

# Directorate of Higher Education Reviews Programme Review Report

Arab Open University Faculty of Computer Studies BSc (Honors) Information Technology and Computing Kingdom of Bahrain

Date Reviewed: 12-13 October 2020 Extension Visit Date: 2 March 2022 HA040-C3-R040

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# Acronyms

AMR	Annual Monitoring Report
APE	Annual Program Evaluation
APR	Academic Programme Review
BCC	Branch Course Coordinator
BEC	Branch Examination Committee
BQA	Education & Training Quality Authority
BQAC	Branch Quality Assurance Committee
BQAD	Branch Quality Assurance Department
CAC	Course Assessment Committee
CEC	Central Examinations Committee
CGPA	Cumulative Grade Point Average
CILO	Course Intended Learning Outcome
CQAC	Central Quality Assurance Committee
DHR	Directorate of Higher Education Reviews
FCS	Faculty of Computer Studies
FEC	Faculty Examinations Committee
GCC	General Course Coordinator
HEC	Higher Education Council
HESA	Higher Education Statistics Agency
HQ	Headquarter
HR	Human Resources
IAB	Industrial Advisory Board
ICT	Information and Communication Technology
ILO	Intended Learning Outcome
IT	Information Technology
ITC	Information Technology and Computing

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KPI	Key Performance Indicator
LMS	Learning Management System
LRC	Learning Resource Centre
MoE	Bahrain Ministry of Education
MoU	Memorandum of Understanding
MTAs	Mid Term Assessments
NQF	National Qualifications Framework
OOPT	Oxford Online Placement Test
OU	Open University
OUVP	Open University's Validation and Partnership
OUW	Open University Worldwide
PD	Professional Development
PILO	Programme Intended Learning Outcome
QAAD	Quality Assurance and Accreditation Department
QAA-UK	Quality Assurance Agency-United Kingdom
RPL	Recognition of Prior Learning
SER	Self-Evaluation Report
SIS	Student Information System
SRC	Scientific Research Council
ТМА	Tutor Marked Assignment
ToR	Terms of Reference

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# 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 of the APR Reports of the Higher Education Institutions (HEIs).

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

Standard 1: The Learning Programme

Standard 2: Efficiency of the Programme

Standard 3: Academic Standards of Students and Graduates

Standard 4: Effectiveness of Quality Management and Assurance

The Review Panel (hereinafter referred to as 'the Panel') decides whether each indicator, within a standard, is 'addressed', 'partially addressed' or 'not addressed'. From these 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.

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	
All cases where <b>Standard 1</b> is not satisfied	- No Confidence

#### Table 1: Criteria for Judgements

BOA

Programme Review Report-Arab Open University - Faculty of Computer Studies - BSc (Honors) Information Technology and Computing - 12-13 October 2020 & 2 March 2022 5 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 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 and the extension visit, 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
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Institution Name*	Arab Open University	
College/ Department*	Faculty of Computer Studies	
Programme/ Qualification Title*	BSc. Information Technology and Computing	
Qualification Approval Number	-	
NQF Level	-	
Validity Period on NQF	-	
Number of Units*	26	
NQF Credit	-	
Programme Aims*	<ul> <li>To provide students with a sound grasp of essential principles of hardware based, software based or systems-based technologies.</li> <li>To provide students familiarity with a variety of modern programming languages and the underlying principles of programming paradigms- functional, object oriented, logical etc.</li> <li>To enable students to solve scientific problems, along with appreciation for mathematical and scientific methods which will provide lifelong support to their carrier.</li> <li>To prepare students for employment in a wide range of firms, including communication systems, software engineering, networking and Security or web technologies.</li> <li>To enhance students' experience in communication, time management, analysis and problem solving.</li> <li>To develop students' skills for working in a team to tackle an appropriate development task and accomplish projects to demonstrate their ability to undertake a substantial piece of work.</li> </ul>	

Programme	A. Knowledge and Understanding:	
Intended Learning	• Describe and evaluate the principles, concepts and techniques	
Outcomes*	associated with the technology of computers and digital	
	communication systems, at both the individual component and the system level, including use of appropriate models.	
	• Recognise the broad range of contexts in which computers and	
	digital communication systems are used and of the various ways in which users interact with them.	
	<ul> <li>Describe the major trends and issues in Information Technology</li> </ul>	
	and Computing.	
	• Integrate professionally the lifecycle of computing and Information	
	Technology systems, including the integration of theory and	
	practice to develop specifications, designs, and implementations to solve novel problems.	
	B. Cognitive skills	
	• Explain the differentiation between Information Technology and	
	Computing systems, including hardware based, software based or system-based contexts.	
	<ul> <li>Illustrate the sound grasp of principles of Information Technology</li> </ul>	
	and Computing technologies for abstracting, modelling, problem-	
	solving, designing and testing in the fields of Information	
	Technology and Computing, being aware of the limitations involved.	
	• Distinguish the features and specifications of hardware based,	
	software-based Information Technology and Computing systems.	
	• Extend the knowledge about Information Technology and	
	Computing systems to carry out a small project in Information Technology and/or Computing at the module level (as part of the	
	Tutor Marked Assignment) that applies their knowledge and	
	understanding; critically reflecting on the processes involved and	
	the outcomes of their work.	
	C. Key skills	
	• Demonstrate the ability to work independently and as part of a	
	team, gathering and evaluating different types of information,	
	identifying problems, developing and documenting solutions, and making effective use of Information Technology and Computing	
	for project management, communication and collaboration.	
	• Communicate and report professionally and effectively in an	
	Information Technology and Computing context.	

• Apply problem-solving skills in an Information Technology and Computing context.		
• Critically analyse and use data and information effectively in		
Information Technology and Computing context.		
• Exhibit proficiency in using the appropriate numerical and mathematical skills.		
• Conduct own self learning to the extent that they are prepared for		
lifelong learning after graduating.		
inciong learning arter graduating.		
D. Practical and/or professional skills		
• Specify, design, develop, deploy and manage small computing and		
Information Technology projects.		
• Investigate, compare, clarify and select Information Technology		
and computing systems, according to particular demand.		
• Plan and organize themselves and their work appropriately; keep		
systematic records of work in progress and outcomes.		
• Deal with issues such as risk and complexity, including the ability		
to perform trouble shooting in unstructured environments.		

\* Mandatory fields

# III. Judgment Summary

# The Programme's Judgement: Confidence

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

Indicator 3.5	Capstone Project or Thesis/Dissertation Component	Addressed
Indicator 3.6	Achievements of the Graduates	Partially Addressed
Standard 4	Effectiveness of Quality Management and Assurance	Satisfied
Indicator 4.1	Quality Assurance Management	Addressed
Indicator 4.2	Programme Management and Leadership	Addressed
Indicator 4.3	Annual and Periodic Review of the Programme	Addressed
Indicator 4.4	Benchmarking and Surveys	Partially Addressed
Indicator 4.5	Relevance to Labour market and Societal Needs	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 BSc (Hons) Information Technology and Computing (ITC) programme is delivered by the Faculty of Computer Studies (FCS) at the Arab Open University Bahrain, which is part of the Arab Open University with nine branches, including the Headquarter in Kuwait. The programme is delivered under the approval of and licensed from the Open University Worldwide (OUW), a wholly owned subsidiary of the Open University (OU). The programme is offered under license from the Higher Education Council (HEC) and is in line with the rules and regulations of the HEC. Graduates receive two awards: first from the OU and second from the AOU.
- The FCS has an Operational Plan, Risk Register and Risk Management Plan. FCS have indicated that the Risk Management Plan has been developed following recommendations made at HEC Accreditation. There is evidence that potential risks are identified, and likely impact is assessed. However, there is no sufficient evidence to indicate that risks are periodically monitored, reevaluated nor that actions taken deliver improvements throughout the academic year. The Panel recommends that the FCS should implement monitoring and review processes to support its implementation of risk management.
- The ITC programme has recently been submitted (January 2020) to the Directorate of National Framework Operations for the foreign qualifications alignment to the National Qualifications Framework (NQF).
- The programme title is indicative of the content and accurately describes the type of programme as detailed in Indicator 1.3.

- The programme aims are clear and reviewed every five years in line with OU quality assurance processes. The aims relate to the mission and strategic goals of the Institution. They are also consistent with the Bahrain HEC's national strategy. The Panel notes that one recommendation from the revalidation conducted by OU in 2017 was to consider embedding more entrepreneurial skills. This has been addressed through the inclusion of an elective module (course) to meet the Bahrain HEC national strategy.
- There is a valid institutional agreement in place between AOU and OUW, which is regularly reviewed. There is also a clear planning / approval process with OU to ensure that the programme is and remains, relevant, fit for purpose and complies with licensing requirements.
- The nature and mode of delivery of the programme are defined in the Institutional Agreement Appendix 2. Teaching courses are designed and prepared by AOU and subject to validation by OU.
- The award title is confirmed in the Institutional Agreement, which also specifies the institution's applying rules and policies for recruitment, delivery, assessment and support of the programme.
- The Institutional agreement specifies the roles of each institution for academic planning and maintenance of academic standards to ensure that the programme is of comparable quality.

## 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: Partially Addressed

- As per the Self-Evaluation Report (SER), FCS describes graduate attributes as defined and embedded within the programme in terms of intended learning outcomes. There is no definition of the graduate attributes at the institutional level. The Panel notes, however, that the FCS has a draft definition of the graduate attributes, but this has not yet been approved by the Institution. Hence, the Panel recommends that AOU Bahrain should expedite the development of graduate attributes at the institution level and links them to the Programme Intended Learning Outcomes (PILOs).
- The ITC programme has clearly stated PILOs that are grouped under four broad categories. These are described within the Programme Specification. The Panel notes that the PILOs are appropriate for the type and level of degree awarded and are well aligned

to the aims of the programme. The Panel also notes that there are separate aims and PILOs for each pathway of the programme.

- With reference to PILOs, one of the four groups, is concerned with the development of practical work and another refers to the development of cognitive skills. The Panel notes that the OU revalidation of 2017 recommends the development of practical skills, and one external examiner refers to capstone projects as being descriptive and lacking analytical skills. However, it was confirmed in interviews with the academic staff that changes have been made to develop further the practical skills in the programme and that this has been reflected in the skills of employed alumni.
- The ITC programme has measurable PILOs. The Panel notes that the FCS has aligned the programme with the NQF level descriptors (January 2020). The programme also meets international norms as evidenced by validation from OU, use of external examiners and its reference to the Quality Assurance Agency-United Kingdom (QAA-UK) Computing subject benchmark 2016.
- The ITC programme has Course Intended Learning Outcomes (CILOs) which are appropriate for the level and content of the courses. The CILOs also meet international norms as evidenced by validation from OU, use of external examiners and with reference to QAA-UK Computing subject benchmark 2016.
- Each course within the programme is mapped against its PILOs. It was rather unusual to note that most courses are listed as meeting most, if not all, PILOs. The FCS confirmed in the SER that the programme's CILOs have not been mapped to the PILOs, however, during the extension visit, the Panel noted that CILO to PILO mapping is in place.

## 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 Study Plan for the ITC programme shows an appropriate year and semester progression together with pre-requisites. The Plan is available on the AOU's website and in the student prospectus.
- The programme is subject to a five-year review by the OU. The FCS puts a significant focus on these events, as they are viewed as pivotal points for updating the curriculum. At the OU revalidation of 2017, recommendations to update the curriculum were made. External reviewers have also been used extensively to support the programme and provide

recommendations for improvement. The Panel acknowledges the efforts made by the AOU to maintain the currency of the curriculum.

- The Programme Specification clearly shows that the development of practical skills alongside theory are key components of the programme. The OU revalidation of 2017 recommended 'Developing assessments to meet learning outcomes with exposure to practical coursework'. The FCS identifies an example of embedded practical work and the programme has been updated to address these concerns. An external reviewer commented that 'final year projects are descriptive rather than analytical'. A review of capstone project samples provided, did not demonstrate evidence of full product implementation in all cases, though it was confirmed in interviews that levels of practical skills are appropriate among employed graduates. The Panel advises FCS to ensure that all projects include a defined product implementation.
- The programme demonstrates appropriate depth and breadth of subject coverage in the programme and its pathways (the Computer Science, Web Development, Networking & Security and Computing with Business).
- The Course Specification of each course includes details of 'Indicative content', 'Key reading list' and 'Other indicative text (e.g. websites)'. In addition, teaching materials support student learning. These are provided by OU and are available to students *via* the AOU Learning Management System (LMS). Textbooks and other reading list materials are appropriate and reasonably up to date.
- The programme corresponds to the OU programme and therefore it is aligned with the UK NQF at the OU next five-year review process.
- The SER did not address the cultural and linguistic sensitivity guidelines for quality provision in AOU programmes. However, the programme incorporates university required courses such as English Communication Skills, Self-Learning Skills, and Arabic Communication Skills, together with additional electives such as Women Empowerment, Life Skills and a foreign language.

## 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

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• AOU has a Teaching and Learning Policy that is applied across all campuses, including Bahrain campus. The Policy refers to an AOU Teaching and Learning Strategy which is part of the AOU's Strategic Plan. The Policy refers to implementation, strategic focus areas,

operational priorities and annual monitoring of the Policy at campuses as the responsibility of the local Deanships. The Panel finds the Policy sufficiently comprehensive and appropriate to the programme's activities, however, the Panel noted that the Policy is dated 2016 and hence it is due for revision.

- The AOU Strategic Plan includes some elements of teaching and learning as part of achieving broader strategic targets, but there is no focus on the development of teaching and learning. Evidence was not provided of a separate teaching and learning strategy. The Panel recommends that AOU should develop a separate Teaching and Learning Strategy to support staff development in teaching and learning, together with the development of the teaching and learning infrastructure to ensure excellence in teaching and learning.
- The Panel found evidence of monitoring teaching and learning in FCS using a range of metrics; however, a teaching and learning strategy would identify priorities for teaching and learning development together with monitoring and review processes to ensure improvement in teaching and learning.
- The ITC Programme Specification refers to a range of teaching and learning methods headed by blended learning and independent study but with face-to-face tutor led sessions. There is also an opportunity to implement Team Working Environments with the use of the online learning system for group discussion. The approaches referred to are in line with the AOU's teaching and learning philosophy. However, the OU revalidation of 2017 highlights an area for improvement: 'Development of a variety of teaching and learning strategies to best support the development of knowledge and skills as specified in course/programme learning outcomes.' This could include current teaching and learning developments such as the flipped classroom. Interviews with the academic staff, did not indicate that this recommendation has been addressed. Hence, the Panel recommends that AOU should review the range of teaching and learning methods used in the programme to best support the development of knowledge and skills to meet the PILOS.
- E-learning is a fundamental part of the teaching and learning approach of AOU and is implemented fully in the FCS, according to the provided evidence. The learning environment at the FCS attempts to mitigate the challenges of remote/online learning as well as support students' training in research.
- Lifelong learning is encouraged by the flexible learning approach and learning environment of the OU. AOU's independent learning is supported through e-learning requirements and the requirement for students to implement an individual graduation project.

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#### **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

- The assessment framework is taken directly from the OU-UK and has been enshrined in examination and assessment bylaws. The Student Handbook refers to the AOU website for regulations. Individual course assessment is described fully in the course descriptor. The Panel confirms that the assessment framework is adequate and appropriate for the ITC programme.
- Assessment processes are covered in general in the student induction and in the Student Guide. It was also confirmed to the Panel in interviews with students that the examination and assessment bylaws and course descriptors are available to them.
- There are clear criteria for the marking of summative work. In the SER, FCS refers to Tutor Marked Assignments (TMAs) and Mid Term Assessments (MTAs) forming part of the summative weighting of the course assessment. However, the Panel was concerned to note that the FCS refers to formative assessment as assignments and MTAs. The evidence provided shows TMA summative marking and the feedback given as formative assessment feedback. This was also confirmed in interviews with the academic staff. There appears to be confusion about the meaning and use of formative assessment. The Panel recommends that FCS should review its approach to formative assessment to include additional purely formative assessment to support students' awareness of their understanding of topics. The timing of feedback to students was not covered in the SER; however, it was confirmed in interviews that feedback is timely.
- The programme includes an FCS mandatory course, 'Security, Ethics and Privacy in IT and Computing' (TM260). This course covers ethical issues in ITC. It does not cover ethical issues in research in general, nor does it cover scientific research principles in different disciplines. The Panel learned from interviews with students that they are expected to perform a literature review as part of their capstone project course, which is offered over two consecutive semesters, and that this is covered in the first semester of the course. The Panel advises FCS to cover scientific research principles and ethical issues in research in its course contents.
- There are clear processes in place to ensure that students are graded fairly and with rigour. There are also provisions for internal and external moderation.
- There are clear processes in place to address academic misconduct. Turnitin is used to support the FCS efforts at combatting plagiarism. There are clear processes for student

appeals. Students are made aware of these through the induction and through the Student Guide. Deadline dates are posted on the LMS. The evidence provided demonstrates that the appeals process is working well.

# 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: Addressed

- The Admissions Policy for AOU Bahrain is published on the university's website and available to all applicants. The key requirements are 'a good secondary school GPA' and, where appropriate, IELTS 4.5 or equivalent. The secondary school certificate must be approved by the Bahrain Ministry of Education (MoE). Selection is made by the Admission Committee and the results are published on the AOU website.
- The minimum admission requirements are appropriate for the programme, meeting the HEC requirements. At the time of the virtual site visit, the Panel noted that there was no Mathematics requirement above a minimum pass grade. During the extension visit interviews, the Panel learned that a foundation Mathematics course has been developed to start in September 2022. The Admissions Policy entry criteria indicates that the school certificate overall percentage score, English and Mathematics scores are taken into account to determine admission. The Panel suggests that the Foundation Mathematics test pass level is reviewed over time to ensure that it is appropriate and meets mathematics requirements of the degree.
- AOU uses the externally provided Oxford Online Placement Test (OOPT) as the English placement test, which is benchmarked against CEFR, IELTS and other international standards. Students achieving OOPT marks equivalent to IELTS 4.5 may enrol directly in the degree programme. It was confirmed during interviews that there is no benchmarking of the Foundation English Language programme's exit test against international standards, and so no certainty that students entering the programme through this route will have achieved the required IELTS 4.5 or equivalent. The Panel confirmed during Extension Visit interviews that the English exit test is assessed by AOU with a pass level claimed to be equivalent to IELTS 4 4.5, but this is not benchmarked to IELTS or CEFR.

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The Panel recommends that AOU should benchmark the Foundation English Language programme's exit test against international standards to ensure that students enrolling in the ITC programme through this entry route meet the required English language standards.

- The processes for progression and credit transfer are described in the Bylaws. Recognition of Prior Learning (RPL) processes at AOU are also clearly described in the Bylaws.
- There is evidence that student applications for admission are reviewed to decide on those to accept. There is also evidence that the FCS requested changes to the admission requirements in 2019 and that these changes have been implemented. However, at the time of the site visit, it was not clear that there is a systematic, regular review of the Admissions Policy. The Panel noted during the extension visit that the Admissions Policy has been reviewed and adopted in December 2021. It was confirmed during extension visit interviews that the review included an analysis of 2011-2020 cohorts. The Panel suggests that a periodic formal review of Admissions Policy is specified in the 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 is evidence of a formal process for the recruitment and induction of staff. During interviews with staff, the Panel was assured that this process is implemented by FCS for staff recruitment. The induction process appears robust; and a formal appraisal process is in place.
- During the virtual interviews, it was confirmed that the FCS has an operational plan in place including research targets and Key Performance Indicators (KPIs); however, this does not identify monitoring of previous years' actions for implementation or impact. The Operational Plan is defined by the FCS. In addition, there is an Operational Plan developed by the AOU HQ Scientific Research Council (SRC). FCS staff members have a scheduled time for research but this is not reflected in the workload model. The Operational Plan does not identify monitoring of previous years' actions for implementation or impact. The Panel advises that research plan targets are periodically monitored and reviewed to ensure that they are met.
- Staffing workload is calculated by the FCS. The workload model shows teaching allowances per course. The Panel notes that the allowance allocated for teaching a course appears low. The allowance for additional activities including supervising projects and

student placements appears low, and there is no allowance given for conducting research. The Panel suggests that the AOU should consider increasing the allowance for teaching a course and the allowance for additional activities.

- Academic staff in FCS are appropriately qualified. Some relevant and recent research publications are listed. There are four academic staff members in FCS, including the Dean, and the Panel notes that the course leaders are delivering up to nine courses per semester. The Panel was very concerned that the number of academic staff members in relation to the number of courses being taught does not give confidence that the staff have the appropriate specialisms and professional background to teach all the required courses of the ITC programme. During Extension Visit interviews it was confirmed that an additional academic staff member has been recruited. It was also noted that one member of staff has left FCS and that part time staffing cover is in place for the delivery of courses. The recruitment process for a permanent replacement member of staff has started and will be complete by September 2022. The Panel is of the view that with the replacement staff recruited there is the minimum adequate staffing base to deliver the programme. The Panel recommends that the AOU should expediate the recruitment process of the full-time faculty member.
- AOU has a staff development policy in place, which specifies individual engagement with the process. A staffing needs form is listed. The Training Needs Analysis Report of 2018-2019 identifies four ITC staff members and training needs. The report also refers to training needs identified through appraisal. It was confirmed in interviews that staff development requirements are monitored and that development activities do take place.
- There was no monitoring process for staff leavers identified in the SER. Statistics showed that FCS has a very low turnover of staff. Evidence provided shows that an exit leavers' survey is completed, as identified in the Staff Exit Procedure. However, the Procedure does not include a requirement that the completed exit surveys are periodically reviewed. Hence, the Panel advises that AOU implement a process to periodically review staff exit surveys to ensure the retention of well qualified academic staff.

## **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

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- The classrooms and laboratories were listed in the SER, including equipment available in teaching rooms. These are adequate for the delivery of the ITC programme, as shown in the provided evidence and the virtual tour.
- General Information Technology (IT) facilities appear adequate though the replacement policy of PCs was not provided. The virtual tour showed that the specification of PCs and the operating system is up-to date. In addition, the Panel notes evidence of specialist software to support the software pathways.
- There appears to be an adequate range of materials in the Learning Resource Centre (LRC), though many of them are old texts. Many of the resources listed for ITC students are course materials supplied by the OU UK. Most of the textbooks available are single copies. Journals are adequate and available as e-journals. The LRC usage analysis for the e-resources shows that usage is appropriate. With regards to developing the library's collections, there is an informal 'suggest a book' approach. The Panel advises AOU Bahrain to introduce a formal process for FCS LRC resource requests.
- The Panel notes that there is an outsourcing and IT backup policy in place along with a process to regularly test recovery of the backed-up files. Evidence was provided of students surveyed and analysis of the surveys, covering many aspects of the student experience including IT, medical, counselling services, but evidence was not provided regarding a formal process to monitor the usage, availability and adequacy of the general resources and facilities at the campus. The Panel recommends that AOU Bahrain should introduce a formal process to monitor the usage, availability and adequacy of the general campus resources and facilities.
- Civil defence certificate and evacuation report have been provided. Certificates were valid from 2016, there is no indication of the expiry date. Certification of evacuation drills is available in Arabic. Health and Safety and Security processes are in place and monitored by the AOU Health and Safety Committee.

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

There are functioning management information and tracking systems that support the decisionmaking 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

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• The Student Information System (SIS) at AOU Bahrain is centralised and comprehensive. It includes online admission and enrolment, fees payment, complaints and appeals, examination postponement, timetabling, disability registering, attendance recording and marks submission. The Panel acknowledges that there is a detailed reporting available in all areas to support decision making. FCS makes use of student profile data, particularly for special needs students and students at risk of academic failure.

- Reporting of e-learning and e-resource usage in the LRC is undertaken. The Panel requested examples of the use of tracking reports on resource utilisation to inform decision making, however evidence provided at the time of the site visit referred to course and student data not laboratory utilisation. During the extension visit interviews, it was confirmed that laboratory resources are reviewed informally by the IT Department, and this has resulted in a number of updates to laboratories. It was also confirmed that software is currently being purchased to support laboratory utilisation and replacement reporting. The Panel advises AOU Bahrain to formalise this process to ensure regular review of resource utilisation.
- There are policies and procedures in place to maintain the security of learner records. Accuracy of results is ensured through detailed moderation and committee reviews. However, from the interviews with staff that were conducted during the site visit, the Panel learned that there is no regular monitoring procedure to ensure security of learners' records. Based on the recommendations that were sent to AOU Bahrain before the extension visit, AOU started to regularly review staff access to IT systems on a regular basis. The Panel also learned during the extension visit that a review of the user privileges policy is in place and that the access to IT systems is reviewed each semester. Server backup status reporting was provided. The Panel saw evidence of a cloud hosting service agreement to provide offsite backup of systems and data.
- In the SER, FCS claims that the process for awarding certificates and transcripts is in place. Evidence provided demonstrates the process from confirmation of results, graduating students' list sent to HQ, and production of certificates for attestation. Interviews with students and alumni, confirmed that certificates are issued in a timely manner.

## 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: Partially Addressed

BOA

• The Student Affairs Department manages many of the non-academic student support functions. There are clear procedures for each element of support provided. The Student Counselling Unit provides social, psychological and special needs support. The Unit also provides academic and career counselling. IT support is comprehensive with good use of a ticketed help desk and training in the use of the LMS.

- Career Days are managed between the Student Counselling, Public Relations, and Student Affairs. These provide an opportunity for students and employers to meet to identify potential internship placements. For graduates, the Student Affairs and Graduates Department organises a Careers Day, and in Academic Year 2018-2019 17 companies took part in it. A Curriculum Vitae bank is maintained to support graduate employment. The Panel notes that there is no further follow-up with students. The Panel also notes that the majority of students are in employment whilst studying in the ITC programme and therefore the Panel advises FCS to implement further support for graduating students, to maximise employability for graduates seeking employment and for those seeking change of employment. An alumni survey was provided and during interviews, it was confirmed that surveys have been circulated electronically to alumni.
- Student Affairs organises an induction programme/orientation day for the newly admitted students. This is delivered in Arabic and English in Semester 1, 2 and 3 of each academic year. Student satisfaction survey results regarding training in SIS, LMS, e-library were positive. Evidence of a debrief report for possible improvements to the training was noted.
- Academic Advising is managed by the SIS which is also used in identifying at-risk students. Support for at-risk students is initiated when a student achieves a Cumulative Grade Point Average (CGPA) of less than 2.2. At the time of the site visit, the Panel was provided with evidence of academic advising, which included completed academic advising forms. Evidence of email communications between academic advisors and tutors was provided for the extension visit. The evidence and extension visit interviews confirmed that academic advisor meetings focus on selecting courses, particularly for atrisk students. The Academic Advising Policy states that 'Academic advising is available to assist students in learning the skills necessary to be able to make their own choices in the academic environment. The skills include information gathering and processing, critical thinking and decision-making'. Hence, the Panel recommends that AOU should revise its approach to academic advising to embed learning support as specified in the Academic Advising Policy.
- The AOU has an Equal Opportunities Policy and a Special Needs policy in place together with evidence of implementation of services and facilities. The Panel requested evidence of reporting on equal opportunities, analysis and action taken where appropriate. Evidence provided to the Panel reported on the nationality of students enrolled but no further data or analysis to ensure equal opportunities for all students was submitted at the time of the site visit. During the extension visit the Panel were provided with student data analysis showing student recruitment grouped by gender, age, nationality, and disability. The Panel noted that there is no indication of discussion of the data nor is there data to show performance (progression / completion) of each of these groups, nor any commentary on the only student (out of 213 new students) who declared a disability from

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two academic years 2018-2019 and 2019-2020. The extension visit interviews confirmed that students declaring special needs can obtain support, particularly with examinations. A report has been produced by the Student Counselling Unit discussing equal opportunities statistics 2011-2021, but again not showing performance of groups. The Panel recommends that the AOU should review the equal opportunities data, specifically the performance of students to ensure that its approach to equal opportunities is indeed providing equal opportunities for students.

• During the site visit the Panel was not provided with sufficient evidence that the support services are regularly assessed and improved in line with students' needs. The Panel requested evidence of analysis of student feedback on student support to identify areas for improvement; however, the evidence provided was only related to student feedback on academic staff. This issue is further discussed in Indicator 4.4. The Panel was also not provided with sufficient evidence to demonstrate that actions identified in the Operational Plan for the Counselling Unit are implemented (e.g., procedures for psychological and social guidance and procedures for academic guidance). The Panel confirmed during the extension visit that those procedures are in place and that there is evidence of special needs procedures operating.

# 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

- Evidence provided suggests that the assessment methods are to an acceptable extent reliable and that they meet the academic standards of the programme. Further evidence indicates the usage of internal benchmarking (among the various branches of the AOU) for adjusting assessment methods.
- There are appropriate mechanisms for the alignment of assessments with learning outcomes. The alignment is reflected in a matrix mapping different components of the assessment to the learning outcomes. Although such alignment is supposed to be evaluated by external examiners prior to the administration of the assessments, the external examiners' feedback does not address the mapping of the assessment to the learning outcomes. Evidence provided for the extension visit included the comments of external examiners on the extent to which assessments meet CILOs. It was confirmed during the extension visit interviews that a number of templates were considered. These interviews also confirmed that the assessment for the course was modified based on the comments received from external examiners.
- At the time of the site visit, the evidence provided did not sufficiently support the usage of mechanisms for ensuring that graduates' achievements meet the PILOs. The Panel noted a lack of an in-depth analysis of student performance and the degree to which the students achieved the PILOs. There was a simple analysis of grade distribution without sufficient depth to demonstrate the achievement of the PILOs. Based on the recommendations that were sent to AOU Bahrain before the extension visit, matrices were provided for the Panel showing the mapping of assessments to Intended Learning Outcomes (ILOs) for multiple courses, and an analysis of achievements.
- Based on the evidence provided by AOU Bahrain, it was clear to the Panel that there are appropriate mechanisms for monitoring the implementation and improvement of

assessments through the Branch Examination Committee (BEC), the Course Assessment Committee (CAC), the Faculty Examinations Committee (FEC) and the Central Examinations Committee (CEC).

## 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

- The FCS has appropriate policies and procedures in place related to academic integrity in general and to cheating/plagiarism in particular. Dissemination of these policies and procedures is done through multiple channels. The Panel notes that policies and procedures covering integrity and ethics pertaining to research were only available in Arabic. The Panel advises AOU Bahrain to provide an English version of these documents to students and staff who are not fluent in the Arabic language.
- It was clear to the Panel that processes for deterring and detecting academic misconduct have been implemented. In addition, guidelines for the invigilation of examinations are available and there are examples of the dissemination of these guidelines to staff, but not students, through emails and workshops. The Panel advises AOU Bahrain to disseminate the guidelines for the invigilation of examinations to students.
- Cases of suspected plagiarism are handled by a Disciplinary Committee, which takes its decision as per the Disciplinary Actions Bylaws. The Panel notes evidence where cases of academic misconduct and plagiarism are recorded, and appropriate actions are taken.

#### 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: Addressed

BOA

• The Panel notes that internal moderation of assessment is done in both pre-assessment and post-assessment stages. In the pre-assessment stage, the internal moderation is done by the Deanship Moderation Committee at the FCS HQ, using a formal moderation template. However, at the time of the site visit, there were no samples provided of completed moderation templates. It was not clear to the Panel whether this committee is well qualified to moderate the assessment for the variety of courses of the programme. The Panel also noted that FCS Bahrain has no say in the development of the assessment or in its moderation. Based on the recommendations that were sent to AOU Bahrain before the extension visit, the Terms of Reference (ToR) for the Deanship Moderation Committee were revised. Its membership includes all General Course Coordinators (GCCs), Programme Coordinators and Branch Course Coordinators (BCCs) which demonstrates that Bahrain branch representatives can participate effectively in moderation discussions.

- The post-assessment moderation is done by BEC after the final examination grade approval meeting at branch level. Evidence provided for the extension visit includes guidelines showing the BEC remit and communications regarding post moderation, particularly of borderline students prior to the BEC meeting. The Panel was also provided with evidence of communications based on a formal review of courses, identifying where improvements could be made to course assessments.
- The Panel was unable to identify evidence of formal and appropriate mechanisms for the evaluation of the effectiveness of the programme's internal moderation at the time of the site visit. However, for the extension visit, the Panel was provided with evidence of action taken demonstrating evaluation of courses, evaluation of moderation processes and improvement to courses. The Panel was able to confirm during the extension visit interviews that the processes for evaluating moderation and of using moderation to improve courses are considered to be appropriate.
- External examiners are involved in both pre-assessment and post-assessment moderation. At the time of the site visit, the Panel did not find sufficient evidence of formal procedures for the selection of external examiners. The Panel also noted that there was no formal template for the external examiner feedback. The evidence provided for the extension visit shows that there is a formal template used for the external examiner feedback referred to in the affiliate partner documentation and the OU Handbook for validated awards. Procedures for selecting the external examiners were also provided. In addition, the Panel noted at the time of the extension visit that FCS responds to the comments raised by the external examiners. Hence, the Panel is satisfied that external examiners contribute to course and programme improvement and that there is a process for AOU Bahrain to act upon issues raised and respond to external examiners. The programme is also subject to review by the affiliate partner which evaluates the effectiveness of external moderation and the external examiner process.

#### 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: Partially Addressed

- FCS has an Industrial Training Unit, with appropriate ToR and an Industrial Training Manual was recently developed and approved by the Branch Council. The ITC Training Report specifies a requirement of eight weeks of industrial training course. This contradicts the 12-week requirement specified in the Industrial Training Course Specification. Hence, the Panel advises that the industrial training requirements are clarified and consistently communicated to the relevant stakeholders. The Panel notes that there is no approved documentation identifying the roles and responsibilities of the industrial training providers, academic supervisors, training supervisors and students. However, the samples of completed feedback forms provided give an indication of these roles and responsibilities which are further developed in the draft industrial training manual. Hence, the Panel advises AOU Bahrain to expedite the formal approval of this manual.
- The Panel notes that formal templates for the feedback of the training supervisors, academic supervisors, and students are in place. Further, academic supervisors are expected to meet with their students several times during the industrial training. This was confirmed during the extension visit. However, interviews with students and alumni indicated that meetings with supervisor are often informal and feedback given is verbal. The Panel recommends that the FCS should ensure that the recording of supervisor / student meetings is consistently done using the identified template.
- The Panel notes evidence of mapping of the assessments of the industrial training course (INT300) to its CILOs. However, at the time of the site visit, the Panel did not find sufficient evidence for arrangements to evaluate the effectiveness of work-based learning and its contribution to the achievement of the programme aims, and for the use of this evaluation to improve the work placements. During the extension visit, the Panel was provided with an annual evaluation of industrial training and students taking the internship that year. The Panel learned from interviews that the evaluation is done each year but does not form part of a formal review process. Hence, the Panel recommends that the FCS should conduct a formal evaluation of the effectiveness of the industrial training and its contribution to the achievements of the programme aims with the purpose of improving work placements.

#### 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 Course Specification of the final year project describes the CILOs and states that the project contributes to all of the PILOs. The roles and responsibilities of the supervisors and students are clearly stated in final year project study guide. Interviews with students and alumni indicated that the project guidelines were communicated to the stakeholders.
- From the evidence provided at the time of the site visit, the Panel noted that there was no indication of monitoring and review of the progress of the students in the final year project, nor of their satisfaction with the supervision process and the resources available to carry out their research. Interviews with students and alumni also indicated that the supervision process was not properly monitored and that students were not asked to provide feedback on the supervision process. At the time of the extension visit, the evidence provided to the Panel indicated that there is a formal process in place to obtain and analyse feedback from students about each course, including the final year project. AOU extension visit progress report also refers to a formal procedure to monitor final year project students, however the evidence provided only includes a PowerPoint presentation to students, an OU Guide for students taking the project and a bi-weekly meeting record sheet. The Panel recommends, therefore, that the AOU should develop a formal procedure to monitor and record the progress of the students in the final year project.
- The evidence provided to the Panel indicates that feedback is regularly collected from the external examiners on the final year projects and related action plans are implemented. The Panel appreciates the AOU closure of the quality assurance loop through implementing actions based on the External Examiner's feedback on the final year projects.

#### 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

• The sample of student work provided during the site visit indicated variable levels of student achievements. Some of the capstone projects were at an appropriate level while others did not have a proper literature review or did not involve implementation. The Panel noted during the extension visit that there has been limited opportunity for FCS to benefit from the analysis of students' achievements and their ability to create and innovate. The Panel recommends that FCS should conduct a regular analysis of students' achievement in courses to ensure that the learning outcomes are attained and to enhance the ability of students to create and innovate.

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- The FCS provided the Panel with a cohort analysis for 2019 that shows the ratios of admitted students to successful graduates, progression, retention, and length of study; however, neither an in-depth analysis nor benchmarking were provided at the time of the site visit. The evidence provided for the extension visit included a spreadsheet showing some statistics of Bahrain branch graduated students. Furthermore, the provided ITC Annual Programme Report included an evaluation of some areas of performance of FCS students. The Panel learned during the extension visit interviews that FCS students' achievements are benchmarked with UK students on comparable courses using Higher Education Statistics Agency (HESA) data. The Panel is satisfied that analysis of graduating students' statistics and benchmarking their performance to that of students on comparable programmes was appropriate.
- At the time of the site visit, the Panel did not find sufficient evidence that student progression, completion and graduate destination data are used to ensure that the academic standards are met. Alumni survey templates and employability data were provided but without any analysis or action plans. During the extension visit, the Panel learned from interviews that an alumni committee has been established, leading to an alumni portal development. The Panel also learned from interviews that such action is generating data from alumni that FCS can use to supplement their graduate destination survey and thereby enabling appropriate data for analysis to quality assure academic standards.
- Statistics from alumni surveys and feedback from industrial training were provided to the Panel at the time of the site visit. However, this did not include an in-depth analysis of graduate satisfaction. The Panel also noted that employer surveys have not been done in recent years. As indicated above, the recently developed alumni portal will allow the FCS to improve data capture thus enabling a more meaningful analysis of alumni satisfaction. The Panel learned from interviews that the employer survey has been implemented but the response rate was low. The Panel recommends that FCS should implement a regular assessment of the graduates and employers' satisfaction with the programme and graduates' capabilities.

# 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

BOA

- The quality management approach is embedded within the strategic goals and values of AOU's Fourth Strategic Plan (2017-2022) and is carried out through the established quality assurance practices of the Open University's Validation and Partnership (OUVP). This partnership provided the basis for the underlying institutional quality management system and the Panel appreciates the AOU's adoption of the Open University's Validation and Partnership standards. Furthermore, the Panel finds evidence for institutional policies and regulations that address the needs of the programme in various aspects including, internal mechanisms for assuring quality of provision, learning facilities, IT and infrastructure, research, and community service. The existing policies also include external mechanisms implemented through the use of external examiners and a periodic (five-year) revalidation by the OUVP.
- The quality assurance management system is governed by several committees at the branch and HQ levels. At the HQ level, the Central Quality Assurance Committee (CQAC) and the Quality Assurance and Accreditation Department (QAAD) operate concurrently. At the Bahrain branch level, the Branch Quality Assurance Committee (BQAC) and the Branch Quality Assurance Department (BQAD) exist, and they report to the CQAC along with similar committees from the various branches. However, the Panel finds some deficiencies in these practices and in the data flow among the various levels implementing the quality assurance management system, which will be discussed below.
- Several mechanisms were adopted for ensuring the consistent implementation of the policies and procedures, including various surveys for students and tutors, as well as staff appraisals. Annual reviews are also conducted by the BQAD. They cover student recruitment, student activities, and tutor-related activities. Other annual monitoring mechanisms include the Annual Programme Evaluation, which is collected from branches

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and culminates in the Annual Monitoring Report (AMR) prepared at AOU HQ. The Panel also finds evidence of the use of KPIs for monitoring student progression and achievement through various relevant statistics as well as a senior-exit survey and an employer survey.

- The Panel learned during the site visit interviews that staff are involved in collecting data, which are then discussed at the branch level and forwarded to the HQ for comparison among branches, and ultimately used in the preparation of an annual action plan. During interviews the Panel also noted that the staff have a good understanding of quality assurance processes and their role in executing the quality assurance policies at the branch and HQ level.
- The Panel recognizes the inherent complexity embedded in the quality assurance management system, which appears to be due to the multi-branch nature of the AOU, and the need to maintain flow of information from branches to HQ and vice versa. The Panel is of the view that such elaborate monitoring system which is divided into quality assurance committees and quality assurance departments at both the branch and HQ level may lead to excessive centralization in the evaluation and improvement phases of the quality assurance cycle. In addition, the 'improvement actions' process seems to be affected by the somewhat too long five-year cycle for programme review. Furthermore, the annual programme evaluation at the branch level shows very little evidence of reflection and evaluation (e.g., entries 6.1, 8.1 of the 2017-18 and 2018-19 Annual Programme Evaluation Report); and reflection seems to be mostly deferred to the HQ committees. The Annual Programme Evaluation Report also contains repetition of remarks made from previous years. The Panel advises FCS to review the quality assurance policies to establish a more streamlined process and to emphasise the annual 'review' and 'improvement' phases/practices.

## 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

BOA

- The Panel finds the AOU Bahrain organizational chart to be appropriate for the overall management of the programme. The Deanship at HQ also plays a major role in managing the programme, along with the roles played by the GCCs at various branches across the AOU network.
- Existing reporting lines are clear and ensure effective communication. However, the Panel observed during the interviews and from the annual review process that most of the resulting decision making is done at the HQ level. The Panel advises the FCS to review its

Programme Review Report-Arab Open University - Faculty of Computer Studies - BSc (Honors) Information Technology and Computing - 12-13 October 2020 & 2 March 2022 33 policies and practices with regards to decision making so as to delegate matters of local and time-sensitive nature to the branch administration while an oversight can be provided by the central administration.

- The Panel found evidence of clear ToR for management posts and committees such as the CEC and the Central Research Committee. The branch has a number of committees that operate under the Branch Council, and along with various standing committees. The Panel notes that there is a clear understanding among staff of the roles and responsibilities of each.
- As mentioned above, the multi-layer and multi-branch structure is utilized by AOU to ensure appropriate programme management and leadership through the various responsibilities of the FCS Dean, Local Dean, GCCs, and BCCs. The Panel notes that the GCCs and BCCs meet regularly, and they take part in reviewing courses at the end of the semester and in the End of Semester Assessment Report, as well as through other reporting channels.
- The AOU Bahrain has worked effectively towards adhering to the requirements of the HEC as well as the standards of the BQA. The Panel learned during interviews that this has led to programme improvements at the HQ level, when the FCS took the decision to allocate credit for the industrial training course and work-based learning following the previous review cycle. Furthermore, the Panel notes that the AOU has submitted an application to list the programme with the NQF, as a programme aligned with a foreign qualification. The application was submitted on 22<sup>nd</sup> of January 2020.
- The Panel found during the site visit that AOU HQ offers the Bahrain branch various learning opportunities and support for the blended learning experience. This has provided the students with equivalent learning experiences and access to the learning management system and other electronic resources. During interviews, students expressed their satisfaction with the learning environment and support provided to them by AOU.

## 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

BQA

• The SER presents evidence of a five-year periodic programme review conducted by an external organization through the OUVP. This is a comprehensive review that includes an audit of the administrative aspects and a review of the programme structure based on

feedback from various stakeholders. The ITC programme was re-validated in 2017 and the next review is expected in 2022. The SER also includes recommendations made by the 2017 review which have been included in the annual action plan. At the programme level, there is a process for an annual review through the Annual Programme Evaluation (APE) (at the branch level) and the AMR (at the HQ level). However, the Panel notes that at the branch level, the APE is performed at the end of the academic year and the submitted supporting evidence includes very few reflection points or programme improvements generated through this evaluation mechanism. Furthermore, the Panel learned during interviews that any changes whether course additions or changes in the programme structure have to wait for the five-year cycle to be implemented. The Panel recommends that AOU should review the practice of the annual review mechanisms to support more timely improvements to the programme and the individual courses. This is especially true for the computing discipline, a rapidly changing field that requires flexibility to maintain currency and relevance.

- Through the conducted interviews and examination of the supporting materials, the Panel found that the ITC programme conducts a comprehensive periodic review which includes feedback from students, academic staff, senior students, and alumni. The FCS recently established an Industrial Advisory Board (IAB) which includes industry representatives and alumni and started collecting feedback from employers. From interviews and the evidence provided, the Panel notes that feedback from the IAB and employers will be considered in the next five-year review cycle during validation by the OUVP.
- During interviews, the Panel noted that graduating students are given a chance to present their feedback by using an online survey. The Panel believes that a streamlined APE/AMR process along with stakeholders' feedback are effective ways of monitoring the periodic review and improvement plans, especially when improvements can be implemented in a timely manner.

## 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

BQA

• The AOU has a detailed Benchmarking Policy which was revised in 2019. The ITC programme was benchmarked with UK standards as an external reference point, including the Computing Subject Benchmark (issued in February 2016) as well as the UK's Higher Education Qualification Framework. However, the proposed graduate attributes for the ITC programme need to be benchmarked with similar offerings to ensure

comparability with other programmes offered locally and regionally. Therefore, the Panel recommends that the FCS should implement local benchmarking measures through the graduate attributes to inform decision making in the programme.

- Internally, the branches of the AOU perform progression analysis and benchmarking for decision making in areas such as course offerings, dropout analysis, pass rate analysis, and campus efficiency. The AOU has mapped its policies with the UK's QAA Code for issues such as external examiners, and the reports produced by external examiners are utilised within the AOU committees.
- A range of stakeholder surveys are used for collecting comments from various stakeholders, including students, alumni, tutors, and the data is tabulated by the QAAD. An employer survey has been recently implemented as per the outcome of the extension visit, and an IAB was established for the ITC programme.
- The current process for analysing comments of various stakeholders involves the Bahrain branch in the data collection step only. The analysis of data is conducted at the HQ level and feedback returns to the branch through the AMRs along with other data from all branches. The Panel recommends that the FCS should establish a more agile process for the utilization of feedback received from stakeholders in order to implement improvements and affect decision making at the branch level, especially with regards to students' feedback.
- As mentioned above, the main annual review process is carried out using the APE which is prepared by the branch and the AMR which is collated at the HQ level. The 2017-2018 APE describes in section 8.1 that 'student surveys list some problems faced by the students with regards to laboratory time and their need for more time to complete the assessment'. However, even though part (c) of section 8.1 asks 'what is the outcome of this feedback?' and 'how was this action communicated to students?'; the report does not contain any such actions.
- APE reports from past years (e.g., 2016-2017) contained detailed statistics of student surveys and some brief analysis, but no identified actions to rectify these problems and no information on whether this has been communicated to students. The Panel recommends that AOU should establish a more effective means of analysing and communicating improvement/actions taken based on the feedback of students.

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

BQA

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: Addressed

- From the provided evidence and interviews, the Panel notes that IAB is operating and includes industry representatives. The feedback of the IAB is intended to be used systematically to inform programme decision-making. There is a policy for the creation of the IAB, which includes a mission statement and objectives.
- The Panel learned during interviews that recommendations discussed at the IAB meetings were raised to the programme management team to be addressed during the next review and re-validation cycle. However, the meeting minutes indicate that only recommendations concerning electives can be implemented immediately, and that some recommendations will have to wait till the next programme validation cycle to be addressed.
- From interviews and the evidence provided, the Panel notes that the programme has been revised based on feedback from the Bahrain branch, where the industrial training course was established with credit hours. However, due to the varying nature of the labour markets within the AOU Branch Countries such as Bahrain, Sudan, Egypt, etc., the Panel notes that there is a need to ensure certain flexibility within the programme structure to accommodate for local labour market needs. This is especially true for small markets such as Bahrain.
- During the virtual site visit, the Panel learned that new tracks were proposed by the FCS after conducting a feasibility study and were submitted to the HEC for approval. Furthermore, benchmarking with the UK standards for subject areas also ensured that the programme is relevant and current within the IT field.
- The Panel notes that the programme's alumni are regularly surveyed for feedback. Furthermore, the establishment of the Programme IAB provides an effective mechanism for monitoring the labour market needs. The Panel advises AOU to incorporate feedback from the IAB along with that from the alumni survey within the annual review process and to take timely decisions to update the courses and programme.

## V. Conclusion

Taking into account the institution's own self-evaluation report, the evidence gathered from the virtual interviews and documentation made available during the virtual visit, the Panel draws the following conclusion in accordance with the DHR/BQA *Academic Programme Reviews (Cycle 2) Handbook, 2019:* 

There is Confidence in the BSc (Honors) Information Technology and Computing of the Faculty of Computer Studies offered by the Arab Open University.

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

- 1. The AOU closure of the quality assurance loop through implementing actions based on the External Examiner feedback on the final year projects.
- 2. The AOU's adoption of the Open University's Validation and Partnership standards.

# In terms of improvement, the Panel *recommends* that the Arab Open University Bahrain and/or the Faculty of Computer Studies should:

- 1. Implement monitoring and review processes to support its implementation of risk management.
- 2. Expedite the development of graduate attributes at the institution level and links them to the programme intended learning outcomes.
- 3. Develop a separate Teaching and Learning Strategy to support staff development in teaching and learning, together with the development of the teaching and learning infrastructure to ensure excellence in teaching and learning.
- 4. Review the range of teaching and learning methods used in the programme to best support the development of knowledge and skills to meet the programme intended learning outcomes.
- 5. Review its approach to formative assessment to include additional purely formative assessment to support students' awareness of their understanding of topics.
- 6. Benchmark the Foundation English Language programme's exit test against international standards to ensure that students enrolling in the Information Technology and Computing programme through this entry route meet the required English language standards.
- 7. Expediate the recruitment process of the full-time faculty member.
- 8. Introduce a formal process to monitor the usage, availability and adequacy of the general campus resources and facilities.
- 9. Revise its approach to academic advising to embed learning support as specified in the Academic Advising Policy.

- 10. Review the equal opportunities data, specifically the performance of students to ensure that its approach to equal opportunities is indeed providing equal opportunities for students.
- 11. Ensure that the recording of supervisor / student meetings is consistently done using the identified template.
- 12. Conduct a formal evaluation of the effectiveness of the industrial training and its contribution to the achievements of the programme aims with the purpose of improving work placements.
- 13. Develop a formal procedure to monitor and record the progress of the students in the final year project.
- 14. Conduct a regular analysis of students' achievement in courses to ensure that the learning outcomes are attained and to enhance the ability of students to create and innovate.
- 15. Implement a regular assessment of the graduates and employers' satisfaction with the programme and graduates' capabilities.
- 16. Review the practice of the annual review mechanisms to support more timely improvements to the programme and the individual courses.
- 17. Implement local benchmarking measures through the graduate attributes to inform decision making in the programme.
- 18. Establish a more agile process for the utilization of feedback received from stakeholders in order to implement improvements and affect decision making at the branch level, especially with regards to students' feedback.
- 19. Establish a more effective means of analysing and communicating improvement/actions taken based on the feedback of students.

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