



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 Information Technology  
Kingdom of Bahrain**

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

HA002-C3-R002

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## Acronyms

ABET	Accreditation Board for Engineering and Technology
ACM	Association for Computing Machinery
APRs	Academic Programme Reviews
AQAC	Accreditation Quality Assurance Committee
AU	Ahlia University
BQA	Education & Training Quality Authority
BSIT	Bachelor's Degree in Information Technology
CAQA	Centre for Accreditation and Quality Assurance
CGPA	Cumulative Grade Point Average
CILOs	Course Intended Learning Outcomes
CIT	College of Information Technology
CME	Centre for Measurement and Evaluation
DHR	Directorate of Higher Education Reviews
GAs	Graduate Attributes
HEC	Higher Education Council
HEIs	Higher Education Institutions
HR	Human Resources
ICDL	International Computer Driving License
ICT	Information and Communication Technology
ICTC	Information and Communication Technology Center
IEEE	Institute of Electrical and Electronics Engineering
ILOs	Intended Learning Outcomes
KPI	Key Performance Indicator
LAN	Local Area Network
LMS	Learning Management System
MIS	Management Information System

NQF	National Qualifications Framework
PD	Professional Development
PEO	Programme Educational Objective
PILOs	Programme Intended Learning Outcomes
QA	Quality Assurance
QAMS	Quality Assurance Management System
T&L	Teaching and Learning
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**

Criteria	Judgement
All four Standards are satisfied	Confidence
Two or three Standards are satisfied, including Standard 1	Limited Confidence
One or no Standard is satisfied	No Confidence
All cases where <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 Information Technology (BSIT)
Qualification Approval Number	Cabinet of Ministers Decision No. (1626-03) of 2001 Higher Education Council Letter No. (أ ت م / 81 -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>• Exhibit the relevant skills and knowledge for pursuing the Information Technology (IT) career in industry including corporate as well as government sector.</li> <li>• Pursue life-long learning leading to entrepreneurship, research and development.</li> <li>• Contribute to the society through their ethical and professional norms by demonstrating them in IT professions.</li> </ul>
Programme Intended Learning Outcomes*	<p><b>A. Knowledge and Understanding</b></p> <p><b>A1:</b> Concepts and Theories: Demonstrate critical knowledge and understanding of mathematics and current technical concepts and practices in the core information technologies of human computer interaction, information management, programming, networking, and web systems and technologies.</p> <p><b>A2:</b> Contemporary Trends, Problems and Research: Be cognizant of up-to-date trends, problems, research issues, and methods in information technology.</p> <p><b>A3:</b> Professional Responsibility: Demonstrate an understanding of best practices and standards of information technology and their application.</p> <p><b>B. Subject-specific skills</b></p>

**B1: Problem Solving:** An ability to critically analyze and identify user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems.

**B2: Modeling and Design:** An ability to model, design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.

**B3: Application of Methods and Tools:** An ability to use current techniques, skills, and tools necessary for computing practice.

### **C. Critical-Thinking Skills**

**C1: Analytic:** Critically analyze the complexity of real problems, evaluate the possible alternative computable solutions and analyze their performance and impact on individuals, organizations, and society.

**C2: Synthetic:** Demonstrate the ability to integrate existing and new technologies into unified computer systems and effectively integrate IT-based solutions into the user environment.

**C3: Creative:** Innovate and apply new alternative methods to solve IT and real world 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:** An ability to function effectively on teams, as member or leader with decision making responsibilities, to accomplish a common goal.

**D3: Organizational and Developmental Skills:** Demonstrate an ability to manage learning tasks independently and professionally with a view to inculcating skills for self-development and life-long learning in order to effectively prioritize, plan, manage and allocate appropriate resources to implement tasks.

**D4: Ethical and Social Responsibility:** Demonstrate an understanding of professional, ethical, legal, security and social issues and responsibilities.

### 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**

- Ahlia University (AU) has a clear Teaching and Learning (T&L) Plan which specifies Key Performance Indicators (KPIs) with annual targets. The College of Information Technology (CIT) also has a Programme Review Plan which utilises feedback from stakeholders and benchmarking for improvement purposes every three years. In addition, the CIT has an Operational Annual Plan, which is aligned to AU Strategic Plan and stipulates a number of relevant goals. The Panel acknowledges that CIT has measures in place to collect information on quality of the programme.
- The Panel notes that 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 are there 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 to implement a comprehensive plan that regularly identifies potential risks and effectively deals with all aspects of programme delivery and academic standards.
- The Bachelor's degree in Information Technology (BSIT) programme is governed by the Higher Education Council (HEC) requirements, validated by the BQA and placed on the National Qualifications Framework (NQF) Level 8.
- The Programme Specifications document includes a concise programme title which is appropriate for the qualification offered and is also reflected accurately on certificates and the university website. It also includes a set of three concise Programme Educational

Objectives (PEOs) that reflect the aims of the BSIT programme. These objectives are aligned with the CIT mission which is in turn aligned with the AU mission. The Panel notes that the PEOs are relevant and regularly 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**

- Graduate Attributes (GAs) are defined at multiple levels within the institution's hierarchy. These are defined in the T&L Plan at the institution level where the T&L goals and strategies are aligned with them. The Programme Intended Learning Outcomes (PILOs) and Course Intended Learning Outcomes (CILOs) are also aligned with the institutional GAs in terms of knowledge and skills.
- The BSIT programme has clear PILOs which are grouped in four categories, Knowledge and Understanding, Subject-specific skills, Critical-Thinking Skills and Transferable Skills. The PILOs are appropriate for the type and level of BSIT and are essentially aligned with the PEOs. However, entrepreneurship is not explicitly included within the PILOs even though entrepreneurship is mentioned in one of the PEOs. The Panel recommends that the College should review the PILOs so that all PEOs are covered.
- The BSIT PILOs are written in a measurable manner and have been benchmarked with international industry standard requirements such as 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 BSIT PILOs have been benchmarked with international industry standard requirements such as ABET and ACM/IEEE.
- The disciplines of BSIT courses have been mapped with the ACM/IEEE model while the credit hours of the identified disciplines have been aligned with ABET requirements. Moreover, courses have been validated during the NQF placement process to have the appropriate number of credits at the required levels. The Panel notes that the courses have been developed with appropriate CILOs for the level of courses and their contents. The Panel acknowledges that the course CILOs are clearly written, measurable, mapped to NQF descriptors and adhere to international norms. However, the Panel notes that certain required skills at some of the higher-level courses are not explicitly referred to in the CILOs, such as creativity, ethical and professional responsibility. The Panel suggests that

all higher-level required skills should be included in the CILO statements of higher-level courses to reinforce these competencies.

- Staff received training on the alignment of Intended learning outcomes (ILOs) with NQF. A curriculum skills map illustrates how each course contributes to the PILOs and the NQF level. Course specifications include the mapping of teaching methods and assessments to the CILOs. Also, the Panel notes that a spreadsheet is provided which measures the attainment of the CILOs and the overall course scores in terms of its CILOs are also reported with suggested improvements. The Panel is satisfied that 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 BSIT programme specifications and flowchart clearly illustrate the study plan having a suitable student workload, which show year-on-year and course-by-course progression indicating the prerequisites, the number of required courses in each year and credits. Moreover, course NQF level is indicated in the curriculum skills map.
- There is a policy for reviewing programmes which stipulates annual internal and external validation of programmes and periodic comprehensive programme review. The Panel was presented with evidence of the PEOs being updated to meet ABET standards. In addition, as noted earlier, the programme is aligned with ABET and ACM/IEEE requirements. According to the SER, 'the programme has recently included some new elective courses based on the feedback from various stakeholders and in compliance with modern market trends'. Further, 'most of the elective courses are aligned with Professional Certificates such as Cloud Computing, Information security and Data base administration'. Stakeholders and external verifiers acknowledged that the curriculum is relevant in general and appropriate for a small market where it covers diverse Information and Communication Technology (ICT) topics. The Panel appreciates that the curriculum content is relevant and covers appropriate ICT topics. Evidence indicates that the curriculum is revised on a predetermined time scale and there is use of benchmarks in this process.
- The BSIT curriculum includes a set of courses that support the balance of knowledge and skills. The courses are well placed within the curriculum to provide theory and practice, so that students develop expertise in the design and implementation within the field of IT.

Moreover, the ITCS499 capstone project enables students to expand their theoretical and practical knowledge. Furthermore, professional certification requirements are integrated in the material within the courses.

- The BSIT curriculum includes courses starting at NQF level 6 followed by levels 7 and 8 which provides varied levels of knowledge and skills, with the higher-level courses and electives providing more depth in the specialised field. The course contents provide a variety of appropriate topics that broaden the knowledge of students, including Math & Stats, Information management, Security, networking, programming and hardware. The Panel notes that ‘training for Microsoft Certified Database Administrator and systems administration professional Certification tracks has been weaved into the academic programme’ as explained in the SER. Moreover, during interviews the Panel learned that other certifications such as Oracle DBA, Cloud and Security administrator are also integrated in elective courses and students can take the certifications by sitting for the required professional examinations at the end of the course. The Panel appreciates how students are given the opportunity to gain professional certifications by integrating the certification material within the courses.
- The Panel notes that recent textbooks are recommended for the BSIT courses as well as appropriate references. According to the SER, every semester a review is conducted by the Department through an internal verification process and in the case of a new book being required, a request is made to the library and processed accordingly.

### **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**

- T&L is planned at the institution level aiming to create a platform for a knowledge-based economy by following a T&L philosophy that promotes a learner-centred environment and a transformative learning experience. The T&L Plan incorporates appropriate goals that cover university-wide teaching experiences that impart knowledge and skills to students. Furthermore, the T&L Plan also defines strategic objectives, KPIs and annual targets for its goals. Moreover, the College Operational Plan refers to the T&L methods and provides actions with appropriate expected outcomes. The College also follows up on the progress of proposed actions for improving teaching methods. Interviewed students were satisfied with the teaching methods and tools used to deliver the BSIT programme.
- T&L methods are included per topic in each course syllabus. However, these are not closely linked to the institution-wide plan nor reflect the variety of ambitious T&L

methods planned at the university level. The Panel advises that the College revisits the university T&L Plan and to incorporate the relevant university wide T&L methods in its courses.

- According to the SER, the College applies 'e-learning to all the courses offered within the programme' using Moodle. Moreover, Goal 2 of the university-wide T&L Plan specifies the use of virtual learning environment. However, course specifications do not specify virtual learning as being a required teaching method or how the utilisation of e-Learning tools contribute to attainment of the ILOs. The Panel recommends that the College should closely align course specifications with AU's T&L Plan to ensure the achievement of institutional goals. However, interviewed students were satisfied with measures implemented by AU for the delivery of its programme during the COVID-19 pandemic. The Panel acknowledges that during the Covid-19 pandemic the College implemented measures to continue the delivery of the programme using online tools such as Moodle, MS Teams and Zoom.
- The Panel acknowledges that there are measures to encourage student participation in learning. Appropriate skills are integrated within the programme for encouraging lifelong learning such as problem-solving, critical thinking, communication and IT skills. The programme offers exposure to professional practice through the internship course (INTR463), and integrated professional certifications, such as International Computer Driving Licenses. The BSIT major project (ITCS499), encourages students to conduct relevant research and develop solutions within their field of specialisation that are intended to benefit their community. For example, students developed mobile Apps for 'blood donation' and for a 'municipality'. In addition, students are exposed to industry level skills which they receive in some elective courses that are linked with professional certifications.
- The learning environment encourages non-formal learning through external competitions and participation in Injaz company competition. Moreover, interviewed students confirmed that they participate in extracurricular activities such as visits to industry and cultural sites as well as volunteering 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 such 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**

- An Assessment Manual exists at the institutional level, which was last revised in April 2020, and it includes policies and procedure to ensure consistent assessment across colleges and courses. Moreover, there are guidelines for undergraduate projects with marking rubrics, which were last revised in July 2018, and internship grading guidelines, which were published in June 2018. The Panel notes that the Assessment Manual and project guidelines have been revised multiple times. According to the SER, 'The Assessment Manual is implemented by the Department Council every semester and monitored in terms of implementation by the College Council as well as Teaching, Learning and Assessment Committee (TLAC) for issues related to external moderation of assessment'. Submitted evidence and site visit interviews indicate that assessment guidelines are adhered to. The Panel appreciates that the assessment framework includes measures appropriate for the programme and is consistently implemented.
- General guidelines on assessment are included in the Student Handbook, while further particulars on assessments are provided in the course syllabi which are distributed to students in the beginning of the semester. Moreover, the Assessment Manual is available on the AU website. Staff have access to policies on SharePoint and are informed if changes are introduced. During induction, students are provided with relevant assessment information in the Student Handbook. During interviews, the Panel confirmed that assessment guidelines are communicated to faculty and students and are implemented consistently.
- The Assessment Manual is substantial and specifies policies and procedures for the utilisation of formative and summative instruments and for providing oral and written feedback. The Panel notes that brief written feedback is provided to students on their assessments. Course syllabi specify formative assessment methods and marking rubrics are included in the guidelines for undergraduate projects. Moreover, internal verification of courses form specifies the implementation of the aforementioned measures. The Panel acknowledges that there are assessment policies in place to evaluate student performance and assist their learning.
- The guidelines for the undergraduate project emphasises the articulation of a research problem in the field of study. The Department Council approves the research proposals submitted by students and ensures its adherence to ethical standards. The examination committee evaluates the projects and conducts the oral examinations. In addition, the project guidelines clarify what constitutes academic misconduct and plagiarism, and students have to undergo defence of their research to the committee. Further, the programme includes a mandatory course in Ethics and Professional Practice in IT and Engineering.
- To enable the evaluation of the students' achievement of the CILOs, the Assessment Manual specifies that course assessments should have a schedule, specify the methods of

assessment and the marking criteria, which should be transparent to all students. The Panel notes that these guidelines are reflected in the course syllabi, project and internship guidelines. Moreover, the Assessment Manual specifies the moderation of formative and summative assessments, which are discussed further Under Indicator 3.3 of this Report.

- The Assessment Manual addresses academic misconduct in detail, encompassing plagiarism, collusion and personation. There are processes for deterrence, detection and penalties of academic misconduct. These are also stated in the Student Handbook. According to the SER, a discipline committee is tasked with reviewing student infringement cases and imposing penalties. Students have the right to challenge the results of any major assessment within one month of receiving the assessment script. Students can challenge their grades at the end of the semester and their cases are managed by the Student Affairs Committee and are looked at by an ad-hoc committee of three faculty members. The student also has 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*

- Admission requirements are published on the institution's website and in the admission brochure and student handbook. There are general admission as well as programme-specific requirements. The Panel notes that the majority of admitted students into the BSIT programme are Bahraini male students. The Panel also notes that students with special needs are admitted and provided with adequate support.
- Applicants who acquired a secondary school score of 65% or above are given unconditional acceptance and the ones with a score of 50% or higher are accepted after passing an interview. The Panel is concerned that the secondary school score (65%) required for admission in the BSIT programme 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 an IT specialization. The Panel recommends that the College should revise its admission requirements to ensure that appropriate students are accepted who match the BSIT programme level.
- AU offers applicants an orientation programme, Mathematics and English courses, for those who do not meet admission requirements. The Panel notes that, on average, a quarter of accepted students take the orientation programme. Applicants are exempted from the orientation programme and admitted directly into the programme if they pass the placement tests in Mathematics and English, or if they obtain for English a score of 500 in TOEFL or 5.5 in IELTS. The Panel notes that the placement tests are of a reasonable level and that the student handbook specifies 60% as the required pass mark for the placement tests.

- There are policies and procedures for accepting transfer applicants from other Higher Education Institutions recognized and accredited by the HEC. A maximum of 66% of credits can be transferred; for example, year 1 transfer requires 33 and years 2 or 3 require more than 33 transferred credits. Credit transfer is considered for equivalent courses, with at least the same number of credits and with a 'C' grade or higher. The Panel notes that there are several transfer students who were admitted directly into year 1, year 2 or year 3 of the programme. The Panel advises that clear criteria be published which distinguish transfers into year 2 and year 3.
- The Panel notes that the admission requirements were revised by the Department and the College and approved by the University Council (UC/10/2017-18) such that only applicants from Science, Technical, Commercial & General tracks are accepted in the BSIT programme. According to the SER, 'AU benchmarks its admission policy against other universities in the Kingdom of Bahrain in order to set Ahlia admission policy standards'; however, evidence was not provided on that. The Panel recommends that national and international benchmarks should be included in the revisions of the admission policy as per AU 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**

- Faculty recruitment is elaborated in the Human Recourses (HR) Policy and Procedure Handbook, covering varied aspects of selection and recruitment. According to the SER, 'faculty appointment conforms to the Academic Staff Bylaws,' where faculty members are appointed by a decision of the University Council after the approval of the Department Council, the College Council and the Appointment and Promotion Committee. The Panel notes that there is good retention of faculty in the past five years, however the number of staff has been reducing in recent years and there is no staff at the rank of full professor anymore. Appropriate regulation for the promotion of faculty members, based on collection of points on teaching, research and service, is also covered in the Handbook and the Bylaws for academic promotion. The HR Directorate introduces newly recruited staff to rules and regulation, the premises, IT services and safety and security. Mentoring Policies and Procedures for Faculty state that the Chairperson provides newly recruited staff with initial guidance on delivery and assessment and a month later another member of staff takes over the mentoring process. The components of the faculty appraisal process involve evaluations by students, peers, Chairperson of the Department, College Dean, Dean of Graduate studies, Quality Assurance Centre and Vice President (VP). The Panel

notes that the procedure has not been reviewed since 2013 and that it does not emphasise the role of faculty 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.

- AU has a number of research policies in place, such as Rules and Regulations of Research, Postgraduate Studies and Research Bylaws, Funding Policy and Procedures, research ethics framework and Research plan 2016-2020. The Research Plan identifies a number of research performance indicators with annual targets; however, interviews did not confirm the college's progress with the research plan. The Panel advises that the College ensures that scientific research carried out by faculty members is aligned with its research plan. The Panel notes that the Institution provides support for faculty to conduct research.
- According to the University Council's decision (UC/922/01/2014-15), teaching load for faculty members is: three courses and five dissertations/projects for Professors, four courses and four dissertations/projects for Associate Professors and five courses and three dissertations/projects for Assistant Professors. Women are given maternity leave and reduced workload for a year after child birth while fathers are given one day leave for the birth of their child. The Panel notes faculty participation in community engagement activities. The Panel also notes that there have been a number of active researchers in the past few years; however, in the last two years, research activity has been low, an indication of lack of availability of time for research due to high work load. Further, the Panel notes that the load of the Chairperson of the Department is four courses in addition to the supervision of a number of Master students, administrative duties and student advising. The Panel is concerned that the teaching load and administration duties are excessive in some cases and hinder faculty members from having enough time to conduct research and hence apply for promotion. The Panel recommends that faculty members should be allowed adequate time to conduct research to update their knowledge in their field.
- According to the SER, there are nine faculty members in the College, one Associate Professor, five Assistant Professors and three lecturers. Evidence indicates that the last full professor left the College and no other professor has been recruited. The Panel acknowledges that faculty members are qualified and fit for purpose.
- According to the SER, a PD plan is devised annually by the Professional Development Committee based on the Faculty Evaluation Feedback Forms and faculty members' own feedback. The Panel notes that faculty members have participated in a number of appropriate PD activities. However, there are a number of discrepancies between the plan and the reported activities.

- According to the SER, retention rates of faculty members were 90% in 2018 and 100% in 2019. Incentives to support retention include research grants and funding for attending conferences, which were corroborated during interviews.

### **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 Panel notes that the university campus is located on the upper floor of a shopping mall with limited space and no outdoor facilities, where classrooms and laboratories are accessed from the mall corridors. However, access to AU areas are restricted to staff and students through a security check point. There are seven laboratories in the College, five of them are general IT laboratories and four of those are specifically equipped for BSIT courses. The Panel is satisfied that available classrooms are adequate for the number of students and laboratories are appropriately equipped for the needs of the programme, which was confirmed by both students and alumni. The Panel is concerned that the AU main campus 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 Centre, with clear responsibilities for maintaining provision of Wi-Fi across the university buildings and Local Area Network (LAN) to classroom and laboratories SER. The Centre is also responsible for maintaining laboratory computers, software and equipment. During the virtual site visit interview, the Panel confirms that the Students are satisfied with the provision of IT facilities and services for the BSIT programme. In addition, The Panel is satisfied that Information Technology facilities available in the classrooms and laboratories are adequate for students' needs.
- The Library provides a modest study space for the students, which is open seven days a week from 8:00 am till 8:00 pm except for Fridays on which it closes early. As per the evidence provided, the Panel notes that training is provided to students on how to use the electronic resources in the library. The Panel is satisfied that there are adequate physical and online resources for the needs of the students. Moreover, student feedback is used to improve the provided services. During the site visit interviews, students were satisfied with the library resources allocated for the BSIT programme.

- According to the CIT Lab Maintenance Procedure, there are two Laboratory assistants tasked with checking and updating the software and hardware in the IT laboratories. Moreover, they are responsible for renewing informational posters in the laboratories. They are provided with a plan and checking summary to organise their tasks. During interviews, the Panel was informed that there are two technicians looking after all laboratories. The Panel also learned that students were provided with a software to be installed on their own laptop during the COVID period, so they can run the laboratory sessions from home.
- The Director of Student Counselling is responsible for the Safety and Security on campus. There are policies for computer laboratory safety and utilisation which are displayed in the laboratories. Moreover, the policy specifies the correct fire extinguishers for use with electrical equipment and fire extinguishers are located next to the laboratories. The Panel notes that Fire Exits and Fire Assembly Points are not clearly marked in the corridors. The campus is monitored by surveillance cameras and security guards are stationed on campus. The Panel is satisfied with arrangements for ensuring the health and safety of students and staff.

#### **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 Admission and Registration Information System 'ADREG' is maintained by the ADREG system support unit, as an integrated Management Information System (MIS). It helps decision-making related to faculty load, resource planning, and student progression and planning. ADREG reports are used to track students, including at-risk students. AU uses Moodle for its Learning Management System (LMS) 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 an MIS with substantial features that provides support to students and staff, and helps in the decision-making process.
- The ADREG system is also utilised to track laboratory and classroom utilisation. Moodle provides its own reports for tracking purposes. While the library generates separate statistics for usage and e-resources.
- AU maintains its own servers for handling student information, which are managed by the Information and Communication Technology Center (ICTC). There is a server backup

and restore procedure to protect against loss of student records, to perform disk backup on-site at different scheduled intervals. There is also an option to back-up and restore to a data tape, and these backups are stored on campus as well as on another remote site.

- AU has in place a policy and procedures for issuance and authentication of certificates. Completing graduation requirements is initiated by the advisor and is approved by the Chairperson of the Department, the Dean and President. Certificates and student transcripts are issued using the ADREG system. Certificates are verified by the Graduation officer and approved by the President. Moreover, certificates are embossed and printed with a security key, where Policy and procedure for Authenticating and Issuing Certificates stipulates that certificates are issued from ADREG with a 29-digit security code for authentication. Interviews confirmed that graduation requirements are first checked by the Department and forwarded to the Registrar where the certificate is issued by ADREG within one week. The Panel is satisfied that there are policies and procedures that ensure the security of learners' records and awarding certificates.

## **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**

- The Directorate of Student Counselling provides students with advice on academic, personal, career and study skills. Student complaints and mitigating actions are logged in the system. Students may seek support from the Directorate of Admission and Registration by visiting the Admission Office, contacting the helpdesk or through a WhatsApp number. The two laboratory assistants for the IT laboratories provide the needed technical assistance. The library staff assist with photocopying and printing as well as locating resources and information.
- The Directorate of Professional Relations provides career guidance and internship placements as well as organising the Career day. Moreover, the Career Counselling unit helps students for internship placement. During 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 Student Affairs conducts orientation of newly admitted students every semester, which was confirmed by students during the interview. The Academic Advising Policy and Procedure states that all new students are assigned academic advisors by the

Chairperson of the Department and the list of advisees assigned to each faculty member is registered in the ADREG system. As per the SER, 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. During the site visit interviews, the students were very appreciative of the care and guidance they received from their faculty members.

- The Panel notes that AU has a Policy for Supporting Students with Special Needs. Students with mild physical and/or learning disabilities are considered for admission and provided with additional support to help them reach their academic potential. The Special Needs Admission Committee is tasked with supporting the admission and registration of special needs students, who are granted a reduction of 50% in tuition fees. Further, an Equal Opportunities Committee is tasked with maintaining a culture of equality amongst genders across the University. The Panel appreciates the institutional support provided to students with special needs.
- The Policy for Identifying and Supporting 'At Risk' Students identifies students with Cumulative Grade Point Average (CGPA) within the range 2.0 to 2.3, who have completed 16 to 95 credits, as potentially at risk of academic failure, and those are provided with counselling and extra teaching and learning support. Students with CGPA under 1.5 are placed on probation if they have completed 16 to 30 credits, under CGPA 1.67 if completed 31 to 45 credits and under CGPA 2.0 if they have completed 45 to 95 credits. The Panel is of the view that students need a higher level of guidance and advice during their initial phases at the university and hence the Panel advises to identify all students with a CGPA below 2.0 as students on probation.
- According to the SER, the Head of Student Support follows up complaints through the ADREG system and ensures appropriate referral systems for students experiencing difficulties. Other than laboratories maintenance, the Panel was not provided with evidence that support services are regularly assessed and improved. The Panel acknowledges that adequate student support is available, including for students with specific special needs and students at risk. The Panel recommends that support services should be systematically 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 site visit interviews that the BSIT programme is implementing ABET assessment criteria which are detailed and consistent with AU's assessment framework and NQF requirements. The Panel notes that the BSIT programme meets the NQF requirements by applying internal and external verification and moderation processes to ensure that assessments' complexity reflects the NQF level of each course. The Panel notes that the BSIT programme and more precisely, the courses' assessments methods, are covering technologically the theoretical and practical practices, taking into consideration the entire multimedia and information technology fields and tools. As undergraduate level, the used assessment methods reflect and meet all levels and techniques of complexity that jobs and the market need.
- 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 assessment 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 assures and defines 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 BSIT 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 monitors its implementation by the concerned Department. The Centre for Accreditation and Quality Assurance (CAQA) in coordination with TLAC, which is chaired by the Vice President for Academic Affairs, also monitor the implementation of the assessment processes. Based on the site visit interviews and the provided evidence, the Panel was able to confirm 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 it includes detailed academic misconduct and plagiarism policies and procedures. During the 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 the AU 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 the detected misconduct and cheating cases are referred to the disciplinary Committee.

- Based on the site visit interviews and the provided evidence, the Panel was able to confirm that academic misconduct cases are assessed by the Disciplinary Committee and further discussed in the Department Council, to ensure that the 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 weighing 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 internship is marked by the academic supervisor and the employer supervisor.
- Based on the 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 and improvement of both courses and the programme as well as fairness of grading.
- External moderation involves reviewing the marking criteria, solutions, model answers or rubric and grade distribution for a course, as well as the students' works, 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 indicates that 'the external moderation is conducted every semester by forwarding 20% of the offered courses for the external assessor for his/her feedback'.

- Based on the provided evidence and the site visit interviews, the Panel was able to confirm that the Department Council discusses the external assessor report and approves the grades internally, in line with the university procedures, and reflects/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 the courses and the BSIT programme's ILOs and assessment methods.
- As per the SER, CAQA monitors the external moderation processes in coordination with the TLAC, which is chaired by the Vice President of Academic Affairs. The TLAC receives all external moderation reports where comments and recommendations are discussed and evaluated by the Department Council to 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 BSIT programme contains a three-credit internship course (INTR463) 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 BSIT programme. Based on the SER and the 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 BSIT students and ensure that they gain equivalent training and exposure to professional practice. This helps them see the implementation of their theoretical knowledge in real practices and develop their professional and personal skills.
- The internship guidelines describe 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-months internship period. Students 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. The academic supervisors review the students' monthly reports and visit them twice during the training period to ensure that their training covers 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 site visit interviews, the Panel was able to confirm that the internship ILOs are aligned to the PILOs and contribute effectively to the achievement of the PILOs.
- As per the SER, the assessment of the BSIT 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 supervisors fill a written questionnaire form and evaluate the three reports that the students are required to submit during and after their training period. These three reports count as 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 using appropriate evaluation forms. These forms help in 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, from interviews, the Panel learned that the BSIT programme benefits from the feedback and suggestions received on the internship course from all parties involved to improve it.

### **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 BSIT programme includes a major project course (ITCS 499) 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 ITCS 499 course. The Panel acknowledges that the final year project course contributes effectively to the achievement of the BSIT PILOs, particularly those related to problem solving, analytic, synthetic and creative skills, and organizational and developmental skills.

- The Panel notes the 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 ITCS 499 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 site visit interviews, the Panel was informed that the project supervisors follow up the students' progress towards the completion of their projects and enter the minutes of their 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', which ensures 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 of the final year project and that it is appropriate.
- 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 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 BSIT curriculum seeks to achieve. The ITCS499 capstone project also enables students to expand their theoretical and practical knowledge in the real world and develop their expertise in the design and implementation within the field of IT.
- 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 BSIT programme has been 4.19 years in the last 5 years. The Panel also notes that in the in the period from 2013 to 2019, 38%-62% of the programme graduates proceeded to appropriate employment, 14%-32% proceeded to other employment and 8%-38% were looking for work.

- The Panel notes that the programme measures and analyses employers' satisfaction with its graduates using an employers' survey. Yet, improvement based on feedback from employers was not evident. The results of the graduate, alumni and employer surveys are also discussed in the Department Council. Yet, the programme did not provide an action plan for improving employability. The Panel recommends that the College should develop an action plan to improve the employability of the BSIT 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 BSIT graduates. These results are also discussed in the IT Department for the purpose of taking 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 in staff and students' handbooks as well as on the AU Website. The Centre for Information and Documentation is responsible for making available AU 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 being appropriate for the needs of the programme and being 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 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 System (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 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 is 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 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 compliance with its laws and 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 1st, 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 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 Information Technology is responsible for the management of the BSIT 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 was able to confirm appropriate reporting lines for decision making with regards to the programme.
- AU Bylaws clearly define 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 ICT Centre. However, some of these documents have not been revised for a period of time and the Panel recommends that AU's Bylaws should be reviewed periodically.

- As noted earlier, the chairperson is the Academic Programme Review Coordinator and is responsible for academic standards of the programme; while, the College Council makes some decisions and some 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 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 in 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, 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 the AU Assessment Manual is also recorded per course with recommended actions. The Panel notes that the report covers appropriate topics for evaluation per semester, but it 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 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 established.

- 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 its strengths, weaknesses and areas of improvement. The review process of undergraduate programmes specifies that the process is to be initiated at the Department Council and must 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 adherence to AU's review policy and the training of staff on the requirements of these reviews.
- Periodic reviews of the academic programme are 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 the 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 were revised in 2018-2019. The Panel acknowledges that the periodic review process includes feedback from appropriate stakeholders with a high rate of satisfaction toward 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 the University Curriculum Committee and the final approval for the implementations is made by the University Council. The Panel was able to view 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 monitoring 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 its peers, regulatory and professional bodies, and within the university. Formal benchmarking is carried out with its 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 comprehensive benchmarking scope.
- The benchmarking report is used to improve and, if needed, to re-align the programme with international standards and market needs. The 2019 benchmark survey results of the comparison conducted with other three universities were used to improve the BSIT programme. The Panel notes that some course contents are benchmarked with professionally recognized certification bodies. The ITCS-101 course is aligned with the International Computer Driving License (ICDL) and as a result 40% of students are able to pass the ICDL certification examination. The Panel also notes that there is 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 Institution should adhere to its benchmarking policy and benefit from the specified internal and external reference points for programme improvements.
- According to the QA Manual, the CAQA is tasked with obtaining feedback from various stakeholders, including; students, alumni, advisory board members and employers. The CME is in charge of conducting and analysing Stakeholder's surveys. Surveys are conducted with students, alumni, advisory board members and internship supervisors. Moreover, the College Advisory Board is consulted to provide feedback for improving the quality of the programmes and services. During the interview, the Panel confirmed that CME survey reports are sent to the Department and College Councils for review. They are discussed in meetings and lead to action plans. The Panel acknowledges that there are

mechanisms for collecting feedback from a number of stakeholders and the collected feedback is used to inform improvements.

- The Panel notes that improvements based on the recommendations of the College Advisory Board are implemented and communicated back 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 make contact with them and they did not 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 systematically looks at 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 CIT has an External Advisory Board composed of nine members and chaired by the Dean of College. The nine members represent IT discipline experts, employers and alumni. The Panel notes that there are appropriate ToR regarding the role and responsibilities of the External Advisory Board. The Panel also 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-years term expired. 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 found that the feedback from the External Advisory Board is obtained through discussions during bi-annual meetings (recorded in minutes) but also through surveys. The decisions are presented back to them during the next meeting and recorded in meeting minutes. 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, as well as acknowledging the active engagement of the College Advisory Board. 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.
- AU has a clear and appropriate Policy on needs assessments and analysis to maintain an up-to-date awareness of the labour market, national and societal needs. It is used to support improvement of current programmes, develop new programmes or close some programmes. AU's market Needs Assessment policy stipulates that feedback should be solicited from multiple stakeholders, especially employers, students and alumni. According to the SER 'BSIT has conducted a detailed market needs study as part of implementing periodic programme review'. Also, an employer survey was conducted to seek the employers view on the performance of BSIT graduates. During interviews, the Panel confirmed that alumni and employers are satisfied with graduates of the programme.
- Formal studies are conducted as part of the Policy on needs assessments and analysis. The Panel notes that AU conducted a recent desk-top study of the ICT sector growth in Bahrain or the region with data being collected from sources such as the Bahrain Economic Development Board, Oxford business group, Telecommunication Regulatory Authority, eGovernment, Goldstein Market Intelligence and Tamkeen. Moreover, the report contains suggested companies that could employ BSIT graduates. New courses were created based on the learning gained through such analysis.
- The Panel was provided with evidence that a number of modifications were implemented to the BSIT programme based on feedback from the College Advisory Board. However, evidence was not provided 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 Information Technology of College of Information Technology offered by 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 Information Communication technology topics.
3. Students are given the opportunity to gain professional certifications by integrating the certification material within the courses.
4. The assessment framework includes measures appropriate for 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 provides support to students and staff, and help in the decision making process.
7. The institutional support provided to students with special needs.
8. Mechanisms are in place for monitoring the implementation of the annual review process and that recommendations are established.

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

1. Utilise collected data regularly on programme quality to implement a comprehensive plan that regularly identifies potential risks and effectively deals with all aspects of programme delivery and academic standards.

2. Review the Programme Intended Learning Outcomes to ensure that all Programme Educational Objectives are covered.
3. Align closely the course specifications with AU's Teaching & Learning Plan to ensure the achievement of institutional goals.
4. Revise the admission requirement of the College to ensure that appropriate students are accepted who match the BSIT programme level.
5. Include the national and international benchmarks in the revisions of the admission policy as per AU Benchmarking Policy.
6. Allow adequate time to the faculty to conduct research and to update their knowledge in their field.
7. Provide students with adequate campus facilities in line with national standards.
8. Inform students about the existence of career advice services to help them plan their careers as well as find jobs.
9. Support services should be systematically monitored in line with programme's specific needs.
10. Develop a mechanism to evaluate the effectiveness of the internal moderation process and its contribution to and improvement of both courses and the programme as well as fairness of grading.
11. Develop an action plan to improve the employability of the BSIT programme graduates.
12. Effectiveness of the Quality Assurance measures is systematically monitored and improved.
13. Provide more training to staff on the requirements of annual and periodic reviews.
14. Review AU's Bylaws periodically.
15. Monitor the effectiveness of improvements based on the periodic review.
16. Adhere to its benchmarking policy and benefit from the specified internal and external reference points for programme improvements.
17. Collect and analyse feedback from all Stakeholder's and report the outcomes in a structured and systematic manner.
18. Look systematically at 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.
19. 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.

20. Evaluate the effectiveness of the implemented changes which were based on the College Advisory Board's suggestions.
21. Adhere to the policy for market needs assessment to ensure that the programme is aligned with the market and societal needs.