant shortcoming for the BSAE programme as the capstone course presents the opportunity for the final year students to demonstrate their mastery of the profession of architecture overall. The design proposals presented did not demonstrate the student's comprehension of the design problem in its physical context with clear understanding of the interrelated social, cultural, environmental, financial and technological constraints and opportunities, which should have been learnt from their theory courses along with their design courses. The capstone projects may be seen also as a verification of the standard BSAE programme as a whole. Part of the problem here is the absence of independent external moderation of architectural design submissions by the AE students, as noted in paragraph 3.6; also the apparent weakness in the instruction that the AE students are receiving in all of their design courses. For example, in course ARCH 598 (graduation project) in the academic year 2014-2015, the Panel found little evidence of feedback or written justification for marks and therefore derived grades. Moreover, external examiners for the theory courses also found deficiencies with the assessment of student work in terms of stated assessment criteria (see paragraph 3.5). To put these observations into context, it is not sufficient to only have satisfactory theory course delivery and assessment in the BSAE programme, as there must be also robust

instruction in design. Leading educators and senior employers normally consider the capstone course as the major demonstration of impending graduates' mastery of the programme of study. In the case of the programme, the Panel found the outcomes from the capstone course lacking deep contextual analysis and in other aspects as noted in paragraph 3.7. Therefore, the Panel is of the view that the level of graduate achievement as demonstrated in the capstone projects is not satisfactory. The Panel recommends that the College revise its capstone project delivery and assessment mechanisms to ensure that the level of graduate achievement as demonstrated in these projects is adequate for the programme type and level.

- 3.9 The SER provides some records of analyses of cohort data for four academic years starting from the academic year 2007-2008. The data reveals significant variation in cohort size and there was no intake to the BSAE programme for three academic years, 2011-2014. There were 34 full-time students admitted to the programme in 2007-2008, 37 in 2008-2009, eight in 2009-2010 and 33 in 2010-2011. The approximate average length of study period for these four cohorts varied between five and 6.75 years and the retention rate between 62.5% to 70.5%. The Panel also notes that there were 23 graduates from the programme in 2011-2012 and 21 in 2014-2015 with a total of 97 graduates over the past five years. The number of students in the programme was at 78 in 2012-2013 and 60 in 2013-2014. The number increased to 99, in the academic year 2014-2015. Whilst the numbers indicate that the progression rate of students enrolled in the programme is satisfactory, the erratic intake and the low numbers of annual graduates causes these statistics to hold little significance, if any.
- 3.10 An essential component of the programme is its assessed work-based learning which is the training (internship) component that comprises 200 working hours in the summer semester. There is a guiding procedure at the university level where students are expected to consult with their academic advisor to select a suitable host organization for the work-based training. Each student has an academic supervisor for the training, which is over four phases. The student is visited at the place of internship by the supervisor. The student prepares and submits reports on the internship. At the conclusion of the work-based learning, each student presents her/his report. The assessment of the work-based learning is based on the reports, the supervisor visits and the final report presentation. During interview sessions, students reported that the work-based learning was useful, though opportunities would be influenced by the prevailing economic conditions. The employers who hosted these internships stated that the work-based learning provided an important opportunity for the students to experience a work environment, though the duration was too short at two months. On reviewing the evidence and as advised by management, students and stakeholders during the site visit, the Panel acknowledges the effectiveness and importance of the internship but urges that its duration is insufficient by international standards as noted in paragraph 1.6 of this Report.

- 3.11 The Panel notes that the programme does not have a dissertation, thesis or industry project component and that its equivalent in this professional design programme is the graduation project, which is a mandatory course. KU has clear policies and procedures, which state the responsibilities and duties of academic advisors, projects supervisors and students. CAED has also developed through CTLAC its own Graduation Project Guidelines to cater for design-based projects. Students have to complete at least 135 credit hours including prerequisites to register for the graduation project. The Panel's interviews with alumni revealed that the graduation project procedures and guidelines are clear, transparent and well communicated to them. They were also appreciative of their project supervisors as they supported them throughout the phases of graduation project. The assessment of the project is divided into 80% for the written project and 20% for the oral presentation, 40% of the final mark is awarded by the project supervisor and 60% by the external examiners. The Panel acknowledges that the policies, procedures and project guidelines are comprehensive and followed. However as noted above, the Panel is of the view that there should be independent external moderation for all design-based projects to be more effective and there is a noted weakness in the instruction that BSAE students are receiving in all the design courses. Furthermore, the Panel found little evidence of feedback or written justification for marks and therefore derived grades for the graduation projects. This issue is further addressed in 1.8.
- 3.12 CAED has an Industry Advisory Council (IAC) that operates under clearly stated terms of reference. IAC has nine members, of which six are from industry and government. Of these, two are KU alumni and one teaching staff from the BSAE programme. IAC is slated to meet every semester to advise and support the programmes of the College, to effect liaison between the College and the larger community and to offer views on the development of the College and its activities. The Panel reviewed sample of minutes of meetings of the Council and met with its members during the site visit. The minutes show signed attendance and a record of the main points raised during the meeting, which are appropriate for the guidance on the development of the programme. IAC members advised the Panel that they chose to sit on the Council so as to serve the College and the University. They sought to bring what the professional market needs to the attention of the College, thus shaping and forming the programme curricula to better meet the needs of Bahrain. The Panel appreciates the presence of a pro-active advisory council providing useful inputs into future programme development.
- 3.13 KU through its Accreditation and Quality Assurance Office (AQAO) solicits feedback from recent graduates, alumni and employers, which is undertaken on an annual basis. In 2015, the Alumni survey had a sample size of 34, of which 28 were from BSAE and the balance from BSID programme. Responses to this survey were analysed and reported comprehensively. Despite the aggregation of responses from two

programmes (BSAE and BSID), this survey provides useful feedback from the graduates. Similarly, an employer survey was undertaken that informed on the fit between graduates and industry needs. Overall, there was general satisfaction with the standards of the BSAE graduates as expressed in meetings with both the alumni and the employers. Nevertheless, the employer pointed out that the graduates were creative but lacked technical knowledge and according to a recent senior exist survey about 42% of the respondents were dissatisfied with their professional preparation.

3.14 In coming to its conclusion regarding the Academic Standards of the Graduates, the Panel notes, *with appreciation*, the following:

- Graduate attributes are clearly articulated and the programme aims and learning outcome are appropriately mapped to the graduate attributes.
- There are mechanisms to ensure that assessment is aligned with the course and programme intended learning outcomes to meet the academic standards of the graduates.
- There is a pro-active advisory council that meets regularly and provides useful inputs into future programme development.

3.15 In terms of improvement, the Panel **recommends** that the College should:

- formally benchmark the programme against professional body criteria and leading Architectural colleges on a regular basis, and expand the benchmarking activities to include the teaching and learning methods, learning resources and students standards
- reconsider the list of external moderators and follow the formal selection procedure for external moderators
- revise the moderation procedures for design courses to require independent external moderation of all the assessments decided by design juries
- revise the programme's capstone project delivery and assessment mechanisms to ensure that the level of graduate achievement is adequate for the programme type and level.

### 3.16 Judgement

On balance, the Panel concludes that the programme **does not satisfy** the Indicator on **Academic Standards of the Graduates**.

## 4. Indicator 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.*

- 4.1 Institutional policies and regulations, overseen by the Board of Trustees and University Council, are published in the University By-laws, University Employee Handbook and University Student Handbook. College council decisions and documentation are communicated to stakeholders *via* email, face-to-face meetings, digital and analogue notice-boards, intranet and social media. Training workshops for academic and support staff are conducted when necessary, new staff undergo induction *via* the University Induction Programme and students receive the Handbook *via* the Standard Orientation Programme with evolving updates additions or edits being circulated using a variety of methods including email, intranet and notice board announcements. Staff also deliver verbal updates to respective student cohorts. The AQAO is responsible for ensuring that the programme team adheres to these policies and procedures. Subsequent to meetings with faculty and the Quality Assurance Unit and following detail outlined in SER, the Panel appreciates that institutional policies and regulations are engaged with adopted, acknowledged, widely published and effectively applied across the programme.
- 4.2 The Departmental Chairperson (Programme Manager) as outlined in the job description is the key position in terms of Programme Management, with the role encompassing academic leadership, responsibility for programme development and innovation as well as the management deployment and development of faculty and bridging programme requirements with college and university strategy *via* the Dean. The Chairperson also has custodianship over programme marketing and is responsible for ensuring relevance of the offer to students and providing excellence in their experience. The chairperson also engages with support staff in matters of student support, retention and academic progression. Academic responsibility ultimately rests with the Chairperson at all levels, while reporting to the Dean at college level and working within university and college committee structures, such as Departmental and College Councils, and relevant standing committees, outlined in the College Organisational Chart. The Panel views this structure as appropriate and after various meetings, appreciates that the BSAE programme is positively managed with dynamic and engaged leadership.
- 4.3 The Quality Management System (QMS) is managed by AQAO, which has responsibility for the consistent implementation, monitoring and evaluation of the QMS. Structurally its implementation is defined at the university and college levels and the relevant committees; UQAC and CQAC monitor and ensure continuous

improvement and direct quality assurance matters outwards for university, college and to programme level consideration. The Panel notes with appreciation that the CQAC incorporates the student voice albeit by invitation and that this is recorded. The AQAO undertook an academic internal review of the compliance with programme policies and procedures at the college and department levels, in March 2014. The outcomes of this review were communicated to the Chairperson, the Dean and the CQAC, which facilitated programme enhancement in areas including governance, teaching, learning, assessment, student support and course portfolio, with the production of an action plan. An unannounced follow-up event was conducted in July of that year to take stock of improvements based on recommendations. There are further reviews scheduled for this academic session underpinned by robust committee and audit procedures. Documents and records are monitored on a central university register, controlled with alterations, both major and minor, scrutinized and approved by relevant committees. The Panel appreciates the comprehensive QA consistent implementation and that the CQAC incorporates the student voice.

- 4.4 From interviews conducted with senior and junior staff, the Panel was confident that the team has a clear understanding of the internal quality assurance system. This level of awareness is underpinned by the availability of staff training organized primarily by AQAO. These workshops include training on pedagogy as well as broader quality issues including assurance and enhancement. Examples of training workshops include 'Embedding Employability Skills in Higher Education Curriculum', which was offered in June 2015 in association with the British Council and was attended by the Dean, the Chairperson, professors, associate professors and lecturers on the BSAE programme. In addition to such workshops, the University has a Staff Induction Policy. This introduces all staff, both academic and administrative to the academic culture of the University and its particular policies and procedures and the quality assurance system adopted by the University and the programme. The Panel is satisfied that staff members receive adequate and appropriate support from the institution in relation to the University internal QA system.
- 4.5 The procedure for the introduction and development of new programmes begins with identification of demand. This is followed by a discussion at University Council and the commissioning of a feasibility study, which the Council either approves or rejects. If approved, a New Academic Programme Development Committee (NAPDC) is established to develop the detailed proposal. The role of this committee is clearly defined. There are adequate checks and balances indicated within the procedure's outlines to inform adjustments to main programme specifications such as the PILOs and ensure alignment with broader university policies with proposals being filtered by Dean, UPRDC then to University Council and on to the President Office, after which it is submitted to the HEC for licensing. In order to ensure market relevance a market research is undertaken by the NAPDC and specific 'offer' quality is determined

and benchmarked regionally with commentary received from local, regional and international academic and industry reviewers. The Panel considers that procedures and policies for the development of a new programme are robust and clear.

- 4.6 The Programme Review Procedure outlines the process for semester, annual and the five-year periodical review for all programmes offered by the University. The process is differentiated based on the scope of the review. End of semester reviews involve the Departmental Chairperson, Departmental Council and College Programme Review and Development Committee (CPRDC) and overseen by CQAC and AQAO with annual reviews being led by the College Dean. The process covers minor and major changes to programmes, including additions of departments and programmes, changes in the name of programmes, and changes to credit weightings. The Panel notes that the procedure allows for the frequent and diligent maintenance of the programme. Nevertheless, the Panel is of the view that the provided samples of improvement plans as these pertain to the BSAE programme, has little indication of implementation procedures, clear definable target dates and clear measurable results for evaluation. The Panel recommends that the College review its improvement plans as these pertain to the BSAE programme for detailed/analysis, evaluation and effective implementation within one year.
- 4.7 There is an institutional policy indicating that programmes are periodically reviewed every five years. These reviews incorporate – programme specifications, review study plans, resource implications, both internal and external feedback, external moderation issues, benchmarking against other comparable programmes and stakeholders surveys. The processes and procedures for the implementation of recommended improvements are clear and overseen by the Chairperson, AE Department Committee, Dean, IAC, CPRDC and AQAO. The Panel notes that these procedures, which accommodate robust input from external stakeholders, were followed during the last major BSAE programme review of 2014-2015. The Panel appreciates that the programme engages with relevant feedback generated by alumni and industry during major programme reviews.
- 4.8 The University operates an Internal Research Procedure, which is overseen by the AQAO alongside the Institutional Measurement Unit. Feedback mechanisms include Course Evaluation Surveys, Student Satisfaction Surveys and Senior Exit surveys. The Panel considers the mechanisms and procedures for gathering feedback to be appropriate, what is less convincing is how this gathered information then informs programme development and amendments. The SER makes reference to critical feedback but fails to confirm how this was responded to, if at all. The recent senior exit survey did indicate some poor/mixed results relating to courses and professional preparation in the programme. However, no action plan was provided on how to address these findings. The Panel recommends that the College develop a mechanism

to utilize the outcome of the stakeholder surveys in improving the programme and its outcomes.

- 4.9 There are processes and procedures to identify necessary Continuing Professional Development (CPD) for staff in the University and College. CPD can be undertaken within the context of the University, but equally external specialist AE exposure to current international professional issues is important to ensure currency breadth and depth in teaching and learning on the programme. Staff professional development needs are identified by the Chairperson and supported, if there are sufficient funds and the timing is appropriate. For staff participation at quality conferences, there are a series of clear procedures that have to be undertaken for approval and upon return tutors are required to make a presentation to their peers. The Panel was encouraged to see that collaborative links to international universities are being explored and practicums in Manama, Athens, Derby have been successful which may lead to staff/students exchanges and possible joint ventures in the future. The Panel discussed in detail the arrangements for CPD and appreciates that academic staff are supported with appropriate CPD and research opportunities, but cautions that staff training is not simply reactive (i.e. responding to shortfalls or deficits) but is also truly developmental. What is unclear is how staff, and in particular fractional staff initiate and are given time to undertake an element of development that they self-determine. Therefore, the Panel encourages the College to continue to develop CPD opportunities for academic staff in a culture of proactive as well as reactive development.
- 4.10 CAED's IAC solicits commentary from industry advisors on the current market and monitors how this evolves. This is conducted alongside Employer Surveys and Alumni Surveys, the most recent of which was conducted during the Spring and Summer of 2015. Overall surveying of graduates since 2006 has revealed an encouraging 80% who highly regard the programme. The SER indicates further highlights with a particularly significant 83% in employment within three months of graduation. Respondents are asked to comment on how the various key aims of the programme, for example intellectual ability, communication skills and teamwork, have benefited their employability. Results from these are recorded and minuted at the IAC with a view to informing future programme development. The Panel acknowledges the importance of these devices in fostering direct engagement with the regional industry landscape. Nonetheless, in recognition of the current low cohort numbers, the Panel recommends that the College formally scope the industry needs and that this process is conducted in a rigorous manner which is cognisant of national, regional and international opportunities and developments.



4.11 In coming to its conclusion regarding the Effectiveness of Quality Management and Assurance, the Panel notes, *with appreciation*, the following:

- There is a range of institutional policies and regulations that are widely published and effectively applied across the programme.
- The BSAE programme is positively managed with dynamic and engaged leadership.
- There is a comprehensive internal QA system that incorporates the students voice and is consistently implemented.
- The programme engages with relevant feedback generated by alumni and industry during major programme reviews.
- Staff are supported with appropriate continuing professional development and research opportunities.

4.12 In terms of improvement, the Panel **recommends** that the College should:

- review the college improvement plan as it pertains to the BSAE programme for detailed/analysis, evaluation and implementation
- develop a mechanism to utilize the outcome of the stakeholder surveys in improving the programme and its outcomes
- formally scope the market needs and conduct this process in a rigorous manner, cognisant of national, regional and international opportunities and developments.

#### 4.13 **Judgement**

On balance, the Panel concludes that the programme **satisfies** the Indicator on **Effectiveness of Quality Management and Assurance**.

## 5. Conclusion

Taking into account the institution's own self-evaluation report, the evidence gathered from the interviews and documentation made available during the site visit, the Panel draws the following conclusion in accordance with the DHR/QQA *Programmes-within-College Reviews Handbook, 2014*:

**There is limited confidence in the Bachelor of Science in Architecture Engineering of College of Architectural Engineering and Design offered by the Kingdom University.**