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

Directorate of Higher Education Reviews

Programmes-within-College Reviews Report

B.Sc. in Architecture

College of Engineering

University of Bahrain

Kingdom of Bahrain

Date Reviewed: 4-7 April 2016

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Acronyms

BQA	Education & Training Quality Authority
BSAR	B.Sc. in Architecture
CAD	Computer Aided Design
CILOs	Course Intended Learning Outcomes
DHR	Directorate of Higher Education Reviews
HEC	Higher Education Council of the Ministry of Education, Kingdom of Bahrain
ILO	Intended Learning Outcome
MIS	Management Information Systems
NAAB	National Architecture Accreditation Board
NQF	National Qualifications Framework
PAC	Program Advisory Committee
PCAP	Postgraduate Certificate in Academic Practice
PEOs	Programme Educational Objectives
PILOs	Programme Intended Learning Outcomes
PLEs	Programme Learning Expectations
QAAC	Quality Assurance and Accreditation Centre
SAC	Student Advisory Committee
SER	Self-Evaluation Report
SLEs	Student Learning Expectations
UILOs	University Intended Learning Outcomes

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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 Education & Training Quality Authority (BQA) 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 BQA, 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.

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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 **Indicator 1** is not satisfied	

B. The Programmes-within-College Reviews Process at the University of Bahrain

A Programmes-within-College review of the University of Bahrain was conducted by the DHR of the BQA in terms of its mandate to review the quality of higher education in Bahrain. The site visit took place on 4-7 April 2016 for the academic programmes offered by the College of Engineering, these are: B.Sc. in Chemical Engineering, B.Sc. in Process Instrumentation and Control Engineering, B.Sc. in Civil Engineering, B.Sc. in Mechanical Engineering, B.Sc. in Architecture, B.Sc. in Interior Design, B.Sc. in Electronics Engineering and B.Sc. in Electrical Engineering.

This Report provides an account of the review process and the findings of the Panel for the B.Sc. in Architecture programme based on the Self-Evaluation Report (SER) and appendices submitted by the University of Bahrain (UoB), the supplementary documentation made available during the site visit, as well as interviews and observations made during the review site visit.

UoB was notified by the DHR/BQA in 22 October 2015 that it would be subject to a Programmes-within-College review of its College of Engineering with the site visit taking place in April 2016. In preparation for the review, UoB conducted self-evaluations of all its programmes and submitted the SERs with appendices on the agreed date on 10 January 2016.

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The DHR constituted a panel consisting of experts in the academic field of Engineering and in higher education who have experience of external programme quality reviews. The Panel comprised 15 external reviewers.

This Report records the evidence-based conclusions reached by the Panel for the B.Sc. in Architecture Engineering programme 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 the UoB will use the findings presented in this Report to strengthen its B.Sc. in Architecture programme. The DHR recognizes that quality assurance is the responsibility of the higher education institution itself. Hence it is the right of UoB to decide how it will address the recommendations contained in the Review Report. Nevertheless, three months after the publication of this Report, UoB is required to submit to the DHR an improvement plan in response to the recommendations.

The DHR would like to extend its thanks to UoB 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 and administrative staff of the College of Engineering.

C.   Overview of the College of Engineering

The College of Engineering, at UoB, owes its roots to the Gulf Technical College which was established in 1968 and which later became the Gulf Polytechnic in February 1981. In 1986, Amiri Decree No. (12) was issued to establish the University of Bahrain by a merger of the Gulf Polytechnic and the Bahrain University College. Following this decree, the new organization plan of the UoB was issued in November 21, 1987. The College of Engineering currently comprises five departments; namely the Department of Chemical Engineering, Department of Civil Engineering, Department of Electrical and Electronics Engineering, Department of Mechanical Engineering and Department of Architecture and Interior Design. The College is currently running a total of (11) academic programmes (8) at Bachelor and (3) at Master levels. The vision of the College of Engineering is to be among the leading colleges in the region and to maintain a respectful international status and reputation by sustaining a high quality of engineering education and scientific research. During the 2015-2016 academic year, there were (143) full-time and (23) part-time faculty members supported by (60)

administrative staff. The total number of students enrolled in the College at the time of the site visit was (4113) students. The College obtained ABET accreditation for six of its bachelor programmes in 2008 and 2014, these are the B.Sc. in Chemical Engineering, B.Sc. in Civil Engineering, B.Sc. in Electrical Engineering, B.Sc. in Electronics Engineering, B.Sc. in Mechanical Engineering and B.Sc. in Process Instrumentation and Control Engineering. In addition, the B.Sc. in Architecture obtained National Architectural Accrediting Board (NAAB) accreditation in 2014. Moreover, the College is in the process of obtaining accreditation by the Council for Interior Design Accreditation (CIDA) for the B.Sc. in Interior Design programme.

D.   Overview of the B.Sc. in Architecture

The B.Sc. in Architecture (BSAR) is offered by the Department of Architecture and Interior Design. The programme was first offered in the Academic year of 1990-1991 under the title of Architectural Engineering, as a separate section within the Department of Civil and Architectural Engineering and it had its first graduates who were awarded Bachelor of Architectural Engineering degrees in 1995. The SER states that the programme's mission is to 'provide a comprehensive design education to students in order to endow them with broad-based knowledge in social, cultural, historical and environmental aspects of the built-environment and to equip them with aesthetic, intellectual, technological and managerial skills in generating design proposals to produce sustainable built-environments, and to prepare them to lead the development of Bahrain for the benefit of its people'.

The programme was awarded the status of Substantial Equivalency of the National Architecture Accreditation Board of (NAAB), USA. There are 37 full-time and 4 part-time faculty members supported by 2 administrative staff contributing to the delivery of the programme. At the time of site visit, the total number of students enrolled in the programme was 552.

E.   Summary of Review Judgements

Table 2: Summary of Review Judgements for the B.Sc. in Architecture

Indicator	Judgement
1: The Learning Programme	Satisfies
2: Efficiency of the Programme	Satisfies
3: Academic Standards of the Graduates	Satisfies
4: Effectiveness of Quality Management and Assurance	Satisfies
Overall Judgement	**Confidence**

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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   UoB has a well-defined framework for academic planning, which has served the specific development of the BSAR programme over time, in consultation with appropriate committees and internal and external stakeholders such as faculty, students, alumni and employers. The framework illustrates how the university and college's mission are linked to the programme aims, Programme Educational Objectives (PEOs), the Programme Intended Learning Outcomes (PILOs), the performance indicators, targets and the programme implementation plan. This alignment is ensured through all levels: university, college, department and programme. During interview sessions, the Panel confirmed the involvement of stakeholders in the review and development of the programme. The Panel studied the programme aims and objectives and the mapping provided and notes with appreciation that the programme has clear aims that are appropriate to the programme type and level and are aligned to the university and college's mission and set of goals.

1.2   The BSAR programme is structured as a five-year programme consisting of 166 credit hours distributed over 48 courses delivered in 10 semesters. The programme credits are divided into 139 credit hours for professional studies courses and 27 credits for general studies courses, which indicate an emphasis on professional studies. This is appropriate for a professional programme in architecture at this level. During interview sessions, the Panel was informed that the curriculum has gone through a number of reviews benefiting from feedback received from faculty, students, alumni, labour market and external professional accrediting body (NAAB) the programme was subjected to. The Panel studied the programme specification and notes that the curriculum provides appropriate academic progression through appropriate sequencing of courses in terms of complexity from one semester to another. In particular, progression is maintained through the step-by-step development of the studio-based design courses from basic design (Basic Design I (ARCG 110) and Basic Design II (ARCG 120)) through six semesters of increasingly complex and comprehensive architectural design (e.g. Architectural Design I (ARCG 210) to Architectural Design VI (ARCG 420)) to the capstone design courses (Graduation Project – Programme Stage (ARCG 511) and Graduation Project – Design Stage (ARCG 520)). Appropriately, these courses, over the duration of the architecture programme, progressed from simple, small-scale design exercises related to functionality, through complex, medium-scale design projects that relate separately to climate, culture and technology, to highly complex, large-scale urban problems. Moreover, from semester II in the curriculum plan, almost all courses have defined pre-requests. The Panel studied the pre-requests and is satisfied that these are both appropriate and necessary.

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The integration of design and theory courses throughout the curriculum also provides a balance between theory and practice and knowledge and skills. This is further ensured through regular consultation with relevant stakeholders that include alumni, employers, graduating students and the Programme Advisory Committee (PAC), which the Panel confirmed during interview sessions. The Panel appreciates that the curriculum is designed to provide appropriate year-on-year and course-by-course progression and a suitable balance between knowledge and skills, and theory and practice. In addition, the Panel studied the overall work required from students to complete the programme and notes that it is appropriate for a professional design degree at this level and normal for equivalent programmes internationally. Nonetheless, during interview sessions, students reported that the workload assigned to them is heavy and that they require additional time and effort to complete design course submissions. Hence the Panel advices the College to investigate the reasons behind these complains and develop a support mechanism to enable students to finish the required work in due time.

1.3   The specifications of the courses comprising the BSAR programme are documented using a course syllabus template that includes the course description, course content and weekly breakdown, teaching and learning methods, assessment tools and weight and Intended Learning Outcomes (ILOs). During the site visit, the Panel reviewed the provided samples of course files. In general, the Panel notes that the syllabus and course specifications are well documented and that textbooks and other learning resources are appropriate and sufficiently current for the subject matter of the related course. Nonetheless, the Panel noted that there are shortcomings in the documentations of the 'Professional Training' (ARCG 229) and 'Graduation Project II' (ARCG 520) courses. Overall, there was little consistency in the format and presentation of the specifications of these two courses. The Panel recommends that the College should ensure that the course specifications are standardized, to ensure that students and faculty are in agreement about what is expected from the course and their outcomes. The Panel studied the programme syllabi and notes that these maintain the breadth and depth needed for the type of the programme and the degree it offers. Moreover, the Panel was provided with evidence that the course syllabi is benchmarked against a range of relevant courses of similar programmes offered regionally and internationally. In addition, the programme team, with the support of the Department, College and University, sought and obtained accreditation equivalence with the NAAB, which has focussed the Department on developing its programme while bringing enhanced international recognition. The Panel appreciates that the course syllabi are planned and revised to meet professional standards and the norms of the profession of architecture. Nonetheless, upon examining students' graduation projects, the Panel noted the low levels of theoretical and philosophical exploration and positioning in the capstone projects resulting in projects that are overly concerned with aspects of form and novelty at the expense of environmental

and social concerns. This is due to the relatively limited emphasis placed on these aspects during the lower academic levels of the programme. Hence, The Panel recommends that the College should ensure that architectural history, design theory and philosophy receive greater emphasis throughout the programme delivery.

1.4   The BSAR PILOs are expressed as 32 student performance criteria that are grouped under three educational and learning realms. Realm A - critical thinking and representation (A.1 communication skills to A.11 applied research); realm B - integrated building practices, technical skills and knowledge (B.1 pre-design to B.12 building materials and assemblies); and, realm C - leadership and practice (C1 collaboration to C.9 community and social responsibility). The PILOs are made available to faculty and students through publication on the university website and the programme specification and course specifications documents. During interview sessions, the Panel was informed that the PILOs are derived from the NAAB standards and are revised to reflect the recent changes in these standards. The Panel studied the PILOs and acknowledges that these are mapped effectively against the programme educational objectives and collectively represent a coherent and valid set of integrated aims for an undergraduate programme in architecture. Nonetheless, the Panel notes the large number of the PILOs and that these are written in a detailed form suitable for course ILOs rather than PILOs. The Panel recommends that the College should revise the current PILOs to ensure that these are reduced to a reasonable number and are comprehensive in guiding the evaluation of the achievement of programme learning outcomes at a more holistic level.

1.5   Courses are assigned a set of Course Intended Learning Outcomes (CILOs), which are selected from the 32 students' performance criteria comprising the PILOs. This provides a direct link between the CILOs and PILOs. The CILOs are clearly stated in each course specification and syllabus. During interview sessions, students confirmed that they are provided with the course syllabus which includes the CILOs and these are discussed with them at the beginning of the semester. Moreover, when revising the selection and allocation of the CILOs, the programme has benefited from a comprehensive benchmarking with similar programmes offered regionally and internationally. The Panel studied the provided CILOs and notes that they are appropriate for the content and level of the courses and for a professional undergraduate programme in architecture. The Panel appreciates that there are clearly stated CILOs for each course within the programme and that these are suitable for the course level and content.

1.6   The BSAR programme includes a requirement that students must undertake a non-credit barring, work-based learning course (Industrial Training ARCG 229) over 200 hours, usually during the summer period, through formal attachment to an industry partner organization in the private or public sector. Enrolled students must complete

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85 credit hours of the programme to be eligible to register for the training course to ensure that students undertaking their internship with industry have sufficient foundation to benefit educationally from it. The course has a suitable set of CILOs, and there is information on the course specification that stipulates what is expected from the student with an appropriate system of monitoring and dissemination. The assessment policy of the course is covered in the 'Study and Exam Regulations', and the 'Assessment and Moderation Policy'. During interview sessions, the Panel received positive commentary on the educational value of this course from employers, graduates, current students and faculty. Employers reported subsequently hiring some of their interns after they had graduated. The Panel appreciates that the BSAR programme includes a work-based course that effectively contributes to the achievement of the PILOs. Although the course did not bare any credit at the time of the site visit, the Panel was informed during interview sessions that the programme team is planning to assign credit hours to the industrial training course. The Panel encourages the College to expedite the implementation and add credits to the course that represent an appropriate weight to the amount of learning achieved by the student.

1.7 The Department of Architecture and Interior Design has a teaching and learning policy that outlines in some details the department's engagement with a broad range of activities to support the learning environment and experience. Given the strong design, professional and visual foci of the profession, the policy appropriately addresses a variety of modes for teaching and learning covering lectures, discussions, visual presentations, research, model making, design activities and exposure to professional experience through listening, visual thinking, doing, independent and participatory learning. Interviewed students confirmed that faculty members utilise a wide range of teaching and learning methods that enable them to achieve the intended learning outcomes. The Panel studied a large sample of course files provided before and during the site visit and notes that, in general, these include specific sections dedicated to course teaching methods, which are mapped to specific CILOs. The Panel appreciates the diverse nature of teaching and learning approaches used for the delivery of the programme that are suitable for the type of the programme and facilitate the achievement of the learning outcomes. However, the Panel noted that the Professional Training course specifications (ARCG 229) and Graduation Project II (ARCG 520) course specification did not clearly specify the teaching and learning methods. The Panel recommends that the College should revise the course specifications to ensure that these clearly specify the teaching and learning methods, and map these to the relevant CILOs (See paragraph 1.3). Moreover, interview sessions revealed that e-learning is not a central mode of instruction and learning, except for the use of the propriety online educational platform, 'BlackBoard', and for the sourcing of online information. Interviewed students reported that this aspect of their education

is lacking. The Panel recommends that the College should explore ways to further utilize e-learning methods in the delivery of the programme.

1.8 The Department of Architecture and Interior Design has developed and implemented a clear assessment policy outline, 'Assessment Policies and Practices' which is an overarching framework for assessing students' work. As stated in the SER, this framework addresses design courses, architectural theoretical courses, supportive courses and liberal arts/general courses. The policy and procedure for assessing design work is detailed and sets out a comprehensive framework of policy and procedural guidelines related to juries, criteria for evaluation and assessment weightages; among other matters. During interview sessions, the Panel confirmed that students and faculty are well-informed of the policy. Moreover, a distillation of the assessment policy and procedure that is specific for individual courses is recorded in the individual course specifications, which are made available to students undertaking these courses .During meetings with the teaching staff and students, the Panel was informed that feedback to students on assessment of their work is normally provided in writing for written assignments, orally for design projects and only on request for final written examinations. In addition, there are procedures for students to appeal their awarded grades for any of their courses. On student-initiated appeal, a committee, that does not include the original assessor, is formed to review and re-assess the student's submitted work. The policy for plagiarism is handled *via* the Anti-Plagiarism Policy and the library staff assist students understanding of copyright and issues surrounding academic plagiarism. The Panel appreciates that there are clear assessment policy and procedures that faculty and students are well aware of and provide a provision for timely feedback. Nonetheless, the Panel notes that the former appeal process is not applied for design courses evaluated by a jury. The Panel recommends that the College should provide a provision for formal appeal of awarded grade for all assessed student work, including design courses evaluated by a jury, with no original assessor being included in the re-assessment process.

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

- The programme has clear aims that are appropriate to the programme type and level and are aligned to the university and college's mission and set of goals.
- The curriculum is designed to provide appropriate year-on-year and course-by-course progression and a suitable balance between knowledge and skills, and theory and practice.
- The course syllabi are planned and revised to meet professional standards and the norms of the profession of architecture.
- There are clearly stated course intended learning outcomes for each course within the programme and these are suitable for the course level and content.

- The BSAR programme includes a work-based course that effectively contributes to the achievement of the programme intended leaning outcomes.
- Diverse teaching and learning approaches are used for the delivery of the programme that are suitable for the type of the programme and facilitate the achievement of the learning outcomes.
- There are clear assessment policy and procedures that faculty and students are well aware of and provide a provision for timely feedback.

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

- ensure that the course specifications are standardized, as appropriate, include teaching and learning methods that are clearly mapped to the course intended learning outcomes to ensure that students and faculty are in agreement about what is expected from the courses and their outcomes
- ensure that architectural history, design theory and philosophy receive greater emphasis throughout the programme delivery
- revise the current programme intended learning outcomes to ensure that these are reduced to a reasonable number and are comprehensive in guiding the evaluation of the achievement of programme learning outcomes at a more holistic level
- explore ways to further utilize e-learning methods in the delivery of the programme
- provide a provision for formal appeal of awarded grade for all assessed student work, including design courses evaluated by a jury, with no original assessor being included in the re-assessment process.

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 UoB has a clear admission policy with a general condition of scoring a minimum of 70% in the high school certificate, or equivalent, to be admitted to one of the university's undergraduate programmes. In addition to an interview session, applicants must also set an aptitude test to assess their English language, mathematics and general knowledge skills. The admission policy also states that the applicant should be 'medically fit'. However, during interview sessions staff and students did not have a shared understanding of the meaning of the term 'medically fit', or how it is applied. The Panel advices the College to provide clear definitions that are communicated to staff and students in order to ensure student equity during the admission process. Moreover, applicants to the BSAR programme are evaluated in drawing and visual skills that include basic drawing and graphic composition skills, visual perception and freehand rendering, freehand sketch, imagination and proportion abilities. Policies and procedures are published on the university website, in the University Catalogue, and in the Programme Handbook. Interviewed students and staff members were well informed about the admission policy and procedures. The Panel appreciates that there are formal admission policy and procedures, known to students and staff and include an evaluation of applicants drawing skills. During interview sessions, the programme mangers informed the Panel that due to the BSAR programme being taught in English, provisions are made by UoB to offer further English test for students that score less than TOFEL 550. The Panel acknowledges that admission tests and interviews are prepared at a programme level and final decision for student admission is made by the Architecture and Interior Design Department. However, during interview sessions, the Panel noted conflicting information in regards to the role of the Department of Architecture and Interior Design in setting the aptitude test. Moreover, the Panel studied the provided samples of the aptitude tests and noted that some of the questions are general and not at a bachelor entry level. The Panel recommends that the College should revise the aptitude test to be more specific to the entry level and direction of the programme.

2.2 The Panel studied the submitted students' profile and notes that admission criteria are consistently implemented. During interview sessions with staff, the Panel was informed that high school subjects are taken into consideration during the admission process to ensure the appropriateness of student profile to the needs of the programme. In addition, the department's aptitude test evaluates the critical thinking and creative skills the admitted students acquire to ensure that they meet the minimum needs of the programme. Interviewed students indicated their readiness for the programme needs which was confirmed by the statistics provided in the SER. The

Panel also noted the higher ratio of female to male students, which the Panel was informed, is common across UoB. The Panel notes that the average length of study to graduation, setting at 10.7 semesters, is in line with the programme set study plan. Moreover, the rate of employability of the programme is satisfactory, although higher for male graduates. The Panel acknowledges that the profile of the admitted students is suitable for the programme needs.

2.3   There is a clear organisational chart that is appropriate for the management of the BSAR programme. The SER states that the department Chairperson, supported by the programme coordinator, is responsible for the overall management of the department day-to-day operation and for ensuring the quality of the delivery of the two programmes offered by the Department, one of which is the BSAR programme. The Chairperson heads the Department Council, which is responsible for proposing the way study activities, research topics, examination and extra-curricular activities are organized. Proposals are passed by the Chairperson to the College Council where it is discussed and passed to the University Council by the Dean as needed. Course coordinators are responsible for the management and the learning and teaching of the courses offered. Interviewed staff and students were well-informed about the programme management and lines of decision making. The Panel values the regular meetings that take place in the Architecture programme and the professional coherence amongst staff. In addition, the Panel notes the consultation of the programme and university committees such as the Student Advisory Committee (SAC), Program Advisory Committee (PAC), the Timetable Committee and the Academic Committee; these meetings are held regularly and are minuted. The Panel appreciates that there is a formal structure for the management of the programme with clear lines of accountability that students and staff are well-informed of and that student committees are involved in the programme decision-making.

2.4   There are 37 full-time faculty members in the Department responsible for the delivery of the programme (2 professors, 2 associate professors, 10 assistant professors, 7 lectures, 4 instructors and 12 teaching assistants). The Panel studied the profile of the faculty members and notes that they acquire suitable qualifications to teach into a bachelor degree at a higher education level and are fit for the needs of the programme. However, studying the detailed CVs provided, the Panel was concerned that Architecture specialised faculty members lack the range of practical experience that is required to sustain their expertise. During the site visit the Panel was informed that the university regulations does not foster further development of professional experience amongst existing academic staff and that a new recruitment plans are considered with a target to hire more staff with practical architecture design skills and international knowledge in order to offer diversity into the architecture design pedagogy. The Panel also noted a decline in research activities amongst faculty members, which was explained during interview sessions to be a result of reduction

in research funding due to the resent financial restrains. This, together with the heavy workload is affecting the research outcome and personal development of some of the academic staff, which was confirmed by faculty members interviewed during the site visit. In addition, the students-to-staff ratio is set at the College level to be acceptable in the range 20-30:1. The Panel is concerned that for this type of programme, a ratio above 24:1 is considered high, as design courses require many face-to-face feedback, and the high number of students will not allow for that. Interviewed faculty and students also raised this concern. The Panel recommends that the College should develop a long-term recruitment plan that ensures employing faculty members with suitable practical experience and revise the students-to-staff ratio and academic staff workload in order to encourage academic staff to focus more on personal and professional development as well as research.

2.5 UoB has clear recruitment, promotion and retention policies and procedures, which are communicated to the staff. Interviewed staff members during the site visit were well-informed about these policies. The recruitment policy is transparent and the minutes of meetings of the Department, College and University Council indicate that decisions on selection of new staff recruitment are achieved through consultation at a university, college and programme level, which the Panel appreciates. The Panel studied the promotion policy and procedure, and notes that these are appropriate; however, they are not consistently implemented. During interview sessions, the Panel came to know that academic staff face many obstacles in being supported on a personal development and research level, which affects their promotion. Moreover, the Panel is concerned about the draw back in promotions, especially from a lecturer to a senior lecturer position, which hinders staff career progress and development and affects retention rate. The Panel recommends that the College should develop and implement a plan to facilitate faculty promotion. During interview sessions, the Panel was informed that appraisal is made through student surveys and performance review. However, the Panel noted a misalignment in the HR promotion and appraisal procedures, which needs to be addressed. In addition, there is no clear indication or consistency of appraisal implementation for staff. Furthermore, appraisal is not linked to staff professional development (See paragraph 4.9). The Panel also noted that there is no formal induction procedure for new staff. During interview sessions, the Panel was informed that induction is performed informally at a programme level. The Panel recommends that the College should address the misalignment in the HR promotion and appraisal procedure, and develop and implement a formal induction programme for its newly appointed staff at a university, college and department level.

2.6 UoB has a functioning management information system (MIS), consisting of a number of software, used to inform some of the activities needed by the programme. The Online Registration System allows students to add, drop and replace courses during registration period. They can also pay the registration fee online. Interviewed students

expressed their satisfaction with the online registration services. The system contains students' details including biographic and academic data/records, provides students with information about their academic progress and supports academic advising of the students enrolled in the programme. During interview sessions, the Panel was informed that efforts are currently underway to make the system available on smart phones through a mobile application. The MIS team also runs periodic training and evaluation surveys and mini assessment surveys for various departments and programmes. The Panel appreciates the existence of an MIS that provides detailed information about the students and has a provision for online registration and fee payment. In addition, the HR intranet system provides information about academic and administration staff members that can be used by the department Chairperson to enable informed decision-making. However, evidence provided and discussions during the site visit interviews did not clarify how the MIS is utilised to inform the handling of capital equipment, operational and human resource budgets. Moreover, the Panel was not provided with evidence on the MIS system being utilised on a department or college level to inform long-term decision-making based on retention, graduation and success rate. In addition, during interview sessions, staff were not able to provide examples of utilising the MIS system outside academic advising and timetabling. Hence, the Panel encourages the College to further utilise the MIS system in generating periodic reports that are utilised to inform decision making.

2.7   The University has policies and procedures in place to ensure the security of the learners' records and accuracy of results. During interview sessions, the Panel was informed that at a university level, the Deanship of Admission and Registration is responsible for ensuring the security of students' main records. These are maintained both in hard and soft copies, access to which is limited based on level and authority. There is a formal policy in place to ensure security of records through a defined authorization mechanism, storage of data, privacy of information, exchange of information, the usage of anti-virus and security tools, and the security agreements with users. The University has a backup plan where an electronic backup of students' records is executed after each main registration and grade entry stage as per the IT policies and procedures. The Panel toured the facilities and noted that physical facilities and computers access on site are secure and available only for authorized personal and students as per the level of authorization. Moreover, students' marks and grades are recorded by faculty members through a transparent process, which is ensured by the department Chairperson and is additionally validated by the Registration Department. The Panel appreciates that there are policies and procedures that are consistently implemented to ensure the security of students' records and the reliability of the students' grades entering mechanism.

2.8   During the site visit, the Panel toured the facilities of the Isa Town Campus. Facilities visited by the Panel included: teaching halls, laboratories, studios, staff offices, the

main food court, the student activity hall, the Library and other facilities. The Panel recognizes the quality and number of teaching and learning spaces available to students and values that many facilities were improved as per Student Advisory Committee's (SAC) request such as the Wi-Fi and other physical facilities, which interviewed students confirmed during the site visit. The Panel notes with appreciation that general facilities available are suitable for the needs of the programme and the students. Notwithstanding the above, the Panel notes that the available studio facilities and arrangements need further development. The current studio spaces are limited and do not facilitate 2- or 3-D representation. Moreover, during interview sessions the Panel was informed that senior students are not allocated their own space in the studios where they can utilize the space during allocated practical sessions only when the studio is not utilised by other courses. The Panel notes that student collaborative spaces need to be established in order to foster a studio culture that is imperative for creativity and innovation. Hence, the Panel recommends that the College should further expand the studio facilities available to students and ensure that senior students are allocated permanent space to enhance their learning experience. In addition, the Panel acknowledges that computer laboratories are available and are all equipped with updated relevant software, which was confirmed during the site visit. However, during interview sessions the Panel was informed that the plotter was not made available to students although printing in larger format is required for assessment. Moreover, The Panel is of the view that relevant Computer Aided Design (CAD) programmes should be made available to all Architecture students in order to ensure the currency of the graduate attributes. The Panel also toured the Library and noted with appreciation the facilities available for students, which include study rooms, a common study area and the computers with Microsoft Word and printing facilities. The Panel also notes that the library's databases for e-book and e-journals are of an international standard. However, the Panel is concern that the Avery Index, which is an integral database for art, architecture and design journals and publications, is not included. The Panel encourages the College to expand its e-learning resources to include Avery Index.

2.9   UoB employs a number of tracking systems to evaluate the utilisation of its different resources. The Panel notes the involvement of the timetabling committee in managing the resources allocated to the programme. During interview sessions, the Panel was informed that laboratory technicians are responsible for tracking the utilisation of the laboratories and ensuring that sufficient equipment and consumables are available. These are arranged for at the beginning of each semester and monitored throughout the delivery of the courses. Moreover, the e-learning centre maintains usage data of the e-learning resources and the library recently implemented the LibQUAL system, which is a web-based survey to help in assessing and improving its services. The Panel acknowledges the existence of these tracking systems and encourages the College to further utilise these data to inform its decision-making.

2.10   The SER indicates that UoB provides its students with a range of support that includes support for the usage of the laboratory, library and e-resources, academic advising, counselling and health care. The Career Counselling Office supports students through liaising with the industry to provide students with suitable opportunities for on-job training and advocating for the programme graduates to be employed, in addition to conducting workshops on leadership development, CV writing and job interviews. Moreover, the Deanship of Students Affairs organises and oversees students' activities such as peer learning and youth delegation programmes while the university health clinic provides comprehensive on campus services. Interviewed students were satisfied with the range of support provided to them. The Panel appreciates the range of social and career counselling provided to students. The Library provides a range of services, such as library induction, open days and training workshops, which are offered to students and staff. In addition, the institution conducts bi-annual user surveys to monitor the level of satisfaction. Moreover, the IT Centre runs information literacy training and the e-learning Centre provides students with support for the usage of 'Moodle' and 'Blackboard'. All enrolled students are assigned an academic advisor upon enrolling in the programme, however, except for at-risk students, the process used to monitor and follow-up students' progress is unclear and performed informally at the programme and individual level between the student and academic staff. The Panel acknowledges the range of academic support provided to students and encourages the University to develop an overarching support policy in order to ensure consistency and equity amongst students.

2.11   UoB has a formal induction day for newly admitted students organised by the Deanship of Students Affair, where the college's Dean, department Chairperson and course coordinators participate in delivering the event to the students. The orientation programme is compulsory for students who score less than 80% on their aptitude test. During interview sessions, the Panel confirmed that the induction programme comprises both a general orientation section at the university level, and a programme specific section during which students are provided with relevant information, which includes the Handbook, and an Orientation Guide specific to the Department of Architecture and Interior Design. The Panel appreciates that the induction programme is organised at both the university and programme level and caters specifically for the needs of the Architecture Design students. Nonetheless, the Panel noted the low number of students who attend the induction programme. Moreover, it is unclear how students that do not attend the induction are provided with the information needed. The Panel recommends that the College should provide alternative provisions for those students who do not attend the induction programme.

2.12   As stated earlier, every student is assigned an academic advisor from the first day he/she commence in the programme. The SER states that there is an appropriate academic support in place to track students' progress, identify students at risk of

academic failure and provide interventions for them. This is available through a communication system between the IT, MIS, administration and academic staff. Interviewed staff members indicated to the Panel that the follow up support for these students is implemented at a programme level through an action plan. However, the Panel noted that although the system is available, much of student support is performed informally between students and academic staff. There is also a peer-mentoring scheme that at-risk students may benefit from. The Panel appreciates the peer-mentoring scheme, which allows for a vertical collaboration of students between different year levels. The Panel acknowledges that policies and procedures are in place to identify at-risk students and provide timely intervention for students at risk and encourages the College to develop and implement a system to identify students that are undergoing hardships before they become at risk of academic failure.

2.13   The Department of Architecture and Interior Design offers many opportunities for site tours and visits, in addition to attending seminars and lectures presented by guest speakers. Moreover, career day is organised annually and attended by senior students to expose them to the labour market and its expectations. Students are also encouraged to attend conferences and competitions whenever applicable. During interview sessions, the Panel confirmed that students lead the organisation of a number of activities through students' societies and clubs and participate in sport tournaments organised by the University. In addition, a number of activities are organised by the Division of Social and Cultural Activities of the Deanship of Students Affairs. The Panel notes with appreciation the many activities attended and organised by the students that enrich their learning experience.

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

- There are formal admission policy and procedures, known to students and staff and include an evaluation of applicants drawing skills.
- There is a formal structure for the management of the programme with clear lines of accountability that students and staff are well-informed of and student committees are involved in the programme decision-making.
- The recruitment policy is transparent and decisions on selection of new staff recruitment are achieved through consultation at a university, college and programme level.
- There is a management information system that provides detailed information about the students and has a provision for online registration and fee payment.
- There are policies and procedures that are consistently implemented to ensure the security of students' records and the reliability of students' grades entering mechanism.
- General facilities available are suitable for the needs of the programme and the students.

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- A wide range of social and career counselling is provided to students, which support their learning achievement and career development.
- There is a peer-mentoring scheme, which allows for a vertical collaboration of students between different year levels.
- There is a wide range of extra-curricula activities attended and organised by the students that enriches their learning experience **.**

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

- revise the aptitude test to be more specific to the entry level and direction of the programme
- develop a long-term recruitment plan that ensures employing faculty members with suitable practical experience and revise the students-to-staff ratio and academic staff workload in order to encourage academic staff to focus more on personal and professional development as well as research
- address the misalignment in the HR promotion and appraisal procedure, and develop and implement a plan to facilitate faculty promotion
- develop and implement a formal induction programme for the newly appointed staff at a university, college and department level
- further expand the studio facilities available to students and ensure that senior students are allocated permanent space to enhance their learning experience
- provide alternative provisions for newly admitted students who do not attend the orientation programme.

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 programme has adopted the NAAB's aspiration as the generic set of attributes the programme's graduates should attain. These are linked to the 'knowledge possessed and abilities demonstrated at the final graduation level of the programme' and are mapped to the mission of the University. In addition, the SER clearly states how the PILOs are related to the PEOs and NAABs domains and the relationships between the PEOs and the university's mission. During interview session, faculty members elaborated on how the achievement of these attributes are assured through direct assessment of CILOs, which are subset of the PILOs as discussed earlier under Indicator 1, and indirectly through senior exit surveys, industrial training evaluation, online course evaluation and employer survey. The Panel acknowledges that graduate attributes are clearly stated, linked to the university mission and direct and indirect mechanisms are adopted to assess the achievement of these attributes.

3.2 There is a formal benchmarking policy on the university level that stipulates the benchmarking principles and procedures to be used and clearly states the responsibilities of the QAAC, VP academics, college's Dean and the department Chairperson in the process. The Department has benchmarked the BSAR programme against a basket of regional and international programmes in Architecture. The basket comprises seven programmes offered in GCC countries and eight programmes offered by USA universities. The Panel notes with appreciation that benchmarking process resulted in a revision of the programme structure. Nonetheless, the Panel notes that the international selection is limited in diversity and advises the College to widen its selection in order to ensure a more reliable comparison. Moreover, the benchmarking process mainly comprised a comparison of curricula, course contents, ILOs and credit levels. It did not compare admission requirements, progression rates, academic standards, teaching and learning strategies, etc. The Panel recommends that the College should expand its benchmarking activities to include all aspects of the programme and its outcomes.

3.3 There is a formal assessment policy that is adopted by the Department, and is freely available to staff and students. The department Chairperson is responsible for the policy's implementation. During interview sessions with faculty members and registration staff members, the Panel confirmed that students grade distribution is approved by the department Chairperson and the Dean before it is published to students. The department Chairperson is also responsible for arranging for the invigilation of the final examinations to ensure their integrity. There is evidence from the documentations provided and interviews conducted that assessment policy and

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procedures are consistently implemented, monitored and subject to regular reviews. As detailed under Indicator 1, there is also a student's appeal system and an anti-plagiarism mechanism that both students and staff are well-informed of. The Panel appreciates that there is a formal assessment policy and procedures that are consistently implemented and regularly reviewed.

3.4   The SER states that the 'Articulation Matrix' is used by the BSAR programme team to ensure that the PEOs are achieved. This is ensured through linking the assessment tools to the CILOs, which are subset of the PILOs. Moreover, the Departmental Assessment Policy requires that CILOs must form part of all documentations prepared for the Juries of Studio-based courses. At the end of each semester, instructors submit a course assessment sheet that maps the grades of the students with the corresponding CILOs. During interview sessions, the Panel was informed that the Department considers a CILO as achieved if at least 70% of the students achieve 70% or more. Then using the 'Articulation Matrix', the PILOs are mapped to the PEOs to assess the level of PEOs achievement and ensure the academic standards. The Panel notes with appreciation that the system in place is sufficient to assess the level of learning outcomes' achievement. Nonetheless, when studying the provided course files, the Panel noted some discrepancies in the level and accuracy of including information in a few course files. In addition, as pre-assessment moderation is not adopted by the College or the Department, misalignment can be detected after students sit the assessment. This will be discussed in more details in the section below.

3.5   UoB has an assessment and moderation policy that stipulates the pre- and post-assessment moderation. For courses offered in multi sections, all instructors contribute in setting the examination paper, which is finalised by the course coordinator and the examination paper is graded collectively. The Panel furthermore notes that students grade distribution is approved by the department Chairperson and the Dean before it is published to students. During interview sessions, the Panel was informed that post-assessment moderation is conducted by the QAAC, were course files, including assessment tools, are subject to revision and comments on the level of assessment and its relevance to the learning outcome it is assessing is commented on. Moreover, the department's assessment policy stipulates that assessing students' work in all studio-type courses is achieved through a jury with clear roles and responsibilities of jury members who are provided with a rubric to guide their assessment. Nonetheless, the Panel is concerned that theoretical courses (except those offered in multi-sections) are not subject to pre-assessment moderation and that post-assessment moderation is conducted by the QAAC only and not by specialised faculty members. The Panel recommends that the College should expand its internal-moderation system to include a pre-assessment moderation for all its courses and that pre- and post- assessment is conducted by specialised faculty members.

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3.6   UoB and the department's assessment policies indicate that only the assessment of the senior design projects and industrial training courses involves external moderation. During interview sessions, the Panel was informed that by subjecting the programme to external accreditation by a professional body, such as NAAB, the programme is externally moderated. Whilst the Panel agrees that this forms a type of external moderation, it is a post-assessment moderation that occurs only periodically. The Panel recommends that the College should revise its moderation policy to include external moderation of its assessment tools beyond the senior design projects.

3.7   During the site visit, the Panel was provided with ample samples of students' assessed work. These included quizzes, examinations (mid-term and final), assignments and students design work. The Panel studied the samples provided and notes that for theoretical courses, the assessment tools used are, in general, suitable for the course level and content and are properly linked to the CILOs. Moreover, the grades awarded were of an acceptable level. The Panel also studied the exhibited student design work and notes that students' work is comparable with what can be found at other schools offering similar programmes. Students' work illustrate appropriate and diverse basic design scope with suitable media and 3D explorations. A good design forms and an understanding of simple architectural problems was illustrated in students' work in Architectural Design I (ARCG 210), while the work displayed for Architectural Design III (ARCG 310) showed appropriate complexity with emphasis on hand-drawn plans as well as models. The Panel notes with appreciation the emphasis on hand drawing and model building. In general, the Panel notes that students' work is comparable with what can be found at other schools offering similar programme. Nonetheless, the Panel is concerned that research documents prepared for Architectural Design VII (ARCG 510) were not referenced according to accepted academic conventions and that students relied extensively on internet sources with scant use of books, journal articles or conference papers. The Panel recommends that the College should ensure that students research documents related to graduation projects are developed according to acceptable academic conventions, well referenced and pay greater attention to social and environmental issues.

3.8   The level of programme graduates' achievement is measured directly through evaluating the achievement of CILOs and hence the PILOs and PEOs using assessment and mapping as explained in Paragraph 3.4 above. During interview sessions the Panel was informed that the programme team also assess the level of students' achievement indirectly by seeking feedback from the employers and alumni on the level of its graduates' achievement and attainment of PILOs and PEOs, which indicate a high satisfaction. This was confirmed during interview sessions. Moreover, as stated earlier, students' work is in general suitable for the type and level of the programme. Hence, the Panel acknowledges that the level of achievement of graduates meets programme aims and intended learning outcomes. Nonetheless, the Panel is

concerned with the low levels of theoretical and philosophical exploration and positioning in the capstone project resulting in projects that are overly concerned with aspects of form and novelty at the expense of environmental and social concerns and urges the College to address this issue (See recommendation under 1.3). Furthermore, the Panel suggests that the course specification for Architectural Design VII (ARCG 510) should clearly describe the learning outcomes that should be achieved by a capstone project as a means of ensuring that these are taken into consideration during the final assessment of the projects.

3.9   The College of Engineering monitors students' pass rates, completion and exit rates *via* reports generated through the MIS and the registration office. Information provided indicates that for the last five academic years, students graduate from the programme within approximately 10.6 semesters on average, which is suitable for the duration of the programme. Moreover, out of 129 students graduated during the academic years 2012-2015, 68.2% are employed in suitable destination, 6.2% proceeded to other employment, 4.7% are pursuing further studies and 3.9% are engaged with other types of activities while the destination of 17% is unknown. Provided data on the ratios of admitted students to successful graduates including rates of progression, retention and year-on-year progression are consonant with those achieved on equivalent programmes offered regionally and internationally. The Panel appreciates that the ratios of admitted students to successful graduates including retention rates, year-on-year progression, length of study and first destinations of graduates are at good levels for the type of the programme and that the Department has measures in place to monitor these aspects.

3.10   As stated under Indicator 1, the BSAR programme includes a compulsory, non-credit baring, industrial training course (ARCG 299) that comprises a two-month long (200 hour) internship at a private or governmental architecture practice. Students' allocation is managed by the Department and the industrial liaising department on the university level where available training sites are identified and students are allocated. The Department assigns faculty members to supervise students and liaise with the on-job supervisor who is provided with a clear rubric on what is expected from the training and how to assess the trainee. Students are required to write a report and present it as part of their assessment. Interview sessions revealed that stakeholders highly appreciate the process. The Panel appreciates that the work-based learning is properly managed and assessed to ensure appropriate learning experience.

3.11   The BSAR programme includes a final graduation project, which is delivered in two phases; 'Graduation Project I' (ARCG 511), which is the 'programme stage' and 'Graduation Project II' (ARCG 511), which is the 'design stage'. The SER states that management of the course was improved by appointing a Graduation project Coordinator who is responsible for monitoring the process as a whole. Students are

assigned to design supervisors, with a maximum of four students per each supervisor. Students develop three proposals under the supervision of the assigned supervisor and the Graduation project Coordinator is responsible for arranging a forum where these proposals will be discussed and one proposal is selected for the student to proceed to work on. During interview sessions, the Panel was informed that the Graduation project Coordinator is responsible for managing the course and ensuring the quality of the projects. The Coordinator also assembles jury panels for assessing the design work. The grading criteria are clearly stipulated in the 'Graduation Project Guidelines' document distributed to students, supervisors and jury members, which must include an external member. The document also states the roles and responsibilities of the student and the supervisor. Interviewed staff and students were well-informed about these guidelines. The Panel appreciates that there is a clear procedure for managing the graduation design project, clearly stating the role and responsibilities of the student, supervisor and jury members.

3.12   The BSAR programme has a Programme Advisory Committee (PAC), which meets annually as stated in the SER and a Students Advisory Committee (SAC), which also meets at least once a year. The PAC includes representatives from the industry, both from private and government sectors and has a defined set of selection criteria. The Panel is satisfied that the PAC meets regularly and that these meetings are minuted, where the programme content, its learning outcomes, and suggestions for improvements are discussed. However, the BSAR programme team could not provide the Panel with documents on PAC's term of reference, policy or procedure. The Panel recommends that the College should develop and implement a formal policy and procedure for the PAC that clearly state the committee's remit and the number of meetings it should have during an academic year, in addition to a mechanism to assess its effectiveness.

3.13   UoB measures employers and alumni's satisfaction using surveys administrated yearly and every two years, respectively. The SER states that these surveys are used to identify the level of satisfaction with the attainment of the PEOs and PLEs. Alumni and employers aggregated data indicate that they are in general satisfied with the programme outcomes. Senior exit surveys, which is also conducted at the end of each semester indicate a high satisfaction with the overall programme experience (90%). Nonetheless, students were less satisfied with the practical skills complementing the theoretical aspects (68.2%). Moreover, interviewed alumni and employers indicated their high satisfaction with the programme and its outcome. The Panel appreciates that alumni and employers are satisfied with the programme and its outcome.

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

- The Programme is benchmarked with similar programmes offered regionally and internationally and with professional standards and the benchmarking process resulted in a revision of the programme structure.
- There are formal assessment policy and procedures that are consistently implemented and regularly reviewed.
- There is a formal system in place that is sufficient to assess the level of learning outcomes' achievement.
- There is emphasis on hand drawing and model building that is apparent in students' work.
- The ratios of admitted students to successful graduates including retention rates, year-on-year progression, length of study and first destinations of graduates are at good levels for the type of the programme and the Department has measures in place to monitor these aspects.
- The work-based learning is properly managed and assessed to ensure appropriate learning experience.
- There is a clear procedure for managing the graduation design project, clearly stating the role and responsibilities of the student, supervisor and jury members.
- Alumni and employers are satisfied with the programme and its outcome.

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

- expand the benchmarking activities to include all aspects of the programme and its outcomes
- expand the internal-moderation system to include a pre-assessment moderation for all the courses and that pre- and post- assessment is conducted by specialised faculty members
- revise the moderation policy to include external moderation of assessment tools used, beyond the senior design projects
- ensure that students research documents related to graduation projects are developed according to acceptable academic conventions, well referenced and pay greater attention to social and environmental issues
- develop and implement a formal policy and procedure for the PAC that clearly state the committee's remit and the number of meetings it should have during an academic year, in addition to a mechanism to assess its effectiveness.

3.16   **Judgement**

On balance, the Panel concludes that the programme **satisfies** the Indicator on **Academic Standards of the Graduates.**

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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 UoB has a comprehensive set of policies, procedures and regulations for university-wide academic, admission, human resources and other matters. These are available on the university's web sites, where they are accessible by the university community, and the College of Engineering expands that with its own website that includes *inter alia* related policies, procedures, regulations and news. In addition, students have access to the relevant policies and procedures through the orientation programme, Students Handbook and requests to the Dean's office. The SER states that Adherence to university policies and procedures are monitored at two levels. At the university level, QAAC works directly with the colleges' Dean. This office is responsible for the consistency and alignment of the implementation of policies and their related procedures. At the programme level, the Dean and the Chairperson are responsible for the implementation and management. The Panel appreciates that there is a set of appropriate policies and procedures suitable for the management of the programme with clear responsibilities that are accessible by staff and students. However based on the evidence provided in the course files and the staff interviews, the Panel is concerned that for a few policies relevant to the programme, especially the new ones, faculty are not well-informed about these policies and procedures. Hence, the Panel recommends that the College should further enhance the mechanisms for communicating new institutional policies to respective stakeholders to ensure shared understanding and effective implementation.

4.2 Management of the programme is the responsibility of the department Chairperson, who reports to the Dean of the College. The Chairperson is assessed by the programme coordinator and there is a range of committees that have the responsibility for accreditation, curriculum development, administration and events. During interview sessions, the Panel learned that permanent committees are formed at the beginning of each academic year while *ad hoc* committees, such as recruitment, promotion and invigilation committees are formed based on need. The Department Council is the custodian of the academic integrity and is responsible for approving all the major academic decision raised by the programme team, through the Chairperson, to the College. Nonetheless, the Panel is concerned with the heavy workload and responsibilities of the department Chairperson and senior staff members that might hinder their abilities to provide effective leadership to the programme. The Panel recommends that the College should address the leadership responsibilities as this could hinder the effective leadership and could influence the management of the programme.

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4.3　UoB has a formal Quality Assurance Manual that provides comprehensive information about policies and procedures relating to Quality Assurance (QA). The QAAC has the overall responsibility for monitoring and evaluating the effectiveness of the quality management system at the University. On the Department level, the Departmental Quality Assurance and Accreditation Committee operates under the guidance of the college's Quality Assurance Office, which is responsible to the QAAC. During interview sessions, the Panel confirmed that the QAAC conducts periodic QA compliance audits and the findings are logged at a report submitted to the University Council, where there are follow-up actions. In parallel, there are random quality assurance audits at the university and college levels. The Panel acknowledges the provision of a structure for the management of QA within the Department of Architecture and Interior Design. Nonetheless, the Panel is concerned that effectiveness of the system is measured in terms of acquiring NAAB accreditation rather than a continuous improvement process and that the focus of the internal QA monitoring process is on the policies and their implementation rather than the evaluation of the policies and the effectiveness of application. The Panel encourages the College to further evaluate the effectiveness of its internal quality assurance system in creating a culture of contentious enhancement.

4.4　The SER states that quality assurance policy and procedures have been formally established at the UoB since 2009 and faculty members and administrative staff have been made aware of these through briefings and email. In addition, QA principles and mechanisms adopted to quality assure the programme are communicated through workshops and seminars. Reinforcing these is the IDEAS Handbook which is provided to faculty members and administrative staff. During interview sessions, the Panel confirmed the awareness of academic and administrative staff of UoB's adopted quality assurance principles, policies and procedures and their role in assuring the quality of the provision. The Panel appreciates that the College provides capacity-building opportunities for academic and administrative staff to enhance their understanding of quality assurance concepts and their roles and responsibilities.

4.5　New programmes are developed and introduced based on the 'Academic Programme and Course Development Policy', which emphasises the need to evaluate the relevance of the programme to the market needs and the aims and objectives of the Department and the University as a whole and its alignment to external accrediting bodies' requirements. The policy stipulates the role of the Departmental Curriculum Committee, Department Council, College Curriculum Committee and College Council in ensuring that the programme is designed and developed in line with published policies and procedures before submitting it to the University Council for approval, and the Board for final endorsement. During interview sessions, the Panel was informed that the College did not introduce new programmes in the last three years.

The Panel acknowledges that the policy adopted for designing and developing new programmes is fit for purpose.

4.6   Based on the university's internal Quality Assurance manual, an evaluation report is prepared by teaching staff for each taught course at the end of every semester. The report stipulates analysis of students' achievement and grade distribution, evaluation of the adequacy of the pre-requests and comments on course content and changes if needed. During interview sessions, the Panel was informed that these reports are submitted to the departmental Quality Assurance and Accreditation Committee, discussed in the Department Council and as a result minor changes are introduced to the course where needed. The Panel appreciates that there is a formal process for the review and contentious maintenance of the programme that is consistently implemented. Moreover, students' course-specific evaluations play a central role in the contentious assessment of the programme. These surveys cover such topics as the quality of the syllabus, the learning goals, the instructor performance, and teaching and assessment methods. These surveys are analysed by the Centre for Measurement with the outcomes as an input for course revision or faculty mentoring. During interview sessions, the Panel was informed that the responses to these student-completed surveys are processed and the compiled outcomes are given to the department Chairperson and the relevant instructor, though only the quantitative outcomes, but not to the students. The qualitative responses of students, i.e. their comments, are not normally considered. The Panel heard from the faculty that they were therefore less able to understand the quantitative survey outcomes because they lacked the qualitative comments of their students. The Panel concurs that the faculty should receive both quantitative and qualitative results from the student evaluations of their courses.

4.7   Periodic programme review is undertaken through a multi-faceted procedure. A key quality assurance procedure is the bi-annual submission of a self-evaluation report prepared by the Department. This is driven by the Departmental Quality Assurance and Accreditation Committee, supervised by the College level Quality Assurance and Accreditation Committee, which finally reports to the QAAC. Interviewed faculty members indicated their involvement in both committees and the Centre. Central to the periodic review of the BSAR programme has been the acquisition of NAAB substantial equivalency, which was achieved in January 2015. As this certification is valid for six years, the Panel was informed during interview sessions that the programme would be subjected to periodic reviews every six years to maintain this accreditation. In line with the university's 'Academic Programme and Course Development Policy', the periodic review is initiated by the Department and is propagated through different levels to the University Council utilising input from different internal and external stakeholders including the alumni and employers. Evidence of recent and successful major changes of the programme were provided to

the Panel. Programme faculty spoke favourably of the procedure and noted that the NAAB criteria reinforced and helped to define the programme intended learning outcomes as well as individual course intended learning outcomes, which generated confidence for the proposed programme changes indicating that the university procedure has been utilised successfully to bring the recent beneficial changes to the programme. The Panel appreciates that the university process for programme periodic review is effective and has desirable outcomes.

4.8   Stakeholders' input is solicited at the university, college, programme and course levels. The intent is to provide necessary feedback for decisions on programme revision and development. A range of relevant input sources is used to ensure that the programme is up to date and meets internal and external stakeholders' expectations, which include government entities, employers, graduates, exiting seniors, Programme Advisory Committee (PAC), NAAB standards, faculty and students. A number of methods for soliciting input are utilised to engage with these stakeholders. Written surveys, such as employers and students course satisfaction surveys, are a prominent method for obtaining stakeholder views. Structured conversations with exiting seniors and with industry leaders, as with the PAC, is another source of stakeholder polling. Clear evidence of inputs derived from stakeholder engagements is reported in the SER, which are utilised to improve the programme. In meetings with the Panel, stakeholders spoke of their engagement with the programme for feedback purposes. The Panel appreciates the range of methods utilised to collect stakeholders feedback to inform decision making on programme delivery and development. Notwithstanding the above, there is little evidence of feedback being provided to stakeholders on programme development due to their feedback. The Panel recommends that the College should develop a mechanism to communicate the collated outcomes of the feedback and the changes introduced as a result to the relevant stakeholders.

4.9   Professional development of teaching and administrative staff of the programme is important for effective conduct and development of the programme. The SER reports that faculty attend conferences and seminars, some by visiting professionals and academics, as well as training. The Panel acknowledges the Postgraduate Certificate in Academic Practice (PCAP) training programme, which is made available to faculty members to enhance their knowledge and skills of teaching and learning pedagogies. Moreover, a range of workshops on issues related to higher education are conducted at the university level and a limited number of the Department of Architecture and Interior Design's faculty participate in these. The SER also provides a list of professional seminars conducted at the college level during 2014, which include seven seminars of which the Panel found only two of possible relevance to the faculty of the BSAR programme. In addition, evidence was provided on a range of quality assurance workshops offered by the QAAC, but faculty members noted that conflicts with their

teaching and administration responsibilities made attendance difficult. In meetings with the faculty, it was reported that faculty members are encouraged to attend conferences away from the campus within the limitation of the budget. Nonetheless, the Panel was not provided with evidence on personal development plans of faculty members that are formally reviewed and agreed on with the Department or College. Hence, the Panel recommends that the College should develop and implement staff professional development policy and procedure, that identify areas for professional development linked to their appraisal; and that mechanisms be provided to enable faculty participation in their professional development.

4.10   The SER states that scoping of labour market requirements is undertaken mainly by employer survey and through the PAC. Evidence were provided on the systematic application of the employers' survey, which mainly evaluates the employer satisfaction level with the graduate attainment of the PLEs. Given that professional relevance is critical for employment of graduates of the programme, the Panel notes that the channels for obtaining necessary feedback are limited and not much utilised for the purpose of scoping the market needs. The Panel recommends that the College should conduct a formal study of the labour market and its needs to maintain the relevance of the programme.

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 set of appropriate policies and procedures suitable for the management of the programme with clear responsibilities that are accessible by staff and students.
- The College provides capacity-building opportunities for academic and administrative staff to enhance their understanding of quality assurance concepts and their roles and responsibilities.
- There is a formal process for the review and contentious maintenance of the programme that is consistently implemented.
- There is a process for the programme periodic reviews that is effectively implemented and has resulted in programme improvements.
- A range of methods is utilised to collect stakeholders feedback and outcomes are utilised to inform decision making on programme delivery and development.

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

- further enhance the mechanisms for communicating new institutional policies to respective stakeholders to ensure shared understanding and effective implementation
- address the leaderships' responsibilities to ensure effective leadership and management of the programme
- develop a mechanism to communicate the collated outcomes of the feedback and the changes introduced as a result to the relevant stakeholders
- develop and implement staff professional development policy and procedures, that identify areas for professional development linked to their appraisal; and provide mechanisms to enable faculty participation in their professional development
- conduct a formal study of the labour market and its needs to maintain the relevance of the programme.

4.13   **Judgement**

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

BQA

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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/BQA *Programmes-within-College Reviews Handbook, 2014*:

There is confidence in the B.Sc. in Architecture of College of Engineering offered by the University of Bahrain.