



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

# **Directorate of Higher Education Reviews Programme Review Report**

**Ahlia University  
College of Information Technology  
Bachelor's Degree in Multimedia Systems  
Kingdom of Bahrain**

**Site Visit Date: 23 – 24 November 2020**

**HA003-C3-R003**

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## Acronyms

ABET	Accreditation Board for Engineering and Technology
ACM	Association for Computing Machinery
ADREG	Admission and Registration Information System
AQAC	Accreditation Quality Assurance Committee
AU	Ahlia University
BQA	Education & Training Quality Authority
BSMS	Bachelor's Degree in Multimedia Systems
CAQA	Accreditation and Quality Assurance
CILOs	Course Intended Learning Outcomes
CIT	College of Information Technology
DHR	Directorate of Higher Education Reviews
GAs	Graduate Attributes
HEC	Higher Education Council
HR	Human Resource
ICT	Information and Communication Technology
IEEE	Institute of Electrical and Electronics Engineering
ILOs	Intended Learning Outcomes
KPI	Key Performance Indicator
LMS	Learning Management System
NQF	National Qualifications Framework
PD	Professional Development
PILOs	Programme Intended Learning Outcomes
QA	Quality Assurance
SER	Self-Evaluation Report
T&L	Teaching and Learning plan
TLAC	Teaching, Learning and Assessment Committee

ToR	Terms of Reference
VP	Vice President

## I. Introduction

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

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

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

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

*Standard 1: The Learning Programme*

*Standard 2: Efficiency of the Programme*

*Standard 3: Academic Standards of Students and Graduates*

*Standard 4: Effectiveness of Quality Management and Assurance*

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

**Table 1: Criteria for Judgements**

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

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

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

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

## II. The Programme's Profile

Institution Name*	Ahlia University
College/ Department*	College of Information Technology
Programme/ Qualification Title*	Bachelor's Degree in Multimedia Systems (BSMS)
Qualification Approval Number	Cabinet of Ministers Decision No. (1626-03) of 2001 Higher Education Council Letter No. ( 81- أ ت م / 2008 ) of 2008 Higher Education Council Decision No. (93) of Meeting (11/2008) of 2008
NQF Level	8
Validity Period on NQF	7 Jan 2021 – 7 Jan 2026 (Valid for five years)
Number of Units*	45 Units
NQF Credit	548 Credits
Programme Aims*	<ul style="list-style-type: none"> <li>• To provide a high quality undergraduate educational program in Multimedia Systems needed for their career opportunities or postgraduate education.</li> <li>• To enable students to critically analyze, identify and solve real-world problems; to design, implement, and evaluate a multimedia system, or component, to meet desired needs.</li> <li>• To instill in students a keen appreciation of and to demonstrate professionalism and ethical behavior. This includes responsible teamwork, creativity and communication skills with professional attitudes and to prepare them for the complex actual work environment and for life-long learning.</li> </ul>
Programme Intended Learning Outcomes*	<p><b>A. Knowledge and Understanding</b></p> <p><b>A1:</b> Concepts and Theories: Demonstrate solid knowledge and understanding of the essential concepts, principles, and techniques in Multimedia.</p> <p><b>A2:</b> Contemporary Trends, Problems and Research: Demonstrate an informed and critical awareness of the modern and, up-to-date practices, trends, problems, methods, technological advancements, and the contemporary diverse horizons within the Multimedia field.</p>

**A3: Professional Responsibility:** Demonstrate adherence to the professional and legal responsibility, and develop continuing awareness of the best practices and cutting-edge solutions involved in the development and application of Multimedia technology.

**B. Subject-specific skills**

**B1: Problem Solving:** Identify, formulate, and analyze specific real life problems; and plan, design, and implement computable strategies for their solutions.

**B2: Modeling and Design:** Model and design a multimedia system to meet desired needs within realistic constraints.

**B3: Application of Methods and Tools:** Employ appropriate cutting-edge, techniques, tools and technologies used in Multimedia practices to solve considerably important and current problems.

**C. Critical-Thinking Skills**

**C1: Analytic:** Analyze and evaluate the complexity of significantly important and challenging real world problems, identify the appropriate multimedia resources needed to solve them efficiently.

**C2: Synthetic:** Design, plan, implement and manage a computerized system/process within certain constraints in a team or individually to meet certain desirable outcomes.

**C3: Creative:** Create new or improve existing ideas, projects, techniques, and methods in multimedia and identify ways in which these can be applied to solve existing and new problems.

**D. General and Transferable Skills (other skills relevant to employability and personal development)**

**D1: Communication:** Express and communicate ideas effectively, in written and oral form

**D2: Teamwork and Leadership:** Work effectively as a member/leader of a team of technical people who may design, plan, implement, manage, monitor and evaluate a multimedia project.

**D3: Organizational and Developmental Skills:** Work effectively as a member/leader of a team of technical people who may design, plan, implement, manage, monitor and evaluate a multimedia project.

**D4: Ethical and Social Responsibility:** Recognize, accept, and follow ethical and social responsibility and develop positive alertness and responsiveness to the needs of society by identifying, employing and utilizing effectively the multimedia solutions and technologies.

### III. Judgment Summary

## The Programme's Judgment: Confidence

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

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

## IV. Standards and Indicators

### Standard 1

#### The Learning Programme

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

#### Indicator 1.1: The Academic Planning Framework

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

##### **Judgment: Addressed**

- The Bachelor's Degree in Multimedia Systems (BSMS) has a clear academic planning framework which is prescribed in the Ahlia University (AU) Teaching and Learning (T&L) Plan, the College of Information Technology (CIT) Annual Operational Plan, and the Programme Review Plan. The T&L Plan has clear key performance indicators (KPIs) with annual targets. The CIT Annual Plan is aligned to AU's Strategic Plan. Academic and occupational requirements are considered in the Programme Review Plan which engages external stakeholders and utilizes results of benchmarking in the programme three-years review cycle.
- The CIT Annual Operational Plan does not show clearly how some of its goals are planned for or how the CIT programmes adapt to the market needs, nor there are explicit measures to systematically track and report all the KPIs specified in the T&L Plan. The Panel also notes that mitigating measures that effectively use available data to deal with potential risks are not in place. Hence, the Panel recommends that the College should regularly utilise collected data on programme quality and its delivery to implement a comprehensive plan that regularly identifies potential risks and effectively deals with all aspects of programme delivery and academic standards.
- The BSMS programme is governed by the bylaws of Higher Education Council (HEC) and complies to its policies and regulations. The programme has also been reviewed and validated by the BQA and placed on the National Qualifications Framework (NQF) Level 8.

- The title of the BSMS programme is concise and appropriate to the NQF level of the qualification. The Programme Specification document includes all needed information about the BSMS programme/qualification including the programme title, which is reflected accurately on certificates and the university website.
- The BSMS programme has three main educational objectives (aims), which are well defined and consistent with the CIT/AU mission statements. As per the Programme Specification document and the SER, the programme educational objectives are revised based on stakeholders' feedback and international standards.

### **Indicator 1.2: Graduate Attributes & Intended Learning Outcomes**

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

#### **Judgment: Addressed**

- As per the SER, Graduate Attributes (GAs) are defined at the institutional level. The goals and the strategies of AU T&L Plan are aligned with the GAs. The BSMS Programme Intended Learning Outcomes (PILOs) and Course Intended Learning Outcomes (CILOs) are also aligned with the GAs in terms of knowledge and skills.
- The BSMS PILOs are clearly written with appropriate measurable verbs reflecting the BQA four domains requirements (Knowledge and Understanding, Subject-Specific Skills, Critical-Thinking Skills and Transferable Skills). As per the SER, the PILOs are regularly reviewed, every three years and have been benchmarked against the criteria of the Accreditation Board for Engineering and Technology (ABET) and the Association for Computing Machinery (ACM)/ Institute of Electrical and Electronics Engineering (IEEE). The Panel appreciates that the BSMS PILOs have been benchmarked with international industry standard requirements such as ABET and ACM/IEEE.
- The BSMS CILOs are clearly written in measurable manner and are mapped to ABET requirements and the ACM/IEEE curriculum model. The CILOs are also mapped to the NQF level descriptors and have been validated during the NQF placement process to ensure that they are appropriate for the level of courses and their contents.
- As per the SER, the BSMS CILOs are derived directly from the PILOs. Moreover, the BSMS curriculum skills map illustrates how each course is aligned with the PILOs. The Panel was also provided with a spreadsheet which measures the attainment of the CILOs and the overall course scores, in terms of its CILOs are reported along with suggested improvements. In general, the Panel acknowledges that the CILOs are adequately mapped to the PILOs.

### **Indicator 1.3: The Curriculum Content**

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

#### **Judgment: Addressed**

- The BSMS programme comprises 45 courses (134 credits) and an appropriate list of pre-requisite courses, as well as college and department requirements. The NQF level of each course and credit hours are clearly defined as indicated in the Curriculum Skills Map. The BSMS study plan, as shown in the Programme Specification document reflects an appropriate progression and the student workload is suitable.
- As per the SER, the BSMS programme is regularly revised taking into consideration market needs, benchmarking results, stakeholders' feedback, ABET requirements and ACM/IEEE Curriculum model. The revisions are conducted in line with the AU Policies on the Development of New, Review and Closure of Existing Academic Programmes. During the virtual site visit interviews, the Panel learned that the College benefited from the ABET criteria in designing its PILOs and CILOs. The Panel also learned that some new elective courses have been recently added based on the stakeholders' feedback to provide more in-depth knowledge on the emerging Market of Multimedia Science. The Panel appreciates that the curriculum content is relevant and covers appropriate Multimedia topics. However, the benchmarking process is limited to a desktop exercise of courses and the Intended Learning Outcomes (ILOs). Hence, the Panel recommends that the programme should adhere fully to the AU's policies for the review and update of the BSMS curriculum.
- The Panel notes that the programme curriculum/courses/topics contents have an appropriate balance between theory and practice and a good coverage of the required knowledge and skills in Web programming, Multimedia designing, databases, IT programming, information security, Mobile Computing, and Web programming. The SER states that 'courses that constitute training for Microsoft Certified Database Administrator and Microsoft Certified Solution Developer Professional Certification tracks have been weaved into the academic programme'. The BSMS programme also includes a capstone course (ITMS499) and an internship course (INTR464), in addition to elective courses, which aim to further enhance the students' knowledge and skills in advanced and specialized topics. In addition, during the virtual site visit interviews, the Panel was informed that other certifications such as Oracle DBA, Cloud services and Security administrator are also integrated in elective courses and students can obtain the certifications by sitting the required professional examinations at the end of the course.

The Panel appreciates that students are given the opportunity to gain professional certifications by integrating the certification requirements within the courses.

- As per the SER, the BSMS textbooks and references are reviewed every semester by the Department and updated on a regular basis and when necessary. The requests for new books and references are made to the library and processed accordingly. The Panel notes that the textbooks and references recommended for the BSMS courses are recent and appropriate.

### **Indicator 1.4: Teaching and Learning**

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

#### **Judgment: Partially Addressed**

- The BSMS programme follows and implements the AU T&L Plan 2016-2020, which includes strategic objectives and annual targets for the T&L goals. The philosophy of the T&L Plan is to provide a learner-centred environment and a transformative learning experience, in line with the AU Strategic Plan and AU T&L Goals. Moreover, the CIT Operational Plan refers to the T&L methods and the College follows up on the progress of proposed actions for improving the teaching methods.
- The Panel finds that the programme defines and incorporates the T&L methods per topic in the BSMS Programme/Course specifications, yet, the programme did not fully benefit from using the variety of T&L methods mentioned in the AU T&L Plan 2016-2020. The Panel advises the College to revisit the university T&L plan and to incorporate the relevant university wide T&L methods in its courses to attain the intended learning outcomes (ILOs).
- As per the SER, AU T&L Plan 'ensures that colleges are optimizing the usage of virtual learning environment with clearly defined performance measure evaluated annually'. The SER also indicates that the CIT has adopted Goal 2 of the T&L Plan which specifies the use of virtual learning environment and that e-learning is applied in all the BSMS courses. During the virtual site visit interviews, the Panel notes that students were satisfied with measures implemented by AU for the delivery of its programme, during the COVID-19 pandemic, through using online tools such as Moodle, MS Teams and Zoom. However, the Panel notes that the course specifications do not specify virtual learning as being a required teaching method or how the utilisation of e-Learning tools contribute to the attainment of the learning outcomes. The Panel recommends that the College should closely align course specifications with AU's T&L Plan to ensure the achievement of the institutional goals.

- Work-based learning and professional certifications such as International Computer Driving Licenses are integrated in the BSMS programmes. During the virtual site visit interviews, the Panel learned that the programme encourages lifelong learning skills such as; problem solving, critical thinking, communication and other soft skills. Furthermore, the Panel notes during the virtual site visit interviews that employers, students and alumni are satisfied with the level of professional practice and activities delivered by the programme.
- During the virtual site visit interviews, the Panel confirms that the BSMS programme develops the students' research capabilities and motivates their creativity and innovation in Multimedia. The BSMS capstone course (ITMS499) encourages students to develop 'dynamic web-based information systems using multimedia tools, digital marketing and branding'.
- AU learning environment encourages non-formal learning through various co-curricular and extra-curricular activities and competitions such as INJAZ Bahrain and Forsati. Interviewed students confirmed that they have benefited from extracurricular activities such as visits to industry and cultural sites as well as from voluntary work. However, the Panel notes the lack of some other activities that support lifelong learning such as, self-taught study, music, foreign languages, reflection and adaptability skills and the Panel encourages the College to include these activities in the programme.

### **Indicator 1.5: Assessment Arrangements**

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

#### **Judgment: Addressed**

- AU has a well-defined assessment framework with a set of policies and procedures that are compiled in the Assessment Manual. The Manual also includes clear guidelines for undergraduate projects, marking rubrics, and internship grading criteria. The Panel notes that the assessment guidelines, policies and procedures have been revised several times. As per to the SER, the Department Council is responsible for the implementation of AU Assessment Manual, which is monitored by the College Council as well as by the Teaching, Learning and Assessment Committee (TLAC). Submitted evidence and virtual site visit interviews indicate that assessment policies and guidelines are adhered to. The Panel appreciates that the assessment framework includes measures appropriate to the programme and is consistently implemented.
- AU Assessment Manual is available to students and staff on the university website. The Panel was informed during the virtual site visit interviews that staff have access to policies

on SharePoint and are informed if changes are introduced. The Panel was also informed that students are provided with the relevant assessment information in the Student Handbook and during the Induction Day.

- Policies and procedures for the utilisation of formative and summative instruments are specified in the Assessment Manual. The Manual also details the mechanism of providing students with, both oral and written progress and performance feedback. Moreover, both the formative and summative assessment methods and marking rubrics are specified, in the Course Syllabi, and in the Internship Programme Guidelines. During the virtual site visit interviews, students and alumni were satisfied with the feedback received on both formative and summative assessments.
- As per the SER the Department Council approves the research proposals submitted by students and ensures its adherence to ethical standards. There are also clear guidelines for undergraduate projects, which clarify what constitutes academic misconduct and plagiarism. In addition to the written research projects, students -conduct oral presentations of their research and the examination committee evaluates their performance.
- The CIT has a clear grading mechanism that enables the evaluation of the students' achievement of the ILOs, which is specified in the Assessment Manual. Furthermore, this Assessment Manual includes guiding principles, policies, procedures, processes and criteria for the design, conduct, marking, verification and moderation of formative and summative assessments. Furthermore, these policies, procedures, processes and guidelines are reflected in the course syllabi, and the project and internship guidelines.
- Academic misconducts including plagiarism, collusion and personation are addressed in detail in the AU Assessment Manual. This manual includes clear processes for deterrence, detection and penalties of academic misconduct. These are also stated in the Student Handbook. Students are also given the right to challenge the results of any major assessment within one month of receiving the assessment script and they can appeal their final grades at the end of the semester. All student appeal cases are handled by the Student Affairs Committee and are looked at by an ad-hoc committee of three faculty members. The students are also given the right to appeal against the decision of this committee as per the university appeal procedure.

## Standard 2

### Efficiency of the Programme

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

#### Indicator 2.1: Admitted Students

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

#### Judgment: *Partially Addressed*

- There is a clear and published policy at the AU Admission level that students are accepted on equal basis regardless of race, colour, gender, religion, nationality, physical or learning disability (only based on Merit). This policy is communicated through the online marketing brochure, the Student Handbook and the Admission Registration Policy. Gender balance is respected as evidenced by the statistics provided in the SER regarding the number of students registered in the BSMS programme in the last five years.
- The admission requirements are clearly listed in the Undergraduate Admission Requirement document, including Academic Score in the Secondary School Certificate (Tawjihia) or its Equivalent, English Proficiency Skills Requirements, Mathematics Proficiency Skills Requirements. For the BSMS, scores for unconditional acceptance (> 65%) and Conditional acceptance (50%-65%) are well defined. However, the Panel is concerned that the secondary school scores required for admission in BSMS (65%) is excessively low and lowering it even further down to 50% does not ensure the enrolment of students who are appropriate for the programme level in line with international academic standards required for studying IT specialization. The Panel recommends that the College should revise its admission requirement to ensure that the accepted students' profile matches the BSMS programme level.
- AU administers its own placement tests in English language and Mathematics. International English tests are also accepted (i.e., TOEFL, IELTS). In addition, there is an orientation programme which is provided by the College of Arts and Sciences to students who are conditionally accepted to the BSMS programme. During the orientation programme, students take some English and Math classes to achieve the minimum entry level scores.

- There are policies and procedures for accepting transfer applicants from other higher education institutions recognized and accredited by HEC. The transfer rules follow the HEC's transfer of credits regulations. Up to 66% of previously earned credits can be transferred based on a set of predefined criteria. The Panel noticed that students can also be admitted directly into year 1, year 2 or year 3. The Panel advises that clear criteria be published to distinguish students' transferring into year 2 from those transferring to year 3.
- The entry requirements are reviewed at the department and college levels, in consultation with the Dean of Students Affairs and University Council. The reviews are conducted once the admitted cohort is graduated. The Panel notes that the admission requirements were last revised in 2018 by the department and college and approved by the University Council (UC/10/2017-18). During the virtual site visit interviews, the Panel was informed that AU benchmarked its admission policy against other universities to assure that admission criteria are appropriate and provide equal opportunities. The benchmarks supposed to be conducted at the National and international levels. The Panel notes from the evidence meeting minutes instructing to conduct benchmarking however, the benchmarking was not conducted. The Panel recommends that national and international benchmarks are included in the revisions of the admission policy as per AU's benchmarking policy.

## **Indicator 2.2: Academic Staff**

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

### **Judgment: Addressed**

- There are clear and appropriate policies and procedures regarding the recruitment and academic promotion. Promotion decisions are based on collection of points on teaching, research and community service. According to the SER, faculty members are appointed and promoted by a decision of the University Council after the approval of the Department Council, the College Council and the Appointment and Promotion Committee. The provided evidence and virtual site visit interviews confirmed that the hiring and promotion procedures were followed.
- In term of HR induction, a three-hour induction session is offered to new faculty members and staff. Furthermore, there is a clear mentoring policies and procedures that provide support to new joiners. Such mentoring is initially conducted by the Department Chairperson at least during the 1<sup>st</sup> semester as it was confirmed in the virtual site visit interview. A month later another member of staff takes over the mentoring process. The components of faculty appraisal process involve evaluations by students, peers,

Chairperson of the Department, College Dean, Dean of Graduate Studies, Quality Assurance (QA) centre and Vice President (VP). The Panel notes that these procedures have not been reviewed since 2013 and do not emphasize the role of faculty members' appraisal in their Professional Development (PD). Hence, the Panel advises regular review of the institution's procedures and linking faculty PD with their appraisal. The Panel appreciates the clear documentation of procedures for recruitment, induction, appraisal, and promotion of academic staff.

- Policies and procedures are in place to encourage faculty to conduct quality scientific research. AU Research Plan of 2016-2020 defines the main research areas and it is supported by other research policies including; Rules and Regulations of Research, Postgraduate Studies and Research Bylaws, Funding Policy and Procedure, Rules for Sabbatical leave, Funding Schemes for Publication and AU Research Framework.
- The HR policies and procedures manual has a proper policy to support women during their maternity leave as well as other life related events. As per the virtual site visit interview and the provided evidence, the teaching and supervision workloads vary based on the rank and administrative responsibility of each faculty member. The teaching load per semester for PhD holders is three courses and five dissertations/projects for Professors, four courses and four dissertations/projects for Associate Professor and five courses and three dissertations/projects for Assistant Professors. The Panel finds this teaching load to be heavy and consequently the available time allocated for community and research activities is very limited. During the virtual site visit interviews, faculty members did not acknowledge any decline in the number of publications; however, the Panel noted, based on the provided evidence, that the number of publications has decreased over the past years and that it does not meet the minimum AU requirements. The Panel recommends to revise the faculty workload so as to provide them with more time for research.
- Based on the statistics provided in the SER, around 16 full time faculty members serve the BSMS programme. The percentage of time they spent servicing the programme varies from 10% to 60%. It was confirmed during the interview that the ratio Faculty/Student is appropriate with one faculty member for 25 students. The Panel notes that the BSMS programme currently has nine specialized faculty members (one Associate Professor, five Assistant Professors, three Lecturers) with appropriate qualification/background. During the virtual site visit interviews, the Panel was informed that one faculty is currently applying for a full professor position.
- Faculty PD opportunities are offered as part of the Annual PD Plan. During the interviews, it was confirmed that activities are regularly organized to support such plan. It was also confirmed that feedback from participants are collected after each event so as to provide an evaluation mechanism. Furthermore, Faculty can suggest/request some particular PD topics to be addressed. As per the evidence, four faculty members have been trained to

supervise Ph.D. students by the Brunel University London as part of their collaboration with AU.

- HR policies and procedures are in place to ensure equitable and fair treatment to all faculty members. Research grants and salary increments are provided as incentives to faculty for their research publications. Retention rate for the College of IT are good, since it was 90% in 2018 and 100% in 2019.

### **Indicator 2.3: Physical and Material Resources**

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

#### **Judgment: Addressed**

- The IT College has 24 classrooms equipped with computers, projectors and white boards as shown in the virtual tour video that was provided to the Panel. There are also seven IT laboratories (20 PC computers each) equipped with appropriate specific programme software, in addition to a specialized laboratory for the BSMS programme and two studios (TV production studio and Audio production studio) with dedicated software and multimedia devices. The Panel is satisfied that the available classrooms are adequate for the number of students and that the laboratories are appropriately equipped. However, the Panel noted that there was no Apple Macintosh laboratory for students to test their multimedia applications on IOS platforms, to be familiar with the Mac tools, Operating System and the Mac User Interface (UI/UX) which are very popular in the Multimedia Industry. Even though the Panel was informed that there was an ongoing request for the creation of Mac Laboratory, the Panel recommends that the College should expedite the provision of the Mac Laboratory. Furthermore, the Panel is concerned that the AU main campus which is located on the upper floor of a shopping mall provides limited facilities for student activities. The Panel recommends that students should be provided with adequate campus facilities in line with national standards.
- There is an Information and Communication Technology Center, with clear responsibilities for maintaining provision of Wi-Fi across the university buildings and Local Area Network (LAN) to classroom and laboratories SER. The Center is also responsible for maintaining laboratory computers, software and equipment. During the interview with students and alumni, they confirmed that they are satisfied with the provision of IT facilities and services for the BSMS programme.
- Based on the virtual video tour that was provided to the Panel and the interviews, the Panel was able to confirm that the library provides both physical and virtual

spaces/resources. The library physical space has a proper collection of 11,000 books across all disciplines, including 1,533 books on IT related topics. It also provides 30 workstations connected to network for students to access online resources as well as nine study rooms. The digital library is accessible 24/7 and has subscription to the main Journal/publisher databases, including IEEE and many other IT related journal databases. Book requests forms are available, and taken into consideration, for faculty to order specific books. It was confirmed during the interview that the library staff also provide adequate training and assistance to faculty and students.

- The College of IT has an appropriate laboratory maintenance plan that describes the tasks to be completed, before, during and after each semester in each of the computer laboratories. In addition, there are two laboratory assistants that manage the seven laboratories. During the interviews with students, the Panel found that students are satisfied with the assistance provided in the laboratories and that they were provided a USB drive with software to be installed on their own laptops during the COVID period, so they can run the laboratory sessions from home.
- Based on what is reported in the and the virtual site visit interviews, there are proper arrangements to ensure Health, Safety and Security of students and staff on campus. AU uses an external professional security service company to ensure the campus security. Various access controls points are installed at different points of the university to restrict access to only authorized people. Fire equipment are installed at various places on campus and their maintenance is regularly scheduled. Evacuation drills are regularly scheduled to ensure Emergency preparedness. A Health clinic is available on campus and is staffed with certified first aiders and a nurse. Health insurance is provided by AU to all Faculty, staff and students.

## **Indicator 2.4: Management Information Systems**

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

### **Judgment: Addressed**

- AU uses a Management Information System which is an integrated intranet-based database Admission and Registration Information 'ADREG' System. ADREG encompasses the entire student life cycle starting from admission application to graduation and alumni tracking. It covers curriculum, advising, payment, and integration with General ledger and employee records in Human Resources Management System (HRMS). The Panel is satisfied with ADREG system which is appropriate to support the College and BSMS programme decision needs. In term of Learning Management System

(LMS), AU uses Moodle, which is integrated with ADREG for allocation of students and faculty to courses. Faculty and students expressed their satisfaction with the features of the ADREG MIS. The Panel appreciates that there is a MIS with substantial features that provide support to students and staff and help in the decision-making process.

- The ADREG reports are used for 'faculty quality, faculty load, faculty distribution, student quality & employability, resource planning & allocation, student progression, strategic planning & management, financial planning & allocation and student performance'. A Moodle report is provided as evidence to demonstrate the usage of such LMS for each course. The library generates separate statistics for usage and e-resources. Also, the ADREG system is also utilised to track laboratory and classroom utilisation.
- AU has a clear and appropriate policy for Authentication of Certification Procedure. AU students' certificates are printed from one source (ADREG system) and then go through a number of approval and verification steps in order to guarantee that the graduate has fulfilled all the graduation requirements. AU students' certificates are accompanied with a transcript indicating the achieved courses and the overall CGPA. Completing graduation requirements is first issued by the advisor and is approved by the Chairperson of the Department, the Dean and President. The ADREG system generates a unique 29-digit security key for each certificate to prevent from potential frauds. During the interview, the Panel confirmed that there is a server backup and restore procedure to protect against loss of student records, and to perform disk backup on-site/off site at different scheduled intervals.

## **Indicator 2.5: Student Support**

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

### **Judgment: Addressed**

- AU has various mechanisms in place to support students. The Panel was informed during the virtual site visit interviews that the Deanship of Students Affairs has an open-door policy, welcoming students' questions and suggestions at any time. An officer from this unit follows up on all inquiries and complaints raised by students (in person through the ADREG MIS system) until resolved. Students may also seek support from the Directorate of Admission and Registration by visiting the Admission Office, contacting the helpdesk or through a WhatsApp number. There are two laboratory assistants for the IT laboratories who provide the needed technical assistance for students and faculty members. In addition, the library staff assist with photocopy and printing as well as locating resources and information.

- The Directorate of Professional Relations provides student with advices on academic, personal, career and study skills. There is a career day which is organized by the Directorate of Professional Relations and the Career Counselling unit helps students for internship placement. In addition, the Directorate of Students Activities regularly organizes events to encourage students to conduct extra-curricular activities (Sport, culture, and other social events). However, during the virtual site visit interviews, students and alumni were not aware that career advice was available. The Panel recommends that students should be informed about the existence of career advice services to help them plan their careers as well as find jobs.
- The Deanship of Students organizes every semester an orientation day where various university services are presented as well as university Rules and Regulations. The Panel confirmed during the interview that the information regarding the BSMS courses and their schedule is also provided.
- The Academic Advising policy requires every student to have an advisor assigned to them and that they should meet him/her at least once per semester to discuss their academic progress. Faculty members display office hours and have to record all advising sessions when meeting with their advisees, where they can access student records on the ADREG system. There is a policy for identifying and supporting 'At-Risk' students. Students at-risks ( $2.0 \leq \text{CGPA} \leq 2.3$ ) are flagged by the ADREG MIS system and their advisors are informed. AU provides various mechanisms to support such students including, extra time for academic advice, extra teaching and learning sessions, counselling. During the interview, the students were very appreciative of the care and guidance they received from their faculty.
- There is appropriate provision to support students with special needs, and an Equal Opportunities Committee is tasked with maintaining a culture of equality amongst genders across the University. For special needs students, the Special Needs Admission Committee first identifies if the university can provide the necessary support and if so, a dedicated officer will handle and monitor student needs and progress all along their programme of study. Currently three special needs students are enrolled in the BSMS programme. The Panel acknowledges that adequate student support is available, including students with specific special needs.
- Other than laboratories maintenance, the Panel was not provided with sufficient evidence that support services are regularly assessed and improved. The Panel recommends that support services are systematically assessed and monitored in line with programme's specific needs.

## Standard 3

### Academic Standards of Students and Graduates

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

#### Indicator 3.1: Efficiency of the Assessment

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

##### **Judgment: Addressed**

- Assessment methods and their weighting are clearly specified in the Course syllabi. As per the SER, course syllabi are internally verified each semester and the proposed modifications in terms of the complexity and weightage of the assessment methods are implemented before delivering the courses. The Panel was informed during the virtual site visit interviews that the BSMS programme is implementing ABET assessment criteria which is detailed and consistent with AU assessment framework and NQF requirements. The Panel notes that the BSMS programme meet the NQF requirements by applying internal and external verification and moderation processes to ensure that the assessments' complexity reflect the NQF level of each course. The Panel notes that the BSMS programme, more precisely, the courses' assessments methods, cover the theoretical and practical practices by taking into consideration the entire multimedia and information technology fields and tools. At an undergraduate level, the used assessment methods reflect and meet all levels and techniques of complexity that fulfills market needs.
- The alignment of assessments with the AU GAs, PEOs, PILOs and CILOs is regularly reviewed and modified, when needed, through the verification and moderation processes. The Panel notes that there are template forms and rubrics for the implementation of these processes, as well as a generic ILO- T&L- Assessment- NQF descriptor linkage matrix for aligning assessment with programme and course ILOs. Course syllabi also include tables for aligning the different types of assessments methods with CILOs. The Panel notes that the course syllabi include the topics covered in each lecture and the evaluation and assessment methods. In addition, a balance between the theoretical and practical assessments is evident. The interconnection of lectures/topics objectives, outcomes, expected skills and structure assure and define the alignment of assessments with the CILOs.

- AU implements direct and indirect measures that assess the achievement of ILOs, PEOs and AU GAs. In line with AU ILOs achievement procedure, the BSMS ILOs are assessed directly each semester and the attainment rate of each ILO is set at 65%. The NQF confirmation process ensures that the assessments used to measure the attainment of ILOs reflect proper progression matching the NQF level. The external verification process also ensures that student achievements across all the courses are equivalent to other similar programmes. In addition, surveys are used as indirect measures to assess stakeholders' satisfaction level with students and graduates' achievements.
- As discussed earlier under Indicator 1.5, the AU Assessment Manual comprises a comprehensive assessment framework with detailed policies, procedures and guidelines that are regularly revised. The College Council monitor its implementation by the concerned Department. The Centre for Accreditation and Quality Assurance (CAQA) in coordination with TLAC which is chaired by the VP for Academic Affairs also monitor the implementation of the assessment processes. Based on the virtual site visit interviews and the provided evidence, the Panel confirms that the assessment policies and procedures are regularly implemented, monitored and revised to ensure alignment with BQA and HEC requirements.

### **Indicator 3.2: Academic Integrity**

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

#### **Judgment: Addressed**

- AU Assessment Manual is published on the University's website and includes detailed academic misconduct and plagiarism policies and procedures. During the virtual site visit interviews, students and alumni confirmed that they were informed about the penalties for cheating, plagiarism and other forms of academic dishonesty. Faculty members also confirmed that they are constantly discussing issues related to academic integrity and research ethics with their students.
- As per the SER, faculty members are responsible for the detection of academic misconduct and plagiarism cases in line with AU's related policies and procedures and the Guidelines for Supervision of Undergraduates Projects. All assignments including the final projects are submitted through Moodle to be checked by the plagiarism detection software 'Turnitin'. The detected similarities should not exceed 20% of text and are further checked by faculty members to ensure that there is no plagiarism. Examinations are invigilated, and cases of misconduct and cheating detected are referred to the Disciplinary Committee.

- Based on the virtual site visit interviews and the provided evidence, the Panel confirms that academic misconduct cases are assessed by the Disciplinary Committee and further discussed in the Department Council to ensure that appropriate penalties are imposed on the offending students as per AU Assessment Manual.

### **Indicator 3.3: Internal and External Moderation of Assessment**

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

#### **Judgment: Partially Addressed**

- Starting from the academic year 2019-2020, all CIT assessments weighting 10% or above instead of 20% or above of the course final grade are internally verified/moderated by an internal moderation committee which is formed each semester. AU Assessment Manual includes the selection criteria of the internal moderation committee, which consists of the instructor, course verifier and the chairperson for the department. As per the SER, the internal moderation form includes clear criteria that were recently revised and updated. The internal moderation committee fills this form and selects three samples of graded assessments with high, average and low scores to be placed in the course file and externally moderated. The final year project is examined by internal and external examiners, and the internship is marked by the academic supervisor and the employer supervisor.
- Based on the virtual site visit interviews and the provided evidence, the Panel notes that the internal moderation is used to improve the course assessments before delivering the courses. However, the Panel was not provided with evidence to demonstrate that the effectiveness of the internal moderation process which is currently limited to pre-moderation has been evaluated. Hence, The Panel recommends that the College should develop a mechanism to evaluate the effectiveness of the internal moderation process and its contribution to the improvement of both courses and the programme as well as to the fairness of grading.
- External moderation involves reviewing the marking criteria, solutions, model answers or rubric and grade distribution for a course, as well as student work such as final examination papers. There are clear procedures for nominating and approving external assessors and as stated in the SER 'AU ensures obtaining feedback from diversified experts and external assessors'. The SER also indicated that 'the external moderation is conducted every semester by forwarding 20% of the offered courses for external assessor for his/her feedback'.

- Based on the provided evidence and the virtual site visit interviews, the Panel confirms that the Department Council discusses the external assessor report and approves the grades internally in line with the university procedures and uses the pertaining recommendations for enhancement the next time the course is offered. The Panel also learned that the programme benefits from the external moderation reports in revising and improving of the courses and the BSMS programme' ILOs and assessment methods.
- As per the SER, CAQA monitors the external moderation processes in coordination with the TLAC, which is chaired by the VP of Academic Affairs. The TLAC receive all external moderation reports where comments and recommendations are discussed and evaluated by the Department Council which eventually take the necessary decisions for improvements and for record keeping.

### **Indicator 3.4: Work-based Learning**

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

#### **Judgment: Addressed**

- The BSMS programme contains a three-credit internship course (INTR464) which was made compulsory from First Semester 2017-2018. The Panel notes that there are clear and well-defined internship programme guidelines that were recently revised and improved. As per these guidelines, students register in the internship course after completing 90 or more credits of the BSMS programme. Based on the SER and the virtual site visit interviews, the Directorate of Professional Relations of the Deanship of Student Affairs coordinates with the public and private sector enterprises to find suitable training positions for BSMS students and ensures that they gain equivalent training and exposure to professional practice to help them apply their theoretical knowledge in real practice and develop their professional and personal skills.
- The internship guidelines describes clearly the roles and the responsibilities of the CIT academic supervisors, internship providers' site supervisors and students. The assigned academic supervisor and site supervisor for each student are responsible for guiding and training him/her during the two-month internship period. Student are required to fill-in two monthly reports and a final report at the end of the training period. The site supervisors fill the students' mid-evaluation and final-evaluation forms. During the virtual site visit interview, the panel confirms that the academic supervisors review the students' monthly reports and visit them twice during the training period to ensure that their training cover the expected internship ILOs.

- The Internship has a set of well-defined goals written in terms of learning outcomes. These goals include: 'Learn and develop practical skills'; 'Gain first hand understanding of the inner workings of an organization'; 'Acquire problem-solving skills'; and 'Observe and learn ethics at work'. Based on the provided evidence and the virtual site visit interviews, the Panel confirms that the internship ILOs are aligned to the PILOs and contributes effectively in the achievement of the PILOs.
- As per the SER, the assessment of the BSMS students is conducted by the assigned academic and site supervisors. The mid and final evaluation forms filled by the site supervisors constitute 50% of the students' final grade. The academic advisors fill a written questionnaire form and evaluates the three reports that the students are required to submit during and after their training period. These three reports constitute 40% of the final grade assigned to each student and the remaining 10% is taken from the written questionnaire form. The Panel notes that the programme internship procedures, practices and assessments are comprehensive and use appropriate evaluation forms. These forms help collecting and receiving feedback on the internship programme from all parties involved.
- The Panel notes that there are clear arrangements in place to evaluate the achievement of the internship course ILOs and its contribution to the PILOs and PEOs. Further, the BSMS programme benefits from the feedback and suggestions received on the internship course from all parties involved to improve it, which was corroborated during the virtual site visit interviews.

### **Indicator 3.5: Capstone Project or Thesis/Dissertation Component**

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

#### **Judgment: Addressed**

- The BSMS programme includes a major project course (ITMS499) as part of the core courses, which requires students to identify and solve different types of IT problems. There is also a dedicated course for research methods in Information Technology and Engineering (IERM498), which prepares students for the final year project. After completing IERM 498, students need to attain the CIT approval on their research proposals before registering in the ITMS 499 course. The Panel acknowledges that the final year project course contributes effectively towards the achievement of the BSMS PILOs, particularly those related to problem solving, analytic, synthetic and creative skills, and organizational and developmental skills.

- The Panel notes AU has well-defined Guidelines for Undergraduate Projects, which describe clearly the roles and responsibilities of students and their academic supervisors. Before registering in the (ITMS499) course, students discuss their research ideas with their faculty members and agree with one of the faculty members to supervise them while drafting their final project research proposal. During the virtual site visit interviews, the Panel was informed that the project supervisors follow up the progress of the students towards the completion of their project and enter the minutes of the meetings with the supervised students in the ADREG system.
- As per the SER students are evaluated through an examination committee, which consists of the supervisor, an internal examiner who is a faculty member in the Department and an external examiner from the industry' to ensure that the defense is conducted in a fair and transparent manner'. The Panel notes that the Guidelines for Undergraduate Projects include clear assessment rubrics aligning the allocated grades with the ILOs. The Panel acknowledges that there is a well-defined assessment process in place for the final year project.
- The Panel notes that the CIT is monitoring and improving the quality of the final year projects as well as the supervision and assessment processes. As per the SER, the composition of the examination committee was revised to include an expert from the industry to benefit from his/her work experience. During the virtual site visit interviews the Panel was also informed that the CIT is seeking to enhance the employability skills of their students and the collaboration with the industries by encouraging students to work on projects requested by the industry and presenting their projects in exhibitions and national events that attract IT experts and potential employers.

### **Indicator 3.6: Achievements of the Graduates**

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

#### **Judgment: Partially Addressed**

- Based on the provided samples of students assessed work (i.e. assignments, in-course projects, tests, final examinations), the Panel notes that these are of acceptable level and reflect the balance of knowledge and skills that the BSMS curriculum seeks to achieve. The (ITMS499) capstone project also enables students to expand their theoretical and practical knowledge in the real world and develop their expertise in multimedia tools, digital marketing and branding.
- As per the SER, cohort analyses are regularly conducted by the CIT to ensure that the profile of admitted students meet the programme objectives . The Director of Professional

Relations ensures that alumni records are up to date. These records include the graduates' first work destination, current employment status and higher education studies. The CIT Dean and the Chairperson of the Department have access to these records which are available on the ADREG system and use the data in assessing the achievement of AU GAs. The Panel notes that the mean length of the study in the BSMS programme is 4.59 years in the last 5 years. The Panel also notes that in the period from 2013 to 2018, 29%-83% of the programme graduates have proceeded to appropriate employment, 20%-57% proceeded to other employment and 14%-20% are looking for work.

- The Panel notes that the programme measures and analyses employers' satisfactions about its graduates using employers survey. Yet, improvement based on feedback from employers was not evident. The result of the graduate, alumni and employer surveys also discussed in the Department Council. Yet, the programme did not provide an action plan to improve the employability. The Panel recommends that the College should develop an action plan to improve the employability of the BSMS programme graduates.
- Employers and alumni satisfaction surveys are distributed and analysed by the Centre for Measurement and Evaluation (CME). As per the SER, the results of these surveys reflect a general satisfaction with the level of the BSMS graduates. These results are discussed in the IT Department in order to take the necessary improvement actions.

## Standard 4

### Effectiveness of Quality Management and Assurance Academic Standards of Students and Graduates

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

#### Indicator 4.1: Quality Assurance Management

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

#### **Judgment: Addressed**

- The Quality Assurance (QA) policies and procedures are communicated through staff and students' handbooks as well as the AU Website. The Centre for Information and Documentation is responsible for the availability of AU's policies and procedures in booklet format or electronically. The institutional QA Manual is available on the University Internal platform and QA procedure updates are communicated through emails. Interviews with staff confirmed the implementation of the QA Manual and their involvement in the QA processes. The Panel is satisfied with the policies and procedures for the needs of the programme and communicated to the staff through the Centre for Information and Documentation.
- The Department Council, in coordination with the College Council, implements the QA policies and procedures, and the implementation is monitored by the Centre for Accreditation and Quality Assurance (CAQA). The CAQA, managed by an executive director, coordinates internal and external QA activities and provides annual reports to the President on QA matters in the University. It also submits reports on the implementation of the Quality Assurance Management (QAMS) to the relevant committees including TLAC on academic related aspects and the Accreditation Quality Assurance Committee (AQAC) for administrative related aspects. Based on the virtual site visit interviews and submitted evidence, the Panel acknowledges that there are mechanisms in place to monitor the implementation of the QA policies and procedures in the CIT and its Departments. However, systematic monitoring is not apparent, and reflection on findings from various sources is not consistent. The Panel recommends that the effectiveness of these QA measures should systematically monitored and improved
- The Panel notes that faculty members and support staff attended a number of PD activities related to QA and accreditation. The effectiveness of the workshops is assessed by

participants surveys and the resulting report is used for improvement. Moreover, it is evident from the number of QA activities, reports and minutes of meetings that the faculty and support staff have a reasonable understanding of their roles in ensuring effectiveness of provisions. However, the Panel notes that faculty members are not clear about the requirements of annual and periodic reviews. The Panel acknowledges that academic and support staff fulfil their QA duties, and recommends providing more training to staff on the requirements of annual and periodic reviews.

- As per the SER, the Head of legal affairs and Compliance ensures that AU adheres to the requirements of the HEC and other regulatory bodies. The Panel notes that the AU revises its policies and procedures regularly and its QAMS. The QA Manual is also regularly revised (last revision April 1<sup>st</sup>, 2020) and has been recently updated to comply with BQA cycle 2 academic programme review and NQF Handbook. It clearly defines the process for developing policies and version control as well as the entities within AU's QA structure and their relationships. Further, the Panel notes that AU has recently conducted a survey in May 2020 to obtain staff feedback on QA activities.

#### **Indicator 4.2: Programme Management and Leadership**

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

##### **Judgment: Addressed**

- The CIT has a clear organizational structure and well-defined reporting and communication lines. The College is managed by the Dean who oversees two departments. There are two Department Chairpersons, one for the Department of Information Technology and another for the Department of Multimedia Systems. The Chairperson of the Department of Multimedia Systems is responsible for the management of the BSMS programme. He is also the Academic Programme Review Coordinator and chairs the Department Council which reports to the College Council and the University Council. During interviews, the Panel confirms appropriate reporting lines for decision making with regards to the programme.
- AU Bylaws clearly defines the general policy for work organisation, duties and responsibilities of management posts. The important aspects of committee formation and their Terms of Reference (ToR) are clearly defined for the College and 14 University level standing committees. Other deliverables related to QA issues are defined in the QA Manual. The roles and responsibilities of other entities are also clearly defined, such as faculty staff, the College Advisory Board, and the Information and Communication Technology (ICT) Centre. However, some of these documents have not been revised for a

period of time and the Panel recommends that AU Bylaws should be reviewed periodically.

- As noted earlier, the chairperson is the Academic Programme Review Coordinator and is responsible for the academic standards of the programme, while the College Council makes some decisions and other critical matters are passed to the University Council for approval. Academic programmes are assessed by the CAQA in coordination with TLAC and the internal review reports are discussed at AQAC. The Academic Programme Review Coordinator implements the recommendations of the CAQA and AQAC to ensure the achievements of programme objectives.

AU's governance structure includes the Board of Directors, Board of Trustees, External Advisory Board University, College and Department Councils as well as Standing Committees such as the Accreditation and Quality Assurance Committee (ACAQ) and TLAC, with well-defined roles and responsibilities. Interviews confirmed a functional programme management system where staff in general understand their roles and responsibilities and how they fit within it.

### **Indicator 4.3: Annual and Periodic Review of the Programme**

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

#### **Judgment: Addressed**

- AU has developed an end of semester programme quality review report template, which is to be completed by the Academic Programme Review Coordinator and discussed at the Department Council. The report covers matters for evaluation, the deliverables and the procedure to be followed for each deliverable as well as outcomes and suggestions. The evaluation is based on the sub-indicators of the BQA programme review framework covering both the programme and the course. Moreover, procedures and templates are included for recording CILO and another for PILO attainment, with a section for recommended actions in case an ILO did not attain 60%. Further, the outcomes of the implementation of AU Assessment Manual is also recorded per course with recommended actions. The Panel notes that the report covers appropriate topics for evaluations per semester, and also includes some evaluations that are supposed to be conducted over longer periods, such as benchmarking and relevance to labour market needs. The Panel advises that the report template to be made more specific for the annual internal programme review.

- According to the SER the 'Programme Quality Review-End of Semester Report Procedure' was implemented in the first semester 2019-2020. The process is monitored by the Dean and CAQA and the findings are forwarded to TLAC for actions on academic and AQAC for actions on administrative matters. The Panel notes that the end of semester report covers varied aspects of the programme and is discussed in the Department Council and TLAC. CAQA reviews the department end of semester report and generates a report on completed and pending matters. The provided evidence indicates that the required actions for improvement are implemented. The Panel appreciates that mechanisms are in place for monitoring the implementation of the annual review process and that recommendations are addressed.
- AU Policy on Developing of New, Review and Closure of Existing Academic Programmes requires that programmes are reviewed in a three-year cycle to identify their strengths, weaknesses and areas of improvement. The review process of undergraduate programmes specifies that the process to be initiated at the Department Council and to ensure programme's conformity with university regulations, national and international quality guidelines and market needs. The Panel acknowledges that the Policy for periodic reviews is appropriate. However, the Panel notes that implementation of periodic reviews does not strictly adhere to AU policy and that faculty do not clearly understand the requirements of the periodic review. Although Benchmarking and Market scoping are part of the 3-years periodic review policy; yet the Annual Review Template specifies sections for Benchmarking and Market scoping. Moreover, during interviews faculty confirmed that they do fill these sections during semester reviews. The Panel advises to adhere to AU's review policy and train staff on the requirement of these reviews.
- Periodic review of the academic programmes is conducted according to the Developing of New, Review and Closure of Existing Academic Programmes Policy. The programme is benchmarked with national and international equivalent programmes. Feedback is solicited from external evaluator of the programme, from various stakeholders such as students, alumni and employers and from the College External Advisory Board. Evidence indicates that the programme specification and study plan was revised in 2018-2019. The Panel acknowledges that the periodic review process includes feedback from appropriate stakeholders with high rate of satisfaction with the programme.
- The findings of the periodic review are compiled by the Department into an annual operational plan. The Department Council proposes changes to be made to the programme, which are forwarded to the College and in turn to University Curriculum Committee and the final approval for the implementation is made by the University Council. The Panel views evidence that a number of changes were implemented at the programme and course levels based on external and internal input. Interviews confirmed that suggestions by the Advisory Board and improvement plans are implemented. However, the systematic monitoring of the effectiveness of these improvements based on

the periodic review process is not clear. The Panel recommends that the programme should monitor the effectiveness of improvements based on the periodic review.

#### **Indicator 4.4: Benchmarking and Surveys**

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

#### **Judgment: Partially Addressed**

- According to the Benchmarking Policy and Procedures, AU conducts comparative and good practice benchmarking with other HEIs, regulatory and professional bodies, and within the university. Formal benchmarking is carried out with international partner as part of its periodic review cycle which includes admission, curriculum, assessment, grades, retention, throughput rates and resources. Desktop web-based benchmarking is conducted as part of the annual review and its scope is decided by the Chairperson and the Dean. An external assessor is appointed to write a report on the findings of the benchmarking process. CAQA is responsible for monitoring the implementation of the benchmarking procedures. The College Council approves the recommended actions to be implemented by the Department. The Panel acknowledges that the AU's Benchmarking Policy has a comprehensive benchmarking scope.
- The Panel notes that BSMS has conducted a desktop comparative benchmarking study of its courses with three universities, however the study does not include any recommendations. Moreover, minutes of the meetings indicate that this study was discussed and the findings were used to make programme changes. The Panel notes that there is anecdotal evidence that some desktop benchmarking studies of courses from other universities are conducted and the findings are utilised for programme improvement, which was confirmed during interviews. However, evidence does not indicate that the benchmarking process and its monitoring have systematically adhered to AU's policy. The Panel recommends that the College adhere to AU benchmarking policy and benefit from the specified internal and external reference points for programme improvements. Further, the Panel suggests that AU establishes formal benchmarking agreements with other ABET Accredited Universities in line with its policy.
- According to the QA Manual, the CAQA is tasked with obtaining feedback from various stakeholders, including; students, alumni, advisory board members and employers. Moreover, the College Advisory Board is consulted to provide feedback for improving the quality of the programmes and services. The Panel acknowledges that there are mechanisms for collecting feedback from a number of stakeholders. The Panel suggests

that the College develops a comprehensive policy clarifying the mechanisms and time lines for collecting feedback from all involved Stakeholder's.

- Evidence provided indicates that the Centre for Measurement and Evaluation analyses feedback from students, alumni and employers. Consultation with the College Advisory Board results in detailed comments on the programme. Feedback is collected, communicated to both the Department and College Councils; and the recommendations of the Board are implemented by the Department Council. The Panel acknowledges that collected feedback from stakeholders is used to inform improvements.
- The Panel notes that improvements based on the recommendations of the College Advisory Board are implemented and communicated to the Board. According to the SER, findings from feedback gained from other stakeholders is also implemented and outcomes are communicated to them, such as through the annual alumni gatherings and surveys. However, evidence was not available to indicate that outcomes of feedback collection is systematically communicated to all the stakeholders. Moreover, alumni indicated that AU did not contact them nor did they receive requests from AU to fill in surveys. Further, there are a limited number of respondents in the employer and alumni satisfaction surveys as noted earlier. The Panel recommends the College to collect and analyse feedback from all Stakeholder's and report the outcomes in a structured and systematic manner.
- Evidence indicates that the College benefits from feedback provided by the College Advisory Board for improving the programme. Stakeholders' interviews indicated that the members of the College Advisory Board are satisfied that changes are implemented based on their feedback. However, students, alumni and employers were not aware if their feedback was considered for programme improvement. The Panel recommends that the College should systematically determine the level of satisfaction of all stakeholders with the effective implementation of their recommendations, and in particular with the alignment of the programme to the labour market needs.

#### **Indicator 4.5: Relevance to Labour market and Societal Needs**

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

#### **Judgment: *Partially Addressed***

- The College Advisory Board consists of a number of experienced members from several sectors of the IT industry, including employers and alumni, with clear ToR for providing feedback towards improving the quality of the programmes and services to produce graduates who meet the market requirements. However, Board's ToR has not been revised

since 2013 and the Board does not include discipline experts who are particularly specialised in Multimedia Systems or represent companies that are identified by AU's own market needs study as potential employers of BSMS graduates. Moreover, the Panel notes that the appointment of the Board was on 15 May 2017 and evidence was not provided that the Board was reappointed after its two-year term expired, nor that regular meetings were held. Hence, the Panel recommends that the College should adhere to the ToR specified for the College Advisory Board with the respect to selection of its members and the period of the appointment.

- The Panel acknowledges that the College Advisory Board has made a number of suggestions that were embraced by the College for improving and updating the programme. During interviews, the Panel was informed that the Board recently suggested new electives such as cloud computing, information security and parallel distributed systems, revised course content and updated some of the course titles. The Panel appreciates the active engagement of the College Advisory Board which provided various suggestions for the programme improvement that was implemented by the college. Nevertheless, the Panel recommends that the College should evaluate the effectiveness of the implemented changes which were based on the College Advisory Board's suggestions.
- According to the programme objectives and the Programme Review Policy, the programme should meet the needs of the market and other economical and societal requirements. AU's market Needs Assessment policy stipulates that feedback should be solicited from multiple stakeholders, especially employers, students and alumni. According to the SER 'BSMS has conducted a detailed market needs study as part of implementing its periodic programme review'. Also, an employer survey was conducted (5 respondents, with 87% satisfaction) and an alumni survey (8 respondents, 92.5% satisfaction) to seek the employers view on the performance of BSMS graduates. During interviews, the Panel confirmed that alumni and employers are satisfied with graduates of the programme.
- According to the SER, AU has conducted a "Multimedia Market Need analysis". The Panel notes that AU conducted a recent desk top-study of the ICT sector growth in Bahrain and the region with data being collected from sources such as the Bahrain Economic Development Board, Oxford business group, TRA, eGovernment, Goldstein Market Intelligence and Tamkeen. Moreover, the report contains suggested companies that could employ BSMS graduates. However, the study does not specifically scope the market needs in the field of Multimedia.
- The Panel was provided with evidence that a number of modifications were implemented by the BSMS programme based on feedback from the College Advisory Board. However, evidence was not provided on how the applied mechanisms for scoping the market and societal needs are monitored and reviewed. Hence, the Panel recommends that the College

should adhere to its policy for market needs assessment to ensure that the programme is aligned with the market and societal needs.

## V. Conclusion

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

**There is Confidence in the Bachelor's Degree in Multimedia Systems of College of Information Technology offered by the Ahlia University.**

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

1. Programme Intended Learning Outcomes have been benchmarked with international industry standard requirements such as Accreditation Board for Engineering and Technology, the Association for Computing Machinery and Institute of Electrical and Electronics Engineering.
2. The curriculum content is relevant and covers appropriate Multimedia topics.
3. Students are given the opportunity to gain professional certifications by integrating the certification requirements within the courses.
4. The assessment framework includes measures appropriate to the programme and is consistently implemented.
5. The clear documentation of procedures for recruitment, induction, appraisal, and promotion of academic staff.
6. There is a Management Information System with substantial features that provide support to students and staff and help in the decision-making process.
7. The mechanisms are in place for monitoring the implementation of the annual review process and that recommendations are addressed.
8. The active engagement of the College Advisory Board which provided various suggestions for the programme improvement that was implemented by the college.

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

1. Utilise collected data regularly on programme quality and its delivery to implement a comprehensive plan that regularly identifies potential risks and effectively deals with all aspects of programme delivery and academic standards.
2. Adhere fully to the AU's policies for the review and update of the BSMS curriculum.
3. Align course specifications with AU's Teaching & Learning Plan to ensure the achievement of the institutional goals.

4. Revise the college admission requirement to ensure that the accepted students' profile matches the BSMS programme level.
5. Include the national and international benchmarks in the revisions of the admission policy as per AU's benchmarking policy.
6. Revise the faculty workload so as to provide them with more time for research.
7. Expedite the provision of the Mac Laboratory for BSMS college.
8. Provide students with adequate campus facilities in line with national standards.
9. Inform the students about the existence of career advice services to help them plan their careers as well as find jobs.
10. Support services are systematically assessed and monitored in line with programme's specific needs.
11. Develop a mechanism to evaluate the effectiveness of the internal moderation process and its contribution to the improvement of both courses and the programme as well as to the fairness of grading.
12. Develop an action plan to improve the employability of the BSMS programme graduates.
13. Effectiveness of the Quality Assurance measures is systematically monitored and improved.
14. Provide more training to staff on the requirements of annual and periodic reviews.
15. Review AU's Bylaws periodically.
16. Monitor the effectiveness of improvements based on the periodic review.
17. Adhere to its benchmarking policy and benefit from the specified internal and external reference points for programme improvements.
18. Collect and analyse feedback from all Stakeholder's and report the outcomes in a structured and systematic manner.
19. Determine systematically the level of satisfaction of all stakeholders with the effective implementation of their recommendations, and in particular with the alignment of the program to the labour market needs.
20. Adhere to the Terms of Reference specified for the College Advisory Board with the respect to selection of its members and the period of the appointment.
21. Evaluate the effectiveness of the implemented changes which were based on the College Advisory Board's suggestions.
22. Adhere to the policy for market needs assessment to ensure that the programme is aligned with the market and societal needs.